UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 20-F

(Mark One)

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
for the fiscal year ended December 31, 2019

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☐ **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
Date of event requiring this shell company report

Commission file number: 001-37891

AC IMMUNE SA
(Exact name of Registrant as specified in its charter)

Switzerland
(Jurisdiction of incorporation)

EPFL INNOVATION PARK
Building B
1015 Lausanne
Switzerland
(Address of principal executive offices)

Andrea Pfeifer
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Copies to:

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Derek J. Dostal
Davis Polk & Wardwell LLP
450 Lexington Avenue
New York, NY 10017
(212) 450-4000

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Shares, nominal value CHF 0.02 per share	ACIU	The Nasdaq Global Market

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None

Indicate the number of outstanding shares of each of the issuer's classes of capital stock or common stock as of the close of the period covered by the annual report.

Common shares: 71,859,431

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

☐ Yes ☒ No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

☐ Yes ☒ No

Note – Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

☒ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐	Accelerated filer ☒	Non-accelerated filer ☐ Emerging growth company ☒

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by checkmark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

US GAAP ☐	International Financial Reporting Standards as issued by the International Accounting Standards Board ☒	Other ☐

If "Other" has been checked in response to the previous question indicate by check mark which financial statement item the registrant has elected to follow.

☐ Item 17 ☐ Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

☐ Yes ☒ No

AC IMMUNE SA

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PRESENTATION OF FINANCIAL AND OTHER INFORMATION

Unless otherwise indicated or the context otherwise requires, all references in this annual report on Form 20-F (the "Annual Report") to "AC Immune" or the "Company," "we," "our," "ours," "us" or similar terms refer to AC Immune SA. The Company owns various unregistered trademarks for some of which formal protection is being sought, including Morphomer™, SupraAntigen™ and its corporate name, logo and Nasdaq Global Market symbol. All other trademarks, trade names and service marks of other companies appearing in this Annual Report are the property of their respective owners. Solely for convenience, the trademarks and trade names in this Annual Report may be referred to without the ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. The Company does not intend to use or display other companies' trademarks and trade names to imply a relationship with, or endorsement or sponsorship of the Company by, any other companies.

Financial Statements

Our financial statements are presented in Swiss Francs and in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB. None of the financial statements were prepared in accordance with generally accepted accounting principles in the United States. The terms "dollar" and "USD" refer to U.S. dollars and the terms "Swiss Franc" and "CHF" refer to the legal currency of Switzerland, unless otherwise indicated. We have made rounding adjustments to some of the figures included in this Annual Report. Accordingly, any numerical discrepancies in any table between totals and sums of the amounts listed are due to rounding.

FORWARD-LOOKING STATEMENTS

This Annual Report contains statements that constitute forward-looking statements. All statements other than statements of historical facts contained in this Annual Report, including statements regarding our future results of operations and financial position, business strategy, product candidates, product pipeline, ongoing and planned clinical studies, including those of our collaboration partners, regulatory approvals, research and development costs, timing and likelihood of success, as well as plans and objectives of management for future operations are forward-looking statements. Many of the forward-looking statements contained in this Annual Report can be identified by the use of forward-looking words such as "anticipate," "believe," "could," "expect," "should," "plan," "intend," "estimate," "will" and "potential," among others.

Forward-looking statements appear in a number of places in this Annual Report and include, but are not limited to, statements regarding our intent, belief or current expectations. Forward-looking statements are based on our management's beliefs and assumptions and on information currently available to our management. Such statements are subject to risks and uncertainties, and actual results may differ materially from those expressed or implied in the forward-looking statements due to various factors, including, but not limited to, those identified under "Item 3. Key Information – D. Risk Factors" in this Annual Report. These risks and uncertainties include factors relating to:

- The success of our and our collaboration partners' clinical studies, and our and their ability to obtain and maintain regulatory approval and to commercialize semorinemab, ACI-35, Morphomer Tau, ACI-24 for Alzheimer's disease (AD) and for Down Syndrome (DS), crenezumab and PI-2620 (our Tau-PET Imaging Tracer);
- The clinical safety, efficacy and utility of our product candidates;
- The ability of our competitors to discover, develop or commercialize competing products before or more successfully than we do;
- Our plans to research, develop and commercialize our product candidates;
- The identification of serious adverse, undesirable or unacceptable side effects related to our product candidates;
- Our ability to maintain our current strategic relationships with our collaboration partners;
- Our ability to protect and maintain our, and not infringe on third parties', intellectual property rights throughout the world;

- Our ability to raise capital when needed in order to continue our product development programs or commercialization efforts;
- Our ability to attract and retain qualified employees and key personnel;
- The Food and Drug Administration's and applicable foreign regulatory authorities' acceptance of data from studies we and our collaboration partners conduct within and outside the United States now and in the future;
- Our foreign private issuer status, the loss of which would require us to comply with the Exchange Act's domestic reporting regime and cause us to incur significant legal, accounting and other expenses;
- Our incorporation in Switzerland, the laws of which govern our corporate affairs and may differ from those applicable to companies incorporated in the United States; and
- The other risk factors discussed under "Item 3. Key Information – D. Risk Factors."

These forward-looking statements speak only as of the date of this Annual Report and are subject to a number of risks, uncertainties and assumptions described under the sections in this Annual Report entitled "Item 3. Key Information—D. Risk Factors" and "Item 5. Operating and Financial Review and Prospects" and elsewhere in this Annual Report. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

PART I

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

A. Directors and senior management

Not applicable.

B. Advisers

Not applicable.

C. Auditors

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

A. Offer statistics

Not applicable.

B. Method and expected timetable

Not applicable.

ITEM 3. KEY INFORMATION

A. Selected Financial Data

We have derived the selected statements of income/(loss) for the years ended December 31, 2019, 2018 and 2017 presented below and the selected balance sheet data as of December 31, 2019 and 2018 presented below from our audited financial statements included elsewhere in this Annual Report on Form 20-F. The selected statements of income/(loss) for the years ended December 31, 2016 and 2015 and the selected balance sheet data as of December 31, 2017, 2016 and 2015 have been derived from our audited financial statements not included in this Annual Report on Form 20-F.

Our historical results are not necessarily indicative of the results that may be expected in the future. The following summary financial data should be read in conjunction with "Item 5. Operating and Financial Review and Prospects" and our financial statements included elsewhere in this Annual Report.

We maintain our books and records and our audited financial statements in Swiss Francs (CHF).

	For the Years Ended December 31,				
(in CHF thousands)	**2019**	**2018**	**2017**	**2016**	**2015**
Income Statement Data:					
Contract revenue	111,026	7,194	20,255	23,214	39,090
Research & development expenses	(50,432)	(44,277)	(32,663)	(25,774)	(17,049)
General & administrative expenses	(16,058)	(12,467)	(10,131)	(7,896)	(3,417)
Operating income/(loss)	44,536	(49,550)	(22,539)	(10,456)	18,624
Finance result, net	906	(1,401)	(3,872)	3,360	1,646
Income/(loss) before tax	45,442	(50,951)	(26,411)	(7,096)	20,270
Income tax expense	—	—	—	—	—
Income/(loss) for the period	45,442	(50,951)	(26,411)	(7,096)	20,270

	For the Years Ended December 31,				
(in CHF '000 except for share and per share data)	**2019**	**2018**	**2017**	**2016**	**2015**
Earnings/(Loss) per share in CHF (basic)(1)(2)	0.64	(0.82)	(0.46)	(0.14)	0.47
Earnings/(Loss) per share in CHF (fully diluted)(2)	0.64	(0.82)	(0.46)	(0.14)	0.44
Weighted-average number of shares used to compute earnings per share basic	70,603,611	61,838,228	57,084,295	50,096,859	43,412,250
Weighted-average number of shares used to compute earnings per share fully diluted	71,103,341	61,838,228	57,084,295	50,096,859	46,043,198

(1) For the periods prior to the closing of our initial public offering on September 23, 2016, earnings per share includes preferred shares outstanding. These preferred shares were converted on a one-for-one basis upon closing of our initial public offering on September 23, 2016. Amounts for fiscal year 2015 have also been adjusted for the 250-for-1 stock split effective October 23, 2015.

(2) Earnings per share calculations do not give effect to the Series E Private Placement Extension or the CS AG Share Issuance effected in 2016.

	As of December 31,				
(in CHF thousands)	**2019**	**2018**	**2017**	**2016**	**2015**
Cash and cash equivalents	193,587	156,462	124,377	152,210	76,522
Short-term financial assets	95,000	30,000	—	—	—
Total assets	299,250	196,556	132,013	156,100	79,931
Accumulated losses	(75,521)	(121,877)	(72,607)	(46,921)	(40,381)
Total shareholder's equity	272,442	177,623	116,839	142,380	71,043
Total shareholder's equity and liabilities	299,250	196,556	132,013	156,100	79,931
Share capital	1,437	1,351	1,147	1,135	928

B. Capitalization and indebtedness

Not applicable.

C. Reasons for the offer and use of proceeds

Not applicable.

D. Risk factors

You should carefully consider the risks and uncertainties described below and the other information in this Annual Report before making an investment in our common shares. Our business, financial condition or results of operations could be materially and adversely affected if any of these risks occurs, and as a result, the market price of our common shares could decline and you could lose all or part of your investment. This Annual Report also contains forward-looking statements that involve risks and uncertainties. See "Forward-Looking Statements." Our actual results could differ materially and adversely from those anticipated in these forward-looking statements as a result of certain factors.

Risks Related to Our Business

We depend heavily on the success of our clinical and, to a lesser extent, preclinical products. Our clinical product candidates include semorinemab, ACI-35, Morphomer Tau, ACI-24 for AD and for DS, crenezumab and PI-2620. If our clinical studies are unsuccessful, we or our collaboration partners do not obtain regulatory approval or we or our collaboration partners are unable to commercialize semorinemab, ACI-35, Morphomer Tau, ACI-24 for AD and for DS, crenezumab and PI-2620, or we experience significant delays in doing so, our business, financial condition and results of operations will be materially adversely affected.

We currently have no products approved for sale and have invested a significant portion of our efforts and financial resources in the development of semorinemab, ACI-35, Morphomer Tau, ACI-24 for AD and for DS, crenezumab and PI-2620, all of which are in clinical development. Our ability to generate product revenues, which we do not expect will occur for at least the next several years, if ever, will depend heavily on successful clinical development, obtaining regulatory approval and eventual commercialization of these product candidates. In this regard, we rely heavily on our collaboration partners for clinical development of certain of our product candidates, and they may choose to discontinue the clinical development process in certain cases. For example, in January 2019, Roche, the parent of our collaboration partner, discontinued the CREAD and CREAD 2 Phase 3 studies of crenezumab in patients with prodromal to mild sporadic Alzheimer's disease (AD). The decision came after an interim analysis conducted by the Independent Data Monitoring Committee, or IDMC. The IDMC analysis indicated that crenezumab was unlikely to meet its primary endpoint of change from baseline in Clinical Dementia Rating-Sum of Boxes (CDR-SB) Score. However, the Phase 2 development of crenezumab continues in a preventive trial of cognitively healthy individuals in Colombia with a risk of developing AD. In addition, we currently generate no revenues from sales of any drugs or diagnostics, and we may never be able to develop or commercialize a marketable drug or diagnostic. The success of our current and future product candidates will depend on several factors, including the following:

- completing clinical studies that demonstrate the efficacy, safety and clinical utility of our product candidates;
- receiving marketing approvals from applicable regulatory authorities;
- establishing commercial manufacturing capabilities;
- launching commercial sales, marketing and distribution operations;
- acceptance of our product candidates by patients, the medical community and third-party payors;
- a continued acceptable safety profile following approval;
- competing effectively with other therapies or diagnostic approaches; and
- obtaining, maintaining, enforcing and defending our intellectual property rights and claims and not infringing on third parties' intellectual property rights.

If we or our collaboration partners do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize our current or future product candidates, which would materially adversely affect our business, financial condition and results of operations.

Results of early clinical studies may not be predictive of future study results.

Positive or timely results from preclinical or early stage clinical studies do not ensure positive or timely results in late stage clinical studies or product approval by the U.S. Food and Drug Administration, or the FDA, the European Medicines Agency, or the EMA, or comparable foreign regulatory authorities. Products that show positive preclinical or early clinical results may not show sufficient safety or efficacy in later stage clinical studies and therefore may fail to obtain regulatory approvals. In addition, preclinical and clinical data are often susceptible to varying interpretations and analyses. Many companies that believed their product candidates performed satisfactorily in preclinical and clinical studies have nonetheless failed to obtain marketing approval for the product candidates. The FDA, the EMA and comparable foreign regulatory authorities have substantial discretion in the approval process and in determining when or whether regulatory approval will be obtained for any of our product candidates. Even if we believe the data collected from clinical studies of our product candidates are promising, such data may not be sufficient to support approval by the FDA, the EMA or any other regulatory authority.

In some instances, there can be significant variability in safety and/or efficacy results between different studies of the same product candidate due to numerous factors, including changes in study procedures set forth in protocols, differences in the size and type of the patient populations, adherence to the dosing regimen and other study protocols and the rate of dropout among clinical study participants. In the case of our later stage clinical product candidates, results may differ in general on the basis of the larger number of clinical study sites and additional countries and languages involved in these clinical studies.

Clinical studies are, or will be, based on patient reported outcomes, some of which are or will be captured daily by study participants with electronic diaries. We have no assurance and cannot rely on past experience that the high frequency of questioning is not influencing the measured outcome. In addition, low compliance with daily reporting requirements may impact the studies' validity or statistical power. We cannot assure you that any Phase 2, Phase 3 or other clinical studies that either we or our collaboration partners may conduct will demonstrate consistent or adequate efficacy and safety to obtain regulatory approval to market our product candidates.

If we or our collaboration partners are required to conduct additional clinical studies or other testing of any of our current or future product candidates that we or our collaboration partners develop beyond the studies and testing that we or our collaboration partners contemplate, if we or our collaboration partners are unable to successfully complete clinical studies of our product candidates or other testing, if the results of these studies or tests are unfavorable or are only modestly favorable or if there are safety concerns associated with our current or future product candidates, we may:

- be delayed in obtaining marketing approval for our product candidates;
- not obtain marketing approval;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or significant safety warnings, including boxed warnings;
- be subject to additional post-marketing studies or other requirements; or
- remove the product from the market after obtaining marketing approval.

Our product development costs will also increase if we experience delays in testing or marketing approvals and we may be required to obtain additional funds to complete clinical studies. We cannot assure you that our clinical studies will begin as planned or be completed on schedule, if at all, or that we will not need to restructure our studies after they have begun. Significant clinical study delays also could shorten any periods during which we or our collaboration partners may have the exclusive right to commercialize our product

candidates or allow our competitors to bring products to market before we do or shorten any periods during which we or our collaboration partners have the exclusive right to commercialize our product candidates, which may harm our business and results of operations. In addition, some of the factors that cause, or lead to, clinical study delays may ultimately lead to the denial of regulatory approval of our product candidates.

Additional competitors could enter the market with generic versions of our products, which may result in a material decline in sales of affected products.

Under the Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, a pharmaceutical manufacturer may file an abbreviated new drug application, or ANDA, seeking approval of a generic copy of an approved innovator product. Under the Hatch-Waxman Act, a manufacturer may also submit a new drug application, or NDA, under section 505(b)(2) that references the FDA's prior approval of the innovator product. A 505(b)(2) NDA product may be submitted for a new or improved version of the original innovator product. Hatch-Waxman also provides for certain periods of regulatory exclusivity, which preclude FDA approval (or in some circumstances, FDA filing and reviewing) of an ANDA or 505(b)(2) NDA. These include, subject to certain exceptions, the period during which an FDA-approved drug is subject to orphan drug exclusivity. In addition to the benefits of regulatory exclusivity, an innovator NDA holder may have patents claiming the active ingredient, product formulation or an approved use of the drug, which would be listed with the product in the FDA publication, "Approved Drug Products with Therapeutic Equivalence Evaluations," known as the "Orange Book." If there are patents listed in the Orange Book, a generic or 505(b)(2) applicant that seeks to market its product before expiration of the patents must include in the ANDA what is known as a "Paragraph IV certification," challenging the validity or enforceability of, or claiming non-infringement of, the listed patent or patents. Notice of the certification must be given to the innovator, too, and if within 45 days of receiving notice the innovator sues the company which manufactures the generic to protect its patents, approval of the ANDA is stayed for 30 months, or as lengthened or shortened by the court.

Accordingly, if semorinemab, ACI-35, Morphomer Tau, ACI-24 for AD and for DS, crenezumab and PI-2620 are approved, competitors could file ANDAs for generic versions of semorinemab, ACI-35, Morphomer Tau, ACI-24 for AD and for DS, crenezumab and PI-2620, or 505(b) (2) NDAs that reference semorinemab, ACI-35, Morphomer Tau, ACI-24 for AD and for DS, crenezumab and PI-2620, respectively. If there are patents listed semorinemab, ACI-35, Morphomer Tau, ACI-24 for AD and for DS, crenezumab and PI-2620, respectively, in the Orange Book, those ANDAs and 505(b) (2) NDAs would be required to include a certification as to each listed patent indicating whether the ANDA applicant does or does not intend to challenge the patent. We cannot predict whether any patents issuing from our pending patent applications will be eligible for listing in the Orange Book, how any generic competitor would address such patents, whether we would sue on any such patents, or the outcome of any such suit.

We may not be successful in securing or maintaining proprietary patent protection for products and technologies we develop or license. Moreover, if any patents that are granted and listed in the Orange Book are successfully challenged by way of a Paragraph IV certification and subsequent litigation, the affected product could immediately face generic competition and its sales would likely decline rapidly and materially. Should sales decline, we may have to write off a portion or all of the intangible assets associated with the affected product and our results of operations and cash flows could be materially and adversely affected.

One of our collaboration partners is evaluating a product candidate in AD prevention similar to our product candidate crenezumab.

Our collaboration partner Genentech is a subsidiary of Roche, which is evaluating gantenerumab, a product candidate for prodromal and mild AD. Gantenerumab is also being studied as part of the DIAN-TU trial, a worldwide clinical study evaluating multiple compounds in individuals at risk for or with a type of early-onset AD caused by a genetic mutation. Our product candidate crenezumab is being studied in cognitively healthy people who are genetically predisposed to develop early AD in the Alzheimer's Prevention Initiative (API). Our collaboration agreement with Genentech for crenezumab provides Genentech with control over, and responsibility for, the clinical development process, including obtaining regulatory and marketing approvals, manufacturing costs and sales and marketing costs. In addition, the collaboration agreement provides that Genentech may terminate the agreement at any time by providing three months' notice to us. As a result, Genentech may choose to devote more time and resources to advancing gantenerumab instead of crenezumab, which could render crenezumab non-competitive and limit or make it more difficult for us to achieve or maintain profitability with crenezumab. Should this occur, our business, financial condition and results of operations could be materially impacted.

The successful commercialization of our product candidates will depend in part on the extent to which governmental authorities and health insurers establish adequate coverage and reimbursement levels and pricing policies.

The successful commercialization of our product candidates will depend, in part, on the extent to which coverage and reimbursement for our products will be available from government and health administration authorities, private health insurers and other third-party payors. To manage healthcare costs, many governments and third-party payors increasingly scrutinize the pricing of new technologies and require greater levels of evidence of favorable clinical outcomes and cost-effectiveness before extending coverage. In light of such challenges to prices and increasing levels of evidence of the benefits and clinical outcomes of new technologies, we cannot be sure that coverage will be available for any of our current or future product candidates that we or our collaboration partners will commercialize and, if available, that the reimbursement rates will be adequate in each respective region. If we are unable to obtain adequate levels of coverage and reimbursement for our product candidates, their marketability will be negatively and materially impacted.

Third party payors may deny coverage and reimbursement status altogether of a given drug product or cover the product but may also establish prices at levels that are too low to enable us to realize an appropriate return on our investment in product development. Because the rules and regulations regarding coverage and reimbursement change frequently, in some cases at short notice, even when there is favorable coverage and reimbursement, future changes may occur that adversely impact the favorable status. Further, the net reimbursement for drug products may be subject to additional reductions if proposed changes by the Trump administration to Medicare drug reimbursement policies, which presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States, are enacted by the United States Congress. In addition, the Trump administration has adopted a new approach to trade policy and has attempted to renegotiate or terminate certain existing trade agreements. There is a risk that the resulting environment of retaliatory trade practices could lead to legislative or regulatory changes to U.S. trade policy, such as imposing higher tariffs on imported medicine, which may adversely impact our financial results.

The unavailability or inadequacy and variability of third-party coverage and reimbursement could have a material adverse effect on the market acceptance of our product candidates and the future revenues we may expect to receive from those products. In addition, we are unable to predict what additional legislation or regulation relating to the healthcare industry or third-party coverage and reimbursement may be enacted in the future, or what effect such legislation or regulation would have on our business.

Our products may not gain market acceptance, in which case we or our collaboration partners may not be able to generate product revenues, which will materially adversely affect our business, financial condition and results of operations.

Even if the FDA, the EMA or any other regulatory authority approves the marketing of any product candidates that we develop, physicians, healthcare providers, patients or the medical community may not accept or use them. Efforts to educate the medical community and third-party payors on the benefits of our product candidates may require significant resources and may not be successful. If any of our current or future product candidates does not achieve an adequate level of acceptance, we or our collaboration partners may not generate significant product or royalty revenues or any profits from operations. The degree of market acceptance of our product candidates that are approved for commercial sale will depend on a variety of factors, including:

- how clinicians and potential patients perceive our novel products;
- the timing of market introduction;
- the number and clinical profile of competing products;
- our ability to provide acceptable evidence of safety and efficacy or clinical utility;
- the prevalence and severity of any side effects;
- relative convenience and ease of administration;
- cost-effectiveness;
- patient diagnostics and screening infrastructure in each market;

- marketing and distribution support;

- availability of coverage, reimbursement and adequate payment from health maintenance organizations and other third-party payors, both public and private; and

- other potential advantages over alternative treatment methods.

If our product candidates fail to gain market acceptance, this will have a material adverse impact on our ability to generate revenues to provide a satisfactory, or any, return on our investments. Even if some products achieve market acceptance, the market may prove not to be large enough to allow us to generate significant revenues.

In addition, the potential market opportunity of our product candidates is difficult to precisely estimate. Our estimates of the potential market opportunity are predicated on several key assumptions such as industry knowledge and publications, third-party research reports and other surveys. These assumptions involve the exercise of significant judgment on the part of our management, are inherently uncertain and the reasonableness of these assumptions could not have been assessed by an independent source in every detail. If any of the assumptions proves to be inaccurate, then the actual market for our product candidates could be smaller than our estimates of the potential market opportunity. If the actual market for our product candidates is smaller than we expect, or if any approved products fail to achieve an adequate level of acceptance by physicians, health care payors and patients, our product or royalty revenue may be limited and it may be more difficult for us to achieve or maintain profitability.

We depend on enrollment of patients in our clinical studies for our product candidates. If we are unable to enroll patients in our clinical studies, our research and development efforts could be materially adversely affected.

Successful and timely completion of clinical studies will require that we enroll a sufficient number of patient candidates. Studies may be subject to delays as a result of patient enrollment taking longer than anticipated or patient withdrawal. Patient enrollment depends on many factors, including the size and nature of the patient population, eligibility criteria for the study, the proximity of patients to clinical sites, the design of the clinical protocol, the existence of competing clinical studies, the availability of new drugs approved for the indication the clinical study is investigating, and clinicians' and patients' perceptions as to the potential advantages of the drug being studied in relation to other available therapies.

Generally, the specific target population of patients and therapeutic time windows may make it difficult for us to enroll enough patients to complete clinical studies for our products in a timely and cost-effective manner. Delays in the completion of any clinical study of our product candidates will increase our costs, slow down our product candidate development and approval process and delay or potentially jeopardize our or our collaboration partners' ability to commence product sales and generate revenue. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical studies may also ultimately lead to the denial of regulatory approval of our product candidates.

If serious adverse, undesirable or unacceptable side effects are identified during the development of our product candidates or following approval, if any, we may need to abandon our development of such product candidates, the commercial profile of any approved label may be limited, or we may be subject to other significant negative consequences following marketing approval, if any.

If our product candidates are associated with serious adverse, undesirable or unacceptable side effects, we may need to abandon their development or limit development to certain uses or sub-populations in which such side effects are less prevalent, less severe or more acceptable from a risk-benefit perspective. Many compounds that initially showed promise in preclinical or early stage testing have later been found to cause side effects that restricted their use and prevented further development of the compound for larger indications.

At the 2014 Alzheimer's Association International Conference (AAIC), it was reported that in the combined Phase 2 study populations, serious adverse events occurred at similar rates in patients treated with crenezumab (16.5%) and in patients given a placebo (11.9%). Crenezumab's safety profile is especially reflected in a low incidence of ARIA-E (0.3%) in Phase 2 clinical studies. ARIA-E was observed in only one patient who received high-dose intravenous crenezumab in the ABBY study. No case of ARIA-E was reported in the placebo arm or the BLAZE study.

As reported by Roche at the December 2019 Clinical Trials in Alzheimer's Disease (CTAD) conference, no safety signals for crenezumab were observed in the CREAD and CREAD 2 studies and the overall safety profile was similar to that seen in Phase 2 trials. There was no difference in the rate of newly-developing ARIA-E (0.3%) between the active and placebo arms and the rates of ARIA-H were also similar (8.8% on crenezumab vs 6.8% on placebo).

As previously reported, five serious adverse events were observed in three patients during the Phase 1b study with ACI-35. Three of them occurred in two patients. These SAEs were labeled as possibly related due to the close timing proximity with the last administration of ACI-35. In the third patient, the significant adverse events described were not considered related to the study drug. To date, no SAE has been reported in the currently ongoing study which is assessing the first second-generation Tau targeted vaccine in the low dose cohort.

In the previous Phase 1/2 study for ACI-24 for AD, fifteen non-drug related serious adverse events were reported. In the current Phase 2 study, ACI-24 has been safe and well tolerated so far. Six serious adverse events have been reported to date. Five were considered as not related to the study drug and one SAE was considered to be unlikely related to the study drug (i.e. transient ischaemic attack). There have been no serious adverse events and no withdrawals to date in the ACI-24 Phase 1b Down syndrome study.

Occurrence of serious procedure- or treatment-related side effects could impede clinical study enrollment and receipt of marketing approval from the FDA, the EMA and comparable foreign regulatory authorities. Adverse events could also adversely affect physician or patient acceptance of our product candidates.

Additionally if one or more of our product candidates receives marketing approval, and we or others later identify undesirable side effects caused by such products, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw approvals of such product and require us or our collaboration partners to take any approved products off the market;
- regulatory authorities may require the addition of labeling statements, specific warnings, a contraindication or field alerts to physicians and pharmacies;
- we may be required to create a medication guide outlining the risks of such side effects for distribution to patients;
- we may be required to change the way the product is administered, conduct additional studies or change the labeling of the product;
- we or our collaboration partners may be subject to limitations in how we promote the product;
- sales of the product may decrease significantly;
- we could be sued and held liable for harm caused to patients; and
- our reputation and physician or patient acceptance of our products may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, and could significantly harm our business, results of operations and prospects.

We operate in highly competitive and rapidly changing industries, which may result in others discovering, developing or commercializing competing products before or more successfully than we do.

The biopharmaceutical and pharmaceutical industries are highly competitive and subject to significant and rapid technological change. Our success is highly dependent on our ability to discover, develop and obtain marketing approval for new and innovative products on a cost-effective basis and to market them successfully. In doing so, we face and will continue to face intense competition from a variety of businesses, including large, fully integrated pharmaceutical companies, specialty pharmaceutical companies and biopharmaceutical companies, academic institutions, government agencies and other private and public research institutions in Europe, the United States and other jurisdictions. Many of our potential competitors, alone or with their strategic partners, have substantially greater financial, technical and human resources than we do and significantly greater experience in the discovery and development of product candidates, obtaining FDA and other regulatory

approvals of treatments and the commercialization of those treatments. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated among a smaller number of our competitors. The commercial opportunity for our products could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market.

We believe that our key competitor product candidates are (i) gosuranemab (Biogen), ABBV-8E12 (AbbVie) and Zagotenemab (Eli Lilly) for semorinemab; (ii) AADvac1 (Axon Neuroscience) for ACI-35; (iii) UB-311 (United Neuroscience) and ABvac 40 (Araclon Biotech) for ACI-24; (iv) aducanumab (Biogen), gantenerumab (Roche), BAN2401 (Eisai/Biogen) and solanezumab (Eli Lilly) for crenezumab; and (v) Flortaucipir (Eli Lilly), THK-5351 (GE Healthcare), APN-1607 (Aprinoia Therapeutics), MK-6240 (Cerveau/Merck) and 18F-GTP1 (Genentech) for PI-2620, as described under "Item 4. Information on the Company – B. Business Overview – Competition"

The highly competitive nature of and rapid technological changes in the biotechnology and pharmaceutical industries could render our product candidates or our technology obsolete or non-competitive. Our competitors may, among other things:

- develop and commercialize products that are safer, more effective, less expensive, or more convenient or easier to administer;
- obtain quicker regulatory approval;
- establish superior intellectual property and proprietary positions;
- have access to more manufacturing capacity;
- implement more effective approaches to sales, marketing and distribution; or
- form more advantageous strategic alliances.

Should any of these occur, our business, financial condition and results of operations could be materially adversely affected.

We may not be successful in our efforts to use and expand our Morphomer and SupraAntigen proprietary technology platforms to build additional product candidates for our pipeline.

A key element of our strategy is to use and expand our Morphomer and SupraAntigen proprietary technology platforms to create unique therapies and diagnostics for conformational diseases, such as AD, and progress these product candidates through clinical development. Although our research and development efforts to date have resulted in a pipeline of product candidates, we may not be able to develop product candidates that are safe and effective in the future. Even if we are successful in continuing to build our pipelines, the potential product candidates that we identify may not be suitable for clinical development, potentially as a result of having harmful side effects or other characteristics indicating they may be unlikely to receive marketing approval and achieve market acceptance.

Our business is subject to economic, political, regulatory and other risks associated with international operations.

Our business is subject to risks associated with conducting business internationally. We and a number of our suppliers and collaborative and clinical study relationships are located outside the United States. Accordingly, our future results could be harmed by a variety of factors, including:

- economic weakness, including inflation, or political instability in particular non-U.S. economies and markets;
- differing regulatory requirements for drug approvals in non-U.S. countries;

- potentially reduced protection for intellectual property rights;
- difficulties in compliance with non-U.S. laws and regulations;
- changes in non-U.S. regulations and customs, tariffs and trade barriers;
- changes in non-U.S. currency exchange rates and currency controls;
- changes in a specific country's or region's political or economic environment;
- trade protection measures, import or export licensing requirements or other restrictive actions such as sanctions by U.S. or non-U.S. governments;
- negative consequences from changes in tax laws;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- difficulties associated with staffing and managing international operations, including differing labor relations;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geo-political actions, including war and terrorism, or natural disasters including earthquakes, typhoons, floods and fires.

Public health epidemics, including the novel strain of coronavirus (COVID-19), could have a material adverse impact on our business and financial results as well as clinical development of our product pipeline.

Public health epidemics or outbreaks could adversely impact our business. In December 2019, COVID-19 emerged in Wuhan, Hubei Province, China. While initially the outbreak was largely concentrated in China and caused significant disruptions to its economy, it has now spread to several other countries and infections have been reported globally. The extent to which the COVID-19 impacts our operations will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the duration of the outbreak, new information which may emerge concerning the severity of the coronavirus and the actions to contain COVID-19 or treat its impact, among others. For example, if individuals choose not to participate in or leave clinical trials being conducted by us or our collaboration partners due to concerns over public health epidemics or outbreaks, our clinical trial operations could be adversely affected. Should COVID-19 continue to spread globally, this could have a material adverse impact on our business, financial condition and results of operations.

We have no history of commercializing pharmaceutical products, which may make it difficult to evaluate the prospects for our future viability.

We began our operations in 2003. Our operations to date have been limited to financing and staffing our company, developing our technology and developing our product candidates as well as early stage clinical trials. We have not yet demonstrated an ability to successfully complete a large-scale, pivotal clinical study, obtain marketing approval, manufacture a commercial scale product or conduct sales and marketing activities necessary for successful product commercialization. Consequently, predictions about our future success or viability may not be as accurate as they could be if we had a history of successfully developing and commercializing pharmaceutical products.

Our future growth and ability to compete depends on retaining our key personnel and recruiting additional qualified personnel.

Our success depends upon the continued contributions of our key management, scientific and technical personnel, many of whom have substantial experience with or been instrumental for us and our projects.

Members of our key management include Dr. Andrea Pfeifer, our Chief Executive Officer; Dr. Marie Kosco-Vilbois, our Chief Scientific Officer; Piergiorgio Donati, our Chief Technical Operations Officer; Dr. Julien Rongère, our VP Regulatory Affairs and Quality Assurance; Alexandre Caratsch, our General Counsel; Dr. Olivier Sol, our Medical Director; Dr. Bojanna Portmann, our AVP IP and Business Development; Joerg Hornstein, our Chief Financial Officer; and Jean-Fabien Monin, our Chief Administrative Officer.

The loss of our key managers and senior scientists could delay our research and development activities. Laws and regulations on executive compensation, including legislation in our home country, Switzerland, may restrict our ability to attract, motivate and retain the required level of qualified personnel. In Switzerland, legislation affecting public companies has been passed that, among other things, imposes an annual binding shareholder's "say on pay" vote with respect to the compensation of executive management, including executive officers and the board of directors and prohibits severance or similar payment, bonuses for company purchases and sales, additional contracts as consultants to or employees of other companies in the group. In addition, the competition for qualified personnel in the biopharmaceutical and pharmaceutical field is intense, and our future success depends upon our ability to attract, retain and motivate highly-skilled scientific, technical and managerial employees. We face competition for personnel from other companies, universities, public and private research institutions and other organizations. If our recruitment and retention efforts are unsuccessful in the future, it may be difficult for us to implement our business strategy, which could have a material adverse effect on our business.

We may become exposed to costly and damaging liability claims, either when testing our product candidates in the clinic or at the commercial stage; and our liability insurance may not cover all damages from such claims.

We are exposed to potential product liability and professional indemnity risks that are inherent in the research, development, manufacturing, marketing and use of pharmaceutical products. Currently we have no products that have been approved for commercial sale; however, our current and future use of product candidates in clinical studies, and the sale of any approved products in the future, may expose us to liability claims. These claims might be made by patients that use the product, healthcare providers, pharmaceutical companies or others selling such products. Any claims against us, regardless of their merit, could be difficult and costly to defend and could materially adversely affect the market for our product candidates or any prospects for commercialization of our product candidates.

Although the clinical study process is designed to identify and assess potential side effects, it is always possible that a drug, even after regulatory approval, may exhibit unforeseen side effects. If any of our product candidates were to cause adverse side effects during clinical studies or after approval of the product candidate, we may be exposed to substantial liabilities. Physicians and patients may not comply with any warnings that identify known potential adverse effects and patients who should not use our product candidates.

We purchase liability insurance in connection with the clinical studies that we undertake in amounts that we consider to be consistent with industry norms. It is possible that our liabilities could exceed our insurance coverage. We intend to expand our insurance coverage to include the sale of commercial products if we obtain marketing approval for any of our product candidates. However, we may not be able to maintain insurance coverage at a reasonable cost or obtain insurance coverage that will be adequate to satisfy any liability that may arise. If a successful product liability claim or series of claims is brought against us for uninsured liabilities or in excess of insured liabilities, our assets may not be sufficient to cover such claims and our business operations could be impaired.

Should any of the events described above occur, this could have a material adverse effect on our business, financial condition and results of operations.

We may seek to obtain orphan drug designation for certain of our product candidates. Orphan drug designation may not ensure that we will enjoy market exclusivity in a particular market, and if we fail to obtain or maintain orphan drug exclusivity for such product candidates, we may be subject to earlier competition and our potential revenue will be reduced.

Under the Orphan Drug Act, the FDA may designate a product as an orphan drug if it is intended to treat a rare disease or condition, defined as a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States. In the European Union, the EMA's Committee for Orphan Medicinal Products, or COMP, grants orphan drug designation to promote the development of products which meet the following criteria: a) they are intended for the diagnosis, prevention, or

treatment of a life-threatening or chronically debilitating condition affecting not more than five in 10,000 persons in the European Union or for products that are intended for the diagnosis, prevention, or treatment of a life-threatening, seriously debilitating or serious and chronic condition when, without incentives, it is unlikely that sales of the drug in the European Union would be sufficient to justify the necessary investment in developing the drug or biological product; and b) there is no satisfactory method of diagnosis, prevention, or treatment, or, if such a method exists, the medicine must be of significant benefit to those affected by the condition.

In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical study costs, tax advantages and user-fee waivers. In addition, if a product receives the first FDA approval for the indication for which it has orphan designation, the product is entitled to orphan drug exclusivity, which means the FDA may not approve any other application to market the same drug for the same indication for a period of seven years, except in limited circumstances, such as a showing of clinical superiority over the product with orphan exclusivity or where the manufacturer is unable to assure sufficient product quantity. In the European Union, orphan drug designation entitles a party to financial incentives such as reduction of fees or fee waivers and ten years of market exclusivity for the orphan indication following drug or biological product approval, provided that the criteria for orphan designation are still applicable at the time of the granting of the marketing authorization. This period may be reduced to six years if at the end of the fifth year, the orphan drug designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity.

We may not be able to obtain orphan drug designation for any of our product candidates, and even if we do, we may not be the first to obtain marketing approval for any particular orphan indication due to the uncertainties associated with developing pharmaceutical products. Further, even if we obtain orphan drug designation for a product, that exclusivity may not effectively protect the product from competition because different drugs with different active moieties can be approved for the same condition. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process.

Due to our limited resources and access to capital, we must prioritize development of certain product candidates.

Because we have limited resources and access to capital to fund our operations, we must decide which product candidates to pursue and the amount of resources to allocate to each. Our decisions concerning the allocation of research, collaboration, management and financial resources toward particular compounds, product candidates or therapeutic areas may not lead to the development of viable commercial products and may divert resources away from better opportunities. Similarly, our potential decisions to delay, terminate or collaborate with third parties in respect of certain product development programs may also prove not to be optimal and could cause us to miss valuable opportunities. If we make incorrect determinations regarding the market potential of our product candidates or misread trends in the biopharmaceutical industry, in particular for neurological disorders, our business, financial condition and results of operations could be materially adversely affected.

Our research and development activities could be affected or delayed as a result of possible restrictions on animal testing.

Certain laws and regulations require us to test our product candidates on animals before initiating clinical studies in humans. Animal testing activities have been the subject of controversy and adverse publicity. Animal rights groups and other organizations and individuals have attempted to stop animal testing activities by pressing for legislation and regulation in these areas and by disrupting these activities through protests and other means. To the extent the activities of these groups are successful, our research and development activities may be interrupted, delayed or become more expensive.

Our internal computer systems, or those used by our third-party research institution collaborators, Contract Researchers (“CROs”) or other contractors or consultants, may fail or suffer security breaches.

Despite the implementation of security measures, our internal computer systems and those of our CROs and other contractors and consultants may be vulnerable to damage from computer viruses and unauthorized access. Although to our knowledge we have not experienced any such material system failure or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our development programs and our business operations. For example, the loss of clinical trial data from completed, ongoing or future clinical trials could result in delays in our regulatory approval efforts and

significantly increase our costs to recover or reproduce the data. Likewise, we rely on our third-party research institution collaborators for research and development of our product candidates and other third parties for the manufacture of our product candidates and to conduct clinical trials, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or systems, or inappropriate disclosure of confidential or proprietary information or personal data of our employees, partners and study subjects, we could incur liability and the further development and commercialization of our product candidates could be delayed.

A breakdown or breach of our information technology systems and cyber security efforts could subject us to liability, reputational damage or interrupt the operation of our business.

We are increasingly dependent upon technology systems and data. Our computer systems continue to increase in multitude and complexity due to the growth in our business, making them potentially vulnerable to breakdown, malicious intrusion and random attack. Likewise, data privacy or security breaches by individuals authorized to access our technology systems or others may pose a risk that sensitive data, including intellectual property, trade secrets or personal information belonging to us, our patients or other business partners, may be exposed to unauthorized persons or to the public. Cyber-attacks are increasing in their frequency, sophistication and intensity, and are becoming increasingly difficult to detect. They are often carried out by motivated, well-resourced, skilled and persistent actors including nation states, organized crime groups, “hacktivists” and employees or contractors acting with malicious intent. Cyber-attacks could include the deployment of harmful malware and key loggers, ransomware, a denial-of-service attack, a malicious website, the use of social engineering and other means to affect the confidentiality, integrity and availability of our technology systems and data. Our key business partners face similar risks and any security breach of their systems could adversely affect our security posture. While we continue to build and improve our systems and infrastructure and believe we have taken appropriate security measures to reduce these risks to our data and information technology systems, there can be no assurance that our efforts will prevent, detect or appropriately respond to breakdowns or breaches in our systems that could adversely affect our business and operations and/or result in the loss of critical or sensitive information, which could result in financial, legal, business or reputational harm to us. In addition, our liability insurance may not be sufficient in type or amount to cover us against claims related to security breaches, cyber-attacks and other related breaches. We may be required to expend significant capital and other resources to protect against and respond to any attempted or existing cybersecurity incidents. In addition, our remediation efforts may not be successful.

Changes in laws or regulations relating to data privacy and security, or any actual or perceived failure by us to comply with such laws and regulations, or contractual or other obligations relating to data privacy and security, could have a material adverse effect on our reputation, results of operations, financial condition and cash flows.

We are, and may increasingly become, subject to various laws and regulations, as well as contractual obligations, relating to data privacy and security in the jurisdictions in which we operate. The regulatory environment related to data privacy and security is increasingly rigorous, with new and constantly changing requirements applicable to our business, and enforcement practices are likely to remain uncertain for the foreseeable future. These laws and regulations may be interpreted and applied differently over time and from jurisdiction to jurisdiction in a manner that could have a material adverse effect on our results of operations, financial condition and cash flows. There are numerous U.S. federal and state laws and regulations related to the privacy and security of personal information. Regulations promulgated pursuant to the U.S. Health Insurance Portability and Accountability Act of 1996, or HIPAA, establish privacy and security standards that limit the use and disclosure of protected health information and require the implementation of administrative, physical and technological safeguards to protect the privacy of protected health information and ensure the confidentiality, integrity and availability of electronic protected health information. Determining whether protected health information has been handled in compliance with applicable privacy standards and our contractual obligations can be complex and may be subject to changing interpretation. Internationally, laws, regulations and standards in many jurisdictions apply broadly to the collection, use, retention, security, disclosure, transfer and other processing of personal information. For example, the E.U. General Data Protection Regulation, or the GDPR, which became effective in May 2018, greatly increased the European Commission’s jurisdictional reach of its laws and adds a broad array of requirements for handling personal data. European Union member states are tasked under the GDPR to enact, and have enacted, certain implementing legislation that adds to and/or further interprets the GDPR requirements and potentially extends our obligations and potential liability for failing to meet such obligations. The GDPR, together with national legislation, regulations and guidelines of the European Union member states, the United Kingdom and Switzerland governing the processing of personal data, impose strict obligations and restrictions on the ability to collect, use, retain, protect, disclose, transfer and otherwise process personal data. In particular, the GDPR includes obligations and restrictions concerning the consent and

rights of individuals to whom the personal data relates, the transfer of personal data out of the European Economic Area, security breach notifications and the security and confidentiality of personal data. The GDPR authorizes fines for certain violations of up to 4% of global annual revenue or €20 million, whichever is greater.

All of these evolving compliance and operational requirements impose significant costs, which are likely to increase over time. In addition, such requirements may require us to modify our data processing practices and policies, distract management or divert resources from other initiatives and projects. If we are unable to properly protect the privacy and security of personal information, including protected health information, we could be found to have breached our contracts. In addition, any failure or perceived failure by us to comply with any applicable federal, state or similar foreign laws and regulations relating to data privacy and security could result in damage to our reputation and our relationship with our customers, as well as proceedings or litigation by governmental agencies or customers, including class action privacy litigation in certain jurisdictions, which would subject us to significant fines, sanctions, awards, penalties or judgments, all of which could have a material adverse effect on business, our results of operations, financial condition and prospects.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our operations, and those of our third-party research institution collaborators, CROs, contract manufacturers ("CMOs"), suppliers, and other contractors and consultants, could be subject to earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics, and other natural or man-made disasters or business interruptions, for which we are partly uninsured. In addition, we rely on our third-party research institution collaborators for conducting research and development of our product candidates, and they may be affected by government shutdowns or withdrawn funding. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses. We rely on third party manufacturers to produce and process our product candidates. Our ability to obtain clinical supplies of our product candidates could be disrupted if the operations of these suppliers are affected by a man-made or natural disaster or other business interruption.

All of our operations including our corporate headquarters are located in Ecublens, near Lausanne, Canton of Vaud, Switzerland. Damage or extended periods of interruption to our corporate, development or research facilities due to fire, natural disaster, power loss, communications failure, unauthorized entry or other events could cause us to cease or delay development of some or all of our product candidates. Although we maintain property damage and business interruption insurance coverage on these facilities, our insurance might not cover all losses under such circumstances and our business may be seriously harmed by such delays and interruption.

We have never commercialized a product candidate before and may lack the necessary expertise, personnel and resources to successfully commercialize our products on our own or together with suitable partners.

We have never commercialized a product candidate, and we currently have no sales force, marketing or distribution capabilities. To achieve commercial success for our product candidates, we will have to develop our own sales, marketing and supply organization or outsource these activities to a third party.

Factors that may affect our ability to commercialize our product candidates on our own include recruiting and retaining adequate numbers of effective sales and marketing personnel, obtaining access to or persuading adequate numbers of physicians to prescribe our drug candidates and other unforeseen costs associated with creating an independent sales and marketing organization. Developing a sales and marketing organization requires significant investment, is time-consuming and could delay the launch of our product candidates. We may not be able to build an effective sales and marketing organization. If we are unable to build our own distribution and marketing capabilities or to find suitable partners for the commercialization of our product candidates, we may not generate revenues from them or be able to reach or sustain profitability.

Risks Related to Our Relationships with Third Parties

If we fail to maintain our current strategic relationships with Genentech, Eli Lilly and Company ("Lilly"), Janssen Pharmaceuticals, Inc. ("Janssen"), Life Molecular Imaging SA ("Life Molecular") (formerly Piramal Imaging SA) and other of our current or future strategic partners, our business, commercialization prospects and financial condition may be materially adversely affected.

We have two partnerships with Genentech. In 2006, we granted Genentech an exclusive, worldwide license for crenezumab. In 2012, we entered into a second partnership to commercialize anti-Tau antibodies for use as

immunotherapies. In December 2018, we signed a license agreement with Lilly to research and develop Morphomer Tau small molecules for the treatment of Alzheimer's disease and other neurodegenerative diseases. This collaboration commenced in Q1 2019. We partner with Janssen to develop and commercialize therapeutic anti-Tau vaccines for the treatment of AD and potentially other Tauopathies. We also have a diagnostic partnership with Life Molecular for compounds from our Morphomer chemical library that binds pathological Tau for use as a positron emission tomography, or PET, tracer. Our collaboration partners each have the right to terminate their agreements with us for any reason upon providing us with a certain notice period. If Genentech, Lilly, Janssen, Life Molecular or other of our current or future strategic partners terminates its agreement with us at any time, it could delay or prevent development of our product candidates and materially harm our business, financial condition, commercialization prospects and results of operations.

Good relationships with Genentech, Lilly, Janssen, Life Molecular and other of our current or future strategic partners are important for our business prospects. If our relationships with Genentech, Lilly, Janssen, Life Molecular or other of our current or future strategic partners were to deteriorate substantially or Genentech, Lilly, Janssen, Life Molecular or other of our current or future strategic partners were to challenge our use of their intellectual property or our calculations of the payments we are owed under our agreements, our business, financial condition, commercialization prospects and results of operations could be materially adversely affected.

Lastly, our collaboration agreements with Genentech, Lilly, Janssen and Life Molecular provide each partner with control over, and responsibility for, the clinical development process, including obtaining regulatory and marketing approvals, manufacturing costs and sales and marketing costs. Our other existing collaboration agreements provide our collaboration partners with similar control over the clinical development process and future collaboration agreements may also relinquish development control to our partners. Genentech or our other current or future collaboration partners may and do separately pursue competing products, therapeutic approaches or technologies to develop treatments for the diseases targeted by us or our collaborative efforts. Even if our partners continue their contributions to the collaborative agreements to which we are a party, they may nevertheless determine not to actively pursue the development or commercialization of any resulting products. Our partners may also fail to perform their obligations under the collaboration agreements or may be slow in performing their obligations. Any of these circumstances could result in a material adverse impact on our business, financial condition, commercialization prospects or results of operations.

We may seek to form additional strategic alliances in the future with respect to our product candidates, and if we do not realize the benefits of such alliances, our business, financial condition, commercialization prospects and results of operations may be materially adversely affected.

Our product development programs and the potential commercialization of our product candidates will require substantial additional liquidity to fund expenses and may require expertise, such as sales and marketing expertise, which we do not currently possess. Therefore, in addition to our relationships with Genentech, Lilly, Janssen and Life Molecular, we may decide to enter into strategic alliances, or create joint ventures or collaborations with pharmaceutical or biopharmaceutical companies for the further development and potential commercialization of those and other of our product candidates.

We face significant competition in seeking appropriate collaborators. Collaborations are complex and time-consuming to negotiate, document and manage. Any delays in entering into new strategic partnership agreements related to our product candidates could delay the development and commercialization of our product candidates and reduce their competitiveness even if they reach the market. We may also be restricted under existing and future collaboration agreements from entering into strategic partnerships or collaboration agreements on certain terms with other potential collaborators. We may not be able to negotiate collaborations on acceptable terms, or at all, for any of our existing or future product candidates and programs because the potential partner may consider that our research and development pipeline is insufficiently developed to justify a collaborative effort, or that our product candidates and programs do not have the requisite potential to demonstrate safety and efficacy in the target population. If we are unsuccessful in establishing and maintaining a collaboration with respect to a particular product candidate, we may have to curtail the development of that product candidate, reduce the scope of or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of our sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense for which we have not budgeted. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we will not be able to bring our product candidates to market and generate product revenue. Even if we are successful in establishing a new strategic partnership or entering into a collaboration agreement, we cannot be certain that, following such a strategic

transaction or license, we will be able to progress the development and commercialization of the applicable product candidates as envisaged, or that we will achieve the revenues that would justify such transaction, and we could be subject to the following risks, each of which may materially harm our business, commercialization prospects and financial condition:

- we may not be able to control the amount and timing of resources that the collaboration partner devotes to the product development program;
- the collaboration partner may experience financial difficulties;
- we may be required to grant or otherwise relinquish important rights such as marketing, distribution and intellectual property rights;
- a collaboration partner could move forward with a competing product developed either independently or in collaboration with third parties, including our competitors; or
- business combinations or significant changes in a collaboration partner's business strategy may adversely affect our willingness to continue any arrangement.

We rely on third parties to conduct our nonclinical and clinical studies and perform other tasks for us. If these third parties do not successfully carry out their contractual duties, meet expected deadlines, or comply with regulatory requirements, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business could be substantially harmed.

We have relied upon and plan to continue to rely upon third-party clinical research organizations, or CROs, to monitor and manage data for our ongoing nonclinical and clinical programs, including the clinical studies of our product candidates. We rely on these parties for execution of our nonclinical and clinical studies and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards and our reliance on the CROs does not relieve us of our regulatory responsibilities. We and our CROs and other vendors are required to comply with current good manufacturing practices, or cGMP, current good clinical practice, or cGCP, and Good Laboratory Practice, or GLP, which are regulations and guidelines enforced by the FDA, the Competent Authorities of the Member States of the European Union and comparable foreign regulatory authorities for our product candidates in nonclinical and clinical development (where applicable). Regulatory authorities enforce these regulations through periodic inspections of study sponsors, principal investigators, study sites and other contractors. If we or any of our CROs or vendors fail to comply with applicable regulations, the data generated in our nonclinical and clinical studies may be deemed unreliable and the EMA, FDA, other regulatory authorities may require us to perform additional nonclinical and clinical studies before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that all of our clinical studies comply with cGCP regulations. In addition, our clinical studies must be conducted with products produced under cGMP regulations. Our failure to comply with these regulations may require us to repeat clinical studies, which would delay the regulatory approval process.

If any of our relationships with these third-party CROs terminates, we may not be able to enter into arrangements with alternative CROs or do so on commercially reasonable terms. In addition, our CROs are not our employees, and except for remedies available to us under our agreements with such CROs, we cannot control whether or not they devote sufficient time and resources to our on-going nonclinical and clinical programs. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our protocols, regulatory requirements, or for other reasons, our clinical studies may be extended, delayed, or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. CROs may also generate higher costs than anticipated. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase, and our ability to generate revenue could be delayed.

Switching or adding additional CROs involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects.

We currently rely on third-party suppliers and other third parties for production of our product candidates and our dependence on these third parties may impair the advancement of our research and development programs and the development of our product candidates.

We currently rely on and expect to continue to rely on third parties, for the manufacturing and supply of chemical compounds for the clinical studies of our current and future product candidates. For the foreseeable future, we expect to continue to rely on such third parties for the manufacture of any of our product candidates on a clinical or commercial scale, if any of our product candidates receives regulatory approval. Reliance on third-party providers may expose us to different risks than if we were to manufacture product candidates ourselves. The facilities used by our contract manufacturers to manufacture our product candidates must be approved by the FDA or other regulatory authorities pursuant to inspections that will be conducted after we submit our NDA or comparable marketing application to the FDA or other regulatory authority. We do not have control over a supplier's or manufacturer's compliance with these laws, regulations and applicable cGMP standards and other laws and regulations, such as those related to environmental health and safety matters. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or others, they will not be able to secure and/or maintain regulatory approval for their manufacturing facilities. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If we are compelled or we wish to find alternative manufacturing facilities, this could significantly impact our ability to develop, obtain regulatory approval for or market our product candidates. Any failure to achieve and maintain compliance with these laws, regulations and standards could subject us to the risk that we may have to suspend the manufacturing of our product candidates or that obtained approvals could be revoked, which would adversely affect our business and reputation.

Third-party providers may breach agreements they have with us because of factors beyond our control. Contract manufacturers often encounter difficulties involving production yields, quality control and quality assurance, as well as shortages of qualified personnel. They may also terminate or refuse to renew their agreements because of their own financial difficulties or business priorities, potentially at a time that is costly or otherwise inconvenient for us. If we are unable to find adequate replacement or another acceptable solution in time, our clinical studies could be delayed or our commercial activities could be harmed.

In addition, the fact that we are dependent on our suppliers and other third parties for the manufacture, storage and distribution of our product candidates means that we are subject to the risk that our product candidates and, if approved, commercial products may have manufacturing defects that we have limited ability to prevent or control. The sale of products containing such defects could result in recalls or regulatory enforcement action that could adversely affect our business, financial condition and results of operations.

Growth in the costs and expenses of components or raw materials may also adversely influence our business, financial condition and results of operations. Supply sources could be interrupted from time to time and, if interrupted, we cannot be certain that supplies could be resumed (whether in part or in whole) within a reasonable timeframe and at an acceptable cost or at all. Our current and anticipated future dependence upon others for the manufacturing of our current and future product candidates may adversely affect our future profit margins and our, or our collaborations partners' ability to commercialize any products that receive marketing approval on a timely and competitive basis.

Our collaboration arrangements with our strategic partners may make us an attractive target for potential acquisitions under certain circumstances.

Under certain circumstances, due to the structure of our collaboration arrangements with our strategic partners, our strategic partners may prefer to acquire us rather than paying the milestone payments or royalties under the collaboration arrangements, which may bring additional uncertainties to our business development and prospects. For example, under our collaboration arrangements with Genentech, Lilly and Janssen, we may become entitled to substantial milestone payments and royalties. As a result, rather than paying the milestone payments or royalties, Genentech, Lilly or Janssen, or one of their affiliates including Roche or Johnson & Johnson, may choose to acquire us.

Risks Related to Intellectual Property

We may not have sufficient patent terms to effectively protect our products and business.

Patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after it is filed. Although various extensions or adjustments may be available, such as adjustments based on certain delays caused by the United States Patent and Trademark Office, or the USPTO, the life of a patent, and the protection it affords, is limited. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned, co-owned and licensed patent portfolios may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours or otherwise provide us with a competitive advantage. Even if patents covering our product candidates are obtained and unchallenged, once the patent life has expired for a product, we may be open to competition from generic medications.

While patent term extensions under the Hatch-Waxman Act, in the United States and under supplementary protection certificates, or SPCs, in Europe may be available to extend the patent exclusivity term for our products, we cannot provide any assurances that any such patent term extension will be obtained and, if so, for how long. The Hatch-Waxman Act permits a patent extension term of up to five years as compensation for patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, only one patent may be extended and only those claims covering the approved drug, a method for using it or a method for manufacturing it may be extended. However, we may not be granted any extension because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. It is not possible to base an SPC in Europe on the European patent if the patent expires before the marketing authorization of the clinical product, protected by the European patent, is obtained. Since the “product” (active ingredient(s)) must be “protected by a basic patent in force,” only a granted patent that is in force, and remains in force until it reaches the end of its full term, can serve as a “basic patent” upon which an SPC can be based. Therefore, expired patents and pending patent applications cannot serve as the basis for an SPC. Given the relatively long clinical development timelines of biologicals and new chemical entities for therapeutic purpose, we may not be granted any patent extensions as we might fail to apply for the extensions prior to expiration of relevant patents. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or the term of any such extension is less than we request, such result could have a material adverse effect on our business.

We or our licensing or collaboration partners may become subject to intellectual property-related litigation or other proceedings to protect or enforce our patents or the patents of our licensors or collaborators, any of which could be expensive, time consuming, and unsuccessful, and may ultimately result in our loss of ownership of intellectual property.

Competitors may infringe our patents or the patents of our licensors or collaborators. To counter such infringement, we may be required to file infringement claims against those competitors, which can be expensive and time-consuming. If we or one of our licensing or collaboration partners were to initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim that the patent covering our product candidate is invalid or unenforceable or that the defendant’s products do not infringe our patents, or that we infringe the defendant’s patents. In patent litigation in the United States, defendant counterclaims alleging invalidity, unenforceability and non-infringement are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, obviousness-type double patenting, lack of written description, or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. In addition, third parties may raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, post grant review, *inter partes* review, interference and derivation proceedings as well as equivalent proceedings in foreign jurisdictions, such as opposition proceedings in Europe. The outcome following legal assertions of invalidity and unenforceability is unpredictable. Such proceedings or patent litigations could result in the revocation or cancellation of or amendment to our patents in such a way that they no longer cover our product candidates or otherwise provide any competitive advantage. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which the patent examiner and we or our licensing or collaboration partners were unaware during prosecution. A court may also refuse to stop a third party from using the technology in question on the grounds that our patents do not cover that technology. An adverse result in any proceeding could put one or more of our patents at risk of being invalidated or interpreted narrowly, which could have a material adverse effect on our business and financial condition.

Interference proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our licensors or collaborators. An unfavorable outcome could require us or our licensing or collaboration partners to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be materially harmed if the prevailing party does not offer us or our licensing or collaboration partners a license on commercially reasonable terms or at all. If we or our licensing or collaboration partners are unsuccessful in any interference proceedings, we may lose our ownership of intellectual property or our patents may be narrowed or invalidated. There can be no assurance as to the outcome of the interference and opposition proceedings, and any of the foregoing could result in a material adverse effect on our business, financial condition, results of operations or prospects.

Our defense of litigation, interference proceedings or other intellectual property-related proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees from their normal responsibilities. Such litigation or proceedings could substantially increase our operating losses and could substantially reduce the funds necessary to continue our clinical studies, continue our research programs, license necessary technology from third parties, or enter into development partnerships that would help us bring our product candidates to market. We may not be able to prevent, alone or with our licensing or collaboration partners, misappropriation of our intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions, decisions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common shares.

If we or our licensing or collaboration partners are unable to obtain and maintain effective patent rights for our technologies, product candidates or any future product candidates, or if the scope of the patent rights obtained is not sufficiently broad, our competitors could develop and commercialize products and technology similar or identical to ours, and our, or our collaboration partners' ability to successfully commercialize our products and technology may be adversely affected.

We rely upon a combination of patents, trade secret protection, and confidentiality agreements to protect the intellectual property related to our technologies and product candidates. Our success depends in large part on our and our licensing or collaboration partners' ability to obtain and maintain patent and other intellectual property protection in the United States, in the European Union and in other countries with respect to our proprietary technologies and product candidates. In particular, Genentech, Lilly, Janssen or our other licensing or collaboration partners may be dependent on a license with a third party for the development and future commercialization of our product candidates. If such license is terminated, Genentech, Lilly, Janssen or other licensing or collaboration partners may be required to cease development and commercialization of crenezumab or our other product candidates, any of which could have a material adverse effect on our business, financial condition, results of operations or prospects.

We have sought to protect our proprietary position by filing patent applications in the United States and abroad related to any of our novel technologies and products that are important to our business. This process is expensive, time consuming, and complex, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost, in a timely manner or in all jurisdictions. It is also possible that we will fail to identify patentable aspects of our or our licensing or collaboration partners' research and development output before it is too late to obtain patent protection. Moreover, in some circumstances, we do not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license to or from third parties. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain and involves complex legal and factual questions for which legal principles remain unsolved. As a result, the inventorship, issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. The pending or future patent applications that we own, co-own or in-license may fail to issue, fail to result in issued patents with claims that cover our product candidates in the United States or in other foreign countries, or fail to effectively prevent others from commercializing competitive technologies and product candidates. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection.

We may not be aware of all third-party intellectual property rights potentially relating to our technologies or product candidates. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions remain confidential for a period of time after filing, and some remain so until issued. Therefore, we cannot be certain that we were the first to file any patent application related to our product candidates or technologies, or whether we were the first to make the inventions claimed in our owned or co-owned patents or pending patent applications, nor can we know whether those from whom we license patents were the first to make the inventions claimed or were the first to file.

There is no assurance that all potentially relevant prior art relating to our patents and patent applications has been found, which can invalidate a patent or prevent a patent from issuing from a pending patent application. Even if patents do successfully issue, and even if such patents cover our product candidates, third parties may challenge their validity, enforceability, or scope, which may result in such patents being narrowed, found unenforceable or invalidated, which could allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our or our collaboration partners' inability to manufacture or commercialize products without infringing third party patent rights. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property, provide exclusivity for our product candidates, prevent others from designing around our claims or provide us with a competitive advantage. Any of these outcomes could impair our ability to prevent competition from third parties, which may have a material adverse effect on our business.

We may be subject to claims challenging the inventorship of our patents and other intellectual property.

We may be subject to claims that former employees, collaborators or other third parties have an interest in our patents or other intellectual property as an inventor or co-inventor. For example, we may have inventorship disputes arise from conflicting obligations of consultants, CROs, CMOs or others who are involved in developing our product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship or our ownership of our patents or other intellectual property. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or the right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Patent policy and rule changes could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, thereby impairing our ability to protect our technologies and products.

Changes in either the patent laws or interpretation of the patent laws in the United States could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. Assuming the other requirements for patentability are met, in the United States prior to March 15, 2013, the first to make the claimed invention is entitled to the patent, while outside the United States, the first to file a patent application is entitled to the patent. After March 15, 2013, under the Leahy-Smith America Invents Act, or the Leahy-Smith Act, enacted on September 16, 2011, the United States has moved to a first-to-file system. Under a first-to-file system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to the patent on an invention regardless of whether a third party was the first to invent the invention. The Leahy-Smith Act also includes a number of significant changes that affect the way patent applications will be prosecuted and may also affect patent litigation. These include allowing third-party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by the USPTO administered post grant proceedings, including reexamination proceedings, *inter partes* review, post-grant review and derivation proceedings. The effects of these changes on the operation of our business are currently unclear as, among other reasons, the USPTO must still implement various regulations and courts must interpret these changes. However, the Leahy-Smith Act and its implementation increases the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, the patent positions of companies in the development and commercialization of biologics and pharmaceuticals are particularly uncertain. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. This combination of events has created uncertainty with respect to the validity and enforceability of patents, once obtained. Depending on future actions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could have a material

adverse effect on our existing patent portfolio and our ability to protect and enforce our intellectual property in the future.

If we are unable to maintain effective proprietary rights for our technologies, product candidates or any future product candidates, we may not be able to compete effectively in our markets.

In addition to the protection afforded by patents, we rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or that we elect not to patent, processes for which patents are difficult to enforce and any other elements of our product candidate discovery and development processes that involve proprietary know-how, information or technology that is not covered by patents. However, trade secrets can be difficult to protect and some courts inside and outside the United States are less willing or unwilling to protect trade secrets. For instance, the European Union has introduced a new Directive on trade secrets increasing the standards for protection. Because we rely on our advisors, employees and third-party contractors and consultants to research and develop and to manufacture our product candidates, we must, at times, share our intellectual property with them. We seek to protect our intellectual property and other proprietary technology in part by entering into confidentiality agreements and master service agreements, if applicable, material transfer agreements, consulting agreements or other similar agreements with our advisors, employees, contractors, consultants, licensing and collaboration partners, and other third parties with confidentiality provisions. These agreements typically limit the rights of these third parties to use or disclose our confidential information, including our intellectual property and trade secrets. These agreements also typically restrict the ability of third parties to publish data potentially relating to our intellectual property, although our agreements may contain certain limited publication rights. For example, any academic institution that we may collaborate with in the future may expect to be granted rights to publish data arising out of such collaboration, provided that we may have the right to be notified in advance and given the opportunity to delay publication for a limited time period in order for us to secure patent protection of intellectual property rights arising from the collaboration, in addition to the opportunity to remove confidential or trade secret information from any such publication. We also conduct joint research and development programs that may require us to share intellectual property under the terms of our research and development or similar agreements. However, we cannot guarantee that we have entered into such agreements with each party that may have or have had access to our trade secrets or other confidential information or proprietary technology and processes or that such agreements will not be breached or that our trade secrets or other confidential information will not otherwise be disclosed. Despite the contractual provisions employed when working with these advisors, employees and third party contractors and consultants, the need to share intellectual property and other confidential information increases the risk that such confidential information becomes known by our competitors, is inadvertently incorporated into the product development of others or is disclosed or used in violation of these agreements.

We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems. Despite our efforts to protect our intellectual property, our competitors may discover our trade secrets through breach of our agreements by third parties, where we may not have adequate remedies for any breach, independent development or publication of information by any of our licensing or collaboration partners. Additionally, if the steps taken to maintain our trade secrets are deemed inadequate, we may have insufficient recourse against third parties for misappropriating such trade secrets. Misappropriation or unauthorized disclosure of our trade secrets could impair our competitive position and may have a material adverse effect on our business. Moreover, if any of our trade secrets were to be lawfully obtained or independently developed by a competitor or other third party, we would have no right to prevent such competitor or other third party from using that technology or information to compete with us. A competitor’s or other third party’s discovery of our intellectual property would impair our competitive position and have a material adverse effect on our business.

Further, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent material disclosure of the intellectual property related to our technologies to third parties, we will not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, financial condition and results of operations.

Despite confidentiality clauses within our employment agreements, we cannot ensure that departing employees will not breach any post-termination commitments in such agreements by allowing others to access our trade secrets.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other government fees on a patent and patent application are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent and patent application. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply with these requirements and we are also dependent on our licensors or collaboration partners to take the necessary action to comply with these requirements with respect to certain of our intellectual property. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In such an event, our competitors might be able to enter the market, which would have a material adverse effect on our business.

The patent protection and patent prosecution for some of our product candidates is dependent on third parties.

While we normally seek to obtain the right to control prosecution, maintenance and enforcement of the patents relating to our product candidates, there may be times when the filing and prosecution activities for patents relating to our product candidates are controlled by our licensors or collaboration partners. If any of our current or future licensing or collaboration partners fail to prosecute, maintain and enforce such patents and patent applications in a manner consistent with the best interests of our business, including by payment of all applicable fees for patents covering our product candidates, we could lose our rights to the intellectual property or our exclusivity with respect to those rights, our or our collaboration partners' ability to develop and commercialize those product candidates may be adversely affected and we may not be able to prevent competitors from making, using, and selling competing products. In addition, even where we have the right to control patent prosecution of patents and patent applications we have licensed to and from third parties, we may still be adversely affected or prejudiced by actions or inactions of our licensees, our licensors and their counsel that took place prior to the date upon which we assumed control over patent prosecution.

Additionally, we may be adversely affected or prejudiced by actions or inactions of our external and internal patent counsels working solely on our projects or our joint patent counsels representing us and our collaboration partners.

If we fail to comply with the obligations in our intellectual property agreements, including those under which we license intellectual property and other rights to or from third parties, or otherwise experience disruptions to our business relationships with our licensees, our licensors and partners, we could lose intellectual property rights that are important to our business.

We are a party to a number of intellectual property license and co-ownership agreements and research and development collaborations that are important to our business and expect to enter into additional such agreements in the future. Under certain circumstances, the royalties payable to us under these agreements are subject to certain reductions, which may have a materially adverse effect on our business, financial condition, results of operations and prospects. In addition, our existing agreements impose, and we expect that future agreements will impose, various diligence, commercialization, milestone payment, royalty and other obligations on us. If we fail to comply with our obligations under these agreements, we may be required to make certain payments to the licensor, we may lose the exclusivity of our license, or the licensor may have the right to terminate the license, in which event we would not be able to develop or market products covered by the license.

Licensing of intellectual property is of critical importance to our business and involves complex legal, business, and scientific issues. Disputes may arise regarding intellectual property subject to a licensing or co-ownership agreement, including:

- the scope of rights granted under the agreement and other interpretation-related issues;

- the extent to which our technology and processes infringe or otherwise violate intellectual property of the licensor, the licensee or partner that is not subject to the agreement;

- the sublicensing of patent and other rights;
- the diligence, development and commercialization obligations under the agreement and what activities satisfy those obligations;
- the ownership of inventions and know-how resulting from the joint or mutual creation or use of intellectual property by our licensors or collaboration partners and us; and
- the priority of invention in patented technology.

If disputes over intellectual property and other rights that we own, have licensed or co-own prevent or impair our ability to maintain our current licensing or exclusivity arrangements on acceptable terms, we or our collaboration partners may be unable to successfully develop and commercialize the affected product candidates.

In addition, certain provisions in the agreements under which we currently license intellectual property or technology to and from third parties may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, increase what we believe to be our financial or other obligations under the relevant agreement, or decrease the third party's financial or other obligations under the relevant agreement, any of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may not be successful in obtaining or maintaining necessary rights to our product candidates through acquisitions and in-licenses.

Our programs may in the future require the use of proprietary rights held by third parties, the growth of our business will likely depend in part on our ability to acquire, in-license, maintain or use these proprietary rights. In addition, our product candidates may require specific processes and/or formulations to work effectively and efficiently and the rights to these processes and/or formulations may be held by others. We may be unable to acquire or in-license any compositions, methods of use, processes, or other third-party intellectual property rights from third parties that we identify as necessary for our product candidates. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, cash resources, and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment.

For example, we sometimes collaborate with U.S. and foreign academic institutions to accelerate our preclinical research or development under written agreements with these institutions. Typically, these institutions provide us with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Regardless of such option, we may be unable to negotiate a license within the specified timeframe or under terms that are acceptable to us. If we are unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking our ability to pursue our applicable product candidate or program.

If we are unable to successfully obtain a license to third-party intellectual property rights necessary for the development of a product candidate or program, we may have to abandon development of that product candidate or program and our business and financial condition could suffer.

Third-party claims of intellectual property infringement may expose us to substantial liability or prevent or delay our or our collaboration partners' development and commercialization efforts.

Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing product candidates. For example, we are aware of third party patents or patent applications that may be construed to cover one or more of our product candidates. If these patents are asserted against us or our licensing or collaboration partners and either we or our licensing or collaboration partners are found to infringe any of these patents, and are unsuccessful in demonstrating that such patents are invalid or unenforceable, then we and our licensing or collaboration partners could be required to

pay substantial monetary damages or cease further development or commercialization of one or more of our product candidates. There may also be other third-party patents or patent applications with claims to materials, formulations, methods of manufacture, or methods of treatment related to the use or manufacture of our product candidates and technology. Although we generally conduct a freedom to operate search and review with respect to our product candidates, we cannot guarantee that our search and review is complete and thorough, nor can we be sure that we have identified each and every patent and pending application in the United States and abroad that is relevant or necessary to the manufacturing or commercialization of our product candidates or use of our technology. Because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that our product candidates may infringe. In addition, third parties may file and obtain additional patents in the future and claim that use of our technologies infringes upon these patents.

Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future, regardless of merit. Even if we believe such claims are without merit, a court of competent jurisdiction could hold that these third party patents are valid, enforceable and infringed, which could materially and adversely affect our or our collaboration partners' ability to commercialize our product candidates or technologies covered by the asserted third party patents.

Parties making claims against us may also obtain injunctive or other equitable relief, which could effectively block our or our collaboration partners' ability to further develop and commercialize one or more of our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of management and employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties, redesign our infringing products or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure. Any of the foregoing could have a material and adverse effect on our business, financial conditions, results of operations and prospects.

In addition, claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business, financial condition, results of operations and prospects.

There could also be public announcements of the results of hearings, motions, decisions, or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common shares.

Some of our competitors may have substantially greater resources and more mature and developed intellectual property portfolios than we do and may be able to sustain the costs of complex intellectual property litigation to a greater degree and for longer periods of time than we could. In addition, patent holding companies that focus solely on extracting royalties and settlements by enforcing patent rights may target us. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may be subject to claims of infringement of the patent rights of third parties. The uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

We may be subject to claims that our employees, consultants, or independent contractors have wrongfully used or disclosed confidential information of third parties or that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

We employ and utilize the services of individuals who were previously employed or provided services to universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants, and independent contractors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or our employees, consultants, or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of any of our employee's, consultant's or independent contractor's former employer or other third parties. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel, which could adversely impact our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

In addition, while it is our policy to require our employees, consultants and independent contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as the laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. In the ordinary course of prosecution and maintenance activities, we determine whether to seek patent protection outside the U.S. and in which countries. This also applies to patents we have acquired or in-licensed from third parties. In some cases, we, or our predecessors in interest or licensors of patents within our portfolio, have sought patent protection in a limited number of countries for patents covering our product candidates. Competitors may use our technologies and products in jurisdictions where we have not obtained or are unable to adequately enforce patent protection to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing, which would have a material adverse effect on our business and financial positions.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement, misappropriation or other violations of our intellectual property and proprietary rights. Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our names and brands may be misappropriated by third parties and our business may be adversely affected

We have filed trademark applications seeking protection for our corporate name, logo, Nasdaq Global Market symbol and selected names of our technology platforms in selected geographies. There is no guarantee that our trademarks applications will be approved by the respective authorities at all or that we will not be required to narrow the scope of protection in certain or all geographies. Our applications may face opposition from third parties potentially resulting in the lack of protection or narrower protection. Our trademarks or trade names may be challenged, infringed, circumvented, declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors or other third parties may adopt trade names, domain names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of trademarks or trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks and domain names, may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our business, financial condition, results of operations and growth prospects.

Risks Related to Our Financial Condition and Capital Requirements

We are a clinical-stage company and have a history of operating losses. We anticipate that we will continue to incur losses for the foreseeable future.

We are a clinical-stage biopharmaceutical company. Since 2003, while we have received upfront and milestone payments from our collaboration partners and certain other contract revenue, we have also incurred significant operating losses. We earned net income (defined as net income attributable to owners of the company) of CHF 45.4 million for the year ended December 31, 2019. In addition, we had accumulated losses of CHF 75.5 million as of December 31, 2019.

Our losses have resulted principally from research and development expenses and from general business and administrative expenses. We expect to continue to incur significant operating losses in the future as we continue our research and development efforts for our current and future product candidates and seek to obtain regulatory approval and commercialization of such product candidates.

To date, the Company has financed its liquidity requirements primarily from its public offerings, share issuances and revenues from license and collaboration agreements. We have no products approved for commercialization and have never generated any revenues from product sales. Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. It may be several years, if ever, before we or our collaboration partners complete pivotal clinical studies and have a product candidate approved for commercialization and we begin to generate revenue or royalties from product sales.

While we have generated revenues from upfront and milestone payments related to our collaboration agreements, we have never generated any revenue from product sales and may never be profitable.

While we have generated revenue from upfront and milestone payments related to our collaboration agreements, we have no products approved for commercialization and have never generated any revenue from product sales. Our ability to generate revenue and achieve profitability depends on our ability to successfully complete the development of, and obtain the marketing approvals necessary to commercialize, one or more of our product candidates. We do not anticipate generating revenue from product sales unless and until we or our collaboration partners obtain regulatory approval for, and commercialize, our product candidates. Our ability to generate future revenue from product sales depends heavily on our and our collaboration partners' success in many areas, including but not limited to:

- completing research and clinical development of our product candidates, including us or our collaboration partners, as the case may be, successfully completing a Phase 2 clinical study of semorinemab, a Phase 2 clinical study of ACI-24 for AD, a Phase 1b clinical study of ACI-24 for DS, a Phase 2 clinical study of crenezumab, a Phase 1b/2a clinical study of ACI-35, a Phase 1 study for Morphomer Tau and a Phase 2 for PI-2620 in AD;
- obtaining marketing approvals for our product candidates, including semorinemab, ACI-35, Morphomer Tau, ACI-24 for AD and for DS, crenezumab and PI-2620, for which we complete clinical studies;
- developing a sustainable and scalable manufacturing process for any approved product candidates and maintaining supply and manufacturing relationships with third parties that can conduct the process and provide adequate (in amount and quality) products to support clinical development and the market demand for our product candidates, if approved;
- launching and commercializing product candidates for which we obtain marketing approval, either directly or with a collaborator or distributor;
- obtaining market acceptance of our product candidates as viable treatment or diagnostic options;
- addressing any competing technological and market developments;
- identifying, assessing, acquiring and/or developing new product candidates;
- negotiating favorable terms in any collaboration, licensing, or other similar arrangements into which we may enter;

- maintaining, protecting, acquiring and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how; and

- attracting, hiring and retaining qualified personnel.

Because of the numerous risks and uncertainties with pharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. Our expenses could increase beyond expectations if we are required by the FDA, the EMA, or other regulatory agencies, domestic or foreign, to change our manufacturing processes, or to perform clinical, nonclinical, or other types of studies in addition to those that we currently anticipate. In cases where we are successful in obtaining regulatory approvals to market one or more of our product candidates, our revenue will be dependent, in part, upon the size of the markets in the territories for which we gain regulatory approval, the accepted price for the product, the ability to obtain coverage and reimbursement at any price, and whether we own the commercial rights for that territory. If the number of our addressable patients is not as significant as we estimate, the indication approved by regulatory authorities is narrower than we expect, or the treatment population is narrowed by competition, physician choice or treatment guidelines, we may not generate significant revenue from sales of such products, even if approved. Accordingly, we may not be profitable in the future from the sale of any approved products.

We or our collaboration partners may be unable to develop and commercialize any of our current or future product candidates and, even if we do, may not achieve profitability in the future. Even if we do achieve profitability in the future, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to be profitable in the future would decrease the value of our company and could impair our ability to raise capital, expand our business or continue our operations. A decline in the value of our company could cause you to lose all or part of your investment.

If we fail to obtain additional funding, we may delay, reduce or eliminate our product development programs or commercialization efforts.

We are currently advancing our product candidates through clinical development, either together with a collaboration partner (semorinemab, ACI-35, Morphomer Tau, crenezumab and PI-2620) or independently (ACI-24 for AD and for DS). We expect our research and development expenses to continue to increase in connection with our ongoing activities, particularly as we and/or our collaboration partners continue our ongoing studies and initiate new studies of semorinemab, ACI-35, Morphomer Tau, ACI-24 for AD and for DS, crenezumab and PI-2620 and initiate preclinical and clinical development of our other product candidates.

As of December 31, 2019, we had cash and cash equivalents of CHF 193.6 million and short-term financial assets of CHF 95.0 million resulting in liquidity of CHF 288.6 million. We currently believe that our existing capital resources, not including potential milestone payments, will be sufficient to meet our projected operating requirements through at least Q1 2024. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our capital resources sooner than we currently expect. In addition, changing circumstances may cause us to adjust our projected spending to amounts more than currently expected. We may also need to raise additional funds sooner than we anticipate due to various factors such as the scope and rate of progress of our development activities, regulatory approval outcomes and emergence of competing technologies among others.

We expect that we will require additional capital to commercialize certain of our product candidates. If we receive regulatory approval for our current and future product candidates, and if we have not already licensed such product candidate to a collaboration partner and choose to commercialize such product candidate independently, we expect to incur significant commercialization expenses related to product manufacturing, sales, marketing, distribution and establishing a regulatory structure, depending on where we choose to commercialize. Additional funds may not be available on a timely basis, on favorable terms, or at all, and such funds, if raised, may not be sufficient to enable us to continue to implement our long-term business strategy. If we are not able to raise capital when needed, we could be forced to delay, reduce or eliminate our product development programs or commercialization efforts.

Raising additional capital may cause dilution to our shareholders, restrict our operations or require us to relinquish rights to our intellectual property or future revenue streams.

Until such time, if ever, as we can generate substantial product royalty revenue, we expect to finance our liquidity needs through a combination of equity offerings, debt financings, grants and license and development agreements in connection with collaborations. We do not have any material committed external source of funds.

In the event we need to seek additional funds, we may raise additional capital through the sale of equity, convertible debt or other securities. In such an event, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a holder of our common shares. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or proposing dividends to our shareholders.

If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to grant or otherwise relinquish valuable rights to our intellectual property or future revenue streams.

Our ability to use tax loss carryforwards in Switzerland may be limited.

As of December 31, 2019, we reported tax loss carryforwards from financial years 2013 until 2019 for purposes of Swiss corporate income tax in the aggregate amount of CHF 64.1 million that could be available to offset future taxable income. If not used, these tax losses will expire seven years after the year in which they were incurred. Due to our limited income, there is a high risk that the tax loss carryforwards will expire partly or entirely and cannot be used to offset future taxable income thereafter for Swiss corporate income tax purposes.

Exchange rate fluctuations may materially affect our results of operations and financial condition.

Under our existing agreements, we receive and make a significant amount of payments in Swiss Franc, USD and Euro. As a result, changes and fluctuations in currency exchange rates between the Swiss Franc and other currencies, especially the USD and Euro could have a materially adverse effect on our operating results. Since our reporting currency is the Swiss Franc, financial line items are converted into Swiss Francs at the applicable exchange rates. We also expect that in the future, a significant portion of our revenues and expenses will be denominated in Swiss Franc, USD and Euro. Therefore, unfavorable developments in the value of the Swiss Franc as compared to the USD and Euro or any other currency could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to the Regulatory Environment

We cannot give any assurance that any of our product candidates will receive regulatory approval, which is necessary before they can be commercialized.

Our future success is dependent on our and our collaboration partners' ability to successfully develop, obtain regulatory approval for, and then successfully commercialize one or more product candidates. We currently have one product candidate that has completed Phase 2 clinical studies and four that are in a Phase 2. We are not permitted to market or promote any of our product candidates before we receive regulatory approval from the FDA, EMA or comparable foreign regulatory authorities, and we may never receive such regulatory approval for any of our product candidates.

We cannot be certain that any of our product candidates will be successful in clinical studies or receive regulatory approval. Applications for our product candidates could fail to receive regulatory approval for many reasons, including but not limited to the following:

- the FDA, EMA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical studies;
- the population studied in the clinical program may not be sufficiently broad or representative to assure safety in the full population for which we seek approval;
- the FDA, EMA or comparable foreign regulatory authorities may disagree with our interpretation of data from nonclinical or clinical studies;
- the data collected from clinical studies of our product candidates may not be sufficient to support the submission of an NDA or other submission or to obtain regulatory approval in the United States or elsewhere;
- we may be unable to demonstrate to the FDA, EMA or comparable foreign regulatory authorities that a product candidate's benefit-risk ratio for its proposed indication is acceptable;

- the FDA, EMA or other regulatory authorities may fail to approve the manufacturing processes, test procedures and specifications, or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and

- the approval policies or regulations of the FDA, EMA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

We generally plan to seek regulatory approval to commercialize our product candidates in the United States, the European Union and in additional foreign countries where we have commercial and typically IP rights. To obtain regulatory approval in other countries, we must comply with numerous and varying regulatory requirements of such other countries regarding safety, efficacy, chemistry, manufacturing and controls, clinical studies, commercial sales, pricing, marketing and distribution of our product candidates. Even if we are successful in obtaining approval in one jurisdiction, we cannot ensure that we will obtain approval in any other jurisdictions. Failure to obtain marketing authorization for our product candidates will result in our being unable to market and sell such products, which would materially adversely affect our business, financial condition and results of operations. If we fail to obtain approval in any jurisdiction, the geographic market for our product candidates could be limited. Similarly, regulatory agencies may not approve the labeling claims that are necessary or desirable for the successful commercialization of our product candidates.

Clinical drug development involves a lengthy and expensive process with uncertain timelines and uncertain outcomes. If clinical studies of our product candidates are prolonged or delayed, we may be unable to obtain required regulatory approvals, and therefore be unable to commercialize our product candidates on a timely basis or at all.

To obtain the requisite regulatory approvals to market and sell any of our product candidates, we must demonstrate through extensive preclinical and clinical studies that our products are safe and effective in humans. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical study process. The results of preclinical and early clinical studies of our product candidates may not be predictive of the results of later-stage clinical studies. For example, the positive results generated to date in clinical studies for our product candidates do not ensure that later clinical studies will demonstrate similar results. Product candidates in later stages of clinical studies may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical studies. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical studies due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier studies. Our future clinical study results may not be successful.

Clinical studies must be conducted in accordance with FDA, EMA and comparable foreign regulatory authorities' legal requirements, regulations or guidelines, and are subject to oversight by these governmental agencies and Institutional Review Boards, or IRBs, at the medical institutions where the clinical studies are conducted. In addition, clinical studies must be conducted with supplies of our product candidates produced under cGMP and other requirements. We depend on medical institutions and CROs, to conduct our clinical studies in compliance with cGCP standards. To the extent the CROs fail to enroll participants for our clinical studies, fail to conduct the study to cGCP standards or are delayed for a significant time in the execution of studies, including achieving full enrollment, we may be affected by increased costs, program delays or both, which may harm our business.

To date, neither we nor our collaboration partners have completed all clinical studies required for the approval of any of our product candidates. In January 2019, Roche, the parent of our collaboration partner discontinued the CREAD and CREAD 2 Phase 3 studies of crenezumab in patients with prodromal to mild sporadic Alzheimer's disease (AD). The Phase 2 development of crenezumab continues in a preventive trial of cognitively healthy individuals in Colombia with a risk of developing familial AD. Semorinemab is in a Phase 2 clinical study, ACI-24 for AD is in a Phase 2 clinical study, ACI-24 for DS is in a Phase 1b clinical study, ACI-35 is in a Phase 1b/2a clinical study in 2019, ACI-3024 is in a Phase 1 clinical study and PI-2620 is in a Phase 2 clinical study. The development of our other product candidates is less advanced and their clinical studies have not yet started.

The completion of clinical studies for our clinical product candidates may be delayed, suspended or terminated as a result of many factors, including but not limited to:

- the delay or refusal of regulators or IRBs to authorize us to commence or amend a clinical study at a prospective study site or changes in regulatory requirements, policies and guidelines;

- delays or failure to reach agreement on acceptable terms with prospective CROs and clinical study sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and study sites;
- delays in patient enrollment and variability in the number and types of patients available for clinical studies;
- the inability to enroll a sufficient number of patients in studies to ensure adequate statistical power to detect statistically significant treatment effects;
- negative or inconclusive results, which may require us to conduct additional preclinical or clinical studies or to abandon projects that we expected to be promising;
- safety or tolerability concerns, which could cause us to suspend or terminate a study if we find that the participants are being exposed to unacceptable health risks;
- regulators or IRBs requiring that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or safety concerns, among others;
- lower than anticipated retention rates of patients and volunteers in clinical studies;
- our CROs or clinical study sites failing to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all, deviating from the protocol or dropping out of a study;
- delays relating to adding new clinical study sites;
- difficulty in maintaining contact with patients after treatment, resulting in incomplete data;
- delays in establishing the appropriate dosage levels;
- the quality or stability of the product candidate falling below acceptable standards;
- the inability to produce or obtain sufficient quantities of the product candidate to complete clinical studies; and
- exceeding budgeted costs due to difficulty in accurately predicting costs associated with clinical studies.

Any delays in completing our clinical studies will increase our costs, slow our product candidate development and approval process and jeopardize our ability to commence product sales and generate sales revenues. Any of these occurrences may harm our business, financial condition and prospects significantly. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical studies may also ultimately lead to the denial of regulatory approval of our product candidates.

Even if we obtain and maintain approval for our drug candidates from one jurisdiction, we may never obtain approval for our drug candidates in other jurisdictions, which would limit our market opportunities and adversely affect our business.

Sales by us of our approved drugs will be subject to U.S. and non-U.S. regulatory requirements governing clinical studies and regulatory approval, and we plan to seek regulatory approval to commercialize our drug candidates in the United States, the European Economic Area, and other countries. Clinical studies conducted in one country may not be accepted by regulatory authorities in other countries and regulatory approval in one country does not ensure approval in any other country, while a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory approval process in others. For example, approval in the United States by the FDA does not ensure approval by the regulatory authorities in other countries or jurisdictions, and similarly approval by a non-U.S. regulatory authority, such as the EMA, does not ensure approval by regulatory authorities in other countries, including by the FDA. However, the failure to obtain approval in one jurisdiction may have a negative impact on our ability to obtain approval elsewhere. Approval processes and regulatory requirements vary among countries and can involve additional drug testing and

validation and additional administrative review periods. Even if a drug is approved, the FDA or EMA, as the case may be, may limit the indications for which the drug may be marketed, require extensive warnings on the drug labeling or require expensive and time-consuming clinical studies or reporting as conditions of approval. In many countries outside the United States, a drug candidate must be approved for reimbursement before it can be approved for sale in that country. In some cases, the price that would be charged for a drug is also subject to approval. Regulatory authorities in other countries also have their own requirements for approval of drug candidates with which we must comply prior to marketing in those countries. Obtaining non-U.S. regulatory approvals and compliance with such non-U.S. regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our current and any future drugs, in certain countries. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, or if regulatory approvals in international markets are delayed, our target market will be reduced and our ability to realize the full market potential of our drug candidates will be unrealized.

Even if our product candidates obtain regulatory approval, we will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense. Additionally, our product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.

If marketing authorization is obtained for any of our product candidates, the product will remain subject to continual regulatory review and therefore authorization could be subsequently withdrawn or restricted. Any regulatory approvals that we receive for our product candidates may also be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical studies and surveillance to monitor the safety and efficacy of the product candidate. In addition, if the FDA or a comparable foreign regulatory authority approves any of our product candidates, we will be subject to ongoing regulatory obligations and oversight by regulatory authorities, including with respect to the manufacturing processes, labeling, packing, distribution, adverse event reporting, storage, advertising and marketing restrictions, and recordkeeping and, potentially, other post-marketing obligations, all of which may result in significant expense and limit our or our collaboration partners' ability to commercialize such products. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMPs and cGCPs for any clinical studies that we conduct post-approval. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market, or voluntary or mandatory product recalls;
- fines, warning letters or holds on clinical studies;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us, or suspension or revocation of product license approvals;
- regulatory constraints in promotion and distribution of drug products in various markets;
- product seizure or detention, or refusal to permit the import or export of products; and
- injunctions or the imposition of civil or criminal penalties.

If any of these events occurs, our ability to sell such product may be impaired, and we may incur substantial additional expense to comply with regulatory requirements, which could materially adversely affect our business, financial condition and results of operations. The FDA's policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

We have conducted and may in the future conduct clinical studies for our drug candidates outside the United States, and the FDA and applicable foreign regulatory authorities may not accept data from such studies.

We have conducted and may in the future choose to conduct one or more of our clinical studies outside the United States, including in Germany, Austria, Denmark, Sweden, Finland, the UK and Poland. The acceptance of study data from clinical studies conducted outside the United States or another jurisdiction by the FDA or applicable foreign regulatory authority may be subject to certain conditions. In cases where data from foreign clinical studies are intended to serve as the basis for marketing approval in the United States, the FDA will not approve the application on the basis of foreign data alone unless the following are true: the data are applicable to the United States population and United States medical practice; the studies were performed by clinical investigators of recognized competence; and the data are considered valid without the need for an on-site inspection by the FDA or, if the FDA considers such an inspection to be necessary, the FDA is able to validate the data through an on-site inspection or other appropriate means. Additionally, the FDA's clinical study requirements, including sufficient size of patient populations and statistical powering, must be met. Many foreign regulatory bodies have similar requirements. In addition, such foreign studies would be subject to the applicable local laws of the foreign jurisdictions where the studies are conducted. There can be no assurance that the FDA or any applicable foreign regulatory authority will accept data from studies conducted outside of the United States or the applicable jurisdiction. If the FDA or any applicable foreign regulatory authority does not accept such data, it would result in the need for additional studies, which would be costly and time-consuming and delay aspects of our business plan, and which may result in our drugs or drug candidates not receiving approval or clearance for commercialization in the applicable jurisdiction.

Enacted and future legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates and may affect the prices we may set.

In the United States and the European Union, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system. These changes could prevent or delay marketing approval of our product candidates and restrict or regulate post-approval activities and affect our ability to profitably sell any products for which we obtain marketing approval.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the Medicare Modernization Act, changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly and introduced a new reimbursement methodology based on average sale prices for physician-administered drugs. In addition, this legislation provided authority for limiting the number of drugs that will be covered in any therapeutic class. Cost-reduction initiatives and other provisions of this legislation could decrease the coverage and price that we receive for any approved products. While the Medicare Modernization Act applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the Medicare Modernization Act may result in a similar reduction in payments from private payors.

In March 2010, former President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, the Health Care Reform Law, a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for health care and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. The Health Care Reform Law, among other things, increased rebates a manufacturer must pay to the Medicaid program, addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected, established a new Medicare Part D coverage gap discount program, in which manufacturers must provide 50% point-of-sale discounts on products covered under Part D and implemented payment system reforms including a national pilot program on payment bundling to encourage hospitals, physicians and other providers to improve the coordination, quality and efficiency of certain healthcare services through bundled payment models. Further, the new law imposed a significant annual fee on companies that manufacture or import branded prescription drug products. Substantial new provisions affecting compliance were enacted, which may affect our business practices with health care practitioners.

In 2019, we continued to face uncertainties because of continued U.S. federal legislative and administrative efforts to repeal, substantially modify or invalidate some or all of the provisions of the Health Care Reform Law. In January 2017, Congress voted to adopt a budget resolution for fiscal year 2017, or the Budget Resolution, that authorized the implementation of legislation that would repeal portions of the Health Care

Reform Law. Since January 2017, President Trump has signed Executive Orders designed to delay the implementation of certain provisions of the Health Care Reform Law or otherwise circumvent some of the requirements for health insurance mandated under such law. The Executive Order signed on January 20, 2017 directs federal agencies with authorities and responsibilities under Health Care Reform Law to waive, defer, grant exemptions from, or delay the implementation of any provision of Health Care Reform Law that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. The practical implications of that order are unclear, and the future of the Health Care Reform Law is uncertain. The Executive Order signed on October 12, 2017 directs federal agencies to take certain steps intended to make it easier for individuals and small businesses to buy health insurance through association health plans, which are not subject to all of the requirements under the Health Care Reform Law. On the same date, President Trump announced that cost-sharing reduction payments from the U.S. government for low-income health insurance enrollee's copayments and deductibles would cease effective immediately. Congress also could consider subsequent legislation to replace elements of the Health Care Reform Law that are repealed. There is no assurance that the Health Care Reform Law, as currently enacted or as amended in the future, will not adversely affect our business and financial results, and we cannot predict how future federal or state legislative or administrative changes relating to healthcare reform will affect our business.

Moreover, other legislative changes have also been proposed and adopted in the United States since the Health Care Reform Law was enacted. On August 2, 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least USD 1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions to Medicare payments to providers of 2% per fiscal year, which went into effect on April 1, 2013. On January 2, 2013, former President Obama signed into law the American Taxpayer Relief Act of 2012, or the ATRA, which, among other things, further reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other health care funding, which could have a material adverse effect on our customers and accordingly, our financial operations.

Our business is subject to complex and evolving U.S. and international laws and regulations regarding clinical trials reimbursement and privacy and data protection. Many of these laws and regulations are subject to change and uncertain interpretation and could result in claims, changes to our business practices, penalties, increased cost of operations, or declines in user growth or engagement, or otherwise harm our business.

Regulatory authorities around the world are considering a number of legislative and regulatory proposals concerning data protection, including measures to ensure that encryption of users' data does not hinder law enforcement agencies' access to that data. In addition, the interpretation and application of consumer and data protection laws in the U.S., Europe and elsewhere are often uncertain and in flux. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our data practices. These legislative and regulatory proposals, if adopted, and such interpretations could, in addition to the possibility of fines, result in an order requiring that we change our data practices, which could have an adverse effect on our business and results of operations. Complying with these various laws could cause us to incur substantial costs or require us to change our business practices in a manner adverse to our business.

In the European Union, new clinical trial regulations are scheduled to come into force in 2020. This new legislation will enforce the centralization of clinical trial applications and approvals, which will eliminate redundancy, but in some cases this may extend timelines for clinical study approvals due to potentially longer wait times. The new General Data Protection Regulation (GDPR), which became effective in May 2018 in all EU Member States, created a range of new compliance obligations for companies that process personal data of European Union residents. Although it is expected that the GDPR will provide consistency across the territory of the EU, it imposes more onerous requirements concerning consent and the obligations of sponsors of clinical trials (acting as Data Controllers), among other measures, which may increase the costs and extend timelines of our product development efforts. Austerity measures in certain European nations may also affect the prices we are able to seek if our products are approved, as discussed below. Furthermore, the Brexit vote and the impact of the withdrawal of the U.K. may adversely affect business activity, political stability and economic conditions in the U.K., the Eurozone, the EU and elsewhere. The U.K. withdrawal from the EU took place on January 31, 2020 and the UK majority government is expected to complete Brexit even if no formal withdrawal agreement is in place with the EU by the end of the transition period running until December 31, 2020. The specific terms

of the U.K. withdrawal from the EU are still uncertain and will remain so until at least the end of 2020. While we do not have material operations in the U.K., we cannot rule out potential disruptions in relation to the clinical regulatory framework applicable to our clinical studies in the UK and to data privacy and security rules with respect to personal data sharing with vendors and clinical investigators in the UK and cannot predict future implications.

Both in the United States and in the European Union, legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We do not know whether additional legislative changes will be enacted, or whether the regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our product candidates, if any, may be.

We could be subject to liabilities under environmental, health and safety laws or regulations, or fines, penalties or other sanctions, if we fail to comply with such laws or regulations or otherwise incur costs that could have a material adverse effect on the success of our business.

We are subject to numerous environmental, health and safety laws, regulations, and permitting requirements, including those governing laboratory procedures, decontamination activities and the handling, transportation, use, remediation, storage, treatment and disposal of hazardous materials, human substances and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials that produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials or wastes either at our sites or at third party disposal sites. In the event of such contamination or injury, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties. Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, human substances or other work-related injuries, this insurance may not provide adequate coverage against potential liabilities.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws, regulations or permitting requirements. Such laws, regulations and requirements are becoming increasingly more stringent and may impair our research, development or production efforts. Failure to comply with these laws, regulations and permitting requirements also may result in substantial fines, penalties or other sanctions.

Our relationships with clinical centers, customers and payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which, if violated, could expose us to criminal sanctions, civil penalties, exclusion from government healthcare programs, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians and others play a primary role in the recommendation and prescription of any products for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations, primarily in the United States, that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our products for which we obtain marketing approval. Restrictions under applicable healthcare laws and regulations include the following:

- the U.S. healthcare anti-kickback statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under U.S. government healthcare programs such as Medicare and Medicaid;

- the U.S. False Claims Act imposes criminal and civil penalties, including civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the U.S. government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;

- the U.S. Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;

- the transparency requirements under the Health Care Reform Law require manufacturers of drugs, devices, biologics and medical supplies to report to the U.S. Department of Health and Human Services information related to payments and other transfers of value made by such manufacturers to physicians and teaching hospitals, and ownership and investment interests held by physicians or their immediate family members; and

- in various other jurisdictions, analogous laws and regulations, such as state anti-kickback and false claims laws, will apply to sales or marketing arrangements, consultancy and service agreements, and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, and some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available under the U.S. federal Anti-Kickback Statute, it is possible that some of our future business activities could be subject to challenge under one or more of such laws. In addition, recent health care reform legislation has strengthened these laws. For example, the Health Care Reform Law, among other things, amends the intent requirement of the federal anti-kickback and criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it. Moreover, the Health Care Reform Law provides that the government may assert that a claim including items or services resulting from a violation of the federal anti-kickback statute constitutes a false or fraudulent claim for purposes of the False Claims Act.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, exclusion from U.S. government funded healthcare programs, such as Medicare and Medicaid, other foreign healthcare reimbursement and procurement programs and the curtailment or restructuring of our operations. If any of the physicians or other providers or entities with whom we expect to do business with is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Risks from the improper conduct of employees, agents, contractors, or collaborators could adversely affect our reputation and our business, prospects, operating results, and financial condition.

We cannot ensure that our compliance controls, policies, and procedures will in every instance protect us from acts committed by our employees, agents, contractors, or collaborators that would violate the laws or regulations of the jurisdictions in which we operate, including, without limitation, healthcare, employment, foreign corrupt practices, environmental, competition, and patient privacy and other privacy laws and regulations. Such improper actions could subject us to civil or criminal investigations, and monetary and injunctive penalties, and could adversely impact our operating results, ability to conduct business, and reputation.

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include intentional failures to comply with FDA or EMA regulations, to provide accurate information to the FDA or the EMA or intentional failures to report financial information or data accurately or to disclose unauthorized activities to us. Employee misconduct could also involve the improper use of information obtained in the course of clinical studies, which could result in regulatory sanctions and serious harm to our reputation. In June 2016, we adopted a code of conduct, but it is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

Our business activities may be subject to the Foreign Corrupt Practices Act, or FCPA, and similar anti-bribery and anti-corruption laws.

Our business activities may be subject to the FCPA and similar anti-bribery or anti-corruption laws, regulations or rules of other countries in which we operate, including the U.K. Bribery Act. The FCPA generally prohibits offering, promising, giving, or authorizing others to give anything of value, either directly or indirectly, to a non-U.S. government official in order to influence official action, or otherwise obtain or retain business. The FCPA also requires public companies to make and keep books and records that accurately and fairly reflect the transactions of the corporation and to devise and maintain an adequate system of internal accounting controls. Our business is heavily regulated and therefore involves significant interaction with public officials, including officials of non-U.S. governments. Additionally, in many other countries, the health care providers who prescribe pharmaceuticals and the investigators who perform our studies are employed by their government, and the purchasers of pharmaceuticals are government entities; therefore, our dealings with these prescribers and purchasers are subject to regulation under the FCPA. Recently the Securities and Exchange Commission, or SEC, and Department of Justice have increased their FCPA enforcement activities with respect to pharmaceutical companies. There is no certainty that all of our employees, agents, contractors, or collaborators, or those of our affiliates, will comply with all applicable laws and regulations, particularly given the high level of complexity of these laws. Violations of these laws and regulations could result in fines, criminal sanctions against us, our officers, or our employees, the closing down of our facilities, requirements to obtain export licenses, cessation of business activities in sanctioned countries, implementation of compliance programs, and prohibitions on the conduct of our business. Any such violations could include prohibitions on our ability to offer our products in one or more countries and could materially damage our reputation, our brand, our international expansion efforts, our ability to attract and retain employees, and our business, prospects, operating results, and financial condition.

Risks Related to Our Common Shares

The price of our common shares may be volatile and may fluctuate due to factors beyond our control.

The share prices of publicly traded emerging biopharmaceutical and drug discovery and development companies have been highly volatile and are likely to remain highly volatile in the future. The market price of our common shares may fluctuate significantly due to a variety of factors, including:

- positive or negative results of testing and clinical studies by us, strategic partners, or competitors;
- delays in entering into strategic relationships with respect to development and/or commercialization of our product candidates or entry into strategic relationships on terms that are not deemed to be favorable to us;
- technological innovations or commercial product introductions by us or competitors;
- changes in government regulations;
- developments concerning proprietary rights, including patents and litigation matters;
- public concern relating to the commercial value or safety of any of our product candidates;
- financing or other corporate transactions;
- publication of research reports or comments by securities or industry analysts;
- general market conditions in the pharmaceutical industry or in the economy as a whole; or
- other events and factors beyond our control.

Broad market and industry factors may materially affect the market price of companies' stock, including ours, regardless of actual operating performance. Furthermore, issuers such as ourselves whose securities have historically had limited trading volumes and/or have been susceptible to relatively high volatility levels can be particularly vulnerable to short seller attacks and trading in our common shares by non-fundamental investors such as hedge funds and others who may enter and exit positions in our common shares frequently and suddenly, causing increased volatility of our share price. Short selling is the practice of selling securities that the

seller does not own but rather has borrowed or intends to borrow from a third party with the intention of buying identical securities at a later date to return to the lender, and profit from a decline in the value of the securities in the process. The publication of any commentary by short sellers with the intent of creating negative market momentum may bring about a temporary, or possibly long term, decline in the market price of our common stock.

There is only a limited free float of our common shares; this may have a negative impact on the liquidity of and the market price for our common shares.

As of the date hereof, certain principal shareholders controlling 5% or more of our common shares as well as our executive officers and directors together beneficially own approximately 67.9% of our common shares. The limited free float may have a negative impact on the liquidity of our common shares and result in a low trading volume of our common shares, which could adversely affect the price of our common shares.

Certain of our existing shareholders exercise significant control over us, and your interests may conflict with the interests of our existing shareholders.

Certain principal shareholders as well as our executive officers and directors together beneficially own approximately 67.9% of our common shares. Depending on the level of attendance at our general meetings of shareholders, these shareholders may be in a position to determine the outcome of decisions taken at any such general meeting. To the extent that the interests of these shareholders may differ from the interests of the company's other shareholders, the latter may be disadvantaged by any action that these shareholders may seek to pursue. Among other consequences, this concentration of ownership may have the effect of delaying or preventing a change in control and might therefore negatively affect the market price of our common shares.

Future sales, or the possibility of future sales, of a substantial number of our common shares could adversely affect the price of our common shares.

Future sales of a substantial number of our common shares, or the perception that such sales will occur, could cause a decline in the market price of our common shares. If certain of our shareholders sell substantial amounts of common shares in the public market, or the market perceives that such sales may occur, the market price of our common shares and our ability to raise capital through an issue of equity securities in the future could be adversely affected. We also entered into a registration rights agreement in connection with the Series E Private Placement with certain investors in the Series E Private Placement pursuant to which we agreed under certain circumstances to file a registration statement to register the resale of the common shares held by certain of our existing shareholders, as well as to cooperate in certain public offerings of such common shares. In August 2018, we filed a registration statement on Form F-3 to register the resale of one of our shareholder's common shares pursuant to the requirements of the registration rights agreement. In addition, we have adopted a new omnibus equity incentive plan under which we have the discretion to grant a broad range of equity-based awards to eligible participants. These shares were registered pursuant to the registration statement on Form S-8 that we filed with the SEC and, therefore, can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates. If a large number of our common shares or securities convertible into our common shares are sold in the public market after they become eligible for sale, the sales could reduce the trading price of our common shares and impede our ability to raise future capital.

We have broad discretion in the use of our cash and cash equivalents and short-term financial assets (liquidity) and may not use them effectively.

Our management will have broad discretion in the application of our cash and cash equivalents and short-term financial assets. Our or our collaboration partners' decisions concerning the allocation of research, development, collaboration, management and financial resources toward particular product candidates or therapeutic areas may not lead to the development of any viable commercial product and may divert resources away from better opportunities. If we make incorrect determinations regarding the viability or market potential of any of our programs or product candidates or misread trends in the biopharmaceutical industry, in particular for neurodegenerative diseases, our business, financial condition and results of operations could be materially adversely affected. As a result, we may fail to capitalize on viable commercial products or profitable market opportunities, be required to forego or delay pursuit of opportunities with other product candidates or other diseases and disease pathways that may later prove to have greater commercial potential than those we choose to pursue, or relinquish valuable rights to such product candidates through collaboration, licensing or other royalty arrangements in cases in which it would have been advantageous for us to invest additional resources to retain sole development and commercialization rights.

We do not expect to pay dividends in the foreseeable future.

We have not paid any dividends since our incorporation. Even if future operations lead to significant levels of distributable profits, we currently intend that any earnings will be reinvested in our business and that dividends will not be paid until we have an established revenue stream to support continuing dividends. Under our articles of association, the declaration of dividends requires a resolution passed by a simple majority of the votes cast at a shareholder's meeting regardless of abstentions and empty or invalid votes. The proposal to pay future dividends to shareholders will in addition effectively be at the discretion of our board of directors after taking into account various factors including our business prospects, liquidity requirements, financial performance and new product development. In addition, payment of future dividends is subject to certain limitation pursuant to Swiss law or by our articles of association. Accordingly, investors cannot rely on dividend income from our common shares and any returns on an investment in our common shares will likely depend entirely upon any future appreciation in the price of our common shares.

We are a Swiss corporation. The rights of our shareholders may be different from the rights of shareholders in companies governed by the laws of U.S. jurisdictions.

We are a Swiss corporation. Our corporate affairs are governed by our articles of association and by the laws governing companies, including listed companies, incorporated in Switzerland. The rights of our shareholders and the responsibilities of members of our board of directors may be different from the rights and obligations of shareholders and directors of companies governed by the laws of U.S. jurisdictions. In the performance of its duties, our board of directors is required by Swiss law to consider the interests of our Company, our shareholders, our employees and other stakeholders, in all cases with due observation of the principles of reasonableness and fairness. It is possible that some of these parties will have interests that are different from, or in addition to, your interests as a shareholder. Swiss corporate law limits the ability of our shareholders to challenge resolutions made or other actions taken by our board of directors in court. Our shareholders generally are not permitted to file a suit to reverse a decision or an action taken by our board of directors but are instead only permitted to seek damages for breaches of fiduciary duty. As a matter of Swiss law, shareholder claims against a member of our board of directors for breach of fiduciary duty would have to be brought in Lausanne, Switzerland, or where the relevant member of our board of directors is domiciled. In addition, under Swiss law, any claims by our shareholders against us must be brought exclusively in Lausanne, Switzerland.

Our common shares are issued under the laws of Switzerland, which may not protect investors in a similar fashion afforded by incorporation in a U.S. state.

We are organized under the laws of Switzerland. There can be no assurance that Swiss law will not change in the future or that it will serve to protect investors in a similar fashion afforded under corporate law principles in the U.S., which could adversely affect the rights of investors.

Our status as a Swiss corporation may limit our flexibility with respect to certain aspects of capital management and may cause us to be unable to make distributions without subjecting our shareholders to Swiss withholding tax.

Swiss law allows our shareholders to authorize share capital that can be issued by the board of directors without additional shareholder approval. This authorization is limited to 50% of the existing registered share capital and must be renewed by the shareholders every two years. Additionally, subject to specified exceptions, Swiss law grants pre-emptive subscription rights to existing shareholders to subscribe to any new issuance of shares. Any ordinary share capital increase resolution preserving pre-emptive subscription rights expires after three months and requires a simple majority of the votes cast at the shareholder's meeting regardless of abstentions and empty or invalid votes. Swiss law also does not provide as much flexibility in the various terms that can attach to different classes of shares as the laws of some other jurisdictions. Swiss law also reserves for approval by shareholders certain corporate actions over which a board of directors would have authority in some other jurisdictions. For example, dividends must be approved by shareholders. These Swiss law requirements relating to our capital management may limit our flexibility, and situations may arise where greater flexibility would have provided substantial benefits to our shareholders.

Under Swiss law, a Swiss corporation may pay dividends only if the corporation has sufficient distributable profits from previous fiscal years, or if the corporation has distributable reserves, each as evidenced by its audited statutory balance sheet. Freely distributable reserves are generally booked either as "free reserves" or as "capital contributions" (*apports de capital*, contributions received from shareholders) in the "reserve from capital contributions." Distributions may be made out of issued share capital—the aggregate nominal value of a

company's issued shares—only by way of a capital reduction. As of December 31, 2019, the Company has CHF 340.6 million of reserves from capital contributions and CHF 1,434,826 of issued share capital (consisting of 71,741,285 common shares each with a nominal value of CHF 0.02 and no preferred shares) on its audited statutory balance sheet.

We expect the aggregate of these amounts (less the lowest legally possible issued share capital and legal reserve of together CHF 150,000) to represent the amount available for future dividends or capital reductions on a Swiss withholding tax-free basis. We will not be able to pay dividends or make other distributions to shareholders on a Swiss withholding tax-free basis in excess of that amount unless the Company increases its share capital or its reserves from capital contributions. We would also be able to pay dividends out of distributable profits or freely distributable reserves but such dividends would be subject to Swiss withholding taxes. There can be no assurance that we will have sufficient distributable profits, free reserves, reserves from capital contributions or registered share capital to pay a dividend or effect a capital reduction, that our shareholders will approve dividends or capital reductions proposed by us, or that we will be able to meet the other legal requirements for dividend payments or distributions as a result of capital reductions.

Generally, Swiss withholding tax of 35% is due on dividends and similar distributions to our shareholders, regardless of the place of residency of the shareholder, unless the distribution is made to shareholders out of (i) a reduction of nominal value or (ii) assuming certain conditions are met, reserves from capital contributions accumulated on or after January 1, 1997. A U.S. holder that qualifies for benefits under the Convention between the United States of America and the Swiss Confederation for the Avoidance of Double Taxation with Respect to Taxes on Income, which we refer to as the "U.S.-Swiss Treaty," may apply for a refund of the tax withheld in excess of the 15% treaty rate (or in excess of the 5% reduced treaty rate for qualifying corporate shareholders with at least 10% participation in our voting stock, or for a full refund in the case of qualified pension funds). There can be no assurance that we will have sufficient reserves from capital contributions to pay dividends free from Swiss withholding tax, or that Swiss withholding tax rules will not be changed in the future. In addition, we cannot provide assurance that the current Swiss law with respect to distributions out of reserves from capital contributions will not be changed or that a change in Swiss law will not adversely affect us or our shareholders, in particular as a result of distributions out of reserves from capital contributions becoming subject to additional corporate law or other restrictions. In addition, over the long term, the amount of par value available to us for nominal value reductions or reserves from capital contributions available to us to pay out as distributions is limited. If we are unable to make a distribution through a reduction in nominal value or out of reserves from capital contributions, we may not be able to make distributions without subjecting our shareholders to Swiss withholding taxes.

Under present Swiss tax laws, repurchases of shares for the purposes of cancellation are treated as a partial liquidation subject to 35% Swiss withholding tax on the difference between the repurchase price and the nominal value of the shares except, since January 1, 2011, to the extent attributable to reserves from capital contributions (*apports de capital*) if any, and to the extent that, the repurchase of shares is out of retained earnings or other taxable reserves. No partial liquidation treatment applies and no withholding tax is triggered if the shares are not repurchased for cancellation but held by the Company as treasury shares. However, should Company not resell such treasury shares within six years, the withholding tax becomes due at the end of the six year period.

U.S. shareholders may not be able to obtain judgments or enforce civil liabilities against us or our executive officers or members of our board of directors.

We are organized under the laws of Switzerland and our registered office and domicile is located in Ecublens, near Lausanne, Canton of Vaud, Switzerland. Moreover, a number of our directors and executive officers are not residents of the United States, and all or a substantial portion of the assets of such persons are located outside the United States. As a result, it may not be possible for investors to effect service of process within the United States upon us or upon such persons or to enforce against them judgments obtained in U.S. courts, including judgments in actions predicated upon the civil liability provisions of the federal securities laws of the United States. We have been advised by our Swiss counsel that there is doubt as to the enforceability in Switzerland of original actions, or in actions for enforcement of judgments of U.S. courts, of civil liabilities to the extent solely predicated upon the federal and state securities laws of the United States. Original actions against persons in Switzerland based solely upon the U.S. federal or state securities laws are governed, among other things, by the principles set forth in the Swiss Federal Act on Private International Law. This statute provides that the application of provisions of non-Swiss law by the courts in Switzerland shall be precluded if the result is incompatible with Swiss public policy. Also, certain mandatory provisions of Swiss law may be applicable regardless of any other law that would otherwise apply.

Switzerland and the United States do not have a treaty providing for reciprocal recognition and enforcement of judgments in civil and commercial matters. The recognition and enforcement of a judgment of the courts of the United States in Switzerland is governed by the principles set forth in the Swiss Federal Act on Private International Law. This statute provides in principle that a judgment rendered by a non-Swiss court may be enforced in Switzerland only if:

- the non-Swiss court had jurisdiction pursuant to the Swiss Federal Act on Private International Law;
- the judgment of such non-Swiss court has become final and non-appealable;
- the judgment does not contravene Swiss public policy;
- the court procedures and the service of documents leading to the judgment were in accordance with the due process of law; and
- no proceeding involving the same parties and the same subject matter was first brought in Switzerland, or adjudicated in Switzerland, or was earlier adjudicated in a third state and this decision is recognizable in Switzerland.

Our status as a Swiss corporation means that our shareholders enjoy certain rights that may limit our flexibility to raise capital, issue dividends and otherwise manage ongoing capital needs.

Swiss law reserves for approval by shareholders certain corporate actions over which a board of directors would have authority in some other jurisdictions. For example, the payment of dividends and cancellation of treasury shares must be approved by shareholders. Swiss law also requires that our shareholders themselves resolve to, or authorize our board of directors to, increase our share capital. While our shareholders may authorize share capital that can be issued by our board of directors without additional shareholder approval, Swiss law limits this authorization to 50% of the issued share capital at the time of the authorization. The authorization, furthermore, has a limited duration of up to two years and must be renewed by the shareholders from time to time thereafter in order to be available for raising capital. Additionally, subject to specified exceptions, including exceptions explicitly described in our articles of association, Swiss law grants pre-emptive subscription rights to existing shareholders to subscribe for new issuances of shares. Swiss law also does not provide as much flexibility in the various rights and regulations that can attach to different categories of shares as do the laws of some other jurisdictions. These Swiss law requirements relating to our capital management may limit our flexibility, and situations may arise where greater flexibility would have provided benefits to our shareholders.

Swiss law restricts our ability to pay dividends.

The proposal to pay future dividends to shareholders will effectively be at the discretion of our board of directors and subject to approval by, in their discretion, our shareholders after taking into account various factors including our business prospects, liquidity requirements, financial performance and new product development. In addition, payment of future dividends is subject to certain limitation pursuant to Swiss law or by our articles of association. Accordingly, investors cannot rely on dividend income from our common shares and any returns on an investment in our common shares will likely depend entirely upon any future appreciation in the price of our common shares. Dividends paid on our common shares are subject to Swiss Federal withholding tax, except if paid out of reserves from capital contributions (*apports de capital*).

See “Item 10. Additional Information- E. Taxation—Swiss Tax Considerations” for a summary of certain Swiss tax consequences regarding dividends distributed to holders of our common shares.

Shareholders in countries with a currency other than Swiss Francs face additional investment risks from currency exchange rate fluctuations in connection with their holding of our common shares

Any future payments of dividends, if any, will likely be denominated in Swiss Francs. The foreign currency equivalent of any dividend, if any, paid on our common shares or received in connection with any sale of our common shares could be adversely affected by the depreciation of the Swiss Franc against such other currency.

We are a foreign private issuer and, as a result, we are not subject to U.S. proxy rules and are subject to Exchange Act reporting obligations that, to some extent, are more lenient and less frequent than those of a U.S. domestic public company.

We are reporting under the Exchange Act as a non-U.S. company with foreign private issuer status. Because we qualify as a foreign private issuer under the Exchange Act and although we are subject to Swiss laws and regulations with regard to such matters and intend to furnish quarterly financial information to the SEC, we are exempt from certain provisions of the Exchange Act that are applicable to U.S. domestic public companies, including (i) the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations in respect of a security registered under the Exchange Act; (ii) the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and (iii) the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q containing unaudited financial and other specified information, or current reports on Form 8-K, upon the occurrence of specified significant events. In addition, foreign private issuers are not required to file their annual report on Form 20-F until four months after the end of each financial year, while U.S. domestic issuers that are accelerated filers are required to file their annual report on Form 10-K within 75 days after the end of each fiscal year. Foreign private issuers are also exempt from the Regulation Fair Disclosure, aimed at preventing issuers from making selective disclosures of material information. As a result of the above, you may not have the same protections afforded to shareholders of companies that are not foreign private issuers.

As a foreign private issuer and as permitted by the listing requirements of Nasdaq, we rely on certain home country governance practices rather than the corporate governance requirements of Nasdaq.

We are a foreign private issuer. As a result, in accordance with Nasdaq Listing Rule 5615(a)(3), we comply with home country governance requirements and certain exemptions thereunder rather than complying with certain of the corporate governance requirements of Nasdaq. Swiss law does not require that a majority of our board of directors consist of independent directors. Our board of directors therefore may include fewer independent directors than would be required if we were subject to Nasdaq Listing Rule 5605(b)(1). In addition, we are not subject to Nasdaq Listing Rule 5605(b)(2), which requires that independent directors regularly have scheduled meetings at which only independent directors are present.

Although Swiss law also requires that we adopt a compensation committee, we follow home country requirements with respect to such committee and our compensation, nomination and governance committee is tasked with certain director nomination and governance responsibilities as described under “Item 6. Directors, Senior Management and Employees.” As a result, our practice varies from the requirements of Nasdaq Listing Rule 5605(d), which sets forth certain requirements as to the responsibilities, composition and independence of compensation committees, and from the independent director oversight of director nominations requirements of Nasdaq Listing Rule 5605(e).

Furthermore, in accordance with Swiss law and generally accepted business practices, our articles of association do not provide quorum requirements generally applicable to general meetings of shareholders. Our practice thus varies from the requirement of Nasdaq Listing Rule 5620(c), which requires an issuer to provide in its bylaws for a generally applicable quorum, and that such quorum may not be less than one-third of the outstanding voting stock. Our articles of association provide for an independent proxy holder elected by our shareholders, who may represent our shareholders at a general meeting of shareholders, and we must provide shareholders with an agenda and other relevant documents for the general meeting of shareholders. However, Swiss law does not have a regulatory regime for the solicitation of proxies and company solicitation of proxies is prohibited for public companies in Switzerland, thus our practice varies from the requirement of Nasdaq Listing Rule 5620(b), which sets forth certain requirements regarding the solicitation of proxies. In addition, we have opted out of shareholder approval requirements for the issuance of securities in connection with certain events such as the acquisition of stock or assets of another company, the establishment of or amendments to equity-based compensation plans for employees, a change of control of us and certain private placements. To this extent, our practice varies from the requirements of Nasdaq Listing Rule 5635, which generally requires an issuer to obtain shareholder approval for the issuance of securities in connection with such events.

For an overview of our corporate governance principles, see “Item 16G. Corporate governance.” As a result of the above, you may not have the same protections afforded to shareholders of companies that are not foreign private issuers.

We may lose our foreign private issuer status, which would then require us to comply with the Exchange Act’s domestic reporting regime and cause us to incur significant legal, accounting and other expenses.

We are a foreign private issuer and therefore we are not required to comply with all of the periodic disclosure and current reporting requirements of the Exchange Act applicable to U.S. domestic issuers. We may no longer be a foreign private issuer as of June 30, 2020 (or the end of our second fiscal quarter in any

subsequent fiscal year), which would require us to comply with all of the periodic disclosure and current reporting requirements of the Exchange Act applicable to U.S. domestic issuers as of January 1, 2021 (or the first day of the fiscal year immediately succeeding the end of such second quarter). In order to maintain our current status as a foreign private issuer, either (a) a majority of our common shares must be either directly or indirectly owned of record by non-residents of the United States or (b)(i) a majority of our executive officers or directors may not be United States citizens or residents, (ii) more than 50 percent of our assets cannot be located in the United States and (iii) our business must be administered principally outside the United States. If we lost this status, we would be required to comply with the Exchange Act reporting and other requirements applicable to U.S. domestic issuers, which are more detailed and extensive than the requirements for foreign private issuers. We may also be required to make changes in our corporate governance practices in accordance with various SEC and stock exchange rules. The regulatory and compliance costs to us under U.S. securities laws if we are required to comply with the reporting requirements applicable to a U.S. domestic issuer may be significantly higher than the cost we would incur as a foreign private issuer. As a result, we expect that a loss of foreign private issuer status would increase our legal and financial compliance costs and would make some activities highly time consuming and costly. We also expect that if we were required to comply with the rules and regulations applicable to U.S. domestic issuers, it would make it more difficult and expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These rules and regulations could also make it more difficult for us to attract and retain qualified members of our board of directors.

We are an "emerging growth company," and we cannot be certain if the reduced reporting requirements applicable to "emerging growth companies" will make our common shares less attractive to investors.

We are an "emerging growth company," as defined in the Jumpstart our Business Startups Act of 2012, or the JOBS Act. For as long as we continue to be an "emerging growth company," we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies," including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We could be an "emerging growth company" until the end of our fiscal year 2021, although circumstances could cause us to lose that status earlier, including if the market value of our common shares held by non-affiliates exceeds USD 700 million as of any June 30 (the end of our second fiscal quarter) before the end of our fiscal year 2021, in which case we would no longer be an "emerging growth company" as of the following December 31 (our fiscal year end). We cannot predict if investors will find our common shares less attractive because we may rely on these exemptions. If some investors find our common shares less attractive as a result, there may be a less active trading market for our common shares and the price of our common shares may be more volatile.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, shareholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common shares.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud among other objectives. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404 of the Sarbanes-Oxley Act of 2002, or any subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inferior internal controls could also subject us to regulatory scrutiny and sanctions, impair our ability to raise revenue and cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common shares.

We are required to disclose changes made in our internal controls and procedures and our management is required to assess the effectiveness of these controls annually. However, for as long as we are an "emerging growth company" under the JOBS Act, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal controls over financial reporting pursuant to Section 404. We could be an "emerging growth company" until the end of our fiscal year 2021.

Furthermore, in May 2019, the SEC proposed amendments to exempt companies with less than $100 million of revenue and less than $700 million of public float from the requirements of Section 404(b). These proposed amendments would provide that such companies are no longer required to obtain an attestation of their internal controls over financial reporting from an independent outside auditor, even if such companies are no longer "emerging growth companies." The SEC has not yet adopted these proposed amendments.

For as long as we remain an "emerging growth company" or the above described SEC proposed amendments are adopted, we may not be able to detect problems that an independent assessment of the effectiveness of our internal controls could. Undetected material weaknesses in our internal controls could lead to financial statement restatements and require us to incur the expense of remediation.

If securities or industry analysts do not publish research, or publish inaccurate or unfavorable research, about our business, the price of our common shares and our trading volume could decline.

The trading market for our common shares will depend in part on the research and reports that securities or industry analysts publish about us or our business. If no or too few securities or industry analysts cover our company, the trading price for our common shares would likely be negatively affected. In addition, if one or more of the analysts who cover us downgrade our common shares or publish inaccurate or unfavorable research about our business, the price of our common shares would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our common shares could decrease, which might cause the price of our common shares and trading volume to decline.

We believe that it is likely that we were a "passive foreign investment company," or PFIC, for U.S. federal income tax purposes in 2019, and may also be a PFIC in 2020 or later years. If we were a PFIC in 2019 or are a PFIC in 2020 or any later year, U.S. shareholders could be subject to adverse U.S. federal income tax consequences.

Under the Internal Revenue Code of 1986, as amended, or the Code, we will be a PFIC for any taxable year in which, after the application of certain look-through rules with respect to subsidiaries, either (i) 75% or more of our gross income consists of passive income or (ii) 50% or more of the average quarterly value of our assets consists of assets that produce, or are held for the production of, passive income. Passive income generally includes dividends, interest, certain non-active rents and royalties, and capital gains. Although we have not obtained independent valuations of our assets during 2019 and thus are not in a position to make a definitive determination whether we were a PFIC in 2019, based on the composition of our income and assets during 2019 and certain estimates and assumptions, including as to both the total value and the relative value of our assets as implied by our market capitalization during 2019, we believe that it is likely that we were a PFIC in 2019. In addition, it is possible that we may also be a PFIC in 2020 or one or more future years because, among other things, (i) we may not generate a substantial amount of non-passive gross income, for U.S. federal income tax purposes, in any year, (ii) we currently own, and expect to continue to own, a substantial amount of passive assets, including cash, and (iii) the estimated valuation, for PFIC purposes, of our assets that generate non-passive income for PFIC purposes, including our intangible assets, is likely to be dependent in large part on our market capitalization and is therefore uncertain and may vary substantially over time. Accordingly, there can be no assurance that we will not be a PFIC in 2020 or any future taxable year.

If we were a PFIC in 2019 or in any future year during which a U.S. investor held or holds common shares, we generally would continue to be treated as a PFIC with respect to that U.S. investor for all succeeding years during which the U.S. investor holds common shares, even if we ceased to meet the threshold requirements for PFIC status. Such a U.S. investor may be subject to adverse U.S. federal income tax consequences, including (i) the treatment of all or a portion of any gain on disposition as ordinary income, (ii) the application of a deferred interest charge on such gain and the receipt of certain dividends and (iii) compliance with certain reporting requirements. We do not intend to provide the information that would enable investors to take a qualified electing fund election that could mitigate the adverse U.S. federal income tax consequences should we be classified as a PFIC.

For further discussion, see "Item 10. Additional Information—Section E. Taxation."

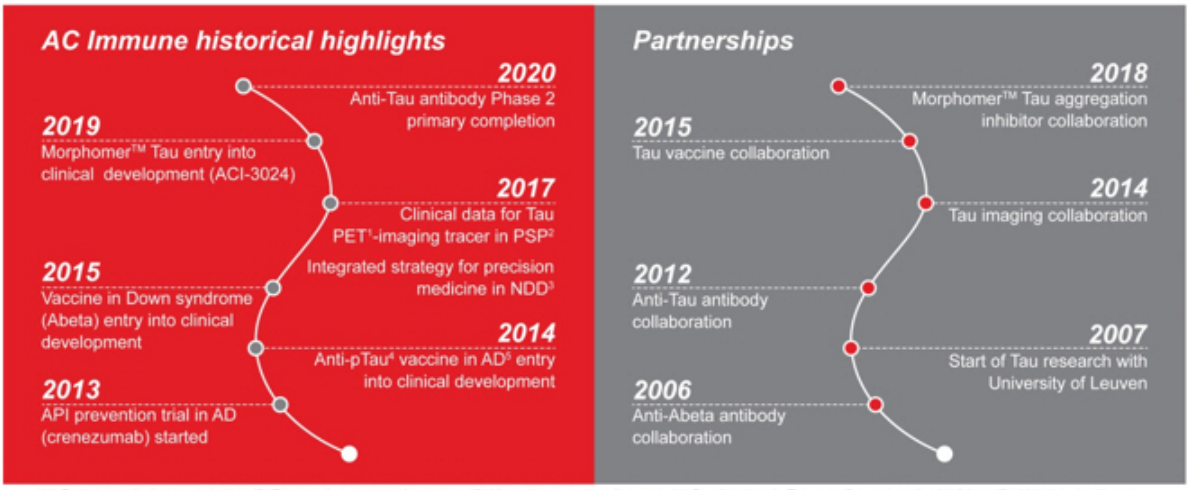
ITEM 4. INFORMATION ON THE COMPANY

A. History and Development of the Company

We are a Swiss stock corporation (*société anonyme*) organized under the laws of Switzerland. We were formed as a Swiss limited liability company (*société à responsabilité limitée*) on February 13, 2003 with our registered office and domicile in Basel, Switzerland. We converted to a Swiss stock corporation (*société anonyme*) under the laws of Switzerland on August 25, 2003. Our Swiss enterprise identification number is CHE-109.878.825. Our domicile and registered office is in Ecublens, at EPFL Innovation Park Building B, 1015 Lausanne, Vaud, Switzerland. Our ordinary shares were admitted to trading on Nasdaq Global Market on September 23, 2016, and trade under the symbol ACIU.

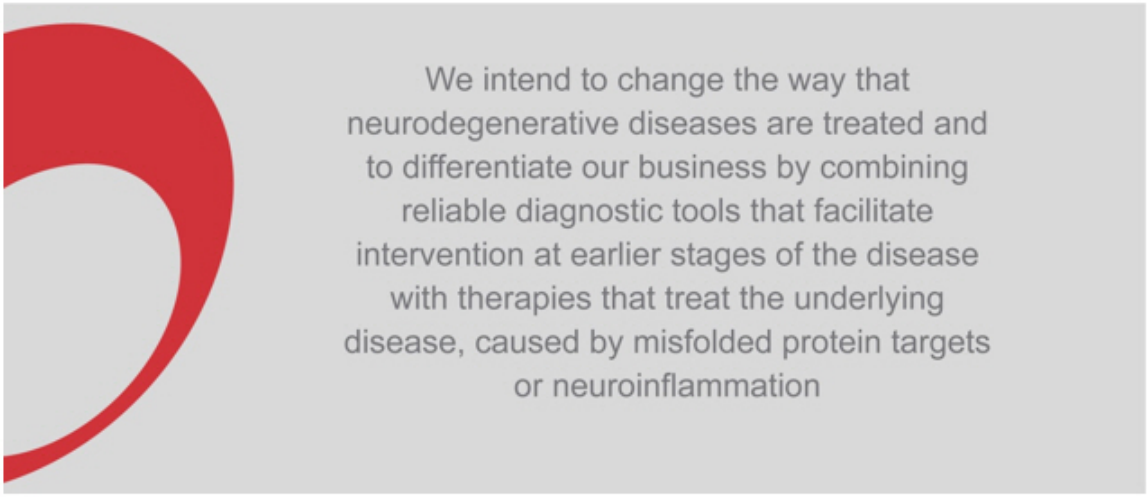
Our registered and principal executive offices are located in Ecublens, at EPFL Innovation Park, Building B, 1015 Lausanne, Switzerland, our general telephone number is (41) 21 345 91 21 and our internet address is www.acimmune.com. Our website and the information contained on or accessible through our website are not part of this document.

Figure 1: Our key business highlights



(1) Positron emission tomography; (2) Progressive supranuclear palsy; (3) Neurodegenerative diseases; (4) Small molecule Tau-specific aggregation inhibitor; (5) Alzheimer's disease

B. Business Overview

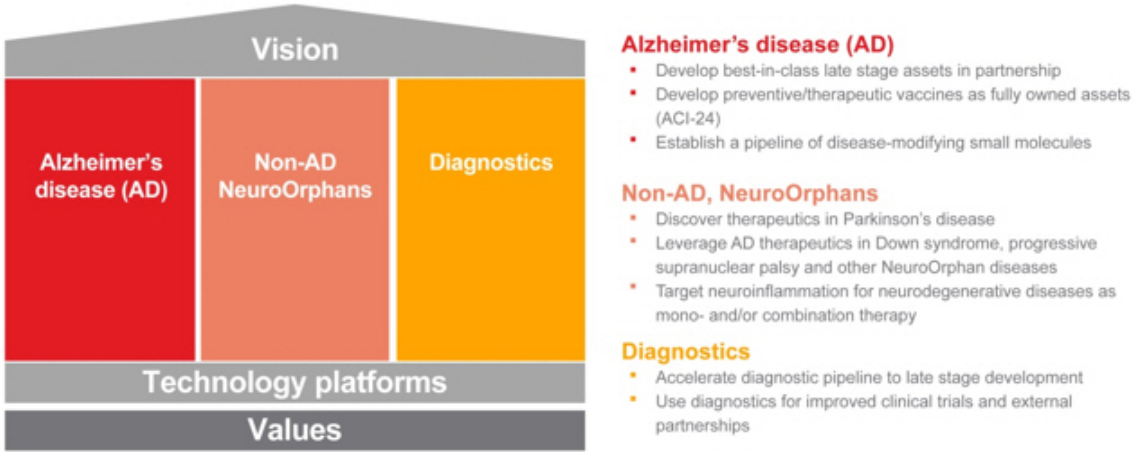


We are a clinical stage biopharmaceutical company focused on neurodegenerative diseases with six product candidates in clinical trials. We leverage our two proprietary technology platforms to discover, design and develop novel, proprietary small molecules, antibodies and vaccines for prevention, diagnosis and treatment of neurodegenerative diseases associated with protein misfolding. Misfolded proteins are generally recognized as the leading cause of neurodegenerative diseases, such as Alzheimer's disease (AD) and Parkinson's disease (PD) with common mechanisms and drug targets, such as Tau, Abeta, alpha-synuclein and Tar DNA-binding Protein (TDP-43). We believe that our large and diverse pipeline of nine therapeutic candidates and three diagnostic candidates has the potential to drive a paradigm shift in the treatment of a broad spectrum of neurodegenerative and other diseases related to protein misfolding.

Our strategic vision

Our goal is to become a global leader in precision medicine for the treatment of neurodegenerative diseases. To that aim, we are executing a clear business strategy around three pillars: (i) AD, (ii) other neurodegenerative diseases and NeuroOrphan indications, and (iii) diagnostics.

Figure 2: AC Immune's three-pillar strategy



Our approach

Key elements of our strategy include:

Advancing our product candidates, in partnership or alone, from clinical development to regulatory approval and potential commercialization. Our products include:

- ***Semorinemab*.** Our collaboration partner, Genentech along with Roche, is currently conducting the clinical development of semorinemab through two Phase 2 clinical studies. The first Phase 2 study (TAURIEL) conducted in prodromal to mild AD patients started in Q4 2017, and the second Phase 2 study (LAURIET) conducted in moderate AD patients started in the Q1 2019. Semorinemab is proposed to slow the prion-like propagation of Tau pathology which coincides with both clinical symptoms and disease progression in AD.

- ***ACI-35*.** Janssen and AC Immune moved the anti-Tau vaccine program forward with the initiation of a Phase 1b/2a study in Q3 2019 to evaluate ACI-35.030, an anti-phospho-Tau (pTau) vaccine; ACI-35.030 targets pathological Tau and is intended as a disease-modifying treatment for AD and other Tauopathies.

- ***Morphomer Tau.*** In collaboration with our partner, Lilly, we are researching and developing Tau Morphomer aggregation inhibitor small molecules with a first indication in AD. We entered ACI-3024, our lead compound, into Phase 1 in Q3 2019.

- ***ACI-24.*** We own the global rights to ACI-24 and we continue to develop ACI-24 in-house as a therapeutic candidate.

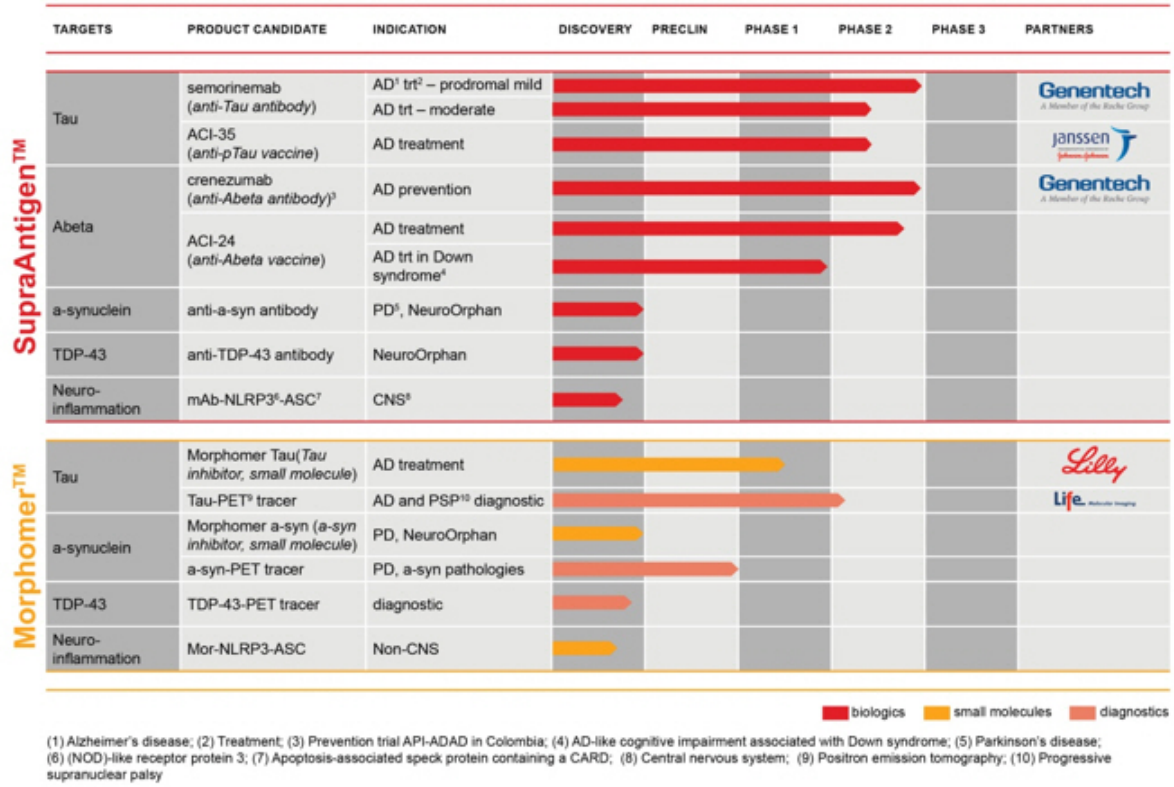
- ***ACI-24 for AD.*** One Phase 2 study commenced in October 2018 in order to assess the safety, tolerability, immunogenicity and target engagement of ACI-24 formulations using intramuscular injections and analyze ACI-24's effects on brain amyloid assessed by PET imaging when given by the intramuscular route in a larger cohort size. The previous Phase 1/2 study has been completed and the clinical study report was finalized in 2019.

- ***ACI-24 for Down syndrome (DS).*** Our Phase 1b clinical study of ACI-24 for individuals with DS, intended to assess safety, tolerability and immunogenicity at two doses, is ongoing for participants in the high dose cohort. Participants from the low dose cohort have fully completed the study. To date, no serious adverse events and no early withdrawal have been observed in any study participants, thus supporting a favorable safety and tolerability profile.

- ***Crenezumab.*** The parent of our collaboration partner discontinued, as of January 2019, the Phase 3 clinical trials in AD but is continuing the Colombian prevention trial in genetically pre-disposed people at risk of developing familial AD. The overall beneficial safety profile was confirmed in the CREAD studies, supporting crenezumab's application in healthy individuals with risk of developing AD.

- ***Diagnostic candidates*.** In addition to the above product candidates, we will continue to develop our complementary diagnostic product candidates for Tau (with Life Molecular), alpha-synuclein and TDP-43 to advance these through clinical development, either independently or with collaboration partners.

Figure 3: Our broad and robust pipeline



(1) Alzheimer's disease; (2) Treatment; (3) Prevention trial API-ADAD in Colombia; (4) AD-like cognitive impairment associated with Down syndrome; (5) Parkinson's disease; (6) (NOD)-like receptor protein 3; (7) Apoptosis-associated speck protein containing a CARD; (8) Central nervous system; (9) Positron emission tomography; (10) Progressive supranuclear palsy

Expanding into other neurodegenerative and NeuroOrphan diseases

We will continue to leverage our proprietary technology platforms to develop product candidates that share the same disease targets like Tau, misfolded Abeta, alpha-synuclein and TDP-43 proteins, which are the key features of many neurodegenerative diseases. We pursue selected NeuroOrphan indications, such as progressive supranuclear palsy (PSP) and other Tau related frontotemporal lobar degeneration (FTLD-Tau), such as the behavior variant of frontotemporal dementia and corticobasal degeneration. Pursuing NeuroOrphan indications may enable us to obtain a streamlined regulatory approval pathway and favorable reimbursement treatment of any approved products.

Accelerating the advancement of our diagnostic portfolio

We are also developing a complementary diagnostics portfolio. We currently have three families of diagnostics candidates in our pipeline that we developed using our Morphomer platform that targets Tau, alpha-synuclein and TDP-43. Our Tau-PET imaging agent PI-2620 commenced Phase 2 studies in AD in Q3 2019, including proof-of-concept in AD and healthy volunteers, dosimetry, and test/re-test in AD and healthy volunteers. We are working with our partner, Life Molecular, to advance PI-2620 through the clinical development process in AD and expand the use of PI-2620 to non-AD Tauopathies such as PSP. We are also developing proprietary PET imaging diagnostics for diseases resulting from the misfolding of alpha-synuclein and TDP-43 proteins.

We are leveraging the duality of our therapeutic and diagnostic approaches to seek to become the leader in precision treatment of neurodegenerative diseases. The goal of precision medicine is to deliver optimally targeted and timed interventions tailored to an individual's molecular drivers of disease. The biggest limitation in neurodegenerative disease management is the lack of appropriate biomarkers and reliable diagnostics for early disease detection and the absence of approved disease-modifying therapies. We believe that the future treatment paradigm for neurodegenerative diseases will likely involve early disease diagnosis and combination therapy, leveraging both symptomatic and disease-modifying treatments, with different disease-modifying treatments used at various points in the progression of the disease. We believe that our multi-pronged approach to neurodegenerative disease diagnosis and treatment may result in the generation of individualized treatment options for patients and improve clinical outcomes.

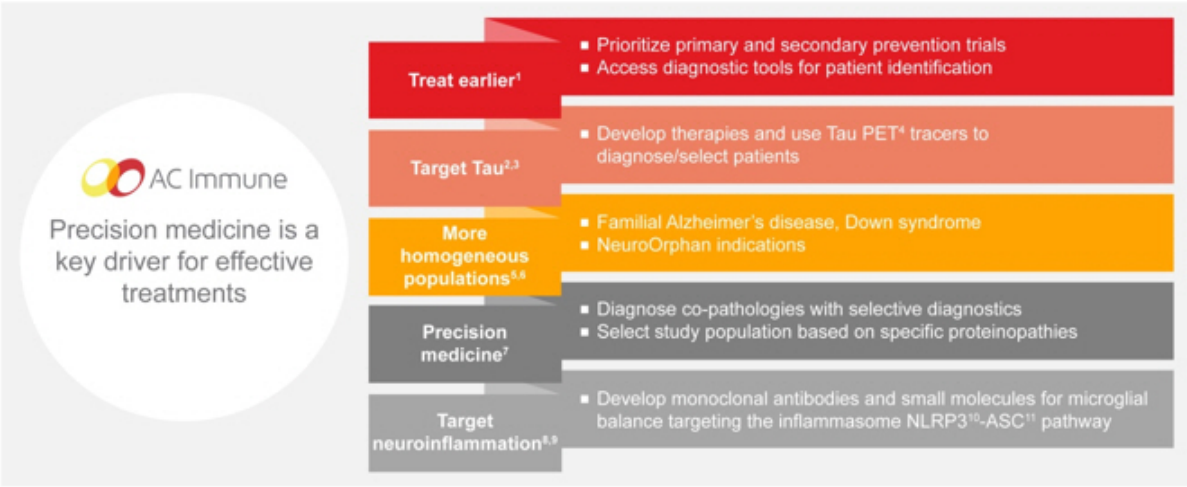
Strategically collaborating or selectively partnering for the development and commercialization of product candidates

Historically, we have relied on collaboration agreements with leading pharmaceutical companies to leverage their scientific, development, manufacturing and commercialization expertise and other resources in order to accelerate the development of our product candidates. To date, we have entered into collaboration agreements with leading global pharmaceutical companies, including two collaborations with Genentech, one with Janssen and one with Lilly. We believe that these partnerships validate our core strategy of discovering safe and efficacious therapies using our proprietary platforms and advancing them through the various stages of regulatory approval. In the future, for any approved products targeting large markets, we may selectively partner with leading companies that we believe can contribute manufacturing and marketing expertise, geographic reach and other resources and know-how that can enhance the value of these approved products. In this respect, we established a strategic partnership with WuXi Biologics for their expertise in manufacturing biologicals as well as the application of AC Immune's vaccine portfolio in China and potential collaborations on AC Immune's SupraAntigen platform.

Our *Roadmap to Successful Therapies for Neurodegenerative Diseases*

In 2019 a number of important developments occurred in the field of neurodegenerative diseases. In response, we developed our five-point *Roadmap to Successful Therapies for Neurodegenerative Diseases*, that recognizes the importance of treating earlier, targeting Tau, focusing on more homogeneous patient populations, exploring precision medicine and researching neuroinflammation as a target. This strategic framework, both reflects that AC Immune has one of the broadest Tau pipelines in the field and our belief that Abeta still has a role to play, particularly in early disease.

Figure 4: AC Immune's *Roadmap to Successful Therapies for Neurodegenerative Diseases*



(1) Reardon S, Nature 2018; (2) Pontecorvo MJ, *et al.*, Brain 2019; (3) Gordon BA, *et al.*, Brain 2019 ; (4) Positron emission tomography; (5) Strydom A, *et al.*, Alzheimers Dement (N Y) 2018; (6) Lott IT and Head E.,Nat Rev Neurol. 2019; (7) Robinson JL, *et al.*, Brain 2018; (8) Heneka MT *et al.*, Nat Rev Neurosci. 2018; (9) Wang S *et al.*, Int Immunopharmacol. 2019 ; (10) (NOD)-like receptor protein 3; (11) Apoptosis-associated speck protein containing a CARD

Treat earlier

It is now believed that treatments targeting Abeta may be most effective before symptoms become apparent. The challenge remains, how to identify such individuals within the population. This places a focus on the Alzheimer's Prevention Initiative (API) trial of crenezumab to answer the fundamental question of whether Abeta monotherapy will work and if AD can be prevented. Through this work, it may be possible to identify biomarkers that could lead to the development of preventive medicine for use in the wider AD population. This has the potential to create a situation with parallels to cardiovascular disease where cholesterol is used as a biomarker and statins are prescribed in a preventative mode.

Target Tau

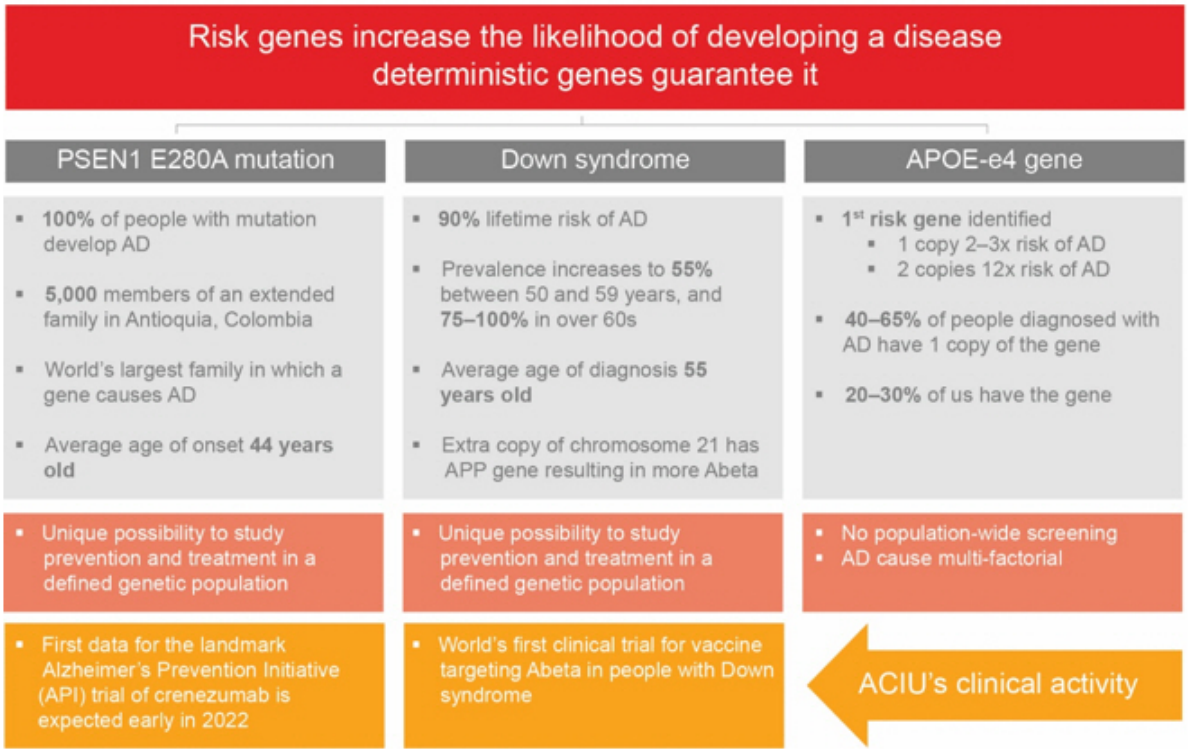
It is well understood that Tau plays a very important role in neurodegeneration, and the question we are asking is whether the Tau cellular machinery in early or mild AD is already so advanced it cannot be stopped by monotherapy. This is being addressed through multiple Tau research programs in early and late stage diseases,

including small molecules intervening at the first step of Tau pathology inside the cell, a key differentiator in our research strategy.

More homogeneous populations

The role of Abeta has been a significant focus of research, however the challenge remains that multiple pathologies are thought to contribute to the development of AD, including genetic, lifestyle and environmental factors. Patient etiology can be diverse. Therefore, to understand if a candidate drug has therapeutic potential, it is important to identify more homogeneous genetic patient populations. This includes PSEN1 E280A mutation carriers with ADAD in Colombia and individuals with DS.

Figure 5: The role of genetics in AD



Precision medicine

Building on the understanding that multiple pathologies contribute to the clinical presentation of AD, there is a need to accurately diagnose the underlying pathology, and, as such, therapeutic strategies may need to be adapted using precision medicine. This builds on our development of specific PET tracers and therapies for the described proteinopathies (i.e. Tau, alpha-synuclein and TDP-43, and selection and treatment of study population according to those dominant proteinopathies).

Target neuroinflammation

It is well established that microglia maintain a healthy brain environment by clearing debris, including misfolded Abeta, Tau and a-synuclein. Hyper-stimulation of microglial cells is now emerging as a hallmark of AD – and could prove a common pathology underpinning all neurodegenerative diseases. Our discovery programs are focused on microglial balance through the NLRP3 pathway by small molecule inhibitors and antibodies which neutralize components of the NLRP3 pathway.

Unmet need in neurodegenerative diseases

Figure 6: The World Health Organization recognizes dementia as a global public health priority

(1) The World Alzheimer Report 2019, Attitudes to dementia; (2) The World Alzheimer Report 2018, The state of the art of dementia research: New frontiers; (3) Alzheimer's Society, Facts for the Media

Neurodegenerative diseases and other diseases associated with protein misfolding are prevalent, but there is currently an absence of reliable, early-stage diagnosis and disease-modifying treatments for these diseases. The growth in the number of people with neurodegenerative diseases has been significant as evidenced by the prevalence of people affected by AD and PD, two of the most common neurodegenerative diseases.

- The World Health Organization recognizes dementia as a global public health priority**.** Worldwide, there is a new case of dementia every three seconds, with an estimated global patient population of approximately 50 million in 2019. This is predicted to increase to 152 million by 2050 (World Alzheimer Report 2019: Attitudes to dementia). AD is the most common form of dementia, accounting for 60–80% of dementia cases (Alzheimer's Association). The estimated aggregate cost of prevention and treatments in the United States was USD 1 trillion in 2019 and is estimated by Alzheimer's Disease International, or ADI, to grow to USD 2 trillion in 2030. ADI estimates the cost of prevention and treatment in the United States could be reduced by 35−40% in 2050 if the onset of AD could be delayed by five years in the patient population. In addition, the prevalence of AD in people with DS is more than 50% over the age of 50 and 75–100% over the age of 60 (Strydom, 2018). DS affects approximately one in 1,000 live births worldwide.

- AD is typically diagnosed by neurologists and psychiatrists through a series of cognitive and functioning tests once symptoms are clinically present, resulting in diagnosis at later stages of the disease after irreversible loss of neurons has already occurred. Currently approved AD treatments include medications that only treat the symptoms of the disease. The clinical benefit derived from these symptomatic treatments is typically incomplete. Only between 40 and 70% of patients with AD benefit from taking symptomatic treatments and the symptoms improve for 6−12 months in most cases.

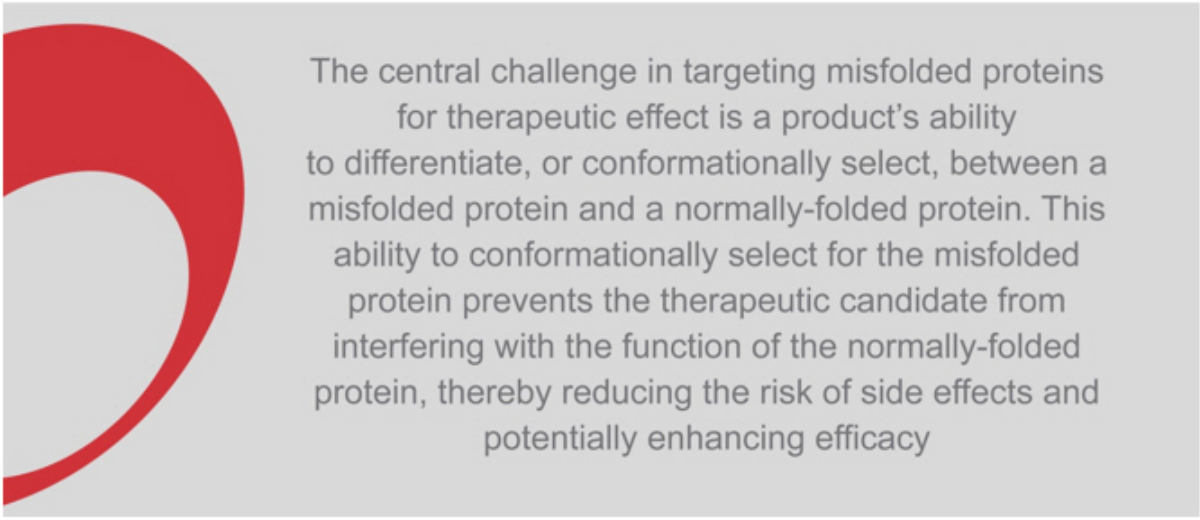
- Therapeutic development for AD is increasingly focused on treating early stages of the disease to delay or prevent progression and to preserve the maximum amount of cognitive function before irreversible neuronal damage occurs. Most clinical studies now target mild stages of the disease, increasing the need for accurate diagnosis that is independent of potentially subjective and otherwise sub-optimal cognitive metrics. Diagnostics therefore have a crucial role in selecting more uniform and stage-specific clinical study subjects, tracking patient progress and results, managing patients receiving treatment and ultimately diagnosing the disease at its earliest stage for immediate treatment.

- PD, the second most common neurodegenerative disease worldwide, affects more than six million people. In PD, the use of symptomatic treatments, such as levodopa, is associated with the loss of control of motor functions in approximately 50% of patients who have taken the drug for five years or longer.

There remains a significant unmet medical need for reliable and accurate diagnostics to enable early diagnosis and disease-modifying treatments that slow the progress of neurodegenerative diseases.

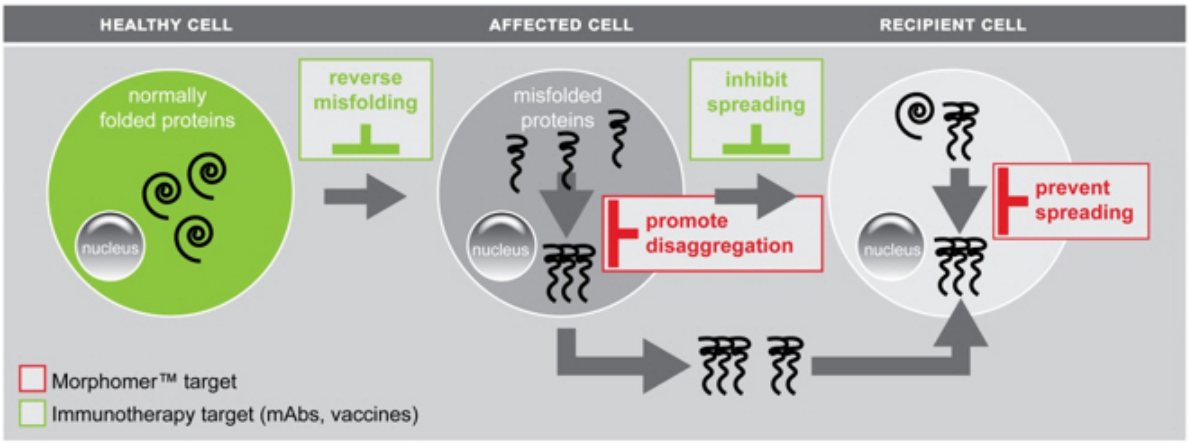
We have assembled an outstanding management team with relevant scientific, clinical and regulatory expertise. Our scientific founders, Dr. Jean-Marie Lehn, Dr. Claude Nicolau, Dr. Roscoe Brady and Dr. Fred van Leuven, are regarded as pioneers in their respective scientific domains, including in the study of AD. Our co-founder and Chief Executive Officer, Dr. Andrea Pfeifer, a pharmacologist with a Ph.D. in cancer research and former National Institute of Health researcher, has a 30 year track record in product innovation and implementation and was formerly head of Nestlé Global Research and the co-founder of Nestlé Venture Fund. In January 2019, we appointed Dr. Marie Kosco-Vilbois to be our Chief Scientific Officer. Dr. Kosco-Vilbois has more than 20 years of experience in various aspects of discovery research and drug development, including working on multiple drug development programs.

Our approach to treating diseases related to protein misfolding



Protein folding and unfolding are important ways of regulating the protein's biological activity and cellular location. Misfolding of proteins occurs due to a breakdown of cellular quality control systems, and is a common feature of many neurodegenerative diseases. Research has shown that misfolded proteins are not only unable to carry out their normal functions, but also aggregate to form deposits in the brain that eventually lead to neuronal damage and cell death. The progression of neurodegenerative diseases, such as AD and PD, is linked to the misfolded conformations of proteins, such as Tau, Abeta, alpha-synuclein and TDP-43.

Figure 7: Misfolded proteins key impact on the pathology of neurodegenerative diseases



The figure above shows how, in today's understanding, misfolded proteins play a key role in the pathology of neurodegenerative diseases. Typically, protein misfolding occurs during cellular stress, which can be triggered by many different causes, including oxidation and a lack of growth factors. A cascade of molecular events begins with the misfolding of single proteins within a cell that then continue to aggregate to ultimately form plaques and tangles. These misfolded proteins are then exported and spread to healthy cells nearby,

causing normal proteins to misfold in a process known as seeding. This process eventually leads to cell death in various areas of the brain and is linked to a decline in cognitive function.

The figure above also shows how we believe our therapies aim to intervene in the key pathology steps involved in neurodegenerative diseases:

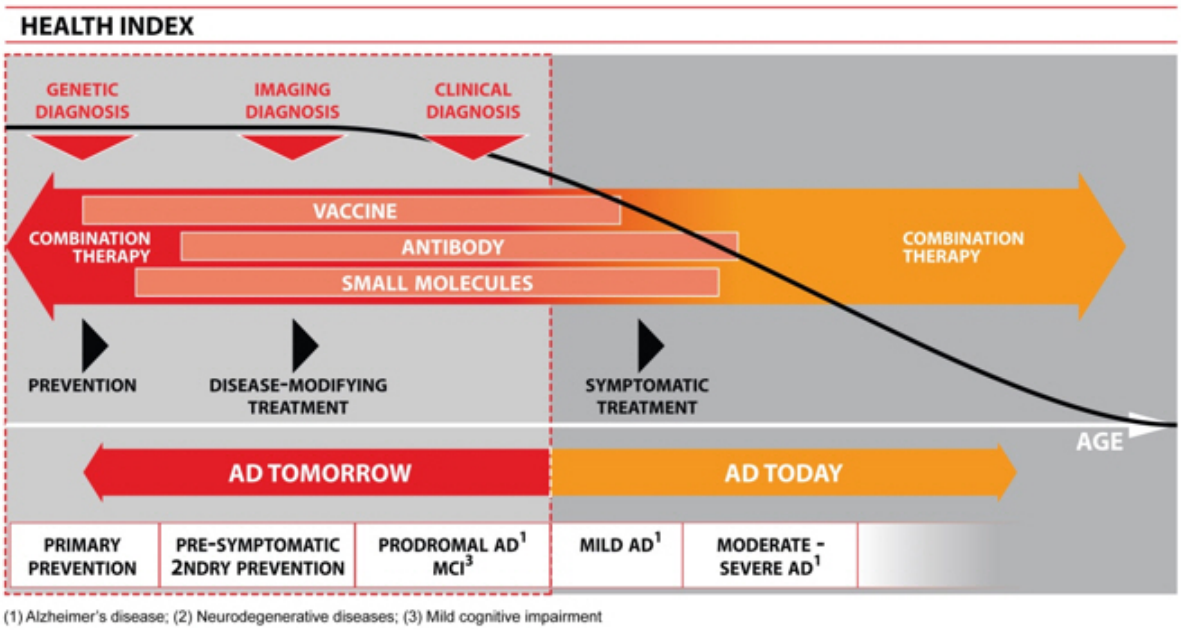
- Prevent misfolding
- Promote disaggregation
- Inhibit spreading
- Prevent seeding in healthy cells

Current treatment paradigm for neurodegenerative diseases

Current diagnostic and treatment paradigms for neurodegenerative diseases are suboptimal. Diagnosis typically takes the form of observation of cognitive, functional and behavioral impairment and other symptoms of the diseases, which are generally only apparent after irreversible neuronal damage has already occurred. These symptoms are treated with medicines capable of providing cognitive benefit and functional improvement but fail to affect the progression of the disease. For AD, there are currently five approved therapies, all of which only provide modest efficacy in treating the symptoms of AD, while having significant side effect risks, and fail to address the progression of the disease. Despite these shortcomings, marketed therapies, such as Eisai and Pfizer's Aricept, have achieved peak annual global sales of approximately USD 4 billion prior to loss of exclusivity. Similarly, in the treatment of PD, the current standard of care is intended only to alleviate physical symptoms. In both AD and PD, there are no approved disease-modifying treatments that slow or stop the course of disease progression.

Modifying the progression of the disease requires targeting the underlying biological processes that drive disease progression. Unfortunately, these processes evolve over the course of many years prior to manifestation of symptoms and a high percentage of neurons may be lost prior to clinical manifestation. Many of the failed clinical studies for disease-modifying treatments targeted patients with moderate stages of the disease, when irreversible neuronal damage and death had already occurred. This has led to the conclusion that early intervention is necessary to slow the disease progression and that disease-modifying therapies should be studied in patients with milder stages of the disease. As a result of this, in recent years, there has been a movement towards early intervention in clinical development. Early intervention, however, requires accurate disease detection prior to physical manifestation of symptoms, using new and sophisticated technologies that are superior to the subjective rating scales currently used to assess patients. Thus, new diagnostic technologies are critical to the clinical development process of disease-modifying therapies and ultimately better disease management of patients with neurodegenerative diseases.

Figure 8: Treatment and diagnosis of AD



(1) Alzheimer's disease; (2) Neurodegenerative diseases; (3) Mild cognitive impairment

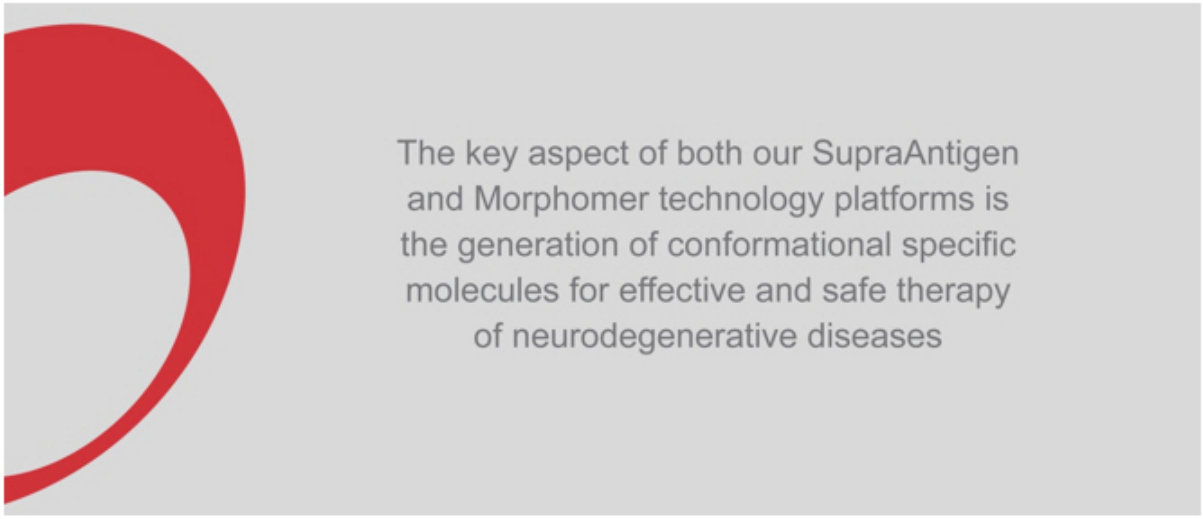
Future treatment paradigms for neurodegenerative diseases may involve different combinations of disease modifiers at various stages of a disease. Therefore combination therapies may include combinations of immunotherapies or combinations of small and large molecules targeting proteinopathies and neuroinflammation. Our therapeutic product candidates seek to modify the course of AD by intervening at an earlier stage of the disease progression prior to irreversible neuronal damage. Beyond AD, we believe that we can leverage our proprietary platforms to generate additional molecules that treat the causes of other neurodegenerative and NeuroOrphan diseases, such as PD, multiple system atrophy (MSA) and FTLD-Tau clinical conditions (e.g. PSP, Pick's disease and Corticobasal degeneration) and Huntington's disease (HD). We believe that the future treatment paradigm for neurodegenerative diseases will involve different disease-modifying treatments used at various points in the progression of the disease. One such combination may be passive immunization targeting Abeta together with anti-Tau antibodies or immunotherapies and small molecules targeting Abeta or Tau.

We believe that we are a leader in discovering new PET imaging agents to improve the timing and accuracy of diagnoses in neurodegenerative diseases. We have three families of diagnostic candidates in our pipeline that were developed through our Morphomer platform that target Tau, alpha-synuclein and TDP-43. We believe our Tau-PET imaging program has received external validation through our partnership with Life Molecular, a leader in imaging agents. We are also developing alpha-synuclein and TDP-43 PET imaging agents for PD and other neurodegenerative diseases. We believe that our diagnostic product candidate pipeline will complement our disease-modifying treatment product candidate pipeline, with the ultimate goal of reshaping the clinical course and treatment of neurodegenerative diseases.

Benefits of our approach

The key aspect of both our SupraAntigen and Morphomer technology platforms is conformational specificity, which we believe is central to the development of effective and safe therapeutics for neurodegenerative diseases. Our SupraAntigen platform targets misfolded proteins through antigens displayed on the surface of liposomes which mimic the targeted pathological form of the protein. In a complementary approach, our Morphomer platform uses small molecular weight compounds to target the aggregation and seeding process, which prevents the misfolded proteins from aggregating inside the cell and the formation of new misfolded proteins in healthy neighboring cells through a seeding mechanism. Small molecules derived from our Morphomer platform, which we refer to as Morphomers, not only reduce aggregation of pathological proteins, but also promote disaggregation of already formed aggregates, thereby potentially enhancing their therapeutic potential even in established disease states.

Our proprietary technology platforms



Our two unique proprietary and versatile technology platforms are engines to drive the growth of our development: our SupraAntigen platform, which is our biological and immunological platform, and our Morphomer platform, which is our small molecule, chemical platform. These platforms are designed to generate vaccines, antibodies and small molecules, respectively, which selectively interact with misfolded proteins that are common in a broad range of neurodegenerative diseases.

Our SupraAntigen platform generates monoclonal antibodies and vaccines for use as passive and active immunotherapies that are highly specific for pathological, or misfolded, forms of proteins typically found in neurodegenerative diseases.

The key advantages of the SupraAntigen platform include:

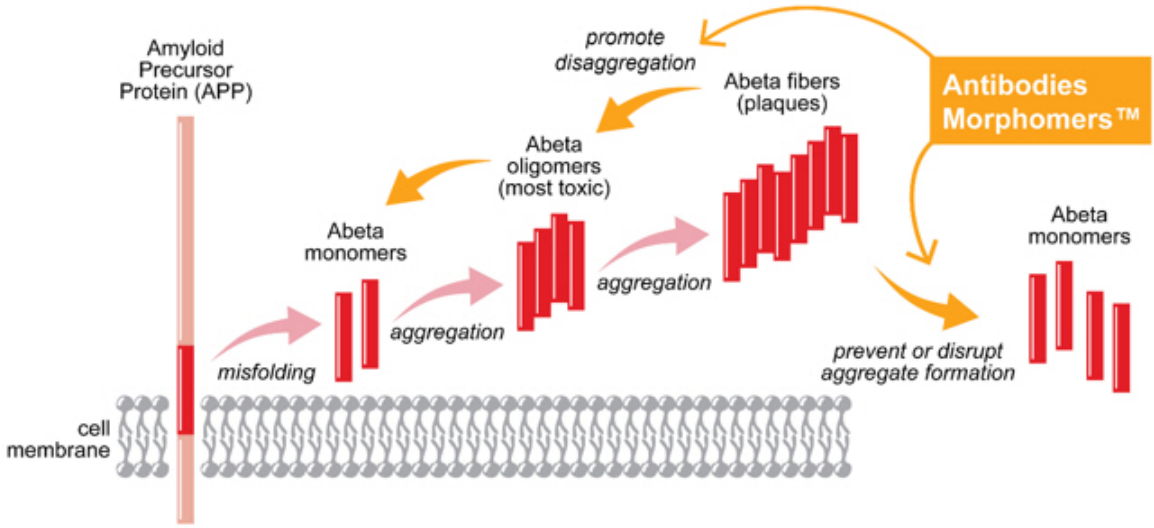
- Highly selective conformation-specific immunotherapy
- Generation of antibodies and vaccines
- Generation of a rapid antibody response
- Favorable safety avoiding T-cell mediated inflammation

Product candidates generated utilizing the SupraAntigen platform include semorinemab in Phase 2 in AD, ACI-35 in Phase 1b/2a in AD, ACI-24 for Phase 2 in AD and Phase 1b in DS, crenezumab in Phase 2 in AD and the pre-clinical antibodies for alpha-synuclein and TDP-43 in PD and NeuroOrphan indications.

Our Morphomer platform represents a highly promising technology that enables us to generate conformation specific small molecules through rational design. As of December 31, 2019, our Morphomer library consisted of more than 9,200 compounds. This proprietary platform enables us to generate small molecules that bind to their target and break up neurotoxic protein aggregates or act as propagation inhibitors.

Therapeutic product candidates generated by the Morphomer platform include ACI-3024, our lead Morphomer Tau candidate, in Phase 1 in AD, Morphomer alpha-synuclein in PD (in the preclinical stage) and the diagnostic programs PI-2620 in Phase 2 and Phase 1 in AD and PSP, respectively and alpha-synuclein-PET and TDP-43 PET imaging agents in the preclinical stage.

Figure 9: Plaque formation and proposed intervention strategies



Our programs

Targeting both intracellular seeds and extracellular spreading by combination therapy of Morphomers and immunotherapy could enable the full control of the Tau pathology progression. Highly selective Tau imaging diagnostic enables more precise patient characterization and potentially more precise prediction of AD progression.

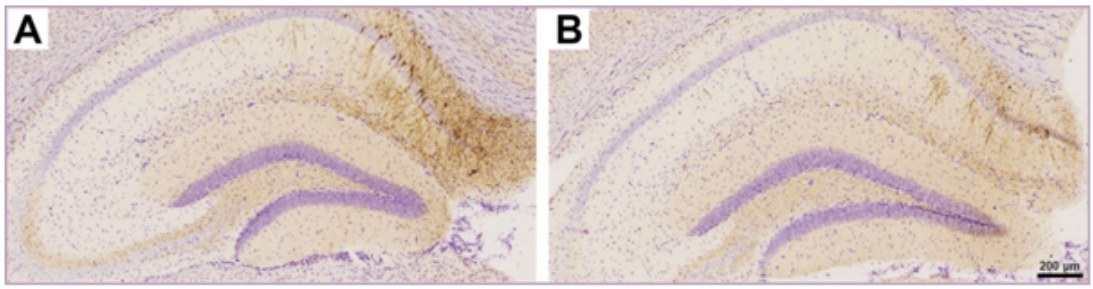
Semorinemab

Our anti-Tau monoclonal antibody program generated humanized antibodies for use as passive immunotherapies highly specific for pathological forms of Tau found in AD brains and other Tauopathies. Results from preclinical studies demonstrated a reduction in pathological Tau and improvement of long-term spatial memory. Semorinemab, an IgG4 isotype, was discovered and developed as a part of a collaboration between AC Immune and Genentech, for the treatment of AD and other neurodegenerative diseases.

Lead characterization

Semorinemab is a high affinity antibody that binds all forms of Tau. Semorinemab is designed to intercept extracellular Tau, stopping or slowing cell-to-cell spread and propagation of pathological Tau in the brain. Efficacy studies run in mouse models of AD and other Tauopathies exhibited dose-response alleviation of Tau pathology with behavioral improvements.

Figure 10: Alleviation of Tau pathology in models of AD



Ref: Ayalon *et al.*, AD/PD 2017

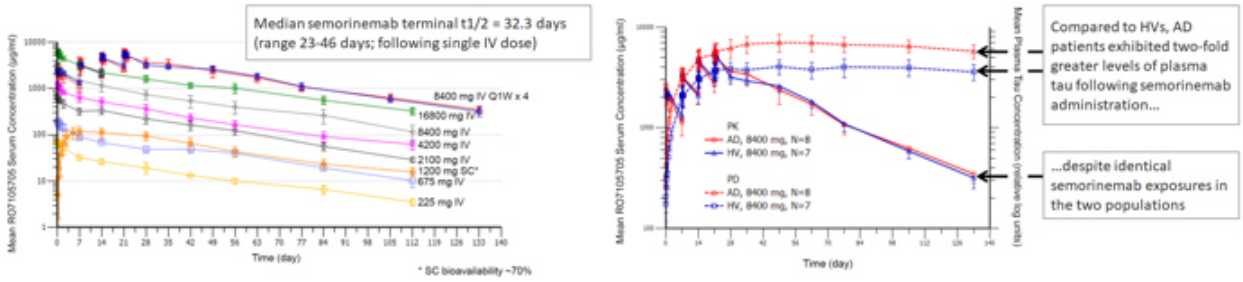
Representative images of hippocampal coronal sections from human Tau-P301L transgenic mice treated with control antibody (**A**) or semorinemab (**B**) and immunostained for pathological Tau deposits

Clinical development

A Phase 1 clinical trial involving 75 subjects evaluated safety, tolerability, pharmacokinetics and preliminary activity of semorinemab in people with AD and in healthy volunteers. This trial was completed in the second quarter of 2017. Semorinemab was administered at single doses up to 16,800 mg to healthy volunteers, and at multiple doses of 8,400 mg to healthy volunteers and patients with mild-to-moderate AD. No dose-limiting toxicities and no serious adverse events were observed. No participant withdrawals, modifications or interruptions due to an adverse event were reported. Results were presented at multiple conferences, including the 13th International Conference on Alzheimer's & Parkinson's Diseases and Related Neurological Disorders (AD/PD) in 2017, the AAIC in 2017, and the 10th international CTAD in 2017.

Semorinemab exhibited a dose proportional pharmacokinetic profile and CNS exposure, with a median half-life of 32.3 days. Plasma total Tau concentration increased with increasing drug doses and was two times greater in participants with AD compared to healthy volunteers, suggesting a pharmacodynamic signal as shown in the figure below.

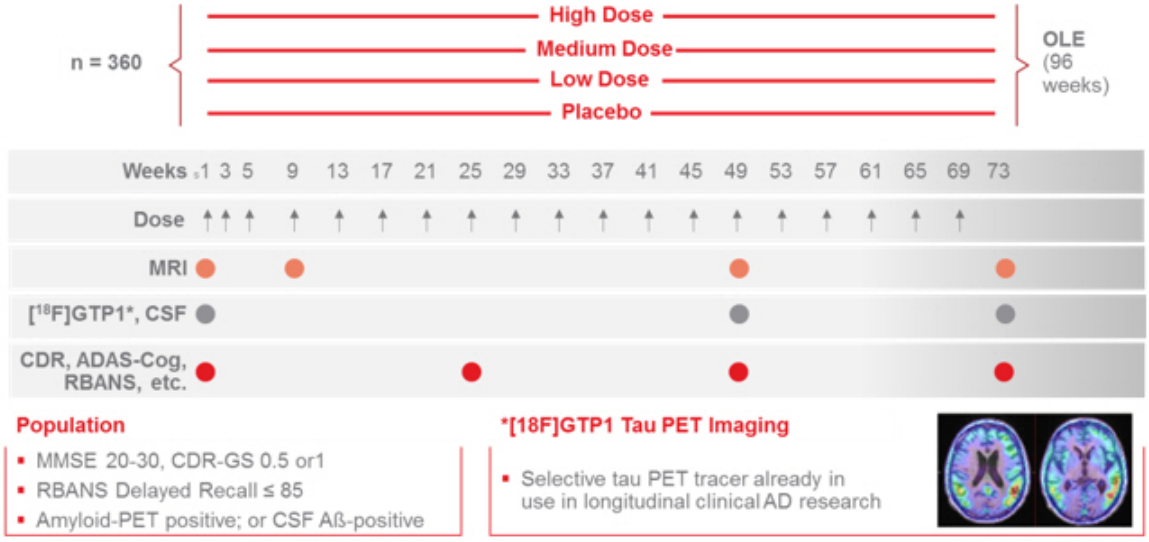
Figure 11: Phase 1 pharmacokinetic and plasma Tau results



Ref: Kerchner *et al.*, CTAD 2017.

A Phase 2 clinical trial (TAURIEL) commenced in Q4 2017 with the dosing of the first patient. This multicenter trial, which has enrolled 457 participants, assesses safety, tolerability and efficacy of semorinemab in people with prodromal-to-mild AD. Participants receive one of three active doses or a placebo for 72 weeks, followed by a 96-week optional open label extension. Primary endpoints include safety assessment and the composite functional and cognitive endpoint CDR (Clinical Dementia Rating scale) sum-of-boxes score (CDR-SB). Change from baseline in Tau pathological burden is an exploratory endpoint. The study design is shown in the graph below with primary completion estimated in Q2 2020.

Figure 12: Phase 2 (TAURIEL) study design



Ref: Kerchner *et al.*, CTAD 2017

A second Phase 2 trial (LAURIET) was initiated in Q1 2019. This is a multicenter study enrolling 260 participants designed to evaluate the clinical efficacy, safety, pharmacokinetics and pharmacodynamics of

semorinemab in patients with moderate AD (MMSE 16-21, CDR-GS=1 or 2). The study consists of a screening period, a double-blind treatment period of 49 weeks, an optional open-label extension (OLE) period, and a follow-up period, with ADAS-Cog11 and ADCS-ADL as the primary endpoints, and CDR-SB, MMSE, and safety as secondary endpoints. Primary completion estimated in Q2 2021.

ACI-35

ACI-35 is a vaccine candidate directed against the key component of the pathology of AD: phosphorylated Tau proteins, or pTau, found in Tau tangles. ACI-35 was developed using our SupraAntigen technology and is designed to stimulate a patient's immune system to produce antibodies against the misfolded and phosphorylated pathological conformers of Tau protein that aggregate to create the neurofibrillary tangles that characterize AD. In preclinical testing, the vaccine candidate induced an antibody response that was highly specific to misfolded and phosphorylated Tau. This antibody response resulted in a significant reduction of phosphorylated Tau and an improvement in clinical parameters. ACI-35 is the first vaccine candidate against phosphorylated pathological Tau in a clinical study involving patients with mild to moderate AD. The first clinical study Phase 1b has been completed.

Clinical development

Phase 1b study design

The safety, tolerability and immunogenicity of ACI-35 were tested in a Phase 1b study in mild to moderate AD patients. It was a randomized, placebo controlled double blind study. Different doses and dosing schedules were investigated in an ascending dose design. Multiple injections of ACI-35 were administered per cohort for active or placebo treatment in a three-to-one ratio.

Phase 1b study results

The safety and tolerability in the study were considered acceptable. As previously reported, five serious adverse events were observed in three patients during the clinical study of ACI-35. The vaccine ACI-35 is considered to be safe and well tolerated with no events related to CNS inflammation.

Antibody response

Analysis of the antibody response of the Phase 1b study demonstrated that ACI-35 elicited a rapid induction of anti-phosphorylated Tau after the first immunization in all study cohorts, indicating a T-cell independent antibody response which, however, lacked the boosting response desired for an optimal long-term and potentially preventive application. Therefore, in a collaborative effort both research teams of AC Immune and Janssen have successfully developed a new generation anti-Tau vaccine, ACI-35.030.

In non-clinical studies, ACI-35.030 has demonstrated an excellent non-clinical safety profile, while producing an enhanced homogeneous antibody response with boosting effect. See e.g. Kosco-Vilbois *et al.*, AC Immune Key Opinion Leader event, 2019.

Phase 1b/2a study

The Phase 1b/2a study is a randomized, multicenter, double-blind, placebo-controlled clinical study with a primary objective to assess the safety, tolerability and immunogenicity of different doses of ACI-35.030 in patients with early AD. Secondary objectives will assess additional immunogenicity parameters, while exploratory endpoints will include notable biomarkers of progression of AD as well as clinical assessments. The Phase 1b/2a study evaluating ACI-35.030 was initiated in Q3 2019.

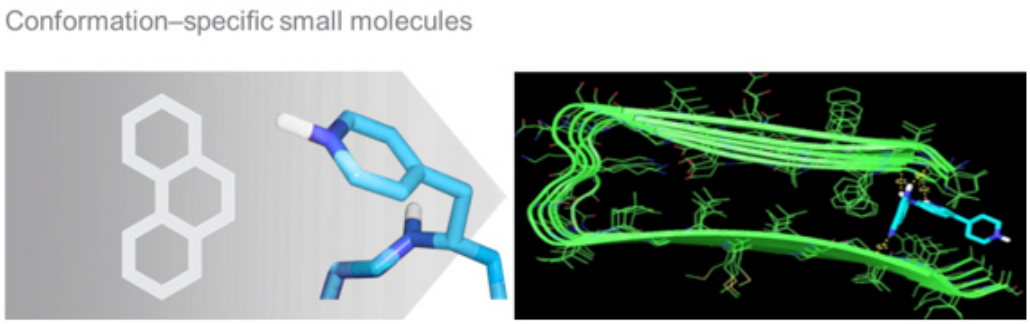
Safety

To date, eight patients (six on active medication and two on placebo) have been randomized in the low dose cohort with ACI-35-030 in the Phase 1b/2a study and the recruitment will be pursued in the subsequent cohorts. No serious adverse events have been reported to date.

Anti-Tau Morphomers

Morphomers are conformation-specific, non peptidic, small molecules designed to specifically recognize pathological misfolded and Beta-sheet-rich aggregated protein forms (Figure 13 below). Being small molecules, Morphomers show drug like properties including brain penetration and can enter cells to access intracellular deposits of aggregated proteins. AC Immune has built a robust proprietary library of around 9,200 Morphomers.

Figure 13: Morphomers derived of proprietary Morphomer platform



Approximately 1,000 compounds were screened so far for the Morphomer Tau (Mor-Tau) program. This allowed the identification of several chemical series of orally bioavailable small molecules with suitable CNS properties. The lead compounds displayed selectivity in binding to pathological Tau aggregates over other protein aggregates. In addition, lead compounds were able to prevent Tau aggregation and promote its disaggregation. Further characterization using multiple orthogonal *in vitro*, *ex vivo* and *in vivo* tests addressing pharmacology, ADME, and safety properties has led to the identification of the clinical candidate ACI-3024.

Lead characterization

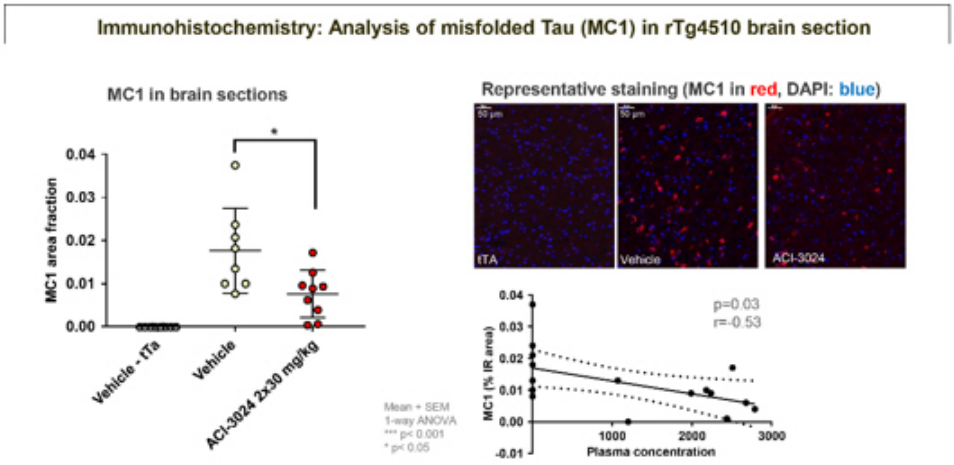
ACI-3024 was shown to be a potent inhibitor of Tau aggregation, not only on the Tau native form, but also on synthetic fibers derived from the six human Tau isoforms or from the four mutants containing common point mutation associated with human Tauopathies, such as FTLD-Tau (e.g. PSP, Pick's disease, Corticobasal degeneration). ACI-3024 selectively binds to aggregated Tau but does not bind to the monomeric forms of Tau; moreover the binding to Tau is selective, with no cross-reactivity to Abeta and alpha-synuclein.

ACI-3024 showed a potent and dose-dependent reduction in spontaneous intracellular Tau aggregation and misfolding as measured by immunocytochemistry in human neuronal-like cells over-expressing Tau. Furthermore ACI-3024 promoted *ex vivo* disaggregation of Tau neurofibrillary tangles on human AD brain sections.

The *in vivo* efficacy of ACI-3024 was evaluated in the rTg4510 mouse model (Ramsden *et al.*, 2005). *In vivo* treatment of Tg4510 transgenic mice with ACI-3024 reduced aggregated and insoluble hyper-phosphorylated Tau. Immunohistochemistry analysis of misfolded Tau (MC1) in the Tg4510 brain section of the same mice treated with ACI-3024 showed reduction of misfolded Tau. These effects were proportional to the plasma concentration of ACI-3024 (Figure 14 below).

Total Tau concentration in CSF were correlated with ACI-3024 exposure in plasma and indicates an increase of Tau clearance from the brain, opening the possibility of exploring CSF Tau concentrations as a biomarker.

Figure 14: Assessment of ACI-3024 treatment effects on misfolded Tau



Ref: AC Immune unpublished data

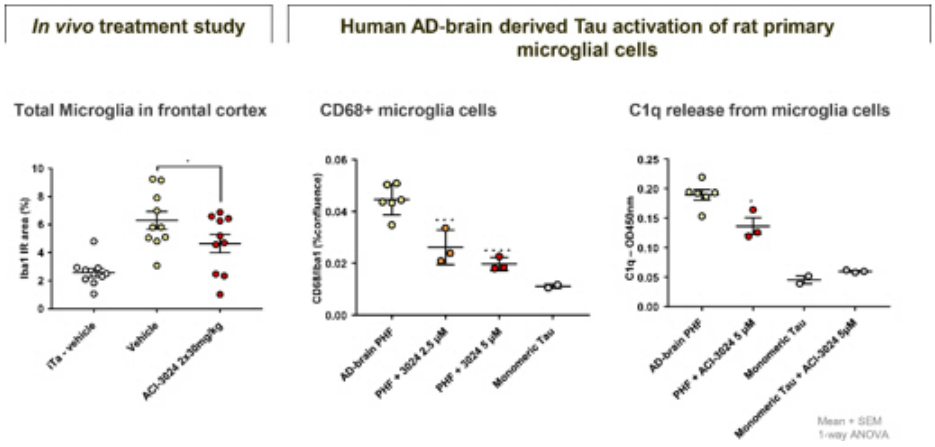
Preclinical safety

ACI-3024 has a good *in vitro* and *in vivo* ADME profile, including low clearance, long half-life and good CNS disposition as assessed by brain and CSF concentrations. ACI-3024 was negative in *in vitro* and *in vivo* genotoxicity assays (AMES, MNT and MLY) and has undergone an extensive toxicology and safety pharmacology assessment. The NOAEL has been established at 300 mg/kg in rodent and at 450 mg/kg in non-rodent after 4-week treatment (Poli, CTAD 2018).

Effect on neuroinflammation

ACI-3024 efficacy on pathological Tau-induced neuroinflammation was assessed *in vitro* and *in vivo*. *In vitro*, ACI-3024 induced a potent reduction of Tau induced neuroinflammation markers (Figure 15 below). *In vivo*, in the rTg4510 mice, treatment with ACI-3024 overall reduced microgliosis, most likely as a downstream consequence of reducing Tau pathology, by reducing the derived pathological Tau induced-microglial activation (Figure 15 below).

Figure 15: ACI -3024's effect on neuroinflammation



Ref: AC Immune unpublished data

Clinical development

Phase 1 study

This Phase 1 study is a first-in-human, randomized, placebo-controlled, double-blind, sequential single and multiple ascending dose study with open-label food effect and pharmacodynamic assessment arms. The study assesses the safety, tolerability, pharmacokinetics and pharmacodynamics of ACI-3024.

To date, the single ascending dose part of the study has been completed in healthy volunteers and the multiple ascending dose part of the study is currently ongoing.

Safety

To date, 40 non-Japanese and non-elderly male Japanese healthy subjects have been enrolled in the first part of the study (five subsequent single ascending dose cohorts, including a food effect cohort, with eight subjects in each). Overall, 30 subjects have received one single dose of ACI-3024 at different doses and 10 subjects have received placebo in single ascending dose cohorts S1 to S5. Eight subjects in the food-effect cohort participated in two subsequent treatment periods (with fasted and fed status), and received either a second identical oral dose of ACI-3024 or one dose of placebo and one dose of ACI-3024. Overall, ACI-3024 has been considered safe and well-tolerated to date and no serious adverse events have been reported thus far.

ACI-24 for AD

ACI-24 is a vaccine candidate that is currently in a Phase 2 clinical study for AD. ACI-24 was developed utilizing our SupraAntigen platform, and is designed to stimulate a patient's immune system to produce antibodies that specifically target the misfolded Abeta conformer to prevent plaque accumulation and to enhance plaque clearance. Preclinical data demonstrated significant activity in plaque reduction and memory restoration. ACI-24 has a favorable safety profile, characterized by a lack of observed local and CNS inflammation and a mechanism of action independent of inflammatory T-cells. ACI-24 is fully owned by AC Immune and has been developed in-house.

Clinical development

Phase 1/2 study

To be considered a Phase 1/2 study, a study or part of it must include as a primary goal the assessment of efficacy in a patient population, assessed using either clinical endpoints or biomarkers. This is in contrast to a Phase 1 study where the primary goal typically includes only safety and pharmacokinetic or pharmacodynamic measures.

The Phase 1 part of the combined Phase 1/2 study is completed and the clinical study report was finalized in 2019. The efficacy, tolerability and immunogenicity of ACI-24 were tested in mild to moderate AD patients with four different doses in a randomized, placebo controlled, double blind study. The different doses were tested via an ascending dose design in four consecutive cohorts with 12 patients each (nine on active, three on placebo treatment). ACI-24 was administered with multiple injections per cohort. The initial safety follow-up period for two years has been shortened to one year mainly for the patients of the last cohort.

Phase 1 study data

Safety and tolerability

Due to the observed favorable safety profile, the treatment-free safety follow-up period of the Phase 1 part of the study was shortened to one year using a protocol amendment. Fifteen non-drug related serious adverse events were observed in the Phase 1/2 study. In the current Phase 2 study in mild AD patients, six serious adverse events have been reported. Five of them were assessed as not related to study treatment and one SAE was considered to be unlikely related to the study treatment (i.e. transient ischaemic attack). Until now, the ACI-24 vaccine is considered as safe and well tolerated.

Antibody response

Antibody responses were only observed in the two higher dose groups of cohorts 3 and 4 indicating a dose dependent effect of the vaccine. No IgG antibody response was observed in placebo treated patients of those cohorts.

PET Imaging and cognitive measures

While the study was not powered to examine efficacy, a tendency for reduction in accumulation in brain amyloid measured by PET imaging was observed in cohorts 3 and 4.

Due to the safety profile and potential dose dependent reduction of amyloid plaques as measured by PET imaging, we have moved this program forward into a Phase 2 clinical trial which is currently ongoing. In order to optimize the immune response, the route of administration has been switched to intramuscular, since this route was associated with a better antibody response in a non-clinical study.

Phase 2

Phase 2 study design

The aim of the Phase 2 double-blind, randomized, placebo-controlled adaptive design study is to assess the safety, tolerability, immunogenicity and target engagement of ACI-24 formulations in patients with mild AD. The trial will seek to confirm the positive trends on Abeta PET imaging observed in the previous Phase 1/2 study. The Phase 2 trial is being conducted in several European countries and the first dosing occurred in October 2018 via the intramuscular route of administration.

Safety and tolerability

Treatment has been safe and well tolerated to date. Six serious adverse events have been reported so far. Five of them were considered as not related to the study treatment. One SAE was considered to be unlikely related to the study treatment (i.e. transient ischaemic attack).

ACI-24 for DS

Individuals with DS have an extra copy of chromosome 21 where the gene for APP resides. These individuals have a rate of AD that is three to five times that of the general population and develop the disease at a much younger age. At autopsy, AD pathology has been reported in 80% of people with DS over age 40 and 100% over age 60. The prevalence of AD in people with DS is more than 50% over the age of 50 and 75–100% over the age of 60 (Strydom, 2018). It is estimated that there are six million people with DS worldwide, with 250,000 in the United States. Preclinical results published by AC Immune in collaboration with Dr. Mobley of the University of California, San Diego in March 2016, shows, in a DS mouse model (Ts65Dn), a significant 20% memory improvement and a 27% reduction of Abeta in the brain following vaccination with ACI-DS-01, the mouse equivalent of ACI-24.

A Phase 1b clinical trial (called the 3 Star Study) is ongoing and evaluates the safety and tolerability of ACI-24, effect on induction of antibodies against Abeta, and changes in biomarkers such as amyloid load as measured by brain amyloid PET scan and Abeta levels in blood and CSF, in adult participants with DS. The study has been primarily funded by the Company with additional partial funding provided by a grant from the US National Institute on Aging, a part of the US National Institutes of Health (NIH) and an additional grant from the LuMind Research Down Syndrome Foundation. This dose escalation study includes 16 participants across all cohorts, aged 25−45 and treated for 12 months, with a 12-month safety follow-up. The recruitment of adults with DS for the low dose cohort was completed in the third quarter of 2017 and for the high dose cohort in the third quarter of 2018. A favorable safety and tolerability profile has emerged as, to date, there have been neither serious adverse events nor any early withdrawals from the study. Importantly, preliminary assessment of immunogenicity over the 12 months demonstrates a specific anti-Abeta IgG response induced in actively treated DS subjects.

Crenezumab

Crenezumab is a humanized, conformation-specific monoclonal antibody that targets misfolded Abeta and has a broad binding profile. Crenezumab was developed using our proprietary SupraAntigen platform. In 2006,

we licensed crenezumab to Genentech, a company with a long history of developing and commercializing innovative biologics.

Mechanism of action:

- Crenezumab binds to multiple forms of Abeta, particularly oligomeric forms, and localizes to brain regions rich in oligomers including the halo around plaques and hippocampal mossy fibers, but not to vascular Abeta (Maloney *et al.*, 2019).

- Crenezumab has been designed with an IgG4 backbone to reduce effector function on microglia and to clear Abeta from the brain while limiting inflammation. Crenezumab's lack of binding to vascular amyloid and the dense core of Abeta plaques results in a reduced risk of Amyloid-related imaging abnormalities-Edema (ARIA-E) and neuroinflammation and allows for higher dosing.

- Due to its capacity to bind to multiple forms of Abeta, with 10-fold higher specificity to oligomers, which are thought to be the most toxic species, crenezumab also protects against oligomer-induced neurotoxicity.

- Linked to its unique epitope, crenezumab has been shown to promote disaggregation of existing Abeta aggregates and to disrupt their assembly to prevent amyloid plaque formation. The crystal structure reveals binding interactions that are consistent with this flexible binding profile and provides further explanation for crenezumab's ability to block aggregation and to promote disaggregation.

Signal of activity in milder AD patients (MMSE 22–26) in Phase 2 clinical trials:

- In the proof-of-concept Phase 2 studies of crenezumab, a positive trend in cognition was observed with a greater effect on cognition in patients with a milder stage of AD (MMSE 22–26).

- In the ABBY cognition study, there, was a statistically significant 35% reduction in the rate of cognitive decline in the non-pre-specified milder AD patient population (MMSE 22–26) for the high-dose arm.

- In the BLAZE biomarker study, the high-dose arm showed a consistent trend of reduced Abeta accumulation in the brain over time, as shown in two independent exploratory analyses of florbetapir-PET data. In addition, results have shown that crenezumab has the ability to enhance the removal of these proteins from the brain as evidenced by a significant increase in CSF Abeta, confirming target engagement by crenezumab.

Favorable safety profile allowing for potentially higher dosing:

- Phase 2 data from ABBY and BLAZE studies suggested that there were no imbalances in overall rate of adverse events, and these were not dose-related, with only one case of asymptomatic ARIA-E (0.4% in ABBY, 0.3% on active pooled) in crenezumab patients. Adverse events also included inflammation of the throat and nasal passages, urinary tract infections and upper respiratory infections. However, no patients in the studies experienced serious adverse events that were believed related to the administration of crenezumab.

- A Phase 1 study with higher doses of crenezumab up to 120mg/kg showed no investigator assessed drug-related serious adverse events and no events of ARIA-E supporting the dose of 60mg/kg in Phase 3 clinical trials CREAD.

- The good safety profile and lack of induction of ARIA-E was confirmed in the Phase 3 CREAD and CREAD 2 studies, in which there was no increase in incidence of serious adverse events compared to placebo.

- Crenezumab is currently being evaluated in a Phase 2 clinical prevention trial in Colombia in 300 cognitively healthy individuals of whom 200 are genetically predisposed to develop early AD. As of January 2019, two Phase 3 clinical trials, CREAD and CREAD 2, in prodromal to mild AD patients were discontinued after an interim analysis of the CREAD study conducted by our collaboration partner Genentech.

Results from preclinical studies

Crenezumab's binding characteristics

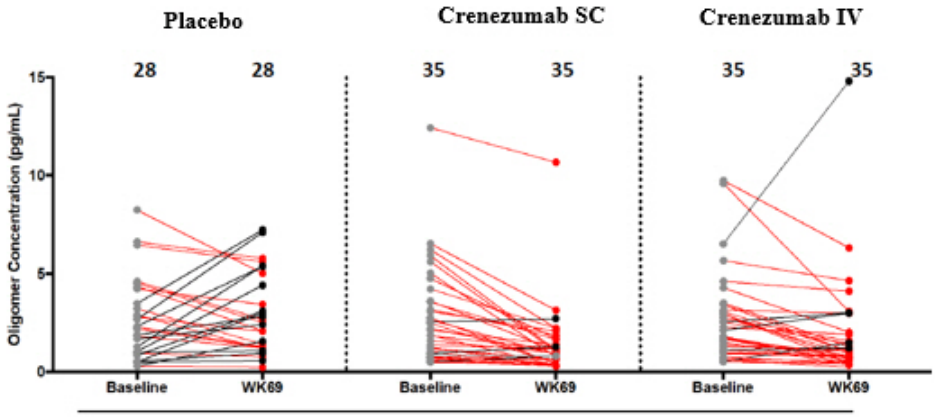
The formation of neurotoxic Abeta pathology in AD is caused by misfolding, oligomerization and aggregation of Abeta. This process leads to the formation of smaller oligomeric species and larger extracellular plaques. To reduce or reverse disease progression, the therapeutic anti-Abeta strategy focuses on targeting all Abeta species that mediate neurotoxicity in the CNS of patients.

In contrast to larger amyloid plaques, soluble, oligomeric forms of Abeta are considered to be the most neurotoxic species. Crenezumab binds multiple forms of Abeta (i.e., monomers, oligomers and fibrils) with a binding preference for oligomeric Abeta.

Crenezumab binds with ~10x higher affinity to oligomeric Abeta over monomers. Crenezumab's binding affinity to monomeric (A) and oligomeric (B) Abeta was assessed using surface plasmon resonance (SPR). Representative sensorgrams are shown. The full-length crenezumab IgG4 exhibited a KD in the range of 3.0–5.0 nM to Abeta monomers and 0.4−0.6 nM to Abeta oligomers, demonstrating a strong preference for oligomeric Abeta.

Oligomeric forms of Abeta are believed to be principally responsible for neurotoxicity in AD. Amyloid plaques occurring in all AD cases are in equilibrium with soluble oligomers of Abeta. These can activate microglia and injure neurons including by inducing Tau positive neurites and tangles.

Figure 16: Reduction of oligomers in CSF by crenezumab: crenezumab's binding affinities and translation into clinical benefits (data from Phase 2)



	Median Change*	Proportion of patients with neg. change	Proportion of patients below LLoQ at W69	P value **
Placebo	-13%	54%	0%	-
SC	-48%	89%	14%	0.001
IV	-43%	86%	20%	0.01

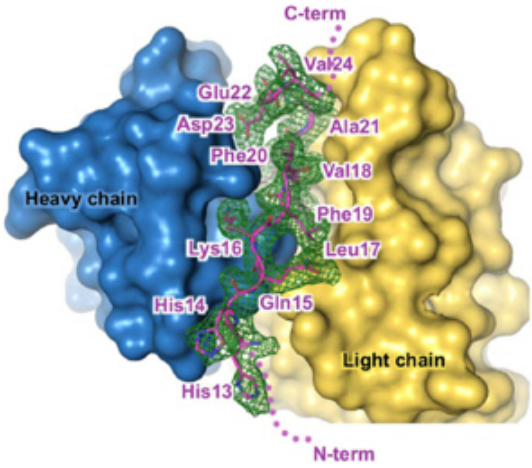
Ref: Yang *et al*., AAIC 2018

Crenezumab, as shown in the figure above, lowers Abeta oligomers levels in CSF of AD patients treated (Abby and BLAZE Phase 2 trials). The figure shows boxplots of Abeta oligomer levels at baseline and week 69 (WK69) of crenezumab treatment. Dots represent mean levels of the Abeta oligomer concentration from matched CSF samples of individual AD subjects. Samples with values below the lower limit of quantitation (LLoQ) are shown in red. Boxes indicate 25th to 75th percentile; horizontal bar indicates median. 86% of patients dosed intravenously (IV) and 89% of patients dosed subcutaneously (SC) display lower levels of CSF Abeta oligomers at week 69 than at baseline ($p<0.01$ for IV and $p<0.001$ for SC vs. placebo; Yang/Selkoe, AAIC 2018 presentation; Figure 16). These data provide strong evidence that the principal targets, engaged by crenezumab in the CNS of AD subjects, are Abeta oligomers.

Significance of crenezumab's epitope

To describe the Abeta-crenezumab interaction with atomic resolution, the crystal structure of crenezumab (as a Fab fragment) in complex with Abeta 11−25 was resolved at 2.3 Å (Ultsch *et al.*, 2016). The structure reveals a well-defined contiguous interaction between crenezumab and Abeta residues His13-Val24, in an extended conformation.

Figure 17: The crystal structure of crenezumab



Ref: Ultsch *et al.*, Sci Rep 2016

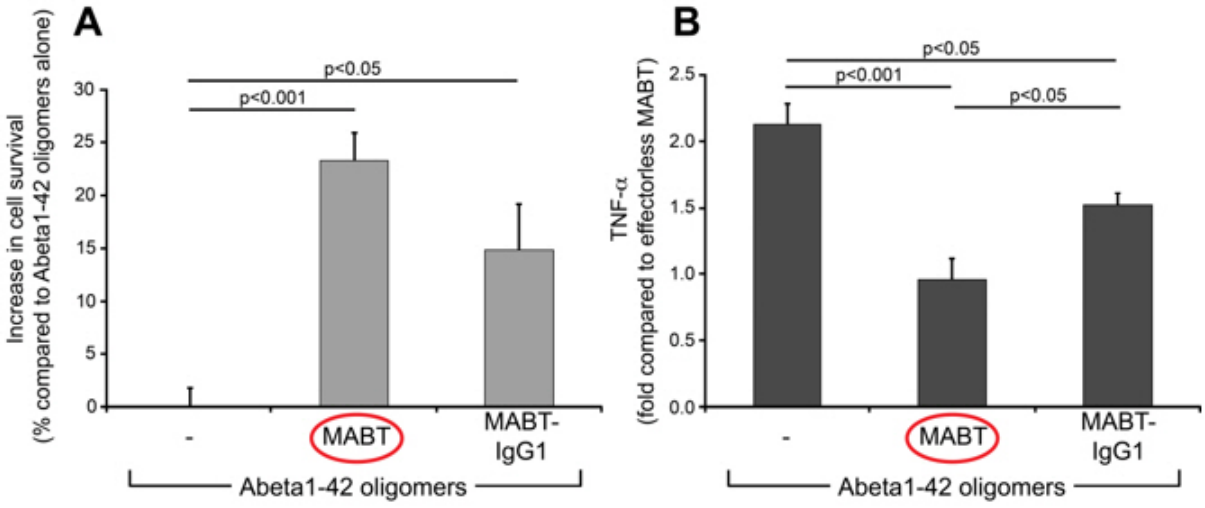
The crystal structure of crenezumab (Fab) shown above complexed with Abeta11−25 peptide. Crenezumab binds and sequesters the hydrophobic core of Abeta breaking a salt-bridge characteristic and essential for the formation of the beta-hairpin conformation, eliminating key features of the basic organization in Abeta oligomers and fibrils. Green mesh shows the electron density map corresponding to the Abeta peptide.

Supportive high resolution imaging data, from APP/PS1 mice dosed with crenezumab, demonstrated that crenezumab localizes to brain areas with putative high concentrations of Abeta oligomers (i.e. the periphery of amyloid plaques and hippocampal mossy fibers) and that crenezumab does not bind to the dense core of plaques or vascular amyloid in these AD transgenic mice (Atal *et al*., CTAD 2017, and Meilandt *et al*., Alz Res Therapy 2019).

Characteristics and benefits of crenezumab's effector function

Crenezumab is a humanized IgG4 antibody selected as a clinical candidate for its unique binding and safety properties. As crenezumab binds multiple forms of Abeta (i.e., monomers, oligomers, fibrils and plaques), and will be present post-dose in the brain and periphery as an antibody/target complex, the safety of downstream events triggered by these immune complexes becomes a crucial consideration. Thus, the human IgG4 backbone was selected as a safer alternative to a human IgG1 for this immuno-therapy. The crenezumab IgG4 backbone confers reduced activation of Fc gamma receptors (FcγRs) in comparison to IgG1 (unpublished data), and was shown to minimize FcγR-mediated inflammatory activation of microglia (Adolfsson *et al*., J. Neurosci 2012).

Figure 18: Crenezumab's IgG4 backbone balances efficacy with safety



Data reported in Adolfsson *et al*., J. Neurosci 2012

The evidence described above suggests that a human IgG4 backbone would have a better safety profile than an IgG1 when administered to patients, a thesis that is reinforced by the safety findings reported from both Phase 1 and Phase 2 clinical studies of crenezumab. Following either single or multiple ascending doses, no increase in ARIA-E was reported (Cummings *et al.*, 2014 and Cummings *et al.*, 2018).

Clinical development

Phase 2 studies

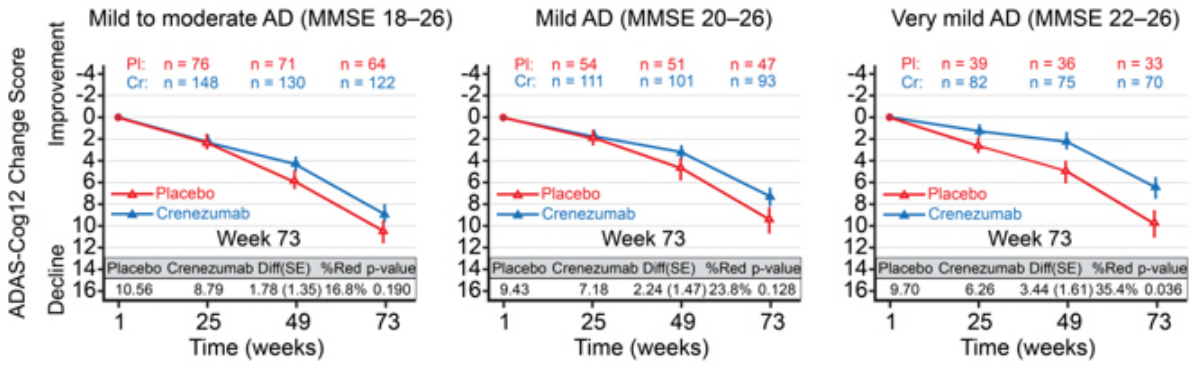
Phase 2 study design overview

Crenezumab has been studied in two Phase 2 clinical studies, the ABBY proof-of-concept study and the BLAZE biomarker study. These two studies enrolled a total of 522 patients. The purpose of these studies was to investigate whether crenezumab could delay cognitive and functional decline and reduce the accumulation of brain amyloid in patients with mild to moderate AD. The sample size of the studies was not expected to have adequate power to detect a modest but clinically significant difference between active medication and placebo at the 5% significance level (as is commonly the case in Phase 2 studies in AD). Instead, consistent trends across different endpoints and dose dependency are considered indicators of a response in this learning phase of development, with confirmation then sought in Phase 3. Both studies had two active arms: a low dose arm receiving 300mg subcutaneous injection, which is an injection administered beneath the skin, every two weeks and a higher dose arm receiving 15mg/kg intravenously every four weeks. The primary analysis was conducted at 73 weeks, after 68 weeks of treatment. Safety and tolerability measures included repeated MRI scans to assess for the development of ARIA, both vasogenic edema (E) and hemorrhages (H).

ABBY study results

In the ABBY study, a positive trend in cognition was observed with a greater effect on cognition in patients with a milder stage of AD (MMSE 22–26), although the study did not meet its co-primary endpoints in mild-to-moderate AD (MMSE 18–26) patients. There was no significant change in cognition in patients who received low-dose subcutaneous crenezumab. Results of an exploratory analysis of the high-dose intravenous arm demonstrated that patients with the mildest cognitive impairment at screening (MMSE 22–26) showed a statistically significant 35% slowing of the rate of cognitive decline over 73 weeks. The effect became greater over time, as shown by the increasing separation of the crenezumab (solid line) and placebo (dashed line) curves in the figure below. The milder group was not pre-specified, meaning the group of milder AD patients was not identified before commencing the Phase 2 clinical studies.

Figure 19: ABBY high dose arm: Change in ADAS-Cog 12



Ref: Cummings *et al.*, AAIC, 2014

An exploratory subanalysis in a non-pre-specified subgroup of patients with milder symptoms (MMSE 22–26) showed a 35.4% reduction in cognitive decline. The sample size of the study was not expected to have adequate power to detect a modest but clinically significant difference between active medication and placebo at the 5% significance level (as is commonly the case in Phase 2 studies in AD). Instead, consistent trends across different endpoints and dose dependency are considered indicators of a response in this learning phase of development, with confirmation then sought in Phase 3. In the pre-specified subgroup analysis in patients with mild AD (MMSE 20–26), treatment with high-dose intravenous crenezumab led to a 23.8% reduction in cognitive decline. In patients with mild-to-moderate AD (MMSE 18–26) treated with high-dose intravenous crenezumab, there was a 16.8% reduction in cognitive decline. Effect sizes and p-values for exploratory analyses were not adjusted for multiplicity.

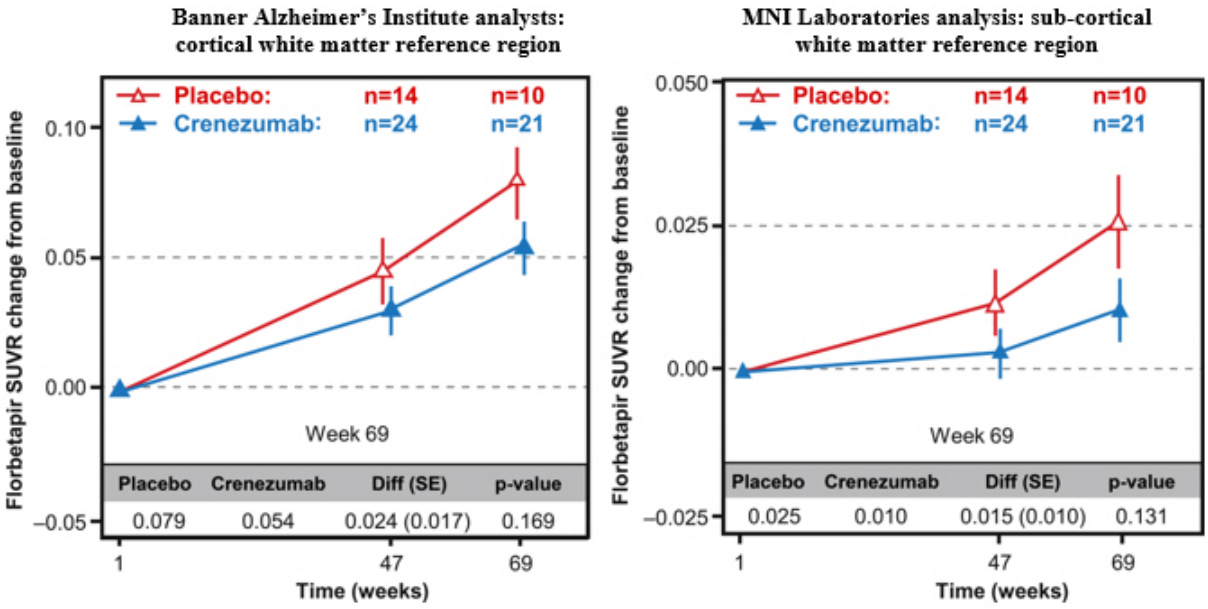
BLAZE study design

The BLAZE study was a randomized, double-blind, parallel-group, placebo-controlled study to evaluate the effects of crenezumab on brain amyloid burden as assessed by amyloid PET imaging and other biomarker endpoints in patients with mild to moderate AD. The primary endpoint was to measure the change in brain amyloid load using florbetapir-PET. The terms brain amyloid burden and brain amyloid load refer to the total amount of amyloid deposited in the brain; 91 patients were included in the study.

BLAZE study results

The primary end point of change in brain amyloid load by florbetapir-PET was not met, but the study was not powered to detect statistically significant results. However, positive trends were observed as shown below in exploratory analyses of the BLAZE amyloid PET results using white matter reference region, which is considered a more sensitive approach for longitudinal studies. These analyses, conducted independently by two laboratories, the Banner Alzheimer's Institute and MNI Laboratories, produced analogous results where a trend in the reduction of Abeta accumulation was observed in the high-dose arm (Figure 20 below). As described below, a similar result was obtained in the Phase 3 studies.

Figure 20: Blaze high dose Arm: amyloid PET results

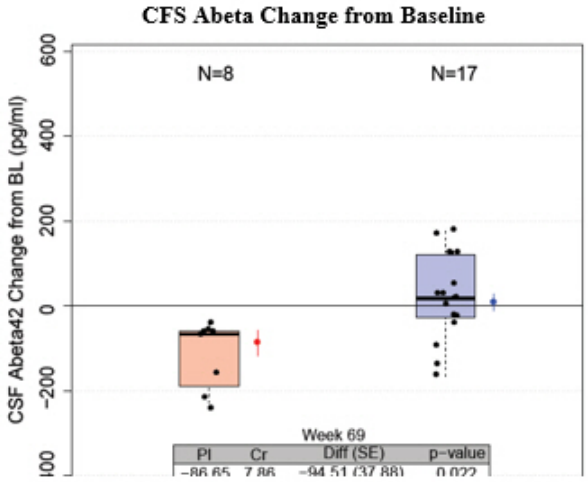


Ref: Honigberg *et al.*, CTAD 2014

The BLAZE biomarker study high-dose intravenous cohort showed a consistent trend of reduced Abeta accumulation in the brain over time shown by two independent exploratory analyses of florbetapir-PET data. Using white matter rather than cerebellum as the key reference region in the brain is generally considered a more robust method of showing treatment effects of AD therapies.

In the BLAZE study, patients also showed a statistically significant increase in CSF $Abeta_{1–42}$, which we believe confirms target engagement by crenezumab. Similar results were observed in the ABBY study where CSF $Abeta_{1-42}$ level was assessed in 49 patients. These results suggest that Abeta is being eliminated from the brain when treated with crenezumab.

Figure 21: BLAZE high dose Arm: Crenezumab increases CSF total Abeta levels relative to placebo



Ref: Honigberg *et al.*, CTAD 2014

The BLAZE study results suggest that Abeta is being eliminated from the brain as patients showed a statistically significant increase in CSF $Abeta_{1–42}$, which confirms target engagement by crenezumab.

Safety data from ABBY and BLAZE studies

Crenezumab demonstrated favorable safety and tolerability in Phase 2 clinical studies even at high doses. Crenezumab's safety profile is especially reflected in a low incidence of ARIA-E (0.3%) in Phase 2 clinical studies. ARIA-E was observed in only one patient who received high-dose intravenous crenezumab in the ABBY study. No case of ARIA-E was reported in the placebo arm or the BLAZE study. Favorable pharmacokinetic properties coupled with a favorable safety and tolerability profile enables crenezumab to penetrate the brain more readily at therapeutically relevant doses. Since dose limiting toxicities are a potential reason for the failure of other antibodies to demonstrate efficacy, crenezumab's potential safety at high doses is a distinguishing product feature.

At AAIC in 2014, it was reported that in the combined Phase 2 study populations, serious adverse events occurred at similar rates in patients treated with crenezumab (16.5%) and in patients given a placebo (11.9%).

Phase 1b study to explore higher doses

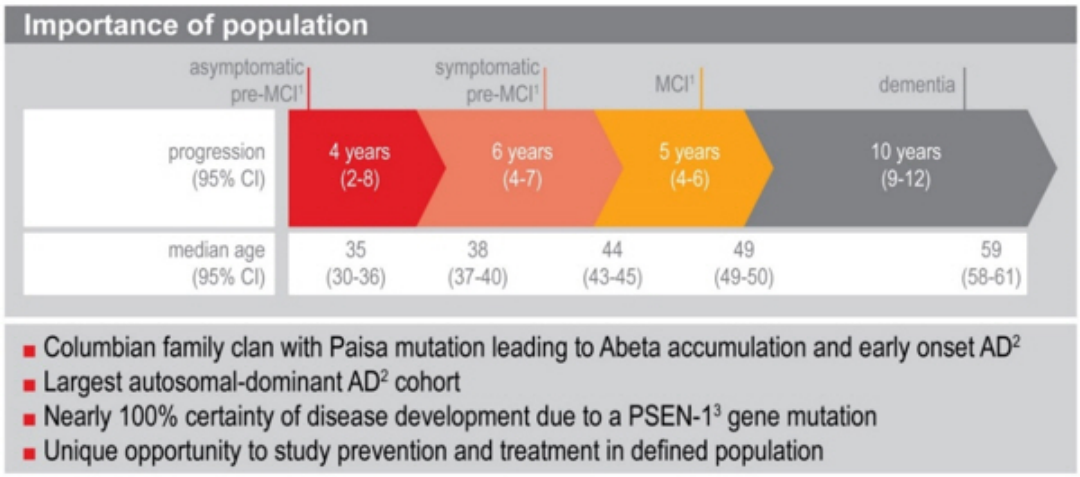
To explore safety at higher doses, crenezumab was tested in a Phase 1b dose escalation clinical study (NCT02353598) conducted in the United States. This randomized, placebo-controlled, double-blind, four parallel-arm study evaluated the safety and tolerability of at least four doses of intravenous crenezumab in 77 patients with mild to moderate AD (MMSE 18–28) between the ages of 50 and 90. An optional open-label extension stage was offered to patients after completion of the double-blind stage of the study. At the 2017 AAIC meeting, Genentech presented the results of the four cohorts with mild-to-moderate AD. No dose-limiting toxicities were observed at 30, 45, 60 and 120 mg/kg doses of crenezumab. No events of ARIA-E were observed and only few patients (6 of 75) showed asymptomatic Amyloid Related Imaging Abnormality-Hemsiderin (ARIA-H).The pharmacokinetic profile of crenezumab was dose proportional up to the 60 mg/kg dose, which was selected for the Phase 3 CREAD and CREAD 2 studies.

Phase 2 AD prevention study

There is increasing understanding from studies in patients at risk of AD due to genetic mutations, that the build-up of Abeta in the brain is a very early event in the condition, starting around 25 years before symptoms develop (McDade *et al.* 2018). To effectively treat the underlying amyloid pathology it may therefore be necessary to use anti-amyloid therapies in a preventive mode starting in patients in whom symptoms have not yet emerged.

In 2012, crenezumab was independently selected from among 25 product candidates for use in the first-ever such AD prevention study. The study, a USD 100 million collaboration between the NIH, Banner Alzheimer's Institute and Genentech, is the cornerstone of the global Alzheimer's Prevention Initiative. Crenezumab is being administered pre-symptomatically to 300 members of an extended Colombian family, of which 200 members carry a mutation that causes early-onset AD. Family members usually develop symptoms before the age of 45. The five-year study has cognitive endpoints. An interim analysis is possible according to the protocol, but the data and results of that analysis may not be made public due to patient sensitivity. The study commenced Q4 2013 and the data for the primary outcome measures is expected in Q1 2022.

Figure 22: Crenezumab AD prevention trial (API AD/AD): Unique population to study prevention treatment



(1) Mild cognitive impairment; (2) Alzheimer's disease; (3) Presenilin-1

Ref: McDade *et al.*, Neurology 2018

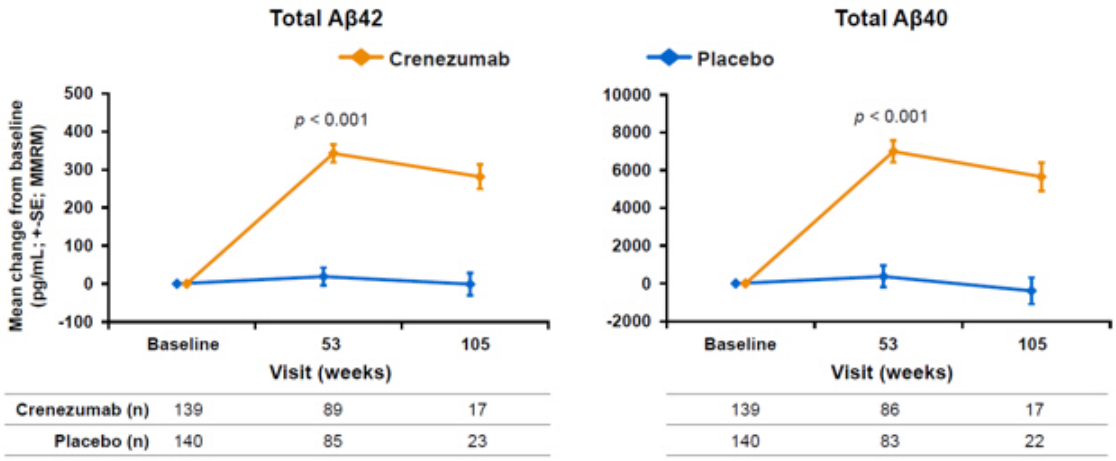
Phase 3 studies (CREAD and CREAD 2)

The randomized, double-blind, placebo-controlled, parallel group Phase 3 study enrolled about 750 participants with prodromal or mild AD at the age of 50−85 years. A high dose of crenezumab (60mg/kg) was administered intravenously once every four weeks for 100 weeks. The primary outcome measure was the change from baseline to week 105 in Clinical Dementia Rating - Sum of Boxes (CDR-SB) score. An exposure-response model to evaluate the best dose of crenezumab for the treatment of AD was established and predicted an improved outcome of the CREAD Phase 3 study by using the higher dose of 60mg/kg relative to the Phase 2 trials (Polhamus *et al.*, CTAD 2016).

On January 30, 2019, we announced that Roche, the parent company of our collaboration partner, is discontinuing the CREAD and CREAD 2 (BN29552 and BN29553) Phase 3 studies of crenezumab in people with prodromal to mild sporadic AD. The decision came after an interim analysis of the first (CREAD) study conducted by the IDMC indicated that crenezumab was unlikely to meet its primary endpoint of change from baseline in Clinical Dementia Rating-Sum of Boxes (CDR-SB) Score.

As presented at CTAD 2019, target engagement was observed with increases in levels of $Abeta_{1–42}$ in blood and CSF.

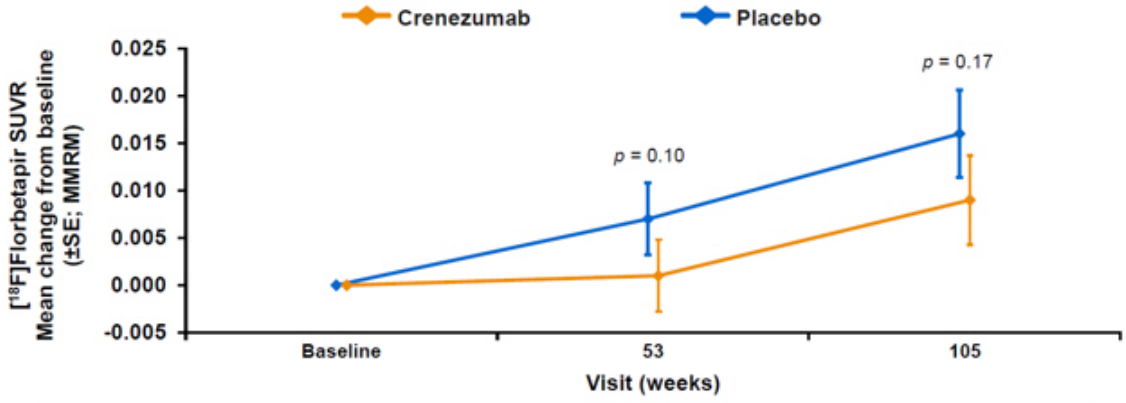
Figure 23: CSF total Abeta42 and total Abeta change from baseline, pooled CREAD/CREAD2



Ref: Bittner *et al.*, Roche CTAD 2019

Reduced accumulation of Abeta in the brain on florebetapir amyloid PET scans was observed, with a pattern very similar to that observed in the Phase 2 BLAZE studies.

Figure 24: [18F] Florbetapir amyloid PET SUVR change from baseline, pooled CREAD/CREAD2

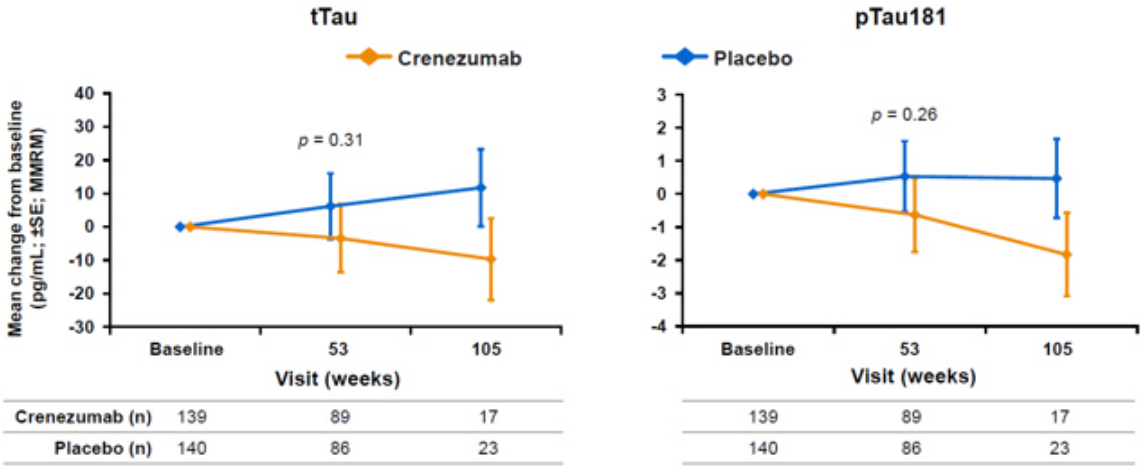


Crenezumab (n)	176	175	74
Placebo (n)	175	175	81

Ref: Bittner *et al.*, Roche CTAD 2019

A numerical trend to reduction in level of total Tau and phosphotau (pTau 181) in the CSF in patients on crenezumab comparted to placebo was observed although the small numbers in the analysis due to early termination of the studies preclude firm conclusions from being drawn.

Figure 25: CFS tTau and pTau181 change from baseline, polled CREAD/CREAD2



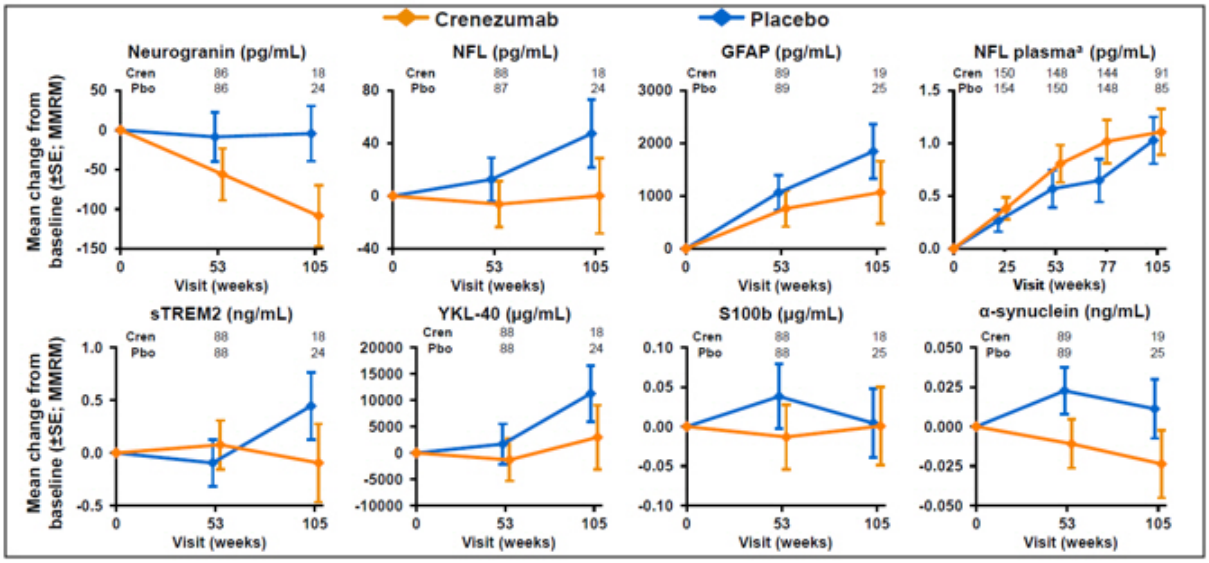
Crenezumab (n)	139	89	17
Placebo (n)	140	86	23

139	89	17
140	86	23

Ref: Bittner *et al.*, Roche CTAD 2019

Positive trends on a range of biomarkers associated with AD in CSF including neurogranin, NFL, GFAP, sTREM2, YKL-40 and alpha-synuclein were reported by Roche at the CTAD 2019 conference, although again the small numbers due to early termination of the studies limit interpretability of the results.

Figure 26: Exploratory biomarkers: Roche NeuroToolkit



Ref: Bittner *et al.*, Roche CTAD 2019

Safety in the CREAD and CREAD 2 studies

The decision to terminate the CREAD and CREAD 2 was not related to safety. No safety signals for crenezumab were observed in this analysis and the overall safety profile was similar to that seen in previous trials. There was no difference in the rate of newly-developing ARIA-E (0.3%) between the active and placebo arms and the rates of ARIA-H were also similar (8.8% on crenezumab vs 6.8% on placebo).

Prevention trial in familial AD

As described above crenezumab continues to be studied in a preventive trial, which began in 2013, of cognitively healthy individuals in Colombia with an autosomal dominant mutation who are at risk of developing familial AD (fAD), under the Alzheimer's Prevention Initiative.

Discovery therapeutic programs

Using our SupraAntigen and Morphomer platforms, we have generated additional discovery and preclinical stage molecules targeting neurodegenerative diseases, and diagnostics targeting Tau, alpha-synuclein and TDP-43. We currently have a number of our therapeutic product candidates in preclinical development focused on indications outside of AD, evidencing our expansion strategy. Three of our later stage preclinical product candidates are outlined below. Based on the data to date, our technology platforms can be applied to misfolded proteins across a broad range of indications. The table below lists three preclinical product candidates:

Product Candidate	Target	Lead Indication	Partner	Platform
alpha-synuclein antibody	alpha-synuclein	PD, NeuroOrphan	N/A	SupraAntigen
anti-TDP-43 antibody	TDP-43	NeuroOrphan	N/A	SupraAntigen
Morphomer inflammasome	NLRP3	AD	N/A	Morphomer

AC Immune's proprietary SupraAntigen platform is used to generate antibodies that can be used as therapeutic and diagnostic products. Such antibodies are generated by injecting the full-length protein and/or corresponding peptide constructs in mice and by selecting the antibodies for their ability to bind and break up aggregated forms of misfolded proteins. The alpha-synuclein and TDP-43 antibody programs were discovered using the SupraAntigen technology platform. Both antibody programs have unique binding properties allowing them to bind to unique epitopes of the pathological forms of alpha-synuclein and TDP-43, respectively.

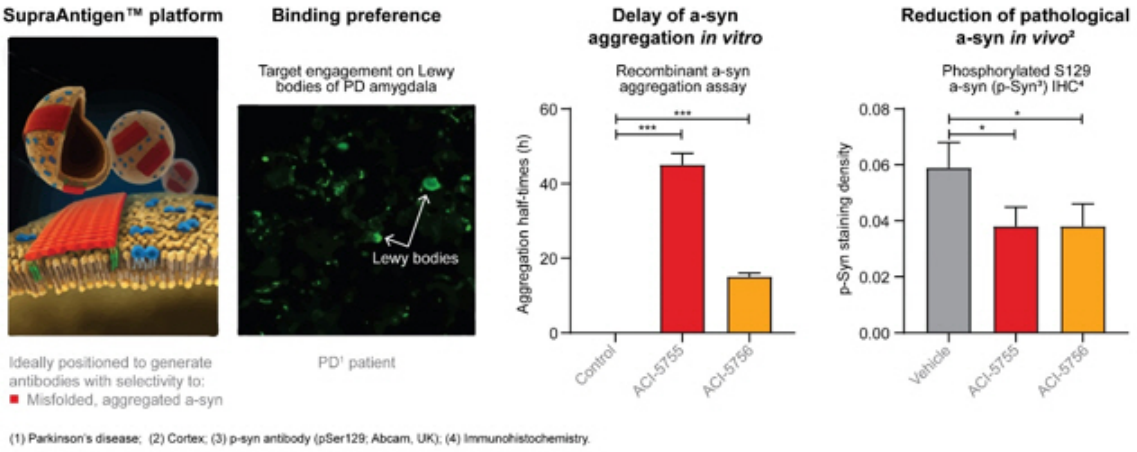
Alpha-synuclein antibody

The alpha-synuclein antibodies generated in our SupraAntigen program have unique binding properties allowing them to bind preferentially to the pathological forms of alpha-synuclein. Alpha-synuclein aggregation and spreading are established targets for PD, MSA, and other synucleinopathy diseases. Antibodies that interfere with the aggregation and spreading mechanisms of alpha-synuclein provide a therapeutic option for the treatment of PD. The alpha-synuclein antibodies were able to significantly delay the seeded aggregation of pathological alpha-synuclein in an *in vitro* aggregation assay. Further, antibodies were able to significantly decrease pathological alpha-synuclein spreading in an *in vivo* animal model of PD. Characterization using multiple orthogonal *in vitro*, and *in vivo* tests addressing binding, specificity, functionality and pharmacology properties has led to the identification of the lead candidate ACI-5755.

Lead characterization

ACI-5755 selectively binds to pathological forms of alpha-synuclein with low nano-molar affinity and shows a significant preference over monomeric alpha-synuclein. Additionally, ACI-5755 shows strong recognition for pathological alpha-synuclein in patient derived tissues from both PD and MSA cases. ACI-5755 shows a potent and dose-dependent reduction in the seeding capacity of pathological alpha-synuclein in a proprietary *in vitro* aggregation assay. Moreover, ACI-5755 substantially reduced the propagation of alpha-synuclein aggregates in a cell-based model. The *in vivo* efficacy of ACI-5755 was evaluated in the M83 propagation mouse model (Luk *et al*., 2012). Treatment of mice with ACI-5755 significantly decreased pathological alpha-synuclein spreading *in vivo*. Furthermore, a significant reduction in the rate of body weight loss as compared to the vehicle treated control group was observed for mice treated with ACI-5755.

Figure 27: Key results for the anti-alpha-synuclein antibody program



(1) Parkinson's disease; (2) Cortex; (3) p-syn antibody (pSer129; Abcam, UK); (4) Immunohistochemistry.

Ref: Pfeifer *et al*., AC Immune Key Opinion Leader event 2019

TDP-43 antibody

TDP-43 is a recently identified target of growing interest for NeuroOrphan indications such as FLD. Interestingly, TDP-43 also plays an important role in other significant neurodegenerative indications such as AD.

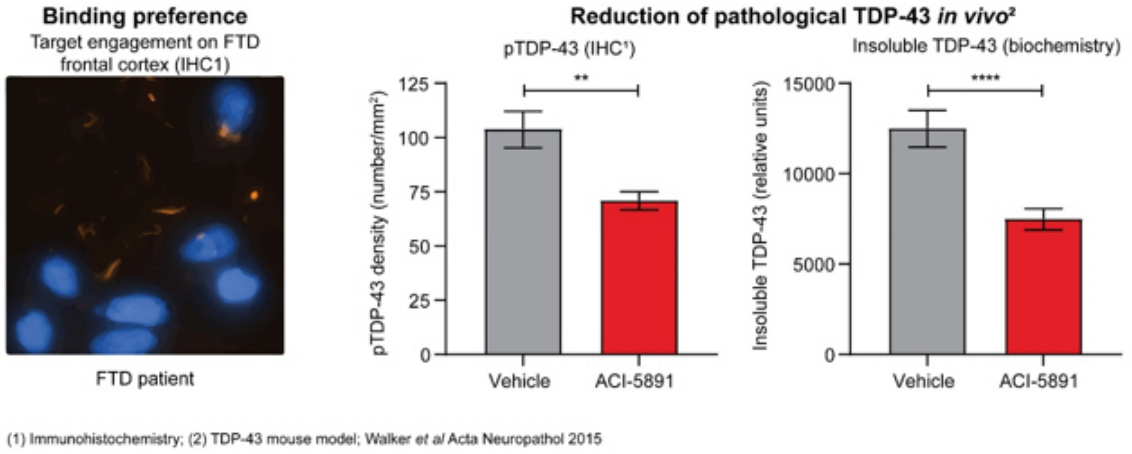
Anti-TDP-43 antibodies binding to various regions of TDP-43 were generated by our SupraAntigen platform. A subset displayed conformational selectivity to misfolded TDP-43, while others recognized all TDP-43 isoforms (Figure 28). Multiple antibodies have been generated and characterized *in vitro* from which two pan-TDP-43 antibodies (ACI-5891 and ACI-5886) were selected for the evaluation of their efficacy in mitigating TDP-43 aggregation *in vitro* and *in vivo*. ACI-5891 showed a high binding affinity for TDP-43 and ability to inhibit TDP-43 aggregation *in vitro*.

Lead characterization

To evaluate the functional efficacy of TDP-43 antibodies *in vitro*, the ability of ACI-5891 to inhibit TDP-43 aggregation was tested. In an *in vitro* assay with recombinant TDP-43, ACI-5891 significantly inhibits TDP-43 aggregation by 98% compared to the isotype control (Figure 28).

To further characterize functional efficacy of ACI-5891 *in vivo*, its ability to mitigate TDP-43 neuropathology in transgenic Tg(rNLS8) mouse model of TDP-43 proteinopathies was evaluated (Walker *et al.*, Acta Neuropath, 2015). In Tg(rNLS8) mice, systemic administration of ACI-5891 led to a significant reduction in the density of phosphorylated TDP-43 (pTDP-43) and insoluble TDP-43 in the brain as compared to the vehicle treated control mice (Figure 28). Further evaluation of mode of action of ACI-5891 *in vivo* is ongoing.

Figure 28: Key results for TDP-43 antibodies program



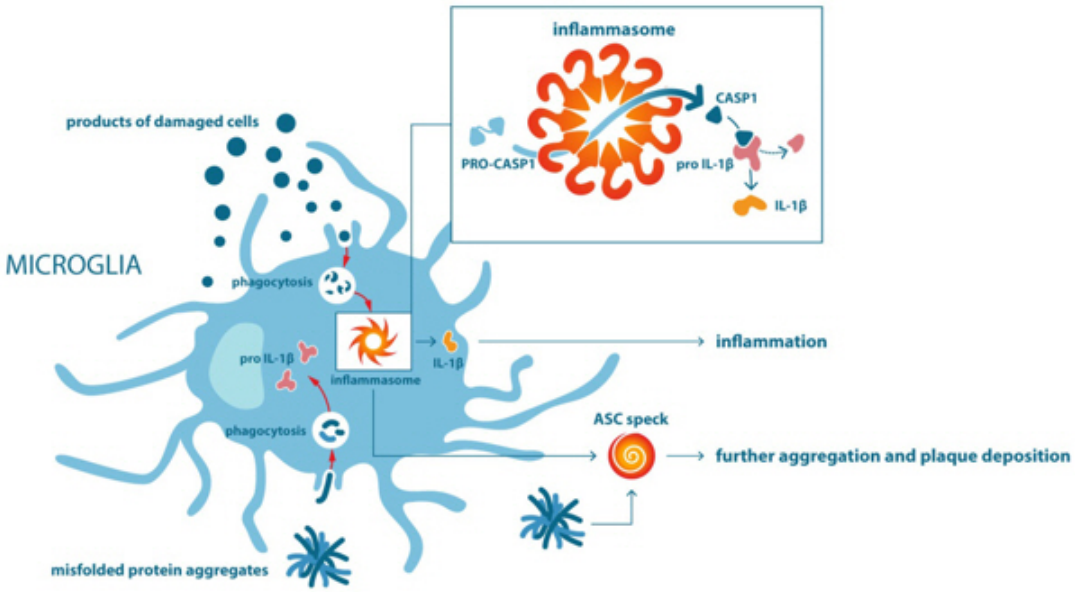
(1) Immunohistochemistry; (2) TDP-43 mouse model; Walker *et al* Acta Neuropathol 2015

Ref: Pfeifer *et al*., AC Immune Key Opinion Leader event, 2019

Neuroinflammation

Neuroinflammation has been linked to the pathology associated with neurodegenerative diseases. Neuroinflammation is initiated by microglia, resident immune cells of the CNS which maintain a healthy status via phagocytosis (removal) of products of damaged cells and misfolded protein aggregates in the brain (Figure 29). However, when overstimulated, microglia drive inflammation, neuronal death and disease progression. Hence, immune modulation shows great potential in neurodegenerative diseases as hyperstimulated microglia are emerging as a hallmark of these CNS diseases.

Figure 29: Schematic of microglia biology and formation of the NLRP3-ASC inflammasome



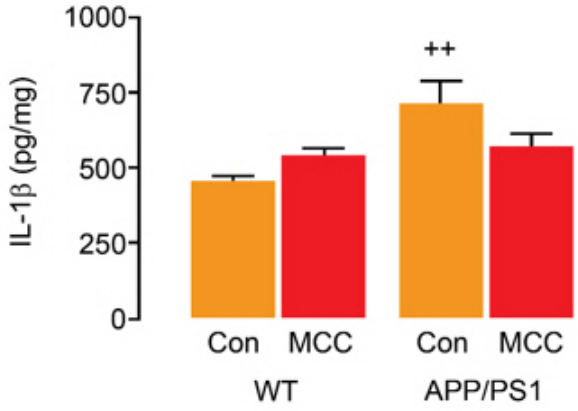
Ref: Adapted from Ransohoff *et al.*, Nature 2017

Inflammasomes are intracellular protein complexes found within microglia that are key components of inflammatory signaling and neuroinflammation (Figure 29). Inflammasomes assemble in response to various

danger signals such as infectious agents (PAMPs) or misfolded proteins (DAMPS). In many diseases of the CNS, oligomeric and fibrillary Abeta, fibrillary alpha-synuclein, Tau seeds and TDP-43 act as DAMPs (Heneka, 2018).

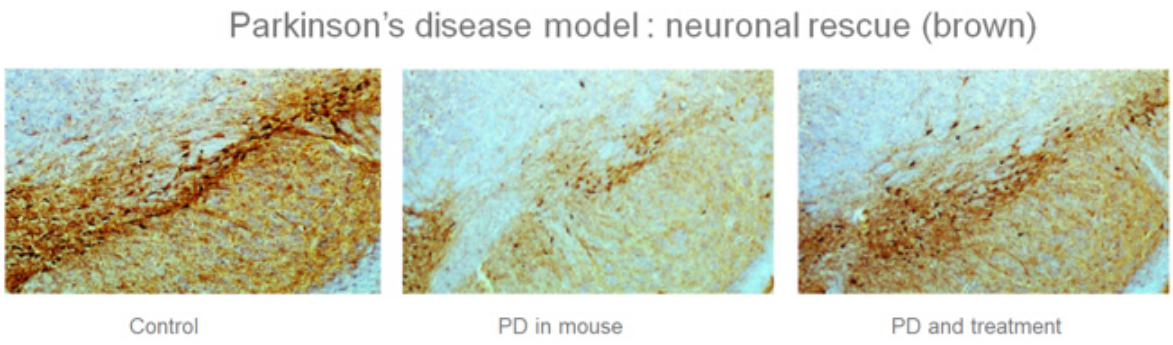
The NLRP3 (Nucleotide-binding oligomerization domain, Leucine Rich repeat and Pyrin domain containing 3) inflammasome is one of the best described inflammasome complexes. The consequence of NLRP3 inflammasome activation is two-fold: (i) activation of proinflammatory factors such as IL-1β, IL-18 and gasdermin D, driving neuroinflammation and ultimately the death of neurons and microglia; and (ii) exacerbation of the production, truncation and/or aggregation of the pathological proteins, Abeta, alpha-synuclein, Tau and TDP-43, setting up a vicious, chronic cycle of neuroinflammation, pathology and neuronal/glial cell loss. *In vivo*, in mouse models of AD and PD, inhibiting NLRP3 leads to an attenuation of the increase in IL-1β concentration (Figure 30) and neuronal rescue (Figure 31).

Figure 30: *In vivo* NLRP3 inhibition in a mouse model of AD: IL-1β attenuated increase



Ref: Dempsey *et al.* BBI 2017

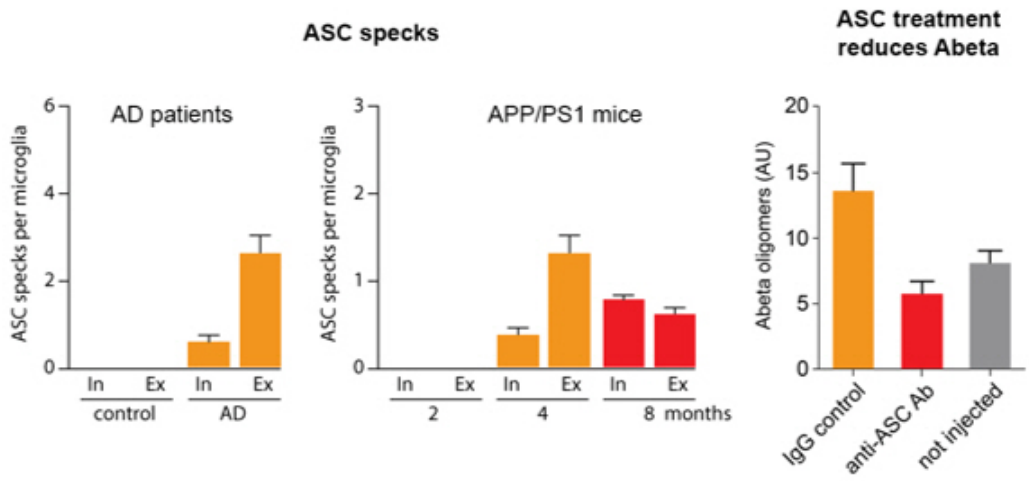
Figure 31: *In vivo* NLRP3 inhibition is protective in mouse model of PD



Ref: Gordon *et al.* STM 2018

Furthermore, when NLRP3 is activated, ASC specks (Apoptosis-associated Speck-like protein containing a CARD complexes) form and are released from the cell (Figure 29). Intracellular ASC specks participate in the production of proinflammatory cytokines and extracellular ASC specks cause acute inflammatory reactions and have been identified in microglia within the CNS of patients with AD (Figure 32). In addition, in the APP/PSI model of AD in mice, intracellular and extracellular ASC specks are present and treatment using an anti-ASC antibody decreases the Abeta load in these mice (Figure 32).

Figure 32. ASC specks in AD patients and mouse model of AD



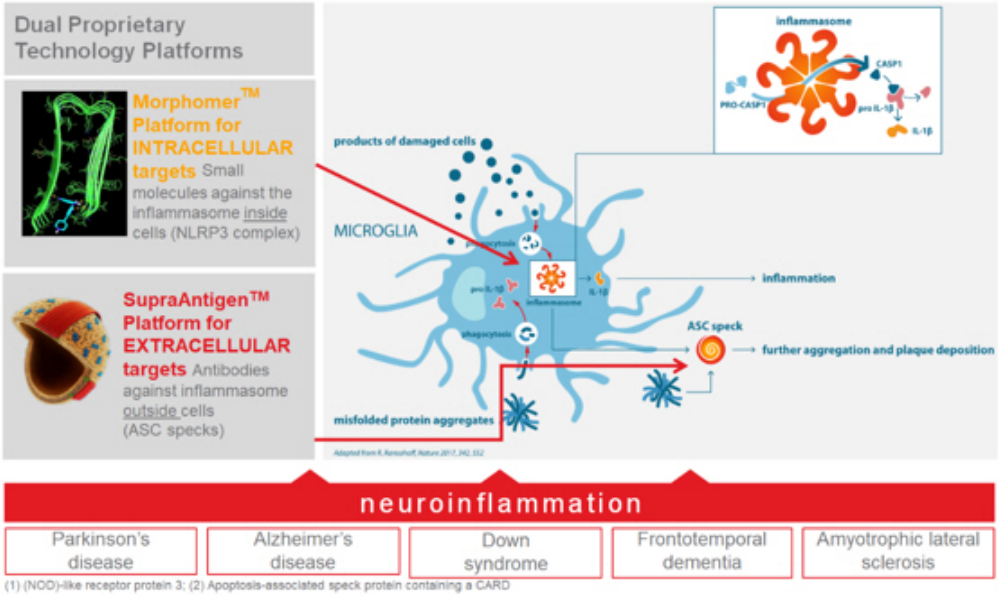
Ref: Vanegas *et al.* Nature 2017

ASC specks detected in- and outside (ex) of microglia in hippocampal sections of brains of patients with AD and age-matched controls without dementia as well as in the hippocampus of APP/PS1 transgenic mice at various ages. *In vivo*, ASC treatment with antibodies reduces misfolded Abeta in the APP/PSI model. APP/PS1 mice were injected bilaterally with APP/PS1 brain lysate with anti-ASC-speck antibody or IgG control antibodies; not injected mice represent the control group of APP/PS1 mice without receiving lysate or antibodies.

In neurodegenerative diseases, there is numerous scientific evidence of a role for these two targets in AD, PD, ALS and traumatic brain injury. Furthermore, other diseases have been reported to be associated with NLRP3-mediated pathology include atherosclerosis, asthma, cryopyrin-associated periodic syndromes, gout, inflammatory bowel disease, nonalcoholic fatty liver disease and nonalcoholic steatohepatitis (NASH), multiple sclerosis, stroke, type 1 diabetes and obesity-induced inflammation or insulin resistance. Taken together, both intracellular NLRP3 and extracellular ASC specks are attractive therapeutic targets.

Thus, AC Immune is specifically targeting the NLRP3-ASC pathway to reduce unwanted disease driving neuroinflammation. Our aim is to develop therapeutics that decrease production of pro-inflammatory factors yet maintain phagocytosis of debris and misfolded proteins as well as allow the function of other pathogen sensing pathways. Currently, the NLRP3-ASC pathway is being addressed with two approaches (Figure 33):

Figure 33: Strategy to use dual property technology platforms to target NLRP3-ASC

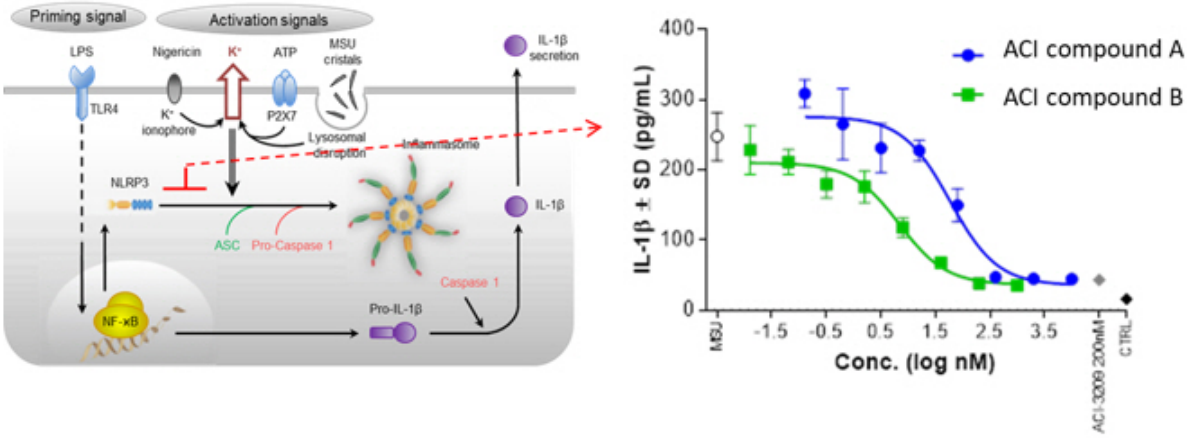


Ref: Adapted from Ransohoff *et al.* Nature 2017

Small molecules for Neuroinflammation (Mor-NLRP3-ASC)

Using our Morphomer Platform for intracellular targeting, we are developing small molecules against the inflammasome inside cells (i.e., the NLRP3 complex). These disease modifying small molecules will have effects downstream of phagocytosis, selectively interfering with the production of the proinflammatory proteins (Figure 34) to be assessed in multiple neuro-indications. In parallel, we will be evaluating our candidates in non-neurodegenerative diseases as well in combination therapies. The aim is to have the first lead candidate in Q4 2020 for the non-neurodegenerative diseases and Q4 2021 for neurodegenerative disease indications.

Figure 34: Screening assay to quantify the compound-mediated inhibition of IL1β production *in vitro* using human microglia

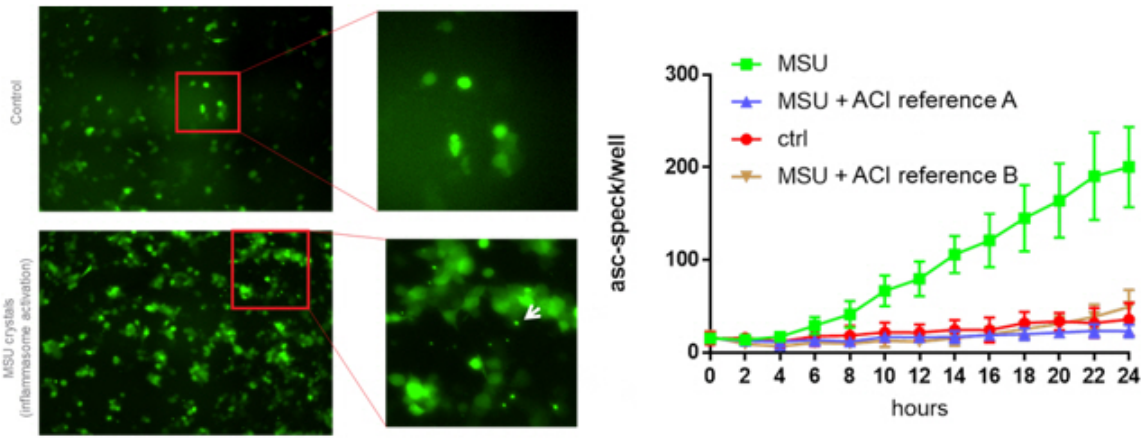


Ref: Adapted from Choi *et al.*, Mol Cell 2014; AC Immune unpublished data

Therapeutic antibodies for Neuroinflammation (mAb-NLRP3-ASC)

Using our SupraAntigen platform for extracellular targeting, we are developing antibodies against the inflammasome outside cells (i.e., the ASC specks; white arrow in Figure 35). These novel, innovative disease-modifying antibodies are directed across numerous parts of the protein, in order to determine which candidate will have the highest potential to prevent inflammation and modify the chronicity of the proteinopathies.

Figure 35: Screening assay to quantify the compound-mediated inhibition of ASC speck formation *in vitro* using human ASC transfected cells or human microglia (MSU, monosodium urate crystals)



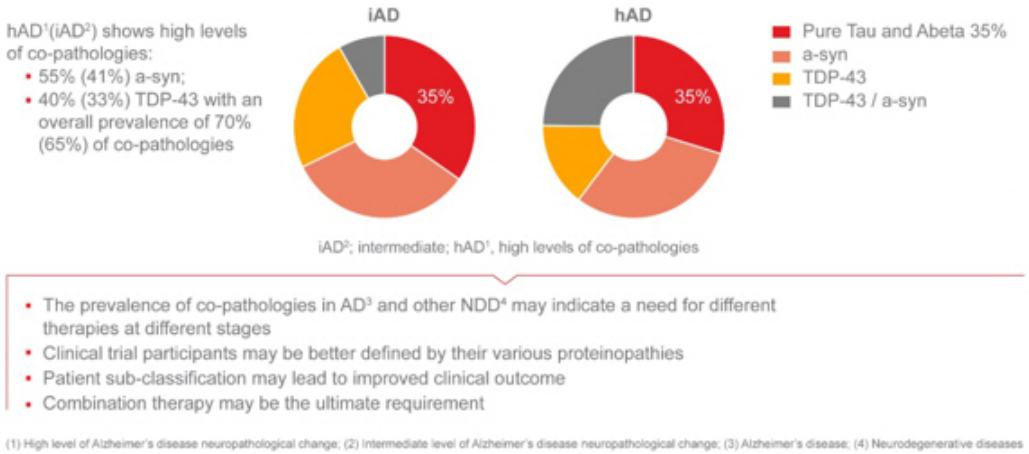
Ref: AC Immune unpublished data

Thus, these therapeutic antibodies have a high potential and are a unique approach to AD, neurodegenerative diseases and non- neurodegenerative diseases as mono- and/or combination therapies. The aim is to have the first lead candidate in Q4 2020 for the non- neurodegenerative diseases and Q4 2021 for neurodegenerative disease indications.

Diagnostics

Scientists believe that early detection of neurodegenerative diseases is critical to enhancing the effectiveness of both symptomatic and disease-modifying therapies. As a result, therapeutic development for AD increasingly focuses on treating early stage disease to delay or prevent progression and to preserve the maximum amount of cognitive function before it is irreversibly lost. Most clinical studies now target mild or even preclinical stages of the disease increasing the need for accurate diagnosis that is independent of potentially subjective cognitive metrics. At least one study estimates that as many as a third of patients in previous AD studies did not in fact have AD. Accurate and early diagnosis of AD is thus a substantial unmet market need, and diagnostic products will have a key role in generating a new treatment paradigm, including by selecting more uniform and stage-specific clinical study subjects, tracking patient progress and results, managing patients receiving treatment, and ultimately diagnosing disease at its earliest stage for immediate treatment.

Figure 36: The need of precision medicine in AD: high level of other proteinopathies and co-pathologies in AD



Ref: Adapted from Robinson *et al.*, Brain, 2018

We are developing three diagnostic product candidates using our Morphomer technology platform. These product candidates are PET ligands that are tracers that can be used to target Tau, alpha-synuclein and TDP-43 aggregates.

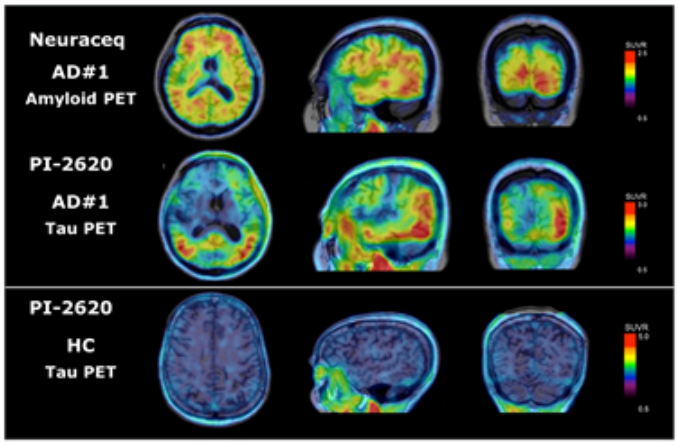
Tau diagnostics

In May 2014, we established a license and collaboration agreement for our Tau-PET imaging program with Life Molecular. The Phase 1 clinical study of PI-2620 in AD was completed in Q1 2018. Life Molecular commenced a Phase 2 clinical study in AD of the program in Q3 2019.

Our Tau-PET tracers are designed to bind specifically to the pathological forms of human Tau in AD and other Tauopathies. They have demonstrated an excellent PET tracer profile with their ability to cross the blood-brain barrier and a high selectivity to pathological Tau even in the early stage disease.

The severity of cognitive impairment in AD patients is correlated with the presence of Tau protein tangles, leading us to believe that an imaging agent for Tau is equally important to assess spreading of Tau protein in the brain. Our clinical candidate PI-2620 is selective for Tau over Abeta and other "off-target" binding when compared to current published Tau-PET agents in development as no binding to Abeta *in vivo* and no "off-target" retention in basal ganglia or choroid plexus was observed. In addition, PI-2620 can be readily radiolabeled with fluorine 18. Although PET imaging will improve the diagnosis of AD by targeting Tau, Abeta imaging will further enhance the diagnosis of early AD. To date, there are no approved Tau tracers.

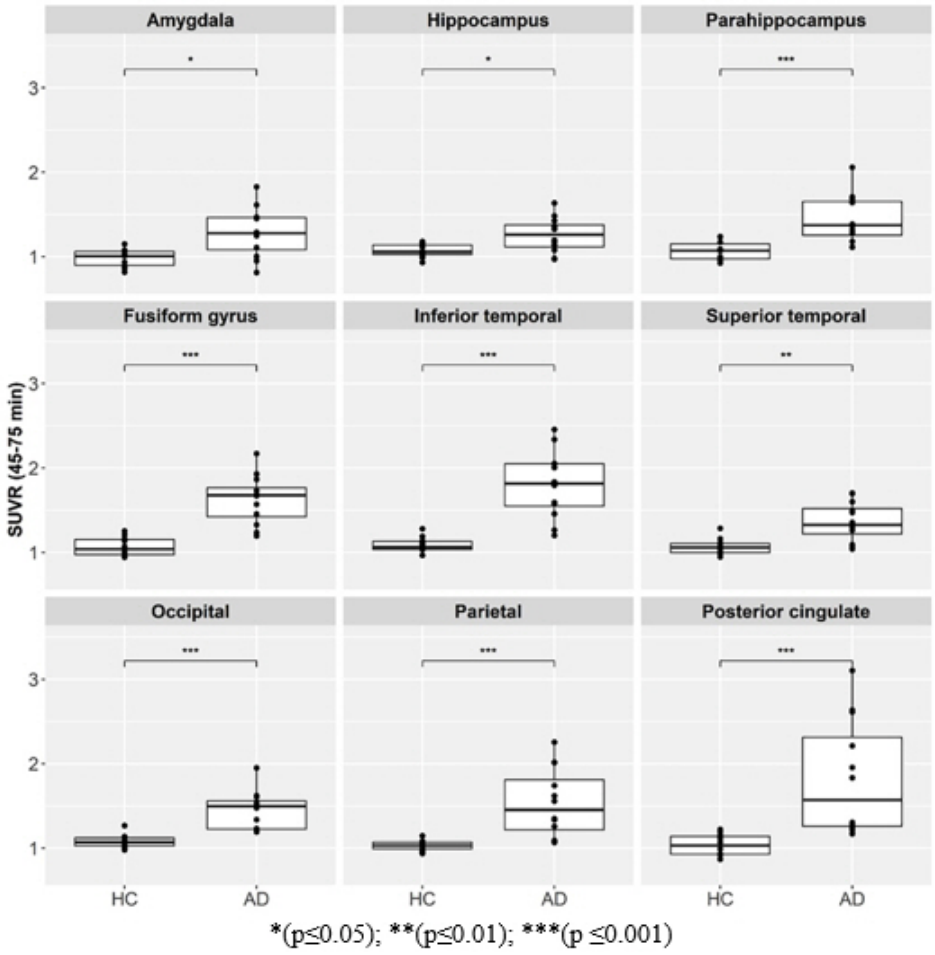
Figure 37: Selectivity of Tau-PET PI-2620



Ref: Stephens *et al*., AD/PD 2019

The PI-2620 Tau-PET data above showed that PI-2620 had the expected distribution pattern in an AD-subject and low off-target binding in a healthy control subject. The PI-2620 Tau-PET spatial distribution was quite different from Abeta obtained with the amyloid PET tracer Neuraceq in the same AD-subject.

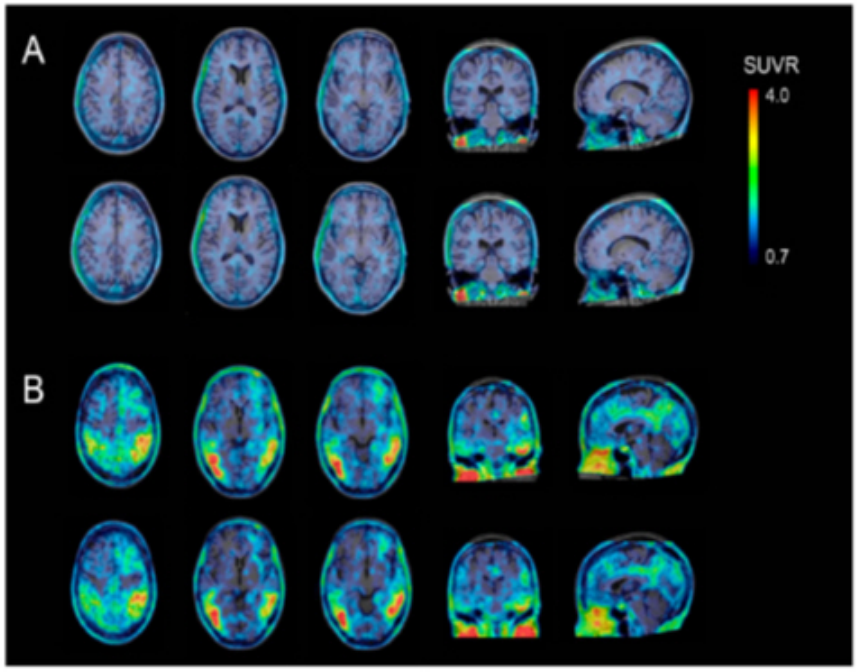
Figure 38: PI-2620 uptake in different cortical regions



Ref: Mueller *et al.*, J Nucl Med. 2019

PI-2620 uptake in different cortical regions is shown as SUVR box plots above for all AD and healthy control subjects. AD subjects showed generally higher SUVR than healthy control subjects in the above mentioned brain regions with a variable degree of statistical significance. The largest effect sizes to discriminate between AD and healthy control subjects using SUVR at 45−75 min p.i. were obtained for the fusiform gyrus, inferior temporal and occipital cortices.

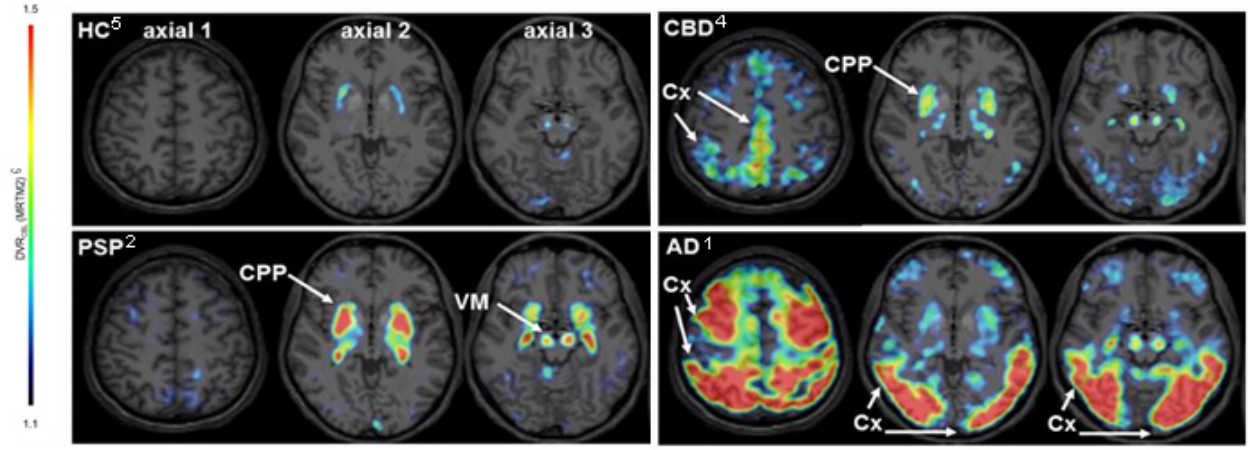
Figure 39: 18F-PI-2620 test and retest SUVR images



Ref: Bullich *et al.*, J Nucl Med. 2019

The PI-2620 test and retest SUVR images (45−75 min) above show the lack of off-target signal in a healthy control subject and the Tau specific signal for the AD subject. No area of specific PI-2620 retention was identified in the healthy control subject (65 years old, MMSE=29, CDR 0, ADAS-Cog=5) and a consistent pattern of initial uptake and fast wash-out was observed (Figure 39). In contrast, asymmetrical uptake of PI-2620 was identified in cortical regions (Figure 39B) of an AD subject (62 years old, MMSE=28, CDR 0.5, ADAS-Cog=16). Within the healthy control and AD subjects, the PI-2620 test and retest images were comparable: The images in the upper row of Figure 39A and Figure 39B show the test images, whereas the lower show the retest images.

Figure 40: Disease specific patterns of PI-2620 in AD (3R/4R) and 4R-Tauopathies (PSP and CBD)



CPP: caudate nucleus, globus pallidus and putamen; VM: ventral midbrain; Cx: central, parietal, and frontal cortex

Ref: Roesler *et al.*, Progress in Neurobiology 2019

The PI-2620 images in the figure above show PI-2620 uptake in brains of healthy control and subjects with suspected pathological forms of human Tau in AD (3R/4R), progressive supranuclear palsy (PSP, 4R) and corticobasal degeneration (CBD, 4R). In contrast to a representative healthy control (HC, 78 years, female), increased PI-2620 retention in a representative patient with probable progressive supranuclear palsy (PSP,

clinical Richardson syndrome, negative Amyloid-beta status, PSPRS=42, MoCA=28, 73 years, female) was observed in the caudate nucleus, globus pallidus and putamen (CPP), and the ventral midbrain (VM). Increased PI-2620 retention in a representative patient with probable corticobasal degeneration (CBD, clinical CBS, negative Aβ-status, PSPRS=21, MoCA=27, 76 years, female) was observed in CPP and VM plus in the central, parietal, and frontal cortex (Cx). Importantly, the cortical (Cx) binding of PI-2620 in probable 4R-Tauopathies was lower when compared to a clinical AD case (positive Aβ-status, MoCA=11, 56 years, female) with probable underlying 3R/4R-Tau, which may reflect the lower density of Tau in 4R-Tauopathies when compared with AD. Thus, the disease specific pattern of PI-2620 Tau PET scans may allow differential diagnosis.

Data from the Tau-PET imaging program was presented at multiple conferences in 2019 including, the Human Amyloid Imaging (HAI) conference 2019, AD/PD 2019, SNMMI 2019, AAIC 2019, the 20th SCI-RSC Medicinal Chemistry Symposium 2019, the EANM Meeting 2019, AC Immune Key Opinion Leader Event 2019 and CTAD 2019.

AD diagnostics are a major market opportunity that will be driven by the growth in the aging population and the testing and availability of disease-modifying drugs. We believe a best-in-class Tau tracer has the potential to achieve a substantial market share in this large and growing market.

Alpha-synuclein diagnostics

Alongside our AD diagnostics activities, we have a program targeting PET imaging agents for alpha-synuclein, an important protein involved in PD, and which progressively accumulates in structures in the PD brain. Scientists believe that the misfolding of alpha-synuclein is central to the neurodegenerative process of PD, as well as a number of other disorders, including Lewy Body Dementia and MSA, making it a priority target for development of therapeutics and diagnostics. We have identified molecules from our Morphomer library that bind selectively alpha-synuclein pathological structures from human PD brain with affinity in the low nanomolar range.

The second generation candidate, ACI-3847 showed low nM binding to pathological alpha-synuclein from PD brain homogenates and no binding to AD brain homogenates containing both pathological Abeta and Tau, indicating a very good selectivity. When tested *in vivo*, [^{18}F]ACI-3847 showed minimal white matter retention in non-human primates.

[^{18}F]ACI-3847 was evaluated in a first-in-human (“FiH”) study in a small cohort of idiopathic PD and healthy volunteers. Clinical data confirmed the excellent PK profile observed preclinically, with a minimal background. Although in this small cohort no statistically significant cross-sectional differences between PD and healthy volunteers were observed, a subset of the PD subjects did show higher tracer retention in the left substantia nigra, one of the first region in which alpha-synuclein deposits start accumulating in PD.

In August 2019, we received an additional follow-up grant from the Michael J. Fox Foundation for Parkinson's Disease Research. The current status of the program has been presented at the following conferences in 2018/2019: AD/PD 2018, AAIC 2018, HAI 2019, AD/PD 2019 and 23rd International Congress of Parkinson’s Disease and Movement Disorders (MDS) 2019.

Currently there are no imaging products in the market that target alpha-synuclein. This provides us with a unique opportunity to become the market leader in alpha-synuclein PET imaging. We believe the ability to image alpha-synuclein deposits in the brain will enable fundamental change in the approach towards treating PD and other alpha-synuclein-associated diseases.

TDP-43 imaging diagnostics

To complement our pipeline of PET imaging tracers, we also selected TDP-43 as a third target. TDP-43 in its physiological function is a protein participating in nucleic acid transport. Similar to Tau, Abeta and alpha-synuclein, TDP-43 misfolds in TDP-43 mediated proteinopathies into insoluble aggregates in the cytoplasm of neurons leading to cellular dysfunction and eventually clinical symptoms. TDP-43 pathology often appears in other neurodegenerative diseases (e.g. AD) as a part of mixed pathologies and it has been proposed that misfolded TDP-43 contributes to the observed clinical phenotype in addition to the primary pathology. The precise molecular diagnosis and differentiation of early stages of such diseases is of critical importance. Using proprietary assays, a set of small molecular weight compounds were identified that bind to patient-derived pathological TDP-43. Several of these compounds demonstrated favorable pharmacokinetic profiles in rodents suggesting suitable properties for further development as PET ligands. Hit-to-Lead optimization is currently ongoing to identify compounds with superior binding profiles for evaluation in preclinical studies. The current

status of the program has been presented at the following conferences: in 2018/2019: XXV EFMC International Symposium on Medicinal Chemistry 2018 and AD/PD 2019.

There are no imaging products in the market today targeting TDP-43. This provides us with a unique opportunity to become the first company providing TDP-43-PET imaging to the market. We believe the ability to image TDP-43 deposits in the brain will enable fundamental change in the approach towards treating primary and secondary TDP-43 based proteinopathies to provide the best outcome for patients.

License agreements and collaborations

Our SupraAntigen and Morphomer platforms have generated large numbers of clinical assets that address diseases related to protein misfolding, such as AD, PD and DS. Selected key assets in the product pipeline have been licensed for upfront payments, milestones and royalties to help offset the cost of our research and internal product development. Discussions with other companies are ongoing. We have signed a number of licensing agreements with leading pharmaceutical companies to assist and accelerate the development of our product pipeline, including:

- A worldwide licensing agreement with Genentech signed in November 2006 (and amended in May 2015) for crenezumab for AD, under which we may become eligible to receive payments potentially greater than USD 340 (CHF 333) million, excluding royalties.

- A worldwide licensing agreement with Genentech signed in June 2012 for semorinemab for AD and potentially other indications, under which we may become eligible to receive payments potentially greater than CHF 400 million, excluding royalties.

- A worldwide licensing agreement with Janssen signed in December 2014 (and amended in April 2016, July 2017, January 2019 and November 2019) for therapeutic anti-Tau vaccines for AD, and potentially other Tauopathies, under which we may become eligible to receive payments totaling up to CHF 500 million, excluding royalties.

- A worldwide licensing and collaboration agreement (“LCA”) with Life Molecular (formerly Piramal Imaging SA) signed in May 2014 for small molecule Tau ligands for use as PET tracers under which we may become eligible to receive payments totaling up to EUR 159 (CHF 175) million, excluding royalties.

- AC Immune entered into a license agreement with Lilly to research and develop Tau Morphomer small molecules for the treatment of AD and other neurodegenerative diseases in December 2018 (and amended in September 2019 and March 2020). The agreement was deemed effective on January 23, 2019. AC Immune may become eligible to receive payments up to approximately CHF 1.9 billion, excluding royalties.

Further information concerning details of AC Immune’s agreements and collaborations can be found under Item 5: Operating and Financial Review and Prospects.

Competition

The biopharmaceuticals industry is highly competitive across all therapeutic fields. In the field of neurodegenerative diseases, there are many public and private companies or institutions that are actively engaged in the discovery and development of therapeutic and diagnostic products. Some of these products may have a similar target to our product candidates or address similar markets. The industry is still in its infancy in terms of defining the pathology of neurodegenerative diseases. As disease understanding progresses, the number of novel product candidates may well increase and broaden the therapeutic and diagnostic options in our product markets.

Currently, there are no approved disease-modifying products for AD or any other neurodegenerative disease. Current approved therapies seek to treat the symptoms of AD, such as cognitive decline, but do not slow or stop the progression of the disease. In addition, commonly, there is off-label prescription of antidepressant and antipsychotic agents for more advanced AD patients who may suffer from agitation, aggressive behaviors, psychosis and depression. No new drugs have been approved for the treatment of AD since 2003.

We expect there to be several classes of disease-modifying agents that will enter the AD market. One target for monoclonal antibodies is pathological Tau protein. Therapeutic vaccines are a second class of disease-modifying therapies, and include our candidate products ACI-24, that targets Abeta plaque, and ACI-35, that targets aggregated, phosphorylated Tau protein.

The availability of novel diagnostic agents to visualize the disease development in AD patients is critical for successful clinical development of disease-modifying products in AD. At the forefront of this new diagnostic effort are PET agents for in-life imaging of disease, and in particular, Tau-targeting PET agents which we believe will allow precise assessment of disease AD patients.

Semorinemab. Semorinemab is one of several monoclonal antibodies in development targeting Tau to potentially act as disease-modifying agents. Biogen is evaluating gosuranemab (licensed from Bristol-Myers Squibb) in Phase 2 clinical trials in PSP and AD. AbbVie is currently investigating ABBV-8E12 in AD in Phase 2 studies. Zagotenemab (Lilly) is currently in a Phase 2 study in AD. UCB-0107 (UCB), BIIB076 (Biogen/Neuroimmune), JNJ3657 (Janssen) and Lu AF87908 (Lundbeck) are being evaluated in Phase 1 studies.

ACI-35. ACI-35, if approved, would compete with other approved Tau-targeting therapeutic vaccines. This includes AADvac1 vaccine developed by Axon Neuroscience, which is currently in a Phase 2 study.

Morphomer Tau. AC Immune has developed the first small molecule targeting aggregated Tau with high selectivity for the target. The molecule has entered a Phase 1 clinical trial as a first-in-class, Tau-specific disease-modifying, Tau aggregation inhibitor small molecule for the treatment of neurodegenerative diseases characterized by misfolded Tau in collaboration with Lilly in Q3 2019. To date, no other pre-clinical or clinical molecule with these characteristics is in development according to our information.

ACI-24 for AD. ACI-24, if approved, would compete with other approved anti-Abeta-targeting therapeutic vaccines. Several potential competing product candidates have not continued through the regulatory approval process such as CAD106 (Novartis), which has been discontinued after completing Phase 2 studies and Lu AF20513 (Lundbeck) after completing a Phase 1 study. Other potential competing product candidates for ACI-24 forclude ABvac 40 (Araclon Biotech) which is currently evaluated in a Phase 2 study and UB-311 from United Neuroscience, which is in a Phase 2 study.

ACI-24 for DS. ACI-24 is the first disease-modifying vaccine candidate addressing AD-like symptoms for DS, with a potential preventive and therapeutic application. While there are symptomatic treatments of DS in clinical development, to our knowledge there are currently no other disease-modifying treatments in development for AD in DS.

Crenezumab. Crenezumab is the first monoclonal antibody candidate that targets Abeta in cognitively healthy individuals at risk of developing familial AD. However, Lilly's solanezumab and Roche's gantenerumab are being evaluated in presymptomatic AD studies.

Alpha-synuclein and TDP-43 antibodies. Several alpha-synuclein antibodies are currently in development; Roche/Prothena entered a Phase 2 with PRX002 in June, 2017; Biogen entered a Phase 2 with BIIB054 in January, 2018; Astra Zeneca/Takeda entered a Phase 1 with MEDI1341 in October, 2017; Lundbeck/Genmab entered a Phase 1 with Lu AF82422 in July, 2018 and AbbVie/BioArctic entered a Phase 1 with BAN0805 in October, 2019. To our knowledge, there are no TDP-43 antibodies in the clinic.

Diagnostics. Currently, there are no approved Tau-PET imaging products. However, should PI-2620 be approved, it would compete with other approved Tau-PET agents. These include (i) Flortaucipir (previously known as 18F-AV-1451 or T807), which is being advanced by Lilly and is currently in regulatory filing in the USA, (ii) APN-1607 (previously known as 18F-PM-PBB3), a product candidate in a Phase 2 study and being advanced by Aprinoia, (iii) THK-5351 (FluoroTau), a product candidate in a Phase 2 study being advanced by GE Healthcare, (iv) Cerveau/Merck is evaluating 18F-MK-6240 in a Phase 2 clinical trial in Autosomal Dominant Alzheimer's Disease patients, (v) Genentech is developing 18F-GTP1 in a Phase 2 study in subjects at risk of developing Autosomal Dominant Alzheimer's disease (vi) Roche has completed a Phase 1 study of 18F-RO6958948 in AD patients, (vii) Janssen has completed a Phase 1 study of 18F-JNJ-067 in AD patients.

Many of our competitors have significantly greater financial, technical and human resources than we have available. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Our commercial opportunity and our success will be based in part on our ability to identify, develop and manage a portfolio of product candidates

that are safer and more effective than competing products. However, this opportunity could be eroded or even eliminated if our competitors develop and/or market products that are novel and have superior safety and efficacy profiles, that may be brought to the market more rapidly due to greater available resources, or that are less costly than our current or future product candidates.

Commercialization Strategy

Our strategy to date has been to focus on identifying partnerships for our early stage product candidates as both a way to secure non-dilutive capital to fund our other research and development programs but also as a way to accelerate the development of these partnered products by leveraging our partners' extensive knowledge in clinical studies, drug development, manufacturing and commercialization.

With greater financial resources at our disposal but also given the significant knowledge acquired by our scientists and scientific leadership, we intend to retain selected promising product candidates in-house for a longer period of time and fund their development from our own resources. This will allow us to generate greater value from these product candidates, allowing us to demand more significant terms from a prospective partner. For example, our current plan is to retain full control of our two Abeta vaccine programs focused on AD and Down syndrome. We are funding the ongoing Phase 2 study for AD and intend to fund the planned Phase 2 study for DS. We also plan to continue funding the subsequent clinical phases of the programs, from our financial resources. In the field of diagnostics, the parallel development of therapeutic compounds and companion diagnostics is of growing importance to the pharmaceutical industry. The development timeframe of a PET diagnostic agent is significantly shorter than for a therapeutic product providing the prospect for potential diagnostic product revenues to be realized quicker than potential therapeutic product revenues. Our Morphomer platform is particularly well suited to generate molecules for use in the development of companion diagnostics.

Given our current stage of product development, we currently do not have a commercialization infrastructure. If any of our product candidates is granted marketing approval, we intend to focus our initial commercial efforts in the United States and select European markets, which we believe represent the largest market opportunities for us. In those markets, we expect our commercial operations to include our own specialty sales force that will target neurologists and gerontologists, both in hospitals and in private practice. In other markets, we expect to seek partnerships that would maximize our products' commercial potential.

In December 2018, AC Immune and WuXi Biologics entered into a memorandum of understanding governing the terms of a preferred partnership allowing AC Immune to leverage WuXi Biologics' capacities and capabilities in the manufacturing and supply of traditional and innovative New Biological Entities (NBE) against disorders of the CNS. Though this collaboration, AC Immune has priority access to WuXi Biologics' proprietary platforms, including the bispecific antibody platform WuXiBody™ and WuxiUP continuous manufacturing platform. In addition, WuXi Biologics is now a preferred partner of AC Immune for bioprocess development, as well as manufacturing for discovery, preclinical and clinical supply of AC Immune's NBE pipeline.

Intellectual Property

We strive to protect the proprietary technology that we believe is important to our business, including seeking and maintaining U.S. and foreign patents intended to cover our products and compositions, their methods of use and processes for their manufacture, as well as our proprietary technology platforms, diagnostic candidates, and any other inventions that are commercially important to the development of our business. We also rely on trade secrets and know-how to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection.

Our success will significantly depend on our ability to obtain and maintain patent and other proprietary protection for commercially important technology, inventions and know-how related to our business, defend and enforce patents, preserve the confidentiality of our trade secrets and operate our business without infringing any patents and other intellectual property or proprietary rights of third parties. See the section titled "Risk Factors— Risks Related to Intellectual Property" for additional information.

As of December 31, 2019 we owned or co-owned approximately 34 issued U.S. patents and 299 issued patents in other jurisdictions, as well as 16 pending U.S. patent applications and 244 pending foreign patent applications. As of December 31, 2019 we licensed approximately 21 issued U.S. patents and 11 pending U.S. patent applications, as well as 215 issued patents in other jurisdictions and 180 pending foreign patent applications.

The patent portfolios for our most advanced product candidates as of December 31, 2019 are summarized below:

Semorinemab

Our global patent portfolio relating to semorinemab includes patents and patent applications with claims directed to compositions of matter, methods of treatment for certain indications, including AD, and methods of use, among others.

Anti-Tau Vaccines

Our patent portfolio for anti-Tau vaccines includes a patent family with composition of matter claims (including claims directed to the ACI-35 antigenic peptide and a pharmaceutical composition comprising such an antigenic peptide), claims directed to treating certain indications using ACI-35 including AD, and claims directed to using ACI-35 to induce an immune response. This patent family currently contains approximately 23 issued patents and seven pending patent applications in 27 countries. The issued patents in this patent family, if the appropriate maintenance, renewal, annuity or other governmental fees are paid, are expected to expire in 2030, excluding any additional term for patent term adjustments or patent term extensions.

Our patent portfolio for anti-Tau vaccines also includes a patent family relating to therapeutic Tau vaccine claims (including claims directed to a pharmaceutical composition comprising an antigenic Tau peptide), claims directed to using such vaccines to induce an immune response in a subject and claims directed to methods for preventing or treating a neurodegenerative disease or disorder, including AD, among others. Any patents issuing in this patent family, if the appropriate maintenance, renewal, annuity or other governmental fees are paid, are expected to expire in 2038, excluding any additional term for patent term adjustments or patent term extensions.

Morphomer Tau

Our patent portfolio relating to Morphomer Tau therapeutics includes patent applications with claims directed to composition of matter (including claims directed to the molecule, a pharmaceutical composition comprising such molecule, a mixture comprising such molecule), claims directed to prevention and treatment of certain indications using such molecules including AD and PSP, among others.

Our patent portfolio relating to Morphomer Tau therapeutic program includes patent applications that we own or co-own in four different patent families. As of December 31, 2019, we owned or co-owned approximately one PCT patent application, one U.S. pending application and two pending foreign patent applications in our main patent family directed to ACI-3024 lead small molecule Tau aggregation inhibitor. If the appropriate maintenance, renewal, annuity, or other governmental fees are paid, national stage applications issuing from this PCT patent application are expected to expire in 2039, excluding any additional term for patent term adjustments or patent term extensions, as applicable.

ACI-24

Our patent portfolio for ACI-24 includes composition of matter claims (including claims directed to the ACI-24 antigenic construct) claims directed to treating certain indications using ACI-24 including AD, and claims directed to using ACI-24 to induce an immune response. Our patent portfolio for ACI-24 consists of approximately 25 issued patents and 9 pending patent applications in 30 countries. With respect to the U.S., we own two issued U.S. patents. The issued patents in this patent portfolio, if the appropriate maintenance, renewal, annuity or other governmental fees are paid, are expected to expire in 2026, excluding any additional term for patent term adjustments or patent term extensions.

Our patent portfolio for ACI-24 also consists of an additional patent family directed to the use of ACI-24 vaccine in treatment and/or prevention of memory and/or cognitive impairments or abnormalities in Down Syndrome subpopulation, among others. As of December 31, 2019, in this patent family, we owned approximately 7 patents and 11 pending patent applications in 18 countries. The issued patents in this patent family, if the appropriate maintenance, renewal, annuity or other governmental fees are paid, are expected to expire in 2032, excluding any additional term for patent term adjustments or patent term extensions.

Our patent portfolio for ACI-24 also includes a patent family related to therapeutic anti-amyloid beta vaccine claims (including claims directed to a pharmaceutical composition comprising an antigenic peptide), claims directed to using such vaccines in treating, preventing, inducing a protective immune response against or alleviating the symptoms associated with an amyloid-beta associated disease in a subject, among others. Any

issued patents in this patent family, if the appropriate maintenance, renewal, annuity or other governmental fees are paid, are expected to expire in 2039, excluding any additional term for patent term adjustments or patent term extensions.

Crenezumab

Our patent portfolio relating to crenezumab includes patents and patent applications with claims directed to composition of matter (including claims directed to the crenezumab antibody or a fragment thereof, a polynucleotide encoding the crenezumab antibody or a fragment thereof, a cell line used to produce the crenezumab antibody as well as pharmaceutical compositions comprising the crenezumab antibody), claims directed to treating certain indications using the crenezumab antibody including AD, claims directed to a method of manufacturing the crenezumab antibody, and claims directed to diagnostic and prognostic uses of the crenezumab antibody.

Our patent portfolio relating to crenezumab includes patents and patent applications that we own or co-own in four different patent families. As of December 31, 2019, we owned or co-owned approximately 41 patents (not including the patents in the individual countries where the issued European patent was validated) and 22 patent applications in 34 countries in our main patent family directed to the crenezumab antibody and methods of using the crenezumab antibody to treat certain indications, including AD. This patent portfolio includes three issued U.S. patents and one pending U.S. patent applications, which, if the appropriate maintenance or other governmental fees are paid, are expected to expire in 2027, excluding any additional term for patent term adjustments or patent term extensions. This patent portfolio also includes a PCT patent application which was filed on July 13, 2007. If the appropriate maintenance, renewal, annuity, or other governmental fees are paid, national stage applications issuing from this PCT patent application are expected to expire in 2027, excluding any additional term for patent term adjustments or patent term extensions, as applicable.

PI-2620

Our patent portfolio relating to PI-2620 includes patent applications with claims directed to composition of matter (including claims directed to the molecule, its precursor, a diagnostic composition comprising such molecule), claims directed to diagnosis of certain indications using PI-2620 including AD and PSP, and claims directed to a method of manufacturing PI-2620, among others.

Our patent portfolio relating to PI-2620 includes patent applications that we own or co-own in three different patent families. As of December 31, 2019, we owned or co-owned approximately 16 patent applications in 16 countries in our main patent family directed to the PI-2620 molecule, its precursor and methods of using the PI-2620 to diagnose certain indications, including AD and PSP. If the appropriate maintenance, renewal, annuity, or other governmental fees are paid, national stage applications issuing from this PCT patent application are expected to expire in 2037, excluding any additional term for patent term adjustments or patent term extensions, as applicable.

Manufacturing and Supply

Background

The manufacturing and supply of the clinical study materials are currently done in collaboration with our collaboration partners (*e.g.* Genentech in case of crenezumab and semorinemab and Life Molecular in the case of Tau- PET imaging) or contract manufacturing organizations (*e.g.*, for ACI-35 and ACI-24) for the supply of raw materials, drug substances and drug products.

We have an established standard operating procedure to properly select the contract manufacturing organization to which the manufacturing tasks will be assigned. In the assessment, we consider the availability of the technical skills necessary to support the project, the business and commercial aspects related to the collaboration and the compliance of our providers with local and international regulations.

Collaboration Partners and Contract Manufacturing Organizations

Genentech, a leading biotech company with extensive experience in developing, producing and distributing products worldwide from preclinical to commercial stages of development, manufactures and supplies clinical study materials for semorinemab and crenezumab. Tau-PET imaging compounds are produced in collaboration with Life Molecular.

ACI-24 and ACI-35 APIs (active pharmaceutical ingredients) are produced by Bachem AG, which is an experienced company specialized in manufacturing synthetic peptides and based in Bubendorf, Switzerland. Drug products for the advancement of ACI-24 are manufactured by Polymun GmbH, a company based in Klosterneuburg, Austria with significant experience in developing and producing Liposomal formulations, while drug products for the advancement of ACI-35 are produced by Evonik Canada Inc., a company based in Vancouver, Canada with a strong and long experience in the field of liposomal formulation and production.

ACI-3024 API and ACI-3024 formulation are produced by Syngene International Limited, an experienced and established company specialized in chemical production based in Bangalore, India. In addition, under the supervision of Lilly & Co, ACI-3024 API is produced by STA Pharmaceutical Co., Ltd., a subsidiary of WuXi AppTec (WuXi STA), a leading pharmaceutical development and manufacturing company with facilities based in China.

Compliance with Governing Rules and Quality Requirements

The facilities used by our collaboration partners and contract manufacturing organizations to manufacture our product candidates are systematically audited by local authorities and occasionally inspected by competent authorities where the clinical studies are ongoing. The facilities where the commercial productions are performed must be approved by the FDA or other relevant regulatory authorities pursuant to inspections that are conducted after we submit our NDA or comparable marketing applications. We perform periodic quality audits of the manufacturing facilities and contract manufacturing organizations to monitor their compliance with the regional laws, regulations and applicable cGMP standards and other laws and regulations, such as those related to environmental health and safety matters. The scope of our audits also involves monitoring the ability of our providers to maintain adequate quality controls and quality assurance systems including personnel qualification.

After manufacturing, our products are submitted to extensive characterization and quality control testing plans performed by using properly developed analytical methods that are qualified or validated; this ensures the accuracy of the results generated and provides evidence of the quality of our products. In addition, our products are submitted to detailed and standardized stability programs aimed at demonstrating the stability during the storage period; this, while it guarantees the safety of the products, supports the definition of a suitable supply chain that may encompass the distribution of the products in different continents.

Contractual framework

We have established, with contract manufacturing organizations supplying drug substances or drug products under GMP, quality agreements and manufacturing service agreements. Quality agreements define the quality standards required to develop, produce and supply the product. Quality agreements also define the responsibilities related to the collaboration with regards to the quality related aspects. Manufacturing service agreements, in turn, define the commercial and financial framework under which product manufacturing under GMP is performed. Any failure to achieve and maintain compliance with the laws, regulations and standards, suspension of the manufacturing of our product candidates or revoke of cGMP permissions which would adversely affect our business and reputation are defined in the master service agreements and quality agreements. The risk that any third-party providers may breach the agreements they have with us because of factors beyond our control and the possibility they may also terminate or refuse to renew their agreements because of their own financial difficulties or business priorities, potentially at a time that is costly or otherwise inconvenient for us is managed by us with constant investments toward maintaining reserve stocks and in-depth process know-how. The latter is supported by continuous in-house process development and production activities of small-scale/research grade materials that may offer the chance to rapidly identify alternative contract manufacturers to which the manufacturing process could be transferred providing continuity for the clinical study.

Interaction with collaboration partners and contract manufacturing organizations

Finally, our partnership with contract manufacturing organizations is managed through an efficient project management platform in which teams are formed with the representatives of each key function from both parties. Meetings occur either by telephone conferences aimed at updating short term actions or face-to-face when mid-long term development plans are discussed.

Government Regulation and Our Regulatory Department

Our regulatory department has a strong culture of regulatory compliance, operating under three guiding principles, to:

- Provide constructive regulatory input for development products;
- Ensure smooth regulatory approvals by anticipating hurdles; and
- Build confidence with regulators by continuous communication

The quality assurance group is included within the regulatory department with the mission to:

- Create and maintain a corporate quality management system; and
- Ensure GCP, GMP, GLP and GDP compliance

A science driven approach is the cornerstone of our interactions and this has helped us to build and maintain a high level of trust with regulators. Besides informal conversations with the authorities, our regulatory department has conducted several pre-IND meetings with the FDA (ACI-24 for AD and DS and PI-2620) and Scientific Advice meetings, which are the European equivalent of pre-IND meetings (with German PEI, Swedish Medical Products Agency; Medicine & Healthcare Products Regulatory Agency (UK), Finnish Medicines Agency, and the European Medicines Agency). Since 2008, our regulatory department has filed a total of 16 clinical trial applications (CTAs) in the European Union (Austria, Denmark, Poland, two in Germany, two in Sweden, four in the UK, four in Finland and one in the Netherlands) and three INDs in the US. Given the seriousness of AD and public pressure for new therapeutics, we consider regulatory agencies to be important stakeholders in our product development strategies. We are committed to working closely with global regulatory authorities to adhere to and achieve the highest levels of safety and quality of our product candidates in the most timely and efficient manner. The transparency we have achieved and our goal of a close working relationship with the regulatory agencies, in particular the FDA, are intended to facilitate expeditious execution through the regulatory approval process.

Our regulatory department contains a quality assurance (QA) group. As every quality issue ultimately requires regulatory involvement and input, this approach is intended to lead to rapid resolution of issues and ensure full compliance to satisfy both the reviewers and the inspectors at the government health authorities. Our regulatory department is charged with keeping our entire organization directly or indirectly involved in the clinical study application process in a state of “inspection readiness.” To that end, we ensure that the Trial Master Files are complete and regularly updated. Our regulatory department is also tasked with generating our annual quality plan. The personnel tasked with QA have issued a set of approximately 65 standard operating procedures and continuously train the relevant staff. Our QA personnel conduct regular audits, including in-person audits of the contract manufacturers, contract research organizations and laboratories conducting primary end-point analysis. In addition, we have a full time corporate documentation specialist to ensure good documentation practice and archiving.

Product Approval Process

The clinical studies, manufacturing, labeling, storage, distribution, record keeping, advertising, promotion, import, export and marketing, among other things, of our product candidates are subject to extensive regulation by governmental authorities in the United States and other countries. The U.S. Food and Drug Administration, or FDA, under the Federal Food, Drug, and Cosmetic Act, or FDCA, regulates pharmaceutical products in the United States. The steps required before a drug may be approved for marketing in the United States generally include:

- the completion of preclinical laboratory tests and animal tests conducted under Good Laboratory Practice, or GLP, regulations;
- the submission to the FDA of an Investigational New Drug, or IND, application for human clinical testing, which must become effective before human clinical studies commence;
- obtaining a positive opinion from the Ethics Committee (Europe)/Institutional Review Board (United States) to commence study on human subjects;
- the performance of adequate and well-controlled human clinical studies to establish the safety and efficacy of the product candidate for each proposed indication and conducted in accordance with current Good Clinical Practice, or cGCP, requirements;

- pre-New Drug Application (NDA) submission meeting with FDA (highly recommended);
- the submission to the FDA of an NDA;
- the FDA's acceptance of the NDA;
- satisfactory completion of an FDA Pre-Approval Inspection (PAI) of the manufacturing facilities at which the product is made to assess compliance with current Good Manufacturing Practice, or cGMP, requirements;
- the FDA's review and approval of an NDA prior to any commercial marketing or sale of the drug in the United States; and
- having a parallel scientific advice from the European Medicines Agency or Health-Technology-Assessment body where the payors are involved at the outset (Phase 2), which is intended to facilitate the design of clinical studies to primarily target populations with a high chance of obtaining reimbursement and accelerate the process of time-to-reimbursement.

The FDA has various programs, including fast track, priority review, accelerated approval, and breakthrough therapy designation, that are intended to increase agency interactions, expedite or facilitate the process for reviewing drug candidates, and/or provide for initial approval on the basis of surrogate endpoints. We believe that one or more of our product candidates may qualify for some of these expedited development and review programs. Even if a drug candidate qualifies for one or more of these programs, the FDA may later decide that the drug candidate no longer meets the conditions for qualification.

The Fast Track program is intended to expedite or facilitate the process for reviewing new drugs that meet certain criteria. Specifically, new drugs are eligible for Fast Track designation if they are designed to treat a serious or life-threatening condition and demonstrate the potential to address unmet medical needs for the condition. Fast Track designation applies to the combination of the product and the specific indication for which it is being studied. The sponsor of a new drug may request the FDA to designate the drug as a Fast Track product at any time during the clinical development of the product. AD, for example, meets both pre-requisites—it is life-threatening and constitutes an unmet medical need. Unique to a Fast Track product, the FDA may consider for review sections of the marketing application on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the application, the FDA agrees to accept sections of the application and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the application.

Any product submitted to the FDA for marketing, including under a Fast Track program, may be eligible for other types of FDA programs intended to expedite development and review, such as priority review and accelerated approval. Any product is eligible for priority review if it has the potential to provide safe and effective therapy where no satisfactory alternative therapy exists or a significant improvement in the treatment, diagnosis or prevention of a disease compared to marketed products. The FDA will attempt to direct additional resources to the evaluation of an application for a new drug designated for priority review in an effort to facilitate the review. Additionally, a product may be eligible for accelerated approval. Drug candidates studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval, which means that they may be approved on the basis of adequate and well-controlled clinical studies establishing that the product has an effect on a surrogate endpoint that is reasonably likely to predict a clinical benefit, or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity. As a condition of approval, the FDA may require that a sponsor of a drug receiving accelerated approval perform adequate and well-controlled post-marketing clinical studies. Failure to conduct required post-approval trials, or the inability to confirm a clinical benefit during post-marketing trials, may allow the FDA to withdraw the drug from the market on an expedited basis. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product. Fast Track designation, priority review and accelerated approval do not change the standards for approval but may expedite the development or approval process.

The Food and Drug Administration Safety and Innovation Act of 2012 also amended the FDCA to require FDA to expedite the development and review of a breakthrough therapy. A drug can be designated as a breakthrough therapy if it is intended to treat a serious or life-threatening disease or condition and preliminary

clinical evidence indicates that it may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints. A sponsor may request that a drug be designated as a breakthrough therapy at any time during the clinical development of the product. If so designated, FDA shall act to expedite the development and review of the product's marketing application, including by meeting with the sponsor throughout the product's development, providing timely advice to the sponsor to ensure that the development program to gather nonclinical and clinical data is as efficient as practicable, involving senior managers and experienced review staff in a cross-disciplinary review, assigning a cross-disciplinary project lead for the FDA review team to facilitate an efficient review of the development program and to serve as a scientific liaison between the review team and the sponsor, and taking steps to ensure that the design of the clinical trials is as efficient as practicable.

The testing and approval process requires substantial time, effort and financial resources, and the receipt and timing of any approval is uncertain. Given this paradigm, AD has been given a Life Threatening Disease status by the FDA and therefore AD therapies are eligible for the expanded access program for investigational drugs and other pathways like Breakthrough Therapy, Accelerated Approval and Priority Review. Also, a single well-designed, well-conducted pivotal clinical study could be sufficient to trigger market approval pending a successful PAI.

Preclinical studies include laboratory evaluations of the product candidate, as well as animal studies to assess the potential safety and efficacy of the product candidate. The results of the preclinical studies, together with manufacturing information and analytical data, are submitted to the FDA as part of the IND, which must become effective before clinical studies may be commenced. The IND will become effective automatically 30 days after receipt by the FDA, unless the FDA raises concerns or questions about the conduct of the studies as outlined in the IND prior to that time. In this case, the IND sponsor and the FDA must resolve any outstanding concerns before clinical studies can proceed.

Clinical studies involve the administration of the product candidates to healthy volunteers or patients with the disease to be treated under the supervision of a qualified principal investigator. Clinical studies are conducted under protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety, and the efficacy criteria to be evaluated. A protocol for each clinical study and any subsequent protocol amendments must be submitted to the FDA as part of the IND. Further, each clinical study must be reviewed and approved by an independent institutional review board, or IRB, either centrally or individually at each institution at which the clinical study will be conducted. The IRB will consider, among other things, ethical factors, the safety of human subjects and the possible liability of the institution. There are also requirements governing the reporting of ongoing clinical studies and clinical study results to public registries. The FDA, the IRB or the clinical study sponsor may suspend or terminate clinical studies at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk. Additionally, some clinical studies are overseen by an independent group of qualified experts organized by the clinical study sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether or not a study may move forward at designated check points based on access to certain data from the study. We may also suspend or terminate a clinical study based on evolving business objectives and/or competitive climate.

Clinical studies are typically conducted in three sequential phases prior to approval, but the phases may overlap. These phases generally include the following:

Phase 1. Phase 1 clinical studies represent the initial introduction of a product candidate into human subjects, frequently healthy volunteers. In Phase 1, the product candidate is usually tested for safety, including adverse effects, dosage tolerance, absorption, distribution, metabolism, excretion and pharmacodynamics.

Phase 2. Phase 2 clinical studies usually involve studies in a limited patient population to (i) evaluate the efficacy of the product candidate for specific indications, (ii) determine dosage tolerance and optimal dosage and (iii) identify possible adverse effects and safety risks.

Phase 3. If a product candidate is found to be potentially effective and to have an acceptable safety profile in Phase 2 studies, the clinical study program will be expanded to Phase 3 clinical studies to further demonstrate clinical efficacy, optimal dosage and safety within an expanded patient population at geographically dispersed clinical study sites.

Phase 4. Clinical studies are conducted after approval to gain additional experience from the treatment of patients in the intended therapeutic indication and to document a clinical benefit in the case of drugs approved under accelerated approval regulations, or when otherwise requested by the FDA in the form of post-market

requirements or commitments. Failure to promptly conduct any required Phase 4 clinical studies could result in withdrawal of approval.

The results of preclinical studies and clinical studies, including negative or ambiguous results as well as positive findings, together with detailed information on the manufacture, composition and quality of the product, are submitted to the FDA in the form of an NDA requesting approval to market the product. The NDA must be accompanied by a significant user fee payment. The FDA has substantial discretion in the approval process and may refuse to accept any application or decide that the data is insufficient for approval and require additional preclinical, clinical or other studies.

We estimate that it generally takes 10 to 15 years, or possibly longer, to discover, develop and bring to market a new pharmaceutical product in the United States. Several years may be needed to complete each phase, including discovery, preclinical, Phase 1, 2 or 3, or marketing authorization.

In addition, under the Pediatric Research Equity Act, or PREA, an NDA or supplement to an NDA must contain data to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. Recently, the Food and Drug Administration Safety and Innovation Act, or FDASIA, which was signed into law on July 9, 2012, amended the FDCA. FDASIA requires that a sponsor who is planning to submit a marketing application for a drug or biological product that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration submit an initial Pediatric Study Plan, within sixty days of an end-of-phase 2 meeting or as may be agreed between the sponsor and FDA. The initial Pediatric Study Plan must include an outline of the pediatric study or studies that the sponsor plans to conduct, including study objectives and design, age groups, relevant endpoints and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information. FDA and the sponsor must reach agreement on the Pediatric Study Plan. A sponsor can submit amendments to an agreed-upon initial Pediatric Study Plan at any time if changes to the pediatric plan need to be considered based on data collected from nonclinical studies, early phase clinical trials, and/or other clinical development programs.

The cost of preparing and submitting an NDA is substantial. Under federal law, NDAs are subject to substantial application user fees and the sponsor of an approved NDA is also subject to annual product and establishment user fees. Under the Prescription Drug User Fee Act, or PDUFA, as amended, each NDA must be accompanied by a user fee. The FDA adjusts the PDUFA user fees on an annual basis. PDUFA VI eliminates fees for supplements as well as for establishments, though applicants will be assessed annual prescription drug program fees for prescription drug products, rather than the prescription drug product fee assessed under the previous iteration of PDUFA. According to the FDA's fee schedule for the 2020 FY, the user fee for each NDA application requiring clinical data is USD 2,942,465 and the annual program fee is USD 325,424. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on NDAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

Once the NDA submission has been submitted, the FDA has 60 days after submission of the NDA to conduct an initial review to determine whether it is sufficient to accept for filing. Under the Prescription Drug User Fee Act, or PDUFA, the FDA sets a goal date by which it plans to complete its review. This is typically 12 months from the date of submission of the NDA application. The review process is often extended by FDA requests for additional information or clarification. Before approving an NDA, the FDA will inspect the facilities at which the product is manufactured and will not approve the product unless the manufacturing facility complies with cGMPs and may also inspect clinical study sites for integrity of data supporting safety and efficacy. The FDA may also convene an advisory committee of external experts to provide input on certain review issues relating to risk, benefit and interpretation of clinical study data. The FDA is not bound by the recommendations of an advisory committee, but generally follows such recommendations in making its decisions. The FDA may delay approval of an NDA if applicable regulatory criteria are not satisfied and/or the FDA requires additional testing or information. The FDA may require post-marketing testing and surveillance to monitor safety or efficacy of a product.

After the FDA evaluates the NDA and conducts inspections of manufacturing facilities where the drug product and/or its API will be produced, it may issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application is not ready for approval. A Complete Response Letter may require additional clinical data and/or an

additional pivotal Phase 3 clinical study(ies), and/or other significant, expensive and time-consuming requirements related to clinical studies, preclinical studies or manufacturing. Even if such additional information is submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. The FDA could also approve the NDA with a Risk Evaluation and Mitigation Strategy, or REMS, plan to mitigate risks, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA also may condition approval on, among other things, changes to proposed labeling, development of adequate controls and specifications, or a commitment to conduct one or more post-market studies or clinical studies. Such post-market testing may include Phase 4 clinical studies and surveillance to further assess and monitor the product's safety and effectiveness after commercialization.

Special Protocol Assessment

The FDA and an IND sponsor may agree in writing on the design and size of clinical studies intended to form the primary basis of a claim of effectiveness in an NDA. This process is known as a special protocol assessment, or SPA. Upon a specific request for a SPA by an IND sponsor, the FDA will evaluate the protocol. If a SPA agreement is reached, however, it is not a guarantee of product approval by the FDA or approval of any permissible claims about the product. The FDA retains significant latitude and discretion in interpreting the terms of the SPA agreement and the data and results from any study that is the subject of the SPA agreement. In particular, the SPA agreement is not binding on the FDA if previously unrecognized public health concerns later come to light, other new scientific concerns regarding product safety or efficacy arise, the IND sponsor fails to comply with the protocol agreed upon, or the relevant data, assumptions, or information provided by the IND sponsor when requesting a SPA agreement change, are found to be false statements or misstatements, or are found to omit relevant facts. A SPA agreement may not be changed by the sponsor or the FDA after the study begins except with the written agreement of the sponsor and the FDA, or if the FDA determines that a substantial scientific issue essential to determining the safety or effectiveness of the drug was identified after the testing began.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biological product intended to treat a rare disease or condition, which is a disease or condition that affects fewer than 200,000 individuals in the US, or if it affects more than 200,000 individuals in the US there is no reasonable expectation that the cost of developing and making a drug product available in the US for this type of disease or condition will be recovered from sales of the product. Orphan product designation must be requested before submitting an NDA. After the FDA grants orphan product designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan product designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has orphan designation subsequently receives the first FDA approval for the disease or condition for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications to market the same drug or biological product for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity. The designation of such drug also entitles a party to financial incentives such as opportunities for grant funding towards clinical study costs, tax advantages and user-fee waivers. Competitors, however, may receive approval of different products for the indication for which the orphan product has exclusivity or obtain approval for the same product but for a different indication for which the orphan product has exclusivity. Orphan product exclusivity also could block the approval of one of our products for seven years if a competitor obtains approval of the same drug or biological product as defined by the FDA or if our drug candidate is determined to be contained within the competitor's product for the same indication or disease. If a drug product designated as an orphan product receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan product exclusivity. Orphan drug status in the European Union has similar but not identical benefits in that jurisdiction.

Disclosure of Clinical Trial Information

Sponsors of clinical trials (other than Phase 1 trials) of FDA-regulated products, including drugs, are required to register and disclose certain clinical trial information. Information related to the product, comparator, patient population, phase of investigation, trial sites and investigators and other aspects of the clinical trial is made public as part of the registration. Sponsors are also obligated to disclose the results of their clinical trials after completion. Disclosure of the results of certain trials may be delayed until the new product or new indication being studied has been approved. However, there are evolving rules and increasing requirements for

publication of trial-related information, and it is possible that data and other information from trials involving drugs that never garner approval could in the future be required to be disclosed. In addition, publication policies of major medical journals mandate certain registration and disclosures as a pre-condition for potential publication, even when this is not presently mandated as a matter of law. Competitors may use this publicly available information to gain knowledge regarding the progress of development programs.

Post-Approval Requirements

Drugs manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product distribution, advertising and promotion and reporting of adverse experiences with the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims are subject to prior FDA review and approval. There also are continuing, annual user fee requirements for any marketed products and the establishments at which such products are manufactured, as well as new application fees for supplemental applications with clinical data.

In addition, drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and state agencies, and are subject to periodic unannounced inspections by the FDA and these state agencies for compliance with cGMP requirements. Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical studies to assess new safety risks; or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- fines, warning letters or holds on post-approval clinical studies;
- refusal of the FDA to approve pending NDAs or supplements to approved NDAs, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

Patent Term Restoration and Marketing Exclusivity

Depending upon the timing, duration, and specifics of FDA approval of the use of our drug candidates, some of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Act. The Hatch-Waxman Act permits a patent term to be extended up to five years as compensation for patent term effectively lost due to the FDA’s pre-market approval requirements. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product’s approval date. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of an NDA, plus the time between the submission date of an NDA and the approval of that application, except that the review period

is reduced by any time during which the applicant failed to exercise due diligence. Only one patent applicable to an approved drug is eligible for the extension. Extensions are not granted as a matter of right and the extension must be applied for prior to expiration of the patent and within a 60 day period from the date the product is first approved for commercial marketing. The U.S. Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. Where a product contains multiple active ingredients, if any one active ingredient has not been previously approved, it can form the basis of an extension of patent term provided the patent claims that ingredient or the combination.

In the future, we may apply for patent term restoration for some of our presently owned patents to add patent life beyond their current expiration date, depending on the expected length of clinical studies and other factors involved in the submission of the relevant NDA; however, there can be no assurance that any such extension will be granted to us.

The Biologics Price Competition and Innovation Act of 2009 provides up to twelve years of non-patent data exclusivity within the United States to the first applicant to gain approval of a BLA for a new biologic product that has not previously been approved by the FDA, which we refer to as a reference product. This twelve-year data exclusivity may prohibit the FDA from approving a biosimilar or interchangeable product of such reference product until twelve years after the licensure of such reference product. In addition, the FDA will not accept a biosimilar or interchangeable product application for review until four years after the date of first licensure of such reference product. Under 21CFR314.108, 5 years exclusivity is also granted to new chemical entities that contain no active moiety that has been approved by FDA under section 505(b). This market exclusivity bars FDA from accepting for review any ANDA or 505(b)(2) application for a drug containing the same active moiety for (i) five years if an ANDA or 505(b)(2) application does not contain a paragraph IV certification to a listed patent, or (ii) four years if an ANDA or 505(b)(2) is submitted containing a paragraph IV certification to a listed patent. Moreover, pediatric exclusivity, if granted, may add six months of exclusivity if the reference product has been studied with respect to a pediatric indication in accordance with certain regulatory requirements. A reference product may also be granted seven years of orphan-drug exclusivity for the treatment of a rare disease or condition under section 527(a) of FDCA, which would run in parallel with the twelve years of data exclusivity of the reference product, if applicable.

Non-U.S. Regulation

In order to market any product outside of the United States, we would need to comply with numerous and varying regulatory requirements of other countries and jurisdictions regarding quality, safety and efficacy and governing, among other things, clinical studies, marketing authorization, commercial sales and distribution of our products. Whether or not we obtain FDA approval for a product, we would need to obtain the necessary approvals by the comparable foreign regulatory authorities before we can commence clinical studies or marketing of the product in foreign countries and jurisdictions. Although many of the issues discussed above with respect to the United States apply similarly in the context of the European Union, the approval process varies between countries and jurisdictions and can involve additional product testing and additional administrative review periods, as described in greater detail below. The time required to obtain approval in other countries and jurisdictions might differ from and be longer than that required to obtain FDA approval. Regulatory approval in one country or jurisdiction does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country or jurisdiction may negatively impact the regulatory process in others.

European Union Drug Review Approval

In the European Economic Area, or EEA (which is comprised of the 28 Member States of the European Union plus Norway, Iceland and Liechtenstein), medicinal products can only be commercialized after obtaining a Marketing Authorization, or MA. There are two types of marketing authorizations: the Community MA, which is issued by the European Commission through the Centralized Procedure based on the opinion of the Committee for Medicinal Products for Human Use, or CHMP, a body of the EMA, and which is valid throughout the entire territory of the EEA; and the National MA, which is issued by the competent authorities of the Member States of the EEA and only authorizes marketing in that Member State’s national territory and not the EEA as a whole.

The Centralized Procedure is compulsory for human medicines for the treatment of human immunodeficiency virus (HIV) or acquired immune deficiency syndrome (AIDS), cancer, diabetes, neurodegenerative diseases, auto-immune and other immune dysfunctions, and viral diseases; for veterinary medicines for use as growth or yield enhancers; for medicines derived from biotechnology processes, such as genetic engineering; for advanced-therapy medicines, such as gene-therapy, somatic cell-therapy or tissue-

engineered medicines; and for officially designated ‘orphan medicines’ (medicines used for rare human diseases). The Centralized Procedure is optional for products containing a new active substance not yet authorized in the EEA, or for products that constitute a significant therapeutic, scientific or technical innovation or for products which are in the interest of public health in the European Union. The National MA is for products not falling within the mandatory scope of the Centralized Procedure. Where a product has already been authorized for marketing in a Member State of the EEA, this National MA can be recognized in another Member State through the Mutual Recognition Procedure. If the product has not received a National MA in any Member State at the time of application, it can be approved simultaneously in various Member States through the Decentralized Procedure. Under the Decentralized Procedure an identical dossier is submitted to the competent authorities of each of the Member States in which the MA is sought, one of which is selected by the applicant as the Reference Member State, or RMS. If the RMS proposes to authorize the product, and the other Member States do not raise objections, the product is granted a national MA in all the Member States where the authorization was sought. Before granting the MA, the EMA or the competent authorities of the Member States of the EEA make an assessment of the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy.

Regulation in the European Union

Product development, the regulatory approval process, and safety monitoring of medicinal products and their manufacturers in the European Union proceed in much the same manner as they do in the United States. Therefore, many of the issues discussed above apply similarly in the context of the European Union. In addition, drugs are subject to the extensive price and reimbursement regulations of the various European Union Member States.

Clinical Studies

As is the case in the United States, the various phases of preclinical and clinical research in the European Union are subject to significant regulatory controls. The Clinical Trials Directive 2001/20/EC, as amended (and which will be replaced in 2020 or later by Regulation (EU) No 536/2014) provides a system for the approval of clinical studies in the European Union via implementation through national legislation of the Member States. Under this system, approval must be obtained from the competent national authorities of the European Union Member States in which the clinical trial is to be conducted. Furthermore, a clinical trial may only be started after a competent ethics committee has issued a favorable opinion on the clinical trial application, which must be supported by an investigational medicinal product dossier with supporting information prescribed by the Clinical Trials Directive and corresponding national laws of the Member States and further detailed in applicable guidance documents. A clinical trial may only be undertaken if provision has been made for insurance or indemnity to cover the liability of the investigator or sponsor. In certain countries, the sponsor of a clinical trial has a strict (faultless) liability for any (direct or indirect) damage suffered by trial subjects. The sponsor of a clinical trial, or its legal representative, must be based in the European Economic Area. European regulators and ethics committees also require the submission of adverse event reports during a study and a copy of the final study report.

Marketing Approval

Marketing approvals under the European Union regulatory system may be obtained through a centralized or decentralized procedure. The centralized procedure results in the grant of a single marketing authorization that is valid for all (currently 28) European Union Member States and three EFTA members (Norway, Iceland, Liechtenstein).

Pursuant to Regulation (EC) No. 726/2004, as amended, the centralized procedure is mandatory for drugs developed by means of specified biotechnological processes, advanced therapy medicinal products, drugs for human use containing a new active substance for which the therapeutic indication is the treatment of specified diseases, including but not limited to acquired immune deficiency syndrome, neurodegenerative disorders, auto-immune diseases and other immune dysfunctions, as well as drugs designated as orphan drugs. The CHMP also has the discretion to permit other products to use the centralized procedure if it considers them sufficiently innovative or they contain a new active substance.

In the marketing authorization application, or MAA, the applicant has to properly and sufficiently demonstrate the quality, safety and efficacy of the drug. Under the centralized approval procedure, the CHMP, possibly in conjunction with other committees, is responsible for drawing up the opinion of the EMA on any matter concerning the admissibility of the files submitted in accordance with the centralized procedure, such as

an opinion on the granting, variation, suspension or revocation of a marketing authorization, and pharmacovigilance.

The CHMP and other committees are also responsible for providing guidelines and have published numerous guidelines that may apply to our product candidates. These guidelines provide additional guidance on the factors that the EMA will consider in relation to the development and evaluation of drug products and may include, among other things, the preclinical studies required in specific cases; and the manufacturing and control information that should be submitted in a MAA; and post-approval measures required to monitor patients and evaluate the long term efficacy and potential adverse reactions. Although these guidelines are not legally binding, we believe that our compliance with them is likely necessary to gain approval for any of our product candidates.

The maximum timeframe for the evaluation of an MAA by the CHMP under the centralized procedure is 210 days after receipt of a valid application. This period will be suspended until such time as the supplementary information requested by the CHMP, has been provided by the applicant. Likewise, this time-limit will be suspended for the time allowed for the applicant to prepare oral or written explanations. When an application is submitted for a marketing authorization in respect of a drug which is of major interest from the point of view of public health and in particular from the viewpoint of therapeutic innovation, the applicant may request an accelerated assessment procedure. If the CHMP accepts such request, the time-limit of 210 days will be reduced to 150 days but it is possible that the CHMP can revert to the standard time-limit for the centralized procedure if it considers that it is no longer appropriate to conduct an accelerated assessment.

If the CHMP concludes that the quality, safety and efficacy of the product are sufficiently proven, it adopts a positive opinion. This is sent to the European Commission which drafts a decision within approximately 67 days following the CHMP opinion. After consulting with the Member States, the European Commission adopts a decision and grants a marketing authorization, which is valid for the whole of the European Economic Area, or EEA. The marketing authorization may be subject to certain conditions, which may include, without limitation, the performance of post-authorization safety and/or efficacy studies.

The EMA has various programs, including accelerated assessment, conditional approval, and PRIME, which are intended to increase agency interactions, expedite or facilitate the process for reviewing drug candidates, and/or provide for initial approval on the basis of surrogate endpoints. One or more of our product candidates may qualify for some of these expedited development and review programs. Even if a drug candidate qualifies for one or more of these programs, the EMA may later decide that the drug candidate no longer meets the conditions for qualification. Eligibility to the PRIME scheme is limited to products considered to offer a major therapeutic advantage in high unmet need populations. PRIME is a voluntary scheme aimed at enhancing interaction and early dialogue with developers of promising medicines through the early appointment of the product Rapporteur, optimizing development plans and speeding up evaluation so these medicines can reach patients earlier. Products benefiting from PRIME can expect to be eligible for accelerated assessment at the time of application for an MAA.

European Union legislation also provides for a system of regulatory data and market exclusivity. According to Article 14(11) of Regulation (EC) No. 726/2004, as amended, and Article 10(1) of Directive 2001/83/EC, as amended, upon receiving marketing authorization, new chemical entities approved on the basis of a complete independent data package benefit from eight years of data exclusivity and an additional two years of market exclusivity. Data exclusivity prevents regulatory authorities in the European Union from referencing the innovator's data to assess a generic (abbreviated) application. During the additional two-year period of market exclusivity, a generic marketing authorization can be submitted, and the innovator's data may be referenced, but no generic medicinal product can be marketed until the expiration of the market exclusivity. The overall ten-year period will be extended to a maximum of eleven years if, during the first eight years of those ten years, the marketing authorization holder, or MAH, obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. Even if a compound is considered to be a new chemical entity and the innovator is able to gain the period of data exclusivity, another company nevertheless could also market another version of the drug if such company obtained marketing authorization based on an MAA with a complete independent data package of pharmaceutical test, preclinical tests and clinical studies. However, products designated as orphan medicinal products enjoy, upon receiving marketing authorization, a period of 10 years of orphan market exclusivity. See also "—Orphan Drug Regulation" below. Depending upon the timing and duration of the European Union marketing authorization process, products may be eligible for up to five years' supplementary protection certification, or SPC, pursuant to Regulation (EC) No. 469/2009. Such SPCs extend the rights under the basic patent for the drug.

In the EU, the pediatric regulation (Regulation (EC) No 1901/2006 as amended) requires sponsors to submit a pediatric investigation plan at the end of Phase 1. This plan will provide the details of the quality, non-clinical and clinical studies required to support the authorization of a pediatric indication. Additional rules apply to medicinal products for pediatric use under Regulation (EC) No. 1901/2006. Potential incentives include a six-month extension of any supplementary protection certificate granted pursuant to Regulation (EC) No. 469/2009, but not in cases in which the relevant product is designated as orphan medicinal products pursuant to Regulation (EC) No. 141/2000, as amended. Instead, medicinal products designated as orphan medicinal product may enjoy an extension of the ten-year market exclusivity period granted under Regulation (EC) No. 141/2000 to twelve years subject to the conditions applicable to orphan drugs.

Orphan Drug Regulation

In the European Union, Regulation (EC) No. 141/2000, as amended, states that a drug will be designated as an orphan drug if its sponsor can establish:

- that it is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting not more than five in ten thousand persons in the Community when the application is made, or that it is intended for the diagnosis, prevention or treatment of a life-threatening, seriously debilitating or serious and chronic condition in the European Union and that without incentives it is unlikely that the marketing of the drug in the European Union would generate sufficient return to justify the necessary investment; and

- that there exists no satisfactory method of diagnosis, prevention or treatment of the condition in question that has been authorized in the European Union or, if such method exists, that the drug will be of significant benefit to those affected by that condition.

Regulation (EC) No. 847/2000 sets out further provisions for implementation of the criteria for designation of a drug as an orphan drug. An application for the designation of a drug as an orphan drug must be submitted at any stage of development of the drug before filing of a marketing authorization application.

If a European Union-wide community marketing authorization in respect of an orphan drug is granted or if all the European Union Member States have granted marketing authorizations in accordance with the procedures for mutual recognition, the European Union and the Member States will not, for a period of 10 years, accept another application for a marketing authorization, or grant a marketing authorization or accept an application to extend an existing marketing authorization, for the same therapeutic indication, in respect of a similar drug. This period may however be reduced to six years if, at the end of the fifth year, it is established, with respect to the drug concerned, that the criteria for orphan drug designation are no longer met, in other words, when it is shown on the basis of available evidence that the product is sufficiently profitable not to justify maintenance of market exclusivity. Notwithstanding the foregoing, a marketing authorization may be granted, for the same therapeutic indication, to a similar drug if:

- the holder of the marketing authorization for the original orphan drug has given its consent to the second applicant;

- the holder of the marketing authorization for the original orphan drug is unable to supply sufficient quantities of the drug; or

- the second applicant can establish in the application that the second drug, although similar to the orphan drug already authorized, is safer, more effective or otherwise clinically superior.

Other incentives available to orphan drugs in the European Union include financial incentives such as a reduction of fees or fee waivers and protocol assistance. Orphan drug designation does not shorten the duration of the regulatory review and approval process.

Manufacturing and Manufacturers' License

Pursuant to Directive 2003/94/EC, as transposed into the national laws of the Member States, the manufacturing of investigational medicinal products and approved drugs is subject to a separate manufacturer's license and must be conducted in strict compliance with cGMP requirements, which mandate the methods, facilities, and controls used in manufacturing, processing, and packing of drugs to assure their safety and identity. Manufacturers must have at least one qualified person permanently and continuously at their disposal.

The qualified person is ultimately responsible for certifying that each batch of finished product released onto the market has been manufactured in accordance with cGMP and the specifications set out in the marketing authorization or investigational medicinal product dossier. cGMP requirements are enforced through mandatory registration of facilities and inspections of those facilities. Failure to comply with these requirements could interrupt supply and result in delays, unanticipated costs and lost revenues, and subject the applicant to potential legal or regulatory action, including but not limited to warning letters, suspension of manufacturing, seizure of product, injunctive action or possible civil and criminal penalties.

Wholesale Distribution and License

Pursuant to Directive 2001/83/EC, the wholesale distribution of medicinal products is subject to the possession of an authorization to engage in activity as a wholesaler in medicinal products. Possession of a manufacturing authorization includes authorization to distribute by wholesale the medicinal products covered by that authorization. The distribution of medicinal products must comply with the principles and guidelines of good distribution practices, or GDP.

Advertising

In the European Union, the promotion of prescription medicines is subject to intense regulation and control, including EU and national legislation as well as self-regulatory codes (industry codes). Advertising legislation inter alia includes a prohibition on direct-to-consumer advertising. All prescription medicines advertising must be consistent with the product's approved summary of products characteristics, and must be factual, accurate, balanced and not misleading. Advertising of prescription medicines pre-approval or off-label is not allowed. Some jurisdictions require that all promotional materials for prescription medicines be subjected to either prior internal or regulatory review and approval.

Other Regulatory Requirements

A marketing authorization holder, or MAH, for a medicinal product is legally obliged to fulfill a number of obligations by virtue of its status as an MAH. The MAH can delegate the performance of related tasks to third parties, such as distributors or marketing partners, provided that this delegation is appropriately documented and the MAH maintains legal responsibility and liability.

The obligations of an MAH include:

- *Manufacturing and batch release*—MAHs should guarantee that all manufacturing operations comply with relevant laws and regulations, applicable good manufacturing practices, with the product specifications and manufacturing conditions set out in the marketing authorization and that each batch of product is subject to appropriate release formalities.

- *Availability and continuous supply*—Pursuant to Directive 2001/83/EC, as transposed into the national laws of the Member States, the MAH for a medicinal product and the distributors of the said medicinal product actually placed on the market in a Member State shall, within the limits of their responsibilities, ensure appropriate and continued supplies of that medical product to pharmacies and persons authorized to supply medicinal products so that the needs of patients in the Member State in question are covered.

- *Pharmacovigilance*—MAHs are obliged to establish and maintain a pharmacovigilance system, including a qualified person responsible for oversight, submit safety reports to the regulators and comply with the good pharmacovigilance practice guidelines adopted by the EMA.

- *Advertising and promotion*—MAHs remain responsible for all advertising and promotion of its products, including promotional activities by other companies or individuals on their behalf and in some cases must conduct internal or regulatory pre-approval of promotional materials. Regulation in this area also covers interactions with healthcare practitioners and/or patient groups, and in some jurisdictions legal or self-regulatory obligations to disclose such interactions exist.

- *Medical affairs/scientific service*—MAHs are required to disseminate scientific and medical information on its medicinal products to healthcare professionals, regulators and patients. Legal representation and distributor issues. MAHs are responsible for regulatory actions or inactions of their distributors and agents.

- *Preparation, filing and maintenance of the application and subsequent marketing authorization*— MAHs must maintain appropriate records, comply with the marketing authorization's terms and conditions, fulfill reporting obligations to regulators, submit renewal applications and pay all appropriate fees to the authorities. We may hold any future marketing authorizations granted for our product candidates in our own name, or appoint an affiliate or a collaboration partner to hold marketing authorizations on our behalf. Any failure by an MAH to comply with these obligations may result in regulatory action against an MAH and ultimately threaten our ability to commercialize our products.

Pricing and Reimbursement

In the European Union, the pricing and reimbursement mechanisms by private and public health insurers vary largely by country and even within countries. The public systems reimbursement for standard drugs is determined by guidelines established by the legislator or responsible national authority. The approach taken varies by Member State. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. Other Member States allow companies to fix their own prices for medicines, but monitor and control company profits and may limit or restrict reimbursement. The downward pressure on healthcare costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products and some of EU countries require the completion of studies that compare the cost-effectiveness of a particular product candidate to currently available therapies in order to obtain reimbursement or pricing approval. Special pricing and reimbursement rules may apply to orphan drugs. Inclusion of orphan drugs in reimbursement systems tend to focus on the medical usefulness, need, quality and economic benefits to patients and the healthcare system as for any drug. Acceptance of any medicinal product for reimbursement may come with cost, use and often volume restrictions, which again can vary by country. In addition, results based rules of reimbursement may apply.

Other US Healthcare Laws

In addition to FDA restrictions on marketing of pharmaceutical products, federal and state healthcare laws restrict certain business practices in the biopharmaceutical industry. These laws include, but are not limited to, anti-kickback, false claims, data privacy and security, and transparency statutes and regulations.

The federal Anti-Kickback Statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration, directly or indirectly, to induce, or in return for, purchasing, leasing, ordering or arranging for the purchase, lease or order of any good, facility, item or service reimbursable under Medicare, Medicaid or other federal healthcare programs. The term "remuneration" has been broadly interpreted to include anything of value, including for example, gifts, discounts, the furnishing of supplies or equipment, credit arrangements, payments of cash, waivers of payment, ownership interests and providing anything at less than its fair market value. The Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand and prescribers, purchasers and formulary managers on the other. Although there are a number of statutory exceptions and regulatory safe harbors protecting certain common activities from prosecution, the exceptions and safe harbors are drawn narrowly, and our practices may not in all cases meet all of the criteria for a statutory exception or safe harbor protection. Practices that involve remuneration that may be alleged to be intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exception or safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the statute has been violated. The Patient Protection and Affordable Care Act as amended by the Health Care and Education Reconciliation Act, or collectively, PPACA, amended the intent requirement under the Anti-Kickback Statute and criminal healthcare fraud statutes (discussed below) such that a person or entity no longer needs to have actual knowledge of the statute or the specific intent to violate it in order to have committed a violation. In addition, PPACA provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act (discussed below). Further, the civil monetary penalties statute imposes penalties against any person or entity that, among other things, is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent.

The federal false claims laws prohibit, among other things, any person or entity from knowingly presenting, or causing to be presented, a false or fraudulent claim for payment or approval to the federal government or knowingly making, using or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes "any request or demand" for money or property presented to the U.S. government. Recently, several pharmaceutical and other healthcare companies have been prosecuted under these laws for, among other things, allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of the companies' marketing of the product for unapproved, and thus non-covered, uses. The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of, or payment for, healthcare benefits, items or services.

In addition, we may be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and its implementing regulations, imposes certain requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA's privacy and security standards directly applicable to business associates—independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also created four new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Additionally, the PPACA also included the federal Physician Payments Sunshine Act, which requires that certain manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report information related to certain payments or other transfers of value made or distributed to physicians and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, the physicians and teaching hospitals and to report annually certain ownership and investment interests held by physicians and their immediate family members.

Also, many states have similar healthcare statutes or regulations that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor. Certain states require the posting of information relating to clinical studies, pharmaceutical companies to implement a comprehensive compliance program that includes a limit on expenditures for, or payments to, individual medical or health professionals and track and report gifts and other payments made to physicians and other healthcare providers. If our operations are found to be in violation of any of the health regulatory laws described above or any other laws that apply to us, we may be subject to penalties, including potentially significant criminal, civil and/or administrative penalties, damages, fines, disgorgement, individual imprisonment, exclusion of products from reimbursement under government programs, contractual damages, reputational harm, administrative burdens, diminished profits and future earnings and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. To the extent that any of our products will be sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals.

Pharmaceutical Coverage, Pricing and Reimbursement

In both domestic and foreign markets, our sales of any approved products will depend in part on the availability of coverage and adequate reimbursement from third-party payors. Third-party payors include government authorities, managed care providers, private health insurers and other organizations. Patients who are prescribed treatments for their conditions and providers performing the prescribed services generally rely on third-party payors to reimburse all or part of the associated healthcare costs. Patients are unlikely to use our products, if approved, unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our products. Sales of our products will therefore depend substantially, both domestically and

abroad, on the extent to which the costs of our products will be paid by third-party payors. These third-party payors are increasingly focused on containing healthcare costs by challenging the price and examining the cost-effectiveness of medical products and services.

In addition, significant uncertainty exists as to the coverage and reimbursement status of newly approved healthcare product candidates. The market for our product candidates for which we may receive regulatory approval will depend significantly on access to third-party payors' drug formularies, or lists of medications for which third-party payors provide coverage and reimbursement. The industry competition to be included in such formularies often leads to downward pricing pressures on pharmaceutical companies. Also, third-party payors may refuse to include a particular branded drug in their formularies or otherwise restrict patient access to a branded drug when a less costly generic equivalent or other alternative is available. Because each third-party payor individually approves coverage and reimbursement levels, obtaining coverage and adequate reimbursement is a time-consuming, costly and sometimes unpredictable process. We may be required to provide scientific and clinical support for the use of any product to each third-party payor separately with no assurance that approval would be obtained, and we may need to conduct expensive pharmacoeconomic studies in order to demonstrate the cost-effectiveness of our products. This process could delay the market acceptance of any product and could have a negative effect on our future revenues and operating results. We cannot be certain that our product candidates will be considered cost-effective. Because coverage and reimbursement determinations are made on a payor-by-payor basis, obtaining acceptable coverage and reimbursement from one payor does not guarantee the Company will obtain similar acceptable coverage or reimbursement from another payor. If we are unable to obtain coverage of, and adequate reimbursement and payment levels for, our product candidates from third-party payors, physicians may limit how much or under what circumstances they will prescribe or administer them and patients may decline to purchase them. This in turn could affect our ability to successfully commercialize our products and impact our profitability, results of operations, financial condition and future success.

Furthermore, in many foreign countries, particularly the countries of the European Union, the pricing of prescription drugs is subject to government control. In some non-U.S. jurisdictions, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. We may face competition for our product candidates from lower-priced products in foreign countries that have placed price controls on pharmaceutical products. In addition, there may be importation of foreign products that compete with our own products, which could negatively impact our profitability.

Healthcare Reform

In the United States and other jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes to the healthcare system that could affect our future results of operations as we begin to directly commercialize our products.

In particular, there have been and continue to be a number of initiatives at the U.S. federal and state level that seek to reduce healthcare costs. Initiatives to reduce the federal deficit and to reform healthcare delivery are increasing cost-containment efforts. We anticipate that Congress, state legislatures and the private sector will continue to review and assess alternative benefits, controls on healthcare spending through limitations on the growth of private health insurance premiums and Medicare and Medicaid spending, the creation of large insurance purchasing groups, price controls on pharmaceuticals and other fundamental changes to the healthcare delivery system. Any proposed or actual changes could limit or eliminate our spending on development projects and affect our ultimate profitability.

In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, the Health Care Reform Law was signed into law. The Health Care Reform Law has the potential to substantially change the way healthcare is financed by both governmental and private insurers. The Health Care Reform Law among other things, established an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents; revised the methodology by which rebates owed by manufacturers for covered outpatient drugs under the Medicaid Drug Rebate Program are calculated; increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program; extended the Medicaid Drug Rebate program to utilization of certain injectable outpatient drugs, as well as prescriptions of individuals enrolled in Medicaid managed care organizations;

required manufacturers to offer 50% point-of-sale discounts on negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; and implemented payment system reforms including a national pilot program on payment bundling to encourage hospitals, physicians and other providers to improve the coordination, quality and efficiency of certain healthcare services through bundled payment models.

The future of the Health Care Reform Law remains uncertain. In January 2017, Congress voted to adopt a budget resolution for fiscal year 2017, or the Budget Resolution, that authorized the implementation of legislation that would repeal portions of the Health Care Reform Law. Further, on January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under the Health Care Reform Law to waive, defer, grant exemptions from, or delay the implementation of any provision of the Health Care Reform Law that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. The practical implications of that order are unclear, and the future of the Health Care Reform Law is uncertain. Congress also could consider subsequent legislation to replace elements of the Health Care Reform Law that are repealed.

In the future, there may continue to be additional proposals relating to the reform of the United States healthcare system, some of which could further limit the prices we are able to charge for our products candidates, or the amounts of reimbursement available for our product candidates. If future legislation were to impose direct governmental price controls and access restrictions, it could have a significant adverse impact on our business. Managed care organizations, as well as Medicaid and other government agencies, continue to seek price discounts. Some states have implemented, and other states are considering, price controls or patient access constraints under the Medicaid program, and some states are considering price-control regimes that would apply to broader segments of their populations that are not Medicaid-eligible. Due to the volatility in the current economic and market dynamics, we are unable to predict the impact of any unforeseen or unknown legislative, regulatory, payor or policy actions, which may include cost containment and healthcare reform measures. Such policy actions could have a material adverse impact on our profitability.

Moreover, the recently enacted federal Drug Supply Chain Security Act imposes new obligations on manufacturers of pharmaceutical products, among others, related to product tracking and tracing. Among the requirements of this new federal legislation, manufacturers will be required to provide certain information regarding the drug product to individuals and entities to which product ownership is transferred, label drug product with a product identifier, and keep certain records regarding the drug product. Further, under this new legislation, manufacturers will have drug product investigation, quarantine, disposition, and notification responsibilities related to counterfeit, diverted, stolen, and intentionally adulterated products, as well as products that are the subject of fraudulent transactions or which are otherwise unfit for distribution such that they would be reasonably likely to result in serious health consequences or death.

Physician Payment Sunshine Act

The Physician Payment Sunshine Act requires most pharmaceutical manufacturers to report annually to the Secretary of HHS any and all financial arrangements, payments, or other transfers of value made by that entity to physicians and teaching hospitals. The payment information is made publicly available in a searchable format on a CMS website. Over the next several years, we will need to dedicate significant resources to establish and maintain systems and processes in order to comply with these regulations. Failure to comply with the reporting requirements can result in significant civil monetary penalties. Similar laws have been enacted or are under consideration in foreign jurisdictions, including France which has adopted the Loi Bertrand, or French Sunshine Act, which became effective in 2013.

Environmental, Health and Safety Laws and Regulations

We are subject to numerous environmental, health and safety laws and regulations and permitting requirements, including those governing laboratory procedures, decontamination activities and the handling, transportation, use, remediation, storage, treatment, and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, and the risk of injury, contamination or noncompliance with environmental, health and safety requirements cannot be eliminated. Although compliance with such laws and regulations and permitting requirements has not had a material effect on our capital expenditures, earnings or competitive position, environmental, health and safety laws and regulations and permitting requirements have tended to become increasingly stringent and, to the extent legal or regulatory changes occur in the future, they could result in, among other things, increased costs to us or the impairment of our research, development or production efforts.

C. Organizational structure

We are a Swiss stock corporation (*société anonyme*) organized under the laws of Switzerland. We were formed as a Swiss limited liability company (*société à responsabilité limitée*) on February 13, 2003 with our registered office and domicile in Basel, Switzerland. We converted to a Swiss stock corporation (*société anonyme*) under the laws of Switzerland on August 25, 2003. Our Swiss enterprise identification number is CHE-109.878.825. Prior to our initial public offering, we were a privately owned company. Our domicile and registered office is in Ecublens, near Lausanne, Canton of Vaud, Switzerland. Our registered and principal executive offices are located at EPFL Innovation Park, Building B, 1015 Lausanne, Switzerland, our general telephone number is (41) 21 345 91 21 and our internet address is www.acimmune.com.

We did not have any subsidiaries as of December 31, 2019.

D. Property, plant and equipment

The Company's capital expenditures were CHF 1.9 million in 2019 with CHF 1.5 million for lab equipment and leasehold improvements. These investments are to enhance our research facilities.

Facilities

We lease approximately 22,700 square feet of space at the Innovation Park of the EPFL (École Polytechnique Fédérale Lausanne), Switzerland as of December 31, 2019. This property serves as our corporate headquarters, our research facility and laboratories. We believe that using the EPFL facilities instead of building our own infrastructure helps us to maximize the value of our research and development capital and make efficient use of our funds as we continue to build and develop our pipeline. We believe that the space of our existing facilities is sufficient to meet our current needs.

ITEM 4A. UNRESOLVED STAFF COMMENTS

None.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

You should read the following discussion and analysis of our financial condition and results of operations together with the information under "Item 3. Key Information—A. Selected Financial Data" and our audited financial statements, including the notes thereto, included in this Annual Report. The following discussion is based on our financial information prepared in accordance with IFRS as issued by the IASB, which might differ in material respects from generally accepted accounting principles in other jurisdictions. The following discussion includes forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of many factors, including but not limited to those described under "Item 3. Key Information—D. Risk Factors" and elsewhere in this Annual Report.

A. Operating results

Overview

To date, we have primarily financed our operations through the proceeds from our three follow on and initial public offerings, private placements of preferred securities and upfront and milestone payments from our collaboration partners. We have no products approved for commercialization and have never generated any revenues from product sales. Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. It may be several years, if ever, before we or our collaboration partners complete pivotal clinical studies and have a product candidate approved for commercialization and we begin to generate revenue and royalties from product sales. Since our inception, we have received upfront and milestone payments from our collaboration partners and certain other revenue. However, we have also incurred significant operating losses. Although we earned net income of CHF 45.4 million for the fiscal year ended December 31, 2019, we have an accumulated losses balance of CHF 75.5 million as of December 31, 2019.

Strategic Collaborations and Licensing Agreements

Since our inception, we have entered into strategic collaboration agreements with a range of partners covering a number of our product candidates. We entered into a strategic collaboration with Genentech in November 2006 (as amended in March 2009, January 2013, May 2014 and May 2015) regarding the

development, manufacture and commercialization of crenezumab, and we refer to this agreement as the 2006 Agreement. In June 2012, we entered into an additional strategic collaboration agreement with Genentech regarding the development, manufacture and commercialization of anti-Tau antibodies, and we refer to this agreement as the 2012 Agreement. We expect to capitalize on Genentech's drug development and regulatory expertise and commercial capabilities to bring our partnered therapeutic products to market. In May 2014, we entered into a license and collaboration agreement with Life Molecular (formerly Piramal Imaging SA) covering Tau-PET Imaging tracer. In December 2014 (as amended in April 2016, July 2017, January 2019 and November 2019), we entered into a strategic collaboration agreement with Janssen regarding the development, manufacture and commercialization of ACI-35, an anti-Tau vaccine. We expect to capitalize on Janssen and Johnson & Johnson's extensive regulatory expertise and experience in developing, manufacturing and, if approved, commercializing vaccines to bring ACI-35 to market.

We entered into a license agreement with Lilly to research and develop Tau Morphomer small molecules for the treatment of Alzheimer's disease and other neurodegenerative diseases in December 2018 (as amended in September 2019 and March 2020). Under the terms of this agreement, we will conduct the development of Tau Morphomer small molecules through the completion of Phase 1, which began in Q3 2019. Lilly will fund and lead further clinical development and will retain global commercialization rights for all indications, including Alzheimer's disease and other neurodegenerative diseases. The agreement became effective on January 23, 2019 when the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, expired.

Genentech

We have two partnership agreements with Genentech, a company with a reputation for scientific excellence and a history of bringing innovative protein therapeutics to market.

Anti-Abeta antibody in AD - 2006 agreement

We signed our first agreement with Genentech in November 2006 and amended the agreement in March 2009, January 2013, May 2014 and May 2015. This is an exclusive, worldwide licensing agreement for crenezumab, our humanized monoclonal therapeutic antibody targeting misfolded Abeta. The agreement also provides for the development of a second therapeutic product for a non-Alzheimer's disease indication based on the same intellectual property and anti-Abeta antibody compound. Genentech commenced Phase 3 clinical studies for crenezumab in Q1 2016 and Q1 2017.

Under the agreement with Genentech, we may become eligible to receive payments totaling up to approximately USD 340 (CHF 333) million, excluding royalties. The agreement includes upfront and milestone payments. In addition, we may receive royalties on sales. The structure of the collaboration agreement is as follows:

- A right-of-use license;

- *Clinical milestone payments* are payable upon commencement of each of Phase 1 and Phase 2 of clinical developments, and upon the earlier of Genentech's decision to authorize Phase 3 or the commencement of Phase 3 of clinical developments. In addition, for a second indication, clinical milestone payments would be payable upon commencement of Phase 2 of clinical developments and upon the earlier of Genentech's decision to authorize Phase 3 or the commencement of Phase 3 of clinical developments;

- *Regulatory milestone payments* upon making regulatory filings in the U.S. and Europe, respectively, and milestone payments upon obtaining marketing approval in each of the U.S. and Europe. In addition, for a second indication, additional regulatory and approval milestones would be payable.

- *Royalties* on sales with different royalty rates applicable in the U.S. and Europe. Royalty levels are tied to annual sales volumes. We may receive royalties on sales of crenezumab with the percentage rates ranging from net high single digits to the mid-teens.

To date, we have received total payments of USD 65 (CHF 70.1) million which comprise upfront and clinical milestone payments. We received a USD 25 (CHF 31.6) million upfront payment at the time of signing of the collaboration agreement and have since then obtained three milestone payments totaling USD 40 (CHF 38.2) million, including the Phase 3 milestone payment we received in July 2015.

Under the terms of the agreement, Genentech bears all the costs of developing crenezumab through the clinical phases. In addition, Genentech is responsible for the costs associated with seeking and obtaining regulatory and marketing approvals, manufacturing costs, sales and marketing costs. Intellectual property costs related to any crenezumab-related intellectual property filed solely by us and any costs associated with filing, maintaining and protecting intellectual property filed jointly we share with Genentech. The agreement will terminate by its terms on the date on which all obligations between the parties with respect to the payment of milestones or royalties for licensed products have passed or expired. Either party may terminate the agreement for any material breach by the other Party, provided a cure period of 90 days from the date that notice is given.

On January 30, 2019, we announced that Roche, the parent company of our collaboration partner, is discontinuing the CREAD and CREAD 2 (BN29552 and BN29553) Phase 3 studies of crenezumab, in people with prodromal to mild sporadic Alzheimer's disease (AD). The Phase 2 development of crenezumab continues in a preventive trial of cognitively healthy individuals in Colombia with a risk of developing AD.

Anti-Tau antibody in AD – 2012 agreement

In June 2012, we entered into a second agreement with Genentech to commercialize anti-Tau antibodies for use as immunotherapeutics and diagnostics. The agreement was amended in December 2015. The value of this exclusive, worldwide alliance is potentially greater than CHF 400 million and includes upfront and milestone payments. In addition to milestones, we will be eligible to receive royalties on sales at percentage rates ranging from the mid-single digits to high single digits. The agreement also provides for collaboration on at least an additional therapeutic indication outside of Alzheimer's disease built on the same anti-Tau antibody program, as well as an anti-Tau diagnostic product for Alzheimer's disease.

To date, we have received payments totaling CHF 59 million. We received a CHF 17 million upfront payment associated with this agreement at the time of signing the collaboration agreement. Additionally, we received a CHF 14 million milestone payment received and recognized in Q4 2017 associated with the first patient dosing in a Phase 2 clinical trial for Alzheimer's disease with an anti-Tau monoclonal body known as semorinemab, a CHF 14 million milestone payment recognized in Q2 2016 and received in July 2016, associated with the announcement of the commencement of the Phase 1 clinical study of semorinemab and a CHF 14 million milestone payment received in 2015 in connection with the ED-GO decision.

The structure of the collaboration agreement is as follows:

- A right-of-use license;
- *Preclinical and clinical milestone payments* upon selection of a lead candidate, commencement of each of Phase 1, 2 and 3 of clinical development. In addition, for a second indication, clinical milestone payments would be payable upon commencement of each of Phase 2 and 3 of clinical development;
- *Regulatory milestones payments* upon making regulatory filings for marketing approvals in the U.S., Europe, and Japan, respectively. In addition, for a second indication, similar regulatory milestones would be payable;
- *Commercialization milestones* payable upon making a first commercial sale in each of the U.S., Europe and Japan. For a second indication, commercialization milestones exist for each of the U.S., Europe and Japan which are triggered by the first commercial sale for the second indication in each of those jurisdictions; and
- *Royalties* on sales with royalty rates differing based on the source of the intellectual property underlying the commercial product.

Under the terms of the agreement, Genentech bears all the costs of developing semorinemab through the clinical phases. In addition, Genentech is responsible for the costs associated with seeking and obtaining regulatory and marketing approvals, manufacturing costs, sales and marketing costs. Intellectual property costs related to any anti-Tau antibody-related intellectual property filed solely by us and any costs associated with filing, maintaining and protecting intellectual property filed jointly we share with Genentech. The agreement will terminate by its terms on the date on which all obligations between the parties with respect to the payment of milestones or royalties for licensed products have passed or expired. Either party may terminate the agreement for any material breach by the other Party, provided a cure period of 90 days from the date that notice is given.

Janssen Pharmaceuticals

Tau Vaccine in AD – 2014 agreement

In December 2014, we entered into an agreement with Janssen Pharmaceuticals, Inc. ("Janssen") one of the Janssen Pharmaceutical Companies of Johnson & Johnson, to develop and commercialize therapeutic anti-Tau vaccines for the treatment of AD and potentially other Tauopathies. The value of this partnership is potentially up to CHF 500 million and includes upfront and clinical, regulatory and commercial milestones. In addition to milestones, we will be eligible to receive royalties on sales at a percentage rate ranging from the low-double digits to the mid-teens. In April 2016, July 2017, January 2019 and November 2019, the companies entered into the First, Second, Third and Fourth amendments, respectively. These amendments allow for the alignment of certain payment and activity provisions with the Development Plan and Research Plan activities. We and Janssen will co-develop second generation lead therapeutic vaccines, ACI-35.030 and JACI-35.054, through Phase 1b/2a completion. AC Immune and Janssen will jointly share research and development costs until the completion of the first Phase 2b. From Phase 2b and onwards, Janssen will assume responsibility for the clinical development, manufacturing and commercialization of the second generation vaccines.

The Company received a CHF 25.9 million upfront, non-refundable license fee, which we recognized as revenue in 2014. In May 2016, we received a CHF 4.9 million payment for reaching a clinical milestone in the Phase 1b study. As we met all performance obligations on reaching the milestone, we recognized this milestone as revenue.

The structure of the collaboration agreement is as follows:

- A right-of-use license;
- *Clinical milestone payments* upon completion of Phase 1b, commencement of the first Phase 2b or 2b/3 of clinical development, upon reaching enrollment thresholds in the first Phase 2b or Phase 2b part of the first Phase 2b/3, commencement of the first Phase 3 or phase 3 part of a Phase 2b/3 study. In addition, for a second indication, clinical milestone payments would be payable upon commencement of a Phase 3 clinical study, which would be payable concurrently with the first regulatory milestone, if Janssen were to file for regulatory approval based on Phase 2 clinical data;
- *Regulatory milestone payments* upon making regulatory filings in the U.S., Europe, and Japan, respectively. In addition, for a second indication, similar regulatory milestones would be payable. For a second indication, additional regulatory milestone payments are payable by Janssen to us upon receipt of each of the regulatory approvals in the U.S., Europe and Japan;
- *Commercialization milestones* payable upon making a first commercial sale in each of the U.S., Europe and Japan, and upon achieving certain commercial milestones; and
- *Royalties* on sales with royalty rates differing based on the level of annual sales.

Under the terms of the agreement, Janssen may terminate the agreement at any time after completion of the first Phase 1b clinical study in 2016 by providing 90 days' notice to us. If not otherwise terminated, the agreement shall continue until the expiration of all royalty obligations as outlined in the contract.

Life Molecular Imaging SA (formerly Piramal Imaging SA)

Tau-PET imaging agent in AD – 2014 agreement

In May 2014, we entered into an agreement, our first diagnostic partnership, with Life Molecular, the former Piramal Imaging SA. The partnership with Life Molecular is an exclusive, worldwide licensing agreement for the research, development and commercialization of the Company's Tau protein Positron Emission Tomography (PET) tracers supporting the early diagnosis and clinical management of AD and other Tau-related disorders and includes upfront and sales milestone payments totaling up to EUR 159 (CHF 175) million, plus royalties on sales at a percentage rate ranging from mid-single digits to low double digits. Life Molecular may terminate the LCA at any time by providing three months' notice to us.

The structure of the collaboration agreement is as follows:

- A right-of-use license;

- *Clinical milestone payments* upon the commencement of the Phase 1, Phase 2 and Phase 3 studies for generation of data intended to support a regulatory submission in the U.S. or European Union and acceptance of Regulatory filing (NDA) and Regulatory approval for Commercialization in the U.S. or European Union. We would be entitled to further clinical milestone payments for the commencement of Phase 2 and 3 for a second indication; and

- *Sales milestones* tied to specific annual net sales amounts.

Eli Lilly and Company

Tau Morphomer Small Molecule – 2018 license agreement

In December 2018, we entered into a license agreement with Lilly to research and develop Tau Morphomer small molecules for the treatment of Alzheimer's disease and other neurodegenerative diseases. Under the terms of the agreement, we will conduct the development of Tau Morphomer small molecules through the completion of Phase 1, which commenced in Q3 2019. Lilly will fund and lead further clinical development and will retain global commercialization rights for all indications, including Alzheimer's disease and other neurodegenerative diseases.

Under the agreement, we may become eligible to receive payments totaling up to approximately CHF 1.9 billion, excluding royalties. The agreement includes an upfront payment as well as various conditional milestone payments. In addition, the Company will receive royalties on sales of licensed products. The agreement became effective on January 23, 2019 when the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, expired. On September 19, 2019, the Company and Lilly entered into an amendment to divide the first discretionary milestone payment under the agreement of CHF 60 million into two installments with the first CHF 30 million paid in Q3 2019 and the second CHF 30 million to be paid on or before March 31, 2020 unless Lilly earlier terminates the agreement. On March 20, 2020, the Company and Lilly entered into a second amendment to replace the second CHF 30 million to be paid on or before March 31, 2020 with two milestone payments, a CHF 10 million milestone payment to be paid on or before March 31, 2020 and a CHF 60 million milestone payment following the first patient dosed in a Phase 2 clinical study of a licensed product in the U.S. or European Union.

We received an initial upfront payment of CHF 80 million in February 2019. We used the residual approach to estimate the selling price for the right-of-use license and an expected cost plus margin approach for estimating the research and development activities. The right-of-use license was delivered on the effective date. The research and development activities are expected to be delivered over time as the services are performed. For these services, revenue will be recognized over time using the input method, based on costs incurred to perform the services, since the level of costs incurred over time is thought to best reflect the transfer of services to Lilly.

The structure of the collaboration agreement is as follows:

- *An exclusive license* granted by us to Lilly under certain of our intellectual property to develop, manufacture and commercialize products containing Tau Morphomer small molecules for the treatment of Alzheimer's disease and other neurodegenerative diseases throughout the world in any indication;

- *Clinical milestone payment*s CHF 30 million has been recognized and paid for the completion of Lilly Preclinical activities. Per the terms of the second amendment, the second CHF 30 million to be paid on or before March 31, 2020 has been replaced with two milestone payments, a CHF 10 million milestone payment to be paid on or before March 31, 2020 and a CHF 60 million milestone payment following the first patient dosed in a Phase 2 clinical study of a licensed product in the U.S. or European Union. The Company is additionally eligible for milestone payments after the first dosing of a patient in a Phase 3 clinical study of a licensed product in the U.S. or European Union;

- *Regulatory milestone payments* within 60 days after obtaining regulatory approval for any licensed product in the first indication and any licensed product in certain additional indications in the U.S., Europe and Japan, respectively;

- *Commercialization milestones* payable upon achieving certain commercial sales milestones; and

- *Royalties* on sales with royalty rated differing based on the level of annual sales of licensed products.

The agreement will terminate by the date of expiration of the last royalty term for the last licensed product. However, under the terms of the agreement, Lilly may terminate the agreement at any time after March 31, 2020 by providing three months' notice to us.

We and Lilly also entered into a convertible note agreement that became effective on January 23, 2019 for USD 50.0 (CHF 50.3) million from Lilly. On April 25, 2019, the Convertible Note Agreement with Lilly automatically converted in line with the terms of the agreement. As a result of this conversion, 3,615,328 of our common shares were issued to Lilly. This note is now fully settled and there is no further equity or cash consideration due to Lilly thereunder.

Michael J. Fox Foundation for Parkinson's Research

On September 16, 2017, we formally signed a grant continuation with the Michael J. Fox Foundation for Parkinson's disease research ("MJFF"). This grant provides funds for the development of PET tracers for pathological forms of the protein alpha-synuclein, to support the early diagnosis and clinical management of Parkinson's disease. We have since received two additional grants. The first in November 2018 was to conduct a first-in-human ("FiH") study in 2019. This grant aimed to facilitate the execution of a FiH study for a potential alpha-synuclein PET tracer ("PET tracer") with the current lead compound. The second in August 2019 is a supplement for the further development of the PET tracer. The Company retains its intellectual property rights for these programs.

Critical Accounting Policies and Significant Judgments and Estimates

Revenue Recognition

In May 2014, the International Accounting Standards Board (IASB) issued IFRS 15 – *Revenue from Contracts with Customers* which amends the guidance for accounting for revenues from contracts with customers. This IFRS replaces all current revenue standards in IFRS including IAS 11 – *Construction Contracts*, IAS 18 – *Revenue* and various interpretations. The Company adopted this new standard on January 1, 2018, and would have recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the opening balance of accumulated losses; however, the Company did not deem any adjustments required in the transition to the new standard.

This standard applies to all contracts with customers, except for contracts that are within the scope of other standards, such as leases, insurance, collaboration arrangements and financial instruments. Under IFRS 15, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration that the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of IFRS 15, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The Company only applies the five-step model to contracts when it is probable that the entity will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception, once the contract is determined to be within the scope of IFRS 15, we assess the goods or services promised within each contract and identify, as a performance obligation, and assess whether each promised good or service is distinct. We then recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Contract revenue: The Company enters into licensing and collaboration agreements which are within the scope of IFRS 15, under which it licenses certain proprietary rights to its product candidates and intellectual property to third parties. The terms of these arrangements typically include payment to the Company of one or more of the following: non-refundable, upfront license fees; development, regulatory and/or commercial milestone payments; payments for research and clinical services the Company provides through either its full-time employees or third-party vendors; and royalties on net sales of licensed commercialized products depending on the Company's intellectual property. Each of these payments results in license, collaboration and other revenues, which are classified as contract revenue on the statements of income/(loss), except for revenues from royalties on net sales of commercialized products depending on the Company's intellectual property, which are classified as royalty revenues.

Licenses on intellectual property: If the license to the Company's intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, the Company recognizes revenues

from non-refundable, upfront fees allocated to the license when the license is transferred to the customer and the customer is able to use and benefit from the license. For licenses that are sold in conjunction with a related service, the Company uses judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time. If the performance obligation is settled over time, the Company determines the appropriate method of measuring progress for purposes of recognizing revenue from non-refundable, upfront fees. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

Milestone payments: At the inception of each arrangement that includes development, regulatory and/or commercial milestone payments, the Company evaluates whether the milestones are considered highly probable of being reached and estimates the amount to be included in the transaction price using the most likely amount method. If it is highly probable that a significant revenue reversal would not occur in future periods, the associated milestone value is included in the transaction price. These amounts for the performance obligations under the contract are recognized as they are satisfied. At the end of each subsequent reporting period, the Company re-evaluates the probability of achievement of such milestones and any related constraint, and if necessary, adjusts its estimate of the overall transaction price. Any such adjustments recorded would affect contract revenues and earnings in the period of adjustment.

Research and development services: The Company has certain arrangements with our collaboration partners that include contracting our full-time employees for research and development programs. The Company assesses if these services are considered distinct in the context of each contract and, if so, they are accounted for as separate performance obligations. These revenues are recorded in contract revenue as the services are performed.

Sublicense revenues: The Company has certain arrangements with our collaboration partners that include provisions for sublicensing. The Company recognizes any sublicense revenues at the point in time it is highly probable to obtain and not subject to reversal in the future.

Royalties: For arrangements that include sales-based royalties, including milestone payments based on the level of sales, and the license is deemed to be the predominant item to which the royalties relate, the Company recognizes revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). To date, the Company has not recognized any royalty revenue resulting from any of its licensing and collaboration agreements.

Contract balances: The Company receives payments and determines credit terms from its licensees for its various performance obligations based on billing schedules established in each contract. The timing of revenue recognition, billings and cash collections results in billed other current receivables, accrued income (contract assets), and deferred income (contract liabilities) on the balance sheet. Amounts are recorded as other current receivables when the Company's right to consideration is unconditional. The Company does not assess whether a contract has a significant financing component if the expectation at contract inception is such that the period between payment by the licensees and the transfer of the promised goods or services to the licensees will be one year or less.

Accrued Research and Development Costs

We record accrued expenses for estimated costs of our research and development activities conducted by third party service providers, which include amongst others the conduct of preclinical studies and clinical studies and contract manufacturing activities. We record accrued expenses for estimated costs of our research and development activities based upon the estimated amount of services provided but not yet invoiced, and we include these costs in accrued expenses on the balance sheets and within research and development expenses in the statements of income/(loss). These costs are a significant component of our research and development expenses.

We record accrued expenses for these costs based on the estimated amount of work completed in accordance with agreements established with these third parties which involves the following process:

- communicating with our applicable personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual cost;

- estimating and accruing expenses in our financial statements as of each balance sheet date based on facts and circumstances known to us at the time; and

- periodically confirming the accuracy of our estimates with selected providers and making adjustments, if necessary.

Examples of estimated research and development expenses that we accrue include:

- fees paid to CROs in connection with preclinical and toxicology studies and clinical studies;

- fees paid to investigative sites in connection with clinical studies;

- fees paid to contract manufacturing organizations in connection with the production of our product candidates prior to qualifying for capitalization as inventory; and

- professional service fees for consulting and related services.

We base our expense accruals related to clinical studies on our estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and clinical research organizations that conduct and manage clinical studies on our behalf. The financial terms of these agreements vary from contract to contract and may result in uneven payment flows. Payments under some of these contracts depend on factors, such as the successful enrollment of patients and the completion of clinical study milestones. Our service providers invoice us monthly in arrears for services performed. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If we do not identify costs that we have begun to incur or if we underestimate or overestimate the level of services performed or the costs of these services, our actual expenses could differ from our estimates.

To date, we have not experienced significant changes in our estimates of accrued research and development expenses after a reporting period. However, due to the nature of estimates, we may be required to make changes to our estimates in the future as we become aware of additional information about the status or conduct of our clinical studies and other research activities.

Share-Based Compensation

Options

The Company operates an equity-settled, share-based compensation plan. We account for awards of equity instruments issued to employees and directors under the fair value method of accounting and recognize such amounts in our statements of income/(loss). The total amount to be expensed over the vesting period is determined by reference to the fair value of the instruments granted, excluding the impact of any non-market vesting conditions. Non-market vesting conditions are included in assumptions about the number of instruments that are expected to become exercisable. At each balance sheet date, the Company revises its estimates of the number of instruments that are expected to become exercisable. It recognizes the impact of the revision of original estimates, if any, in the statements of income/(loss), and a corresponding adjustment to equity over the remaining vesting period.

We estimate the fair value of all time-vested options as of the date of grant using the Black-Scholes option pricing model. Key assumptions in determining the fair value of share options granted utilizing the Black-Scholes valuation method include the following:

Assumption	Method of estimation
● Estimated expected term of options	● Simplified method
● Expected volatility	● Estimate based on average historical volatilities of common shares of comparable publicly traded companies. We will continue to apply this process to grants made as a public company until a sufficient amount of historical information regarding volatility of our own stock price becomes available
● Risk-free interest rate	● Yields of long dated Swiss government zero coupon bond issues
● Forfeiture rates	● Historical and expected forfeiture data
● Expected dividends	● Zero percent as dividends have not been paid

Historically, for all periods prior to the IPO, the fair value of the common shares underlying our share-based awards was estimated on each grant date by our management and approved by our board of directors. In order to determine the fair value of our common shares underlying option grants, our board of directors considered, among other things, the breadth of our product candidate portfolio, the stages of development of our various product candidates and major changes to stage of development, the progress and additions to our collaboration agreements, risks inherent in our activities, the lack of liquidity of our Company's securities and the valuations and sentiment toward biotech companies. Given the absence of a public trading market for our common shares, our board of directors exercised reasonable judgment and considered a number of objective and subjective factors to determine the best estimate of the fair value of our common shares, including our stage of development, progress of our research and development efforts, the strength of our balance sheets and capital base, equity market conditions affecting comparable public companies and the lack of liquidity of our common shares.

Amendment of Plan A Stock Option Plan

In 2015 and 2017, we amended the Plan A stock option plan that we established in 2004. Two key amendments were made to the program: (i) the duration of the stock option plan was increased from 10.5 to 15.5 years and (ii) the split adjusted strike price of the option was reduced from CHF 0.93 to a split adjusted strike price of CHF 0.15. The lengthening of the plan's term and lowering of the strike price was effected to bring the plan in line with our other plans, and resulted in a material increase in the value of the options to the option holders and required us to recognize the increase of the transfer in value on our accounts in the first half of 2015 and first half of 2017. The impact of the amendment of the Plan A stock option plan was immaterial in 2017. There are no further expenses that we need to recognize in the future associated with this plan.

Restricted Shares and Restricted Share Units

We estimate the fair value of non-vested stock awards (restricted shares and restricted share units) using a reasonable estimate of market value of the common stock on the date of the award. We classify our share-based payments as equity-classified awards as they are settled in shares of our common stock. We measure equity-classified awards at their grant date fair value and do not subsequently remeasure them. Compensation costs related to equity-classified awards are equal to the fair value of the award at grant-date amortized over the vesting period of the award using the graded method. We reclassify that portion of vested awards to share premium as the awards vest.

Right-of-Use Assets and Lease Liabilities

Effective January 1, 2019, the Company adopted IFRS 16 Leases which provides a new model for lessee accounting in which all leases, other than short-term and low-value leases, are accounted for by the recognition on the balance sheet of a right-of-use asset and a lease liability, and the subsequent amortization of the right-of-use asset over the earlier of the end of the useful life or the lease term. The Company applied the modified retrospective approach, which requires the recognition of the cumulative effect of initially applying IFRS 16 as of January 1, 2019 to accumulated losses and not to restate prior years. Since the Company recognized the right-of-use assets at the amount equal to the lease liabilities there was no impact to accumulated losses. For a complete discussion of accounting, see Note 3 "Summary of significant accounting policies" of our financial statements.

Financial Operations Overview

Revenue

Given our stage of development, we have not generated any revenue from product sales. Our revenue to date has been derived primarily from separate license and collaboration agreements on some of our product candidates in various stages of preclinical and clinical development and a number of research grants we have secured.

Effective January 1, 2018, the Company adopted IFRS 15 *Revenue from Contracts with Customers* and deemed that no adjustments were necessary in the transition to the new standard. This standard applies to all

contracts with customers, except for contracts that are within the scope of other standards, such as leases, insurance, collaboration arrangements and financial instruments. Under IFRS 15, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of IFRS 15, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The Company only applies the five-step model to contracts when it is probable that the entity will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception, once the contract is determined to be within the scope of IFRS 15, the Company assesses the goods or services promised within each contract and determines those that are performance obligations, and assesses whether each promised good or service is distinct. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Our revenues have experienced fluctuations over the past three years as a result of securing new collaboration agreements, the timing of milestone achievement and the size of each milestone payment. We expect that any revenue we generate from our collaboration agreements with each of Lilly, Genentech, Janssen and Life Molecular, research and development grants, and any other current or future collaboration partners will fluctuate from year to year as a result of the timing and amount of milestones and other payments.

Research and Development Expenses

Research and development costs are expensed as incurred and consist of salaries and benefits, lab supplies, materials, intellectual property and facility costs, as well as fees paid to other nonemployees and entities that conduct certain research and development activities on our behalf. Amounts incurred in connection with collaboration and license agreements are also included in research and development expense. Payments made prior to the receipt of goods or services to be used in research and development are capitalized until the goods or services are received.

Clinical trial costs are a component of research and development expenses. We accrue and expense clinical trial activities performed by third parties based upon actual work completed in accordance with agreements established with clinical research organizations and clinical sites. We determine the actual costs through monitoring patient enrollment and discussions with internal personnel and external service providers as to the progress or stage of completion of trials or services and the agreed-upon fee to be paid for such services.

Manufacturing start-up costs are a component of research and development expenses. Additionally, manufacturing costs incurred after regulatory approval but in connection with significant changes and/or enhancements to the approved manufacturing process are recorded as research and development expenses. We accrue and expense manufacturing activities performed by third parties based upon actual work completed in accordance with agreements established with contract manufacturers.

Our investment in research and development activities, including the clinical development of our product candidates has historically been and is projected to be more than 75% of our total annual operating costs. Research and development expenses represent costs incurred to conduct research, such as the discovery and development of our product candidates, as well as development of new product candidates from our SupraAntigen and Morphomer platforms as well as the development of product candidates pursuant to our collaboration agreements with Lilly, Genentech, Janssen and Life Molecular. We recognize all research and development costs as they are incurred. Clinical study costs, contract manufacturing and other development costs incurred by third parties are expensed as the contracted work is performed. At present, our research activities comprise three major areas:

- Alzheimer’s disease;
- Non-Alzheimer’s diseases; and
- Diagnostics

We expect our research and development expenses to increase substantially in the future and expect to fund a broader number of projects, which will impact our research strategy in four key ways:

(i) we expect to undertake later-stage research and development of our product candidates and, if approved, to take some of those product candidates into commercialization;

(ii) we will allocate more funding to existing programs to advance the development of these programs;

(iii) we will increase our research and development efforts on non-AD indications including NeuroOrphans and diagnostics; and

(iv) we will initiate a number of new research initiatives that are complementary to our existing and planned research initiatives.

We expect that our total future research and development costs will continue to increase over current levels in line with our three-pillar strategy that focuses on (i) Alzheimer's disease, (ii) other significant neurodegenerative diseases and NeuroOrphan indications, and (iii) diagnostics for early detection and earlier treatment of these diseases.

General and Administrative Expenses

General and administrative expenses include personnel costs, expenses for outside professional services, and all other allocated expenses. Personnel costs consist of salaries, cash bonuses, benefits and share-based compensation. Outside professional services consist of legal, accounting and audit services, IT and other consulting fees. Allocated expenses consist of depreciation expense related to our office and research and development facility. We continue to incur additional expenses as a result of operating as a public company, including expenses related to compliance with the rules and regulations of the SEC, and those of any national securities exchange on which our securities are traded (Nasdaq), additional insurance expenses, investor relations activities and other administrative and professional services.

Finance Result, net

Financial income and expenses include bank fees associated with charges levied by banks on foreign payments and foreign exchange transactions and remeasurement gains and losses which arise from our cash held in currency other than Swiss Francs, certain collaboration agreements such as the collaboration agreements with Genentech and Life Molecular being denominated in currencies other than Swiss Francs and selected purchases, which we effect in foreign currencies. Additionally, the Company recorded a gain on the conversion feature of the convertible loan due to Lilly.

Interest income consists of interest received from banks on our cash balances. Interest expense relates to interest paid to banks, effective interest recorded to amortize the host debt per the convertible loan due to Lilly, interest expense associate with lease liabilities and accrued interest for our financing obligation.

Taxation

AC Immune is subject to corporate Swiss federal, cantonal and communal taxation, respectively in Switzerland, Canton of Vaud, Commune of Ecublens, near Lausanne.

We are entitled under Swiss laws to carry forward any losses incurred for a period of seven years and can offset our losses carried forward against future taxes. As of December 31, 2019, we had tax loss carryforwards totaling CHF 64.1 million. There is no certainty that we will make sufficient profits to be able to utilize these tax loss carryforwards in full.

The effective corporate income tax rate (federal, cantonal and communal) where we are domiciled is currently 13.63% as from January 1, 2020 onwards.

As of January 1, 2020, the Company may request for 2020 a tax relief of 60%, which would be applied to income from patents and similar rights at communal and cantonal levels. Additionally, a so called super-deduction may be granted for payroll and other expenses of research and development of Swiss origins.

However, the above mentioned tax relief based on the patent box and deductions for research and development may not exceed 50% of the overall taxable profit before these tax relief and deductions.

Notwithstanding the corporate income tax, the corporate capital is taxed at a rate of 0.13% (cantonal and communal tax only, as there is no federal tax on capital). As of January 1, 2020 the capital attributable to patents and similar rights is taken into account with 50% relief in the capital tax calculation.

Value Added Tax, or VAT, is charged on all qualifying goods and services by VAT-registered businesses. An amount of 7.7% of the value of the goods or services is added to all sales invoices and is payable to the Swiss tax authorities. Similarly, VAT paid on purchase invoices is reclaimable from the Swiss tax authorities.

Results of Operations

The numbers below have been derived from our audited financial statements included elsewhere herein. The discussion below should be read along with these financial statements and it is qualified in its entirety by reference to them.

Comparison of the Years Ended December 31, 2019 and 2018

Revenue

The following table summarizes our revenues during the years ended December 31, 2019 and 2018:

	For the Years Ended December 31,		
in CHF thousands	**2019**	**2018**	**Change**
Contract revenue	111,026	7,194	103,832
Total revenues	111,026	7,194	103,832

Our revenues experience fluctuations as a result of securing new collaboration agreements, the timing of milestone achievements and the size of each milestone payment. For the year ended December 31, 2019, the increase in collaboration revenues compared to the year ended December 31, 2018 was principally due to recognition of a CHF 73.1 million upfront payment for a right-of-use license fee and CHF 30.0 million for the first installment of the first milestone achieved with Lilly. Additionally, the Company recognized CHF 2.6 million for research and development activities associated with our agreement to research and develop tau morphomer molecules for the potential treatment of Alzheimer's disease (AD) and other neurodegenerative diseases. There were no comparable revenues in 2018, with revenues in the prior year primarily comprised of revenues associated with our collaboration agreements with Janssen and Biogen. As the Biogen agreement ended in April 2019, the Company recognized CHF 3.0 million fewer revenue in 2019 compared to 2018 for this collaboration.

Research and Development Expenses

Research and development activities are essential to our business and represent the majority of our costs incurred. Costs for certain development activities, such as clinical trials, are recognized based on an evaluation of the progress to completion of specific tasks using information from the clinical sites and our vendors. Our collaboration arrangements share costs for the development of our product candidates differently. We have completed our research and development spending in both of our Genentech collaborations. Janssen will be responsible for the full development cost from the completion of the first Phase 2 or first Phase 3 clinical trial. In addition to these arrangements, we expect that our total future research and development costs will continue to increase over current levels in line with our three-pillar strategy that focuses on Alzheimer`s disease, NeuroOrphan indications and diagnostics.

The table below provides a breakdown of our research and development costs, including direct research and development costs and manufacturing costs related to research and development, by major development categories of our programs for the periods covered by this Annual Report. The research and development costs not allocated to specific programs include employment costs, regulatory, quality assurance and intellectual property costs. We do not assign our internal costs, such as salary and benefits, stock-based compensation expense, laboratory supplies and other direct expenses and infrastructure costs to individual research and development projects, because the employees within our research and development groups typically are deployed across multiple research and development programs.

The following table summarizes our research and development expenses during the years ended December 31, 2019 and 2018:

Detailed Research and Development Expenditures by Major Development Category

in CHF thousands	For the Years Ended December 31, 2019	2018	Change
Alzheimer's disease	21,108	21,452	(344)
Non-Alzheimer's diseases	8,644	6,874	1,770
Diagnostics	1,946	2,350	(404)
New discovery programs	942	243	699
Total Programs	32,640	30,919	1,721
R&D Expenses not allocated to specific programs	17,792	13,358	4,434
Total	50,432	44,277	6,155

R&D expenses in AD decreased by CHF 0.3 million in 2019 and were driven by a CHF 0.3 million decrease for ACI-35 due to the completion of certain toxicology and manufacturing work in the prior year as well as a CHF 0.3 million decrease for ACI-24 AD related to higher costs for the initiation of the Phase 2 study in the prior period. These decreases were partially offset by a CHF 0.3 million increase in spending on our Tau Morphomer program. In non-AD, the Company increased investment by CHF 1.8 million. Notably, we invested an incremental CHF 0.7 million for increased manufacturing activities and preparation of the Phase 2 study and other clinical analytical activities for ACI-24 for DS. The Company invested CHF 0.5 million more for our TDP-43 antibody related to research activities in collaboration with the University of Pennsylvania. Finally, we incurred a CHF 0.9 million increase associated with higher research, pre-clinical and manufacturing costs for the lead alpha-synuclein antibody. Diagnostic investments decreased CHF 0.4 million compared to 2018. New discovery programs increased CHF 0.7 million and was driven largely by a CHF 0.6 million increase related to investments made for our inflammasome project for enhanced preclinical research.

R&D Expenses not allocated to specific programs increased CHF 4.4 million predominantly driven by a CHF 1.6 million increase in salaries and related costs with the increase of 16 full time equivalents, CHF 0.5 million in depreciation expense and CHF 0.3 million in regulatory and quality assurance costs.

in CHF thousands	For the Years Ended December 31, 2019	2018	Change
Operating expenses (1)	37,465	32,921	4,544
Salaries and related costs (2)	12,967	11,356	1,611
Total research and development expenses	50,432	44,277	6,155

(1) Includes depreciation expense
(2) Includes share-based compensation

Our research and development expenses increased to CHF 50.4 million for the year ended December 31, 2019, from CHF 44.3 million, an increase of CHF 6.2 million, as compared to year ended December 31, 2018 as discussed in the Major Development Category comparison above.

Our salaries and costs related to our research and development activities rose by CHF 1.6 million to CHF 13.0 million for the year ended December 31, 2019 from CHF 11.4 million for the year ended December 31, 2018 primarily due to the hiring of almost 16 full time equivalent employees as discussed above.

General and Administrative Expenses

The following table summarizes our general and administrative expenses during the years ended December 31, 2019 and 2018:

in CHF thousands	For the Years Ended December 31, 2019	2018	Change
Operating expenses (1)	6,637	4,903	1,734
Salaries and related costs (2)	9,421	7,564	1,857
Total general and administrative expenses	16,058	12,467	3,591

(1) Includes depreciation expense
(2) Includes share-based compensation

For the year ended December 31, 2019 our general and administrative expenses totaled CHF 16.1 million, up by CHF 3.6 million from CHF 12.5 million we incurred during the year ended December 31, 2018. The increase is due to a CHF 1.9 million increase in salary and benefit related costs due to the hiring of seven additional full time equivalent employees and higher stock based compensation expense of CHF 0.4 million related predominantly to an increase of stock options issued to executive officers and directors.

Operating expenses were CHF 1.7 million higher driven by increased expenditure in line with the growth of the Company in 2019. IT support expenditures increased CHF 0.9 million as part of the Company's expansion of IT infrastructure and CHF 0.4 million increase for investor relations offset by a CHF 0.4 million decrease in professional services.

Finance Result, Net

The following table summarizes our financial income and expenses during the years ended December 31, 2019 and 2018:

	For the Years Ended December 31,		
in CHF thousands	**2019**	**2018**	**Change**
Interest income/(expense), net	(1,590)	(269)	(1,321)
Change in fair value of conversion feature	4,542	—	4,542
Foreign currency remeasurement gain/(loss), net	(2,013)	(1,194)	(819)
Other finance income/(expense)	(33)	62	(95)
Finance result, net	906	(1,401)	2,307

Net finance result was a gain of CHF 0.9 million for the year ended December 31, 2019, an increase of CHF 2.3 million from a loss of CHF 1.4 million for the year ended December 31, 2018. The CHF 4.5 million gain on the conversion feature related to the Company's convertible loan due to Lilly. This gain was mainly related to the change in value of the shares between the share price determined in the convertible loan and the share price at the date of the conversion. Additionally, the Company incurred CHF 1.6 million in net interest expense of which CHF 1.4 million was effective interest recorded to amortize the host debt per the convertible loan due to Lilly. Finally, the Company incurred a CHF 1.2 million remeasurement loss related to the settlement of the convertible loan and an additional CHF 0.8 million foreign currency loss related to currency remeasurements.

B. Liquidity and capital resources

Cash Flows

Comparison of the Years Ended December 31, 2019 and 2018

The following table summarizes our cash flows for the years ended December 31, 2019 and 2018:

	For the Years Ended December 31,		
in CHF thousands	**2019**	**2018**	**Change**
Net cash provided by (used in):			
Operating activities	55,220	(44,078)	99,298
Investing activities	(66,885)	(32,036)	(34,849)
Financing activities	49,616	109,378	(59,762)
Net change in cash and cash equivalents	37,951	33,264	4,687

Operating activities

Net cash provided by operating activities was CHF 55.2 million for the year ended December 31, 2019 compared with net cash used in operating activities of CHF 44.1 million for the year ended December 31, 2018. The change in cash provided by operating activities for the year ended December 31, 2019 was due to the Company's reporting net income of CHF 45.4 million for the year ended December 31, 2019 compared with a net loss of CHF 50.9 million for the same period in 2018 driven by (i) an increase of CHF 103.8 million in

revenues principally due to recognition of a CHF 73.1 million upfront payment for a right-of-use license fee, CHF 2.6 million for research and development activities and a CHF 30 million payment for the first installment of the first milestone associated with our agreement with Lilly and (ii) offset by the increase in research and development costs in the year ended December 31, 2019.

Investing activities

Net cash used in investing activities rose to CHF 66.9 million for the year ended December 31, 2019 compared with net cash used in investing activities of CHF 32.0 million for the year ended December 31, 2018 due to a CHF 35.0 million increase in investment in fixed-term deposits with maturities of six to 12 months as well.

Financing activities

Net cash provided by financing activities was CHF 49.6 million for the year ended December 31, 2019 compared with net cash provided by financing activities of CHF 109.4 million for the year ended December 31, 2018. The decrease of CHF 59.8 million is predominantly related to CHF 109.5 million received from three follow-on offerings completed in July 2018. This decrease is offset by CHF 50.3 million received from Lilly for a convertible loan offset by CHF 0.5 million for transaction costs associated with loan settlement.

Operating capital requirements and plan of operations

We do not expect to generate revenues from royalties based on product sales unless and until our partners obtain regulatory approval of, and successfully commercialize, our current or any future product candidates. As of December 31, 2019, we had cash and cash equivalents of CHF 193.6 million and short-term financial assets of CHF 95.0 million, resulting in CHF 288.6 million of liquidity. The increase relative to December 31, 2018 is due to the receipt of a CHF 80 million upfront payment from Lilly, a CHF 30 million for the first milestone payment from Lilly as well as USD 50 (CHF 50.3) million in consideration for the convertible note agreement. These increases in cash receipts were offset by an increase in research and development spending on our major discovery, research and development programs and the strengthening of the Company's infrastructure, systems and organization. There can be no certainty as to the exact timing, or in fact, whether any future milestone payments will ever be made given that these milestone payments are contingent on clear milestones being reached. Accordingly, assuming we do not receive potential milestone payments and based upon our currently contemplated research and development strategy, we believe that our existing capital resources will be sufficient to meet our projected operating requirements through the Q1 2024.

We expect to generate losses for the foreseeable future, and these losses could increase as we continue product development until we successfully achieve regulatory approvals for our product candidates and begin to commercialize any approved products. We are subject to all the risks pertinent to the development of new products, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may harm our business. We expect to incur additional costs associated with operating a public company and we anticipate that we will need substantial additional funding in connection with our continuing operations. If we need to raise additional capital to fund our operations and complete our ongoing and planned clinical studies, funding may not be available to us on acceptable terms, or at all.

Our future funding requirements will depend on many factors, including but not limited to the following:

- The scope, rate of progress, results and cost of our pre-clinical and clinical studies and other related activities, according to our long-term strategic plan;
- The cost of manufacturing clinical supplies and establishing commercial supplies of our product candidates and any other products we may develop;
- The cost, timing and outcomes of regulatory approvals;
- The costs and timing of establishing sales, marketing and distribution capabilities;
- The terms and timing of any collaborative, licensing and other arrangements that we may establish, including any required milestone and royalty payments thereunder;
- The emergence of competing technologies or other adverse market developments; and

- The potential cost and timing of managing, protecting, defending and enforcing our portfolio of intellectual property.

Comparison of the Years Ended December 31, 2018 and 2017

For a discussion of the financial results and condition for the fiscal year ended December 31, 2017, please refer to Item 5. Operating and Financial Review and Prospects—A. Operating Results-Comparison of the Years Ended December 31, 2018 and 2017 of our annual report on Form 20-F for the year ended December 31, 2018 filed on March 21, 2019, from pages 108 to 110.

C. Research and development, patents and licenses, etc.

See "Item 4. Information on the Company – B. Business Overview" and Item 5. Operating and Financial Review and Prospects –A. Operating Results – Results of Operations."

D. Trend information

See "Item 5. Operating and Financial Review and Prospects."

E. Off-balance sheet arrangements

We do not have any material off-balance sheet arrangements or commitments.

F. Tabular disclosure of contractual obligations

We have been a tenant at our current location in the EPFL Innovation Park since shortly after our inception in 2003. We have entered into long-term rental lease agreements with respect to these facilities. However, our lease agreements are structured such that we can exit these lease agreements without penalty provided we give the owner of our premises sufficient notice. We have capitalized a portion of our lease liabilities in accordance with IFRS 16. See Note 5 "Right-of-use assets and lease liabilities."

The following table presents information relating to our contractual obligations that are committed as of December 31, 2019:

	Payments Due by Period				
(in CHF thousands)	**Less Than 1 Year**	**Between 1-3 Years**	**Between 3-5 years**	**More than 5 years**	**Total**
Leases	778	970	948	—	2,696
Purchase obligations (including research and development)	19,614	12,993	4,816	2,193	39,616
Financing obligation	652	—	—	—	652
Total	21,044	13,963	5,764	2,193	42,964

G. Safe harbor

See "Forward-Looking Statements."

H. Non-IFRS Financial Measures

In addition to our operating results, as calculated in accordance with International Financial Reporting Standards, or IFRS, as adopted by the International Accounting Standards Board, we use adjusted income/(loss) and adjusted earnings/(loss) per share when monitoring and evaluating our operational performance. Adjusted income/(loss) is defined as income/(loss) for the relevant period, as adjusted for certain items that we believe are not indicative of our ongoing operating performance. Adjusted earnings/(loss) per share is defined as adjusted income/(loss) for the relevant period divided by the weighted-average number of shares for such period.

We believe that these measures assist our shareholders because they enhance comparability of our results each period and provide more useful insight into operational results for the period. The Company's executive management uses these non-IFRS measures to evaluate our operational performance. These non-IFRS financial measures are not meant to be considered alone or as substitutes for our IFRS financial measures and should be read in conjunction with AC Immune's financial statements prepared in accordance with IFRS. The most

directly comparable IFRS measure to these non-IFRS measures is net income/(loss). The following table reconciles net income/(loss) to adjusted income/(loss) and adjusted earnings/(loss) per share for the periods presented:

Reconciliation of Income/(Loss) to Adjusted Income/(Loss) and Earnings/(Loss) Per Share to Adjusted Earnings/(Loss) Per Share

in CHF thousands except for share and per share data	For the Years Ended December 31, 2019	2018	2017
Income/(Loss)	**45,442**	**(50,951)**	**(26,411)**
Adjustments:			
Non-cash share-based payments (a)	2,834	2,518	1,579
Foreign currency (gains)/losses (b)	826	1,179	4,168
Effective interest expense (c)	1,355	—	—
Change in fair value of conversion feature (d)	(4,542)	—	—
Adjusted Income/(Loss)	**45,915**	**(47,254)**	**(20,664)**
Earnings/(Loss) per share – basic	0.64	(0.82)	(0.46)
Earnings/(Loss) per share – diluted	0.64	(0.82)	(0.46)
Adjustment to earnings/(loss) per share – basic	0.01	0.06	0.10
Adjustment to earnings/(loss) per share – diluted	0.00	0.06	0.10
Adjusted earnings/(loss) per share – basic	**0.65**	**(0.76)**	**(0.36)**
Adjusted earnings/(loss) per share – diluted	**0.64**	**(0.76)**	**(0.36)**
Weighted-average number of shares used to compute Adjusted Loss per share – basic	70,603,611	61,838,228	57,084,295
Weighted-average number of shares used to compute Adjusted Loss per share – diluted	71,103,341	61,838,228	57,084,295

(a) Reflects non-cash expenses associated with share-based compensation for equity awards issued to Directors, Management and employees of the Company. This expense reflects the awards' fair value recognized for the portion of the equity award which is vesting over the period.

(b) Reflects foreign currency remeasurement gains and losses for the period, predominantly impacted by the change in the exchange rate between the U.S. Dollar and the Swiss Franc.

(c) Effective interest expense for the period relates to the accretion of the Company's convertible loan in accordance with the effective interest method.

(d) Change in fair value of conversion feature that is bifurcated from the convertible loan host debt with Lilly.

Adjustments for the years ended December 31, 2019, 2018 and 2017, were CHF 0.4 million in net gains, CHF 3.7 million in net losses and CHF 5.7 million in net losses, respectively. The Company recorded CHF 2.8 million, CHF 2.5 million and CHF 1.6 million for the years ended December 31, 2019, 2018 and 2017, respectively, for share-based compensation expenses. There were foreign currency remeasurement losses of CHF 0.8 million, CHF 1.2 million, CHF 4.2 million for the years ended December 31, 2019, 2018 and 2017, respectively, predominantly related to the cash balance of the Company as a result of fluctuations of the U.S. Dollar against the Swiss Franc. Related to the Company's convertible note settled with Lilly in 2019, we recorded CHF 1.4 million for amortization of effective interest for the year ended December 31, 2019 and recognized a CHF 4.5 million gain for the change in fair value of the liability related to the conversion feature in 2019. There were no comparable expenses and gains in 2018 nor 2017, respectively.

The Company also discloses liquidity which is defined as a financial indicator comprised of cash and cash equivalents and short term financial assets. See Note 3 "Summary of significant accounting policies" to our Financial Statements for further definition.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. Directors and senior management

Executive Officers, Other Key Employees and Board of Directors

The following table presents information about our executive officers, other key employees and, directors and director nominees, including their ages, as of March 1, 2020. The term of each of our directors is one year and, accordingly, will expire at our 2020 annual shareholder meeting to be held in June 2020.

Name	Position	Age	Initial Year of Appointment
Executive Officers			
Andrea Pfeifer, Ph.D.	Chief Executive Officer and Director	62	2003
Joerg Hornstein	Chief Financial Officer	42	2017
Jean-Fabien Monin	Chief Administrative Officer	49	2009
Marie Kosco-Vilbois, Ph.D.	Chief Scientific Officer	62	2019
Piergiorgio Donati	Chief Technical Operations Officer	49	2019
Other Key Employees			
Julien Rongère, Ph.D.	VP Regulatory Affairs and Quality Assurance	42	2017
Alexandre Caratsch	General Counsel	54	2018
Olivier Sol, M.D.	Medical Director	53	2016
Bojana Portmann, Ph.D.	AVP IP and Business Development	40	2011
Julian Gray, M.D., Ph.D.	Clinical Advisor	62	2007
Non-Executive Directors			
Douglas Williams, Ph.D.	Chairman and Director	61	2018
Martin Velasco	Vice-Chairman and Director	65	2003
Friedrich von Bohlen und Halbach, Ph.D.	Director	57	2015
Peter Bollmann, Ph.D.	Director	66	2015
Thomas Graney	Director	55	2016
Werner Lanthaler, Ph.D.	Director	51	2018
Roy Twyman, M.D.	Director	63	2019

The current business addresses for our executive officers, other key employees, directors and director nominee is AC Immune SA, EPFL Innovation Park, Building B, 1015 Lausanne, Switzerland.

Executive Officers

Andrea Pfeifer, Ph.D., Co-Founder, Chief Executive Officer and Director: Dr. Pfeifer co-founded AC Immune in April 2003, and has served as a director on our board since our IPO. Prior to founding us, Dr. Pfeifer was head of Nestlé's Global Research in Lausanne, Switzerland. While at Nestlé, she led the scientific development of the first Functional Food, LC1, and one of the first Cosmoceutical products in a joint venture with L'Oreal, Innéov Fermeté. She also co-founded the Nestlé Venture Capital Fund, a Life Sciences corporate venture fund. She serves as chairwoman of Investment Fund BioMedInvest, Basel and AB2 Bio, Lausanne and is a member of the Supervisory Board of Symrise AG, Holzminden. Dr. Pfeifer is a member of the CEOi Initiative on Alzheimer's Disease.

Dr. Pfeifer holds a Ph.D. in Toxicology, Cancer Research from the University of Würzburg, Germany. She continued with post-doctoral work in Molecular Carcinogenesis at the National Institutes of Health, Human Carcinogenesis Branch, in Bethesda, Maryland. Dr. Pfeifer is a registered toxicologist and pharmacist. She received her habilitation from the University of Lausanne, Switzerland and is also an honorary professor at the École Polytechnique Fédérale de Lausanne (EPFL).

Joerg Hornstein, Chief Financial Officer: Mr. Hornstein has served as our Chief Financial Officer since April 2017. Prior to joining AC Immune, Mr. Hornstein served as Senior Vice President Group Controlling for Unternehmensgruppe Theo Müller based in Luxembourg from January 2014 to March 2017. Between 2002 and 2013 he worked for Merck KGaA, a leading science and technology company in healthcare, life science and performance materials, where he held various senior finance roles. Amongst others, he was CFO for Merck's operations in Indonesia and Merck Serono's operations in China. Furthermore, he served as Vice President Group Controlling for Merck Group Headquarters in Germany and as Divisional CFO for Merck Millipore in the U.S. Mr. Hornstein holds an MBA with Distinction from London Business School, UK, and a Bachelor of Business Administration from Baylor University in the U.S.

Jean-Fabien Monin, Chief Administrative Officer: Mr. Monin was nominated Chief Administrative Officer in July 2015 following his role as our Chief Financial Officer from March 2009 to July 2015. Prior to AC Immune, he held several positions during his tenure of 14 years at bioMérieux, a leading international *in vitro* diagnostics group, culminating in his nomination as Chief Financial Officer. His last position was CFO of bioMérieux Central Europe based in Vienna, Austria from December 2006 to March 2009. Mr. Monin holds a Masters in Finance and International Business from the University of Paris-Dauphine, France.

Marie Kosco-Vilbois, Ph.D., Chief Scientific Officer: A US citizen, Dr. Kosco-Vilbois has extensive experience in the biopharmaceutical industry and served as Chief Scientific Officer of Novimmune since 2005. Prior to joining Novimmune in 2002, Dr. Kosco-Vilbois was Head of Immunology and Preclinical Pharmacology at the Serono Pharmaceutical Research Institute, a Senior Scientist and then Head of Immunology at the Glaxo Wellcome Research Institute in Geneva and a Scientific Member of the Basel Institute for Immunology. During her career, she has taken numerous Biologicals from discovery into preclinical studies and clinical development, most notably filing market applications of a Biological for an Orphan indication. Dr. Kosco-Vilbois gained her Bachelor's Degree in Biology from Rutgers University, New Jersey, US, and a PhD in Anatomy and Immunology from the Medical College of Virginia/Virginia Commonwealth University School of Medicine, US.

Piergiorgio Donati, Chief Technical Operations Officer: Mr. Donati joined AC Immune in June 2018 as Director, Global Program Management, having previously worked for AC Immune from 2011-2015 as Head of Manufacturing and Project Management. Between 2015 and 2018, Mr. Donati was Head of CMC program development at Glenmark Pharmaceuticals and Biotech CMC Lead at Merck KGaA. Prior to 2011, he held R&D positions at Abiogen, Merck Group and Serono. Mr. Donati holds a degree in Analytical Chemistry from the Technical Institute G.L. Bernini.

Other Key Employees

Julien Rongère, Ph.D., VP Regulatory Affairs and Quality Assurance: Dr. Rongère joined AC Immune in July 2017 as Head of European Regulatory Affairs and Quality Assurance. Prior to AC Immune, Dr. Rongère held positions of increasing responsibility at Celgene in Switzerland. Most recently, he served as Director, Regulatory Affairs, leading the development of regulatory strategies for small molecules and CAR-T cell therapies and contributed to the development and approval of Revlimid in Multiple Myeloma and Mantle Cell Lymphoma. Prior to Celgene, he served as a Regulatory Expert at Apoxis, S.A. in Switzerland. During his career, Dr. Rongère gained specific expertise in the development of regulatory strategies for taking products from Phase 1 through to commercialization in the field of hematology/oncology and immunology/inflammation, including fast to market approaches, orphan drugs and pediatric development. Dr. Rongère gained his Masters Degree in Medical Genetics from the University of Aberdeen, UK, and holds a Ph.D. in Molecular Biology from the University of Lausanne, Switzerland.

Alexandre Caratsch, General Counsel: Alexandre Caratsch is a Swiss qualified attorney with 30 years' experience in private practice, multinational companies and in ventures. He initially worked as an in-house lawyer for E&Y and the SGS Group before specializing in healthcare, holding senior legal positions at Novartis and Medtronic. Before joining AC Immune, he led the Corporate Legal Affairs and Intellectual Property group for Medtronic's EMEA region. Mr. Caratsch has also co-founded two start-up companies in the field of IT and medical technology, respectively, and has supported other start-up companies with strategic, transactional and general counsel. Mr. Caratsch holds a Master's in Law from the University of Neuchâtel, Switzerland and is admitted to the Bar of Geneva, Switzerland.

Oliver Sol, M.D., Medical Director: Prior to joining AC Immune, Dr. Olivier Sol was Clinical Director of Exonhit (Paris) and thereafter Medical & Regulatory Affairs Director for Diaxonhit, where he was responsible for the development and medical validation of in-vitro diagnostic products in cancer, infectious diseases and Alzheimer's disease. Dr. Sol spent his over 20-year career as a Medical Expert in several therapeutic areas with a strong focus on central nervous system diseases, within pharmaceutical companies as Janssen, UCB-Pharma, GlaxoSmithKline and Sanofi. He contributed to the clinical development of currently marketed drugs in epilepsy (topiramate and levetiracetam) and galantamine in Alzheimer's. He has also gained significant experience in the field of biological biomarkers. Dr. Sol holds an M.D. from the Paris-Sud University (Paris-Saclay) with a specialization in Medical Biology.

Bojana Portmann, Ph.D., AVP IP and Business Development: Dr. Portmann joined AC Immune in 2011 as Intellectual Property Manager and has held multiple roles within the IP department with increasing responsibility over the past years, during which her work was mainly focused on creating and strengthening patent portfolio for biologicals, small molecules and liposomal technology. Dr. Portmann holds a Ph.D. degree

from the EPFL University in Switzerland, and a LL.M. degree, Master of Intellectual Property Law and Management (MIPLM), from the CEIPI in France. She also received a M.Sc. (Dipl. Ing.) degree in Polymer and Chemical Engineering from the University of Belgrade in Serbia.

Julian Gray, M.D., Ph.D., Clinical Advisor: Dr. Gray has served as Clinical Advisor to our programs in neurodegenerative diseases since January 2007 and works in this function exclusively for AC Immune. He has previously held the position of Head of CNS Therapeutics at Eisai Ltd in London leading the global development of early and late-stage CNS projects in Alzheimer's disease, Parkinson's disease and other CNS areas. Prior to this he served as Head of Alzheimer Clinical Research at Hoffmann-La Roche in Basel where he conducted large scale clinical trials in the US and Europe. After his studies he was Medical Expert at Sandoz Pharmaceuticals in Basel undertaking clinical studies of different compounds in dementia and Parkinson's disease. Dr. Gray holds the title of a Specialist in Pharmaceutical Medicine (Switzerland). He received his medical degree (MBBS) from the University of London, a BA and Ph.D. from the University of Oxford and an MBA from the Oxford Brookes University.

Non-Executive Directors

Douglas Williams, Ph.D., Chairman and Director: Dr. Douglas E. Williams is currently the President, CEO and member of the Board of Directors of Codiak BioSciences. He was previously Biogen's Executive Vice President, Research and Development, serving in this role from January 2011 to July 2015. He joined Biogen from ZymoGenetics, where he was most recently CEO and member of the Board of Directors. Previously, he held leadership positions within the biotechnology industry, including Chief Scientific Officer and Executive Vice President of Research and Development at Seattle Genetics, and Senior Vice President and Washington Site Leader at Amgen. Dr. Williams served in a series of scientific and senior leadership positions over a decade at Immunex, including Executive Vice President and Chief Technology Officer and a member of the Board of Directors. During his more than thirty year career in the biotechnology industry he has played a role in the development of several novel drugs including Enbrel, Tecfidera, and Spinraza. He has served on the board of numerous biotechnology companies and is currently a member of the Board of Directors of Ovid Therapeutics, and AC Immune.

Martin Velasco, Vice-Chairman and Director: Mr. Velasco has served on our board of directors since December 2003. Martin Velasco is an entrepreneur and Business Angel with extensive experience in the IT, medical and biotech areas. He serves on the board of directors or advisory board of several other high-tech companies including: as Founder, Chairman and Chief Executive Officer of Anecova, an assisted reproductive technology (ART) company and World Economic Forum Technology Pioneer 2008 as Chairman of the Supervisory Board of Cocomore, a digital communications agency and IT services firm and as a Board Member of Aridhia, a Health Informatics company. Martin is also the Founder of Infantia Foundation, a philanthropic organization aiding children in the developing world. He is an Ambassador of BlueOrchard, the leading private microfinance investment advisory company and a member of the Strategic Advisory Board of the EPFL.

Friedrich von Bohlen und Halbach, Ph.D., Director: Dr. von Bohlen has served on our board since October 2015. He is co-founder and managing director of dievini Hopp BioTech holding GmbH & Co. KG. He brings extensive industry experience from Fresenius AG, FAG Kugelfischer, and WASAG-Chemie AG, founded LION bioscience AG in 1997 (now Expedeon) and served as the company's CEO. Dr. von Bohlen is a board member of various companies of the dievini portfolio, CEO of Molecular Health GmbH and Chairman of Apogenix AG and Novaliq GmbH. He holds a PhD in Neurobiology from the Swiss Federal Institute of Technology in Zurich, Switzerland.

Peter Bollmann, Ph.D., Director: Dr. Bollmann has joined our board in December 2015. He has extensive management and finance experience in Switzerland and abroad as CEO, CFO and member of the board. His broad industry experience embraces biotechnology and medical technology firms including previous Board positions with Cytos Biotechnology and Prionics.

Thomas Graney, Director: Mr. Thomas Graney is currently the Chief Financial Officer of Generation Bio. Prior to Generation Bio he was Senior Vice President and Chief Financial Officer at Vertex Pharmaceuticals Inc. and Chief Financial Officer and Senior Vice President of Finance & Corporate Strategy at Ironwood Pharmaceuticals. Prior to Ironwood Pharmaceuticals, Mr. Graney spent 20 years working with J&J and its affiliates, serving for four years as worldwide vice president of finance and Chief Financial Officer of Ethicon. Mr. Graney has extensive global experience that spans corporate development, commercial strategy, portfolio management and supply chain management, communication and investor relations. A Chartered Financial Analyst charterholder, Mr. Graney holds a B.S. in accounting from the University of Delaware and an M.B.A. in

Marketing, Finance and International Business from the Leonard N. Stern School of Business at New York University.

Werner Lanthaler, Ph.D., Director: Dr. Werner Lanthaler is the CEO of Evotec AG, a drug discovery alliance and development partnership company focused on rapidly progressing innovative product approaches with leading pharmaceutical and biotechnology companies, academics, patient advocacy groups and venture capitalists. Since joining Evotec in 2009, Dr. Lanthaler has focused the company on collaborating with biotech and pharma companies and academia - supporting biotech innovation. He previously served as Chief Financial Officer at Intercell AG where he played a key role in many of the company's major milestones. During his tenure, Intercell undertook an Initial Public Offering and developed from a venture-backed biotechnology company into a global vaccine player. Dr. Lanthaler has also served as Director of the Federation of Austrian Industry, and from 1995 to 1998 was a Senior Management Consultant at McKinsey & Company. Dr. Lanthaler is a Non-Executive Member of the Board of Directors of arGEN-X and is a member of the Supervisory Board of Topas Therapeutics GmbH. He holds a Doctorate in Economics from Vienna University, a Master's degree in Business Administration from Harvard University, and a degree in Psychology.

Roy Twyman, M.D., Director: Dr. Twyman is a neurologist and currently CEO and founder of Amron Neuroscience, LLC, a private consulting company focused on neuroscience drug development. Prior to this, Dr. Twyman spent almost 20 years at Janssen Research & Development, LLC (a Johnson & Johnson company) and was a member of the Neuroscience Therapeutic Area Leadership team responsible for clinical R&D and strategic planning of CNS neurology and psychiatry pipeline products. From 2012 to March 2018, he was a Senior Vice President in the Neuroscience Therapeutic Area overseeing the Alzheimer’s Disease Area. He currently participates as an independent board member or as a scientific advisory board member for a number of small biotech or pharmaceutical companies.

B. Compensation

Compensation of Directors and Executive Officers

For the year ended December 31, 2019, the aggregate compensation accrued or paid to the members of our board of directors and our executive officers for services in all capacities was CHF 6.2 million.

During the year ended December 31, 2019, the total fair value of stock options and non-vested share awards (restricted shares and restricted share units) granted to directors and executive officers was CHF 2.4 million.

The amount set aside or accrued by us to provide pension, retirement or similar benefits to members of our board of directors and executive officers amounted to a total of CHF 215 thousand in the year ended December 31, 2019.

We incorporate by reference into this Annual Report the information in “Item 1.C—2019 Board Compensation” and “Item 2.C—2019 Executive Compensation” of Exhibit 99.3 to our report on Form 6-K filed with the SEC on March 30, 2020.

Equity Incentive Plans

In 2016, we ceased issuing new grants under our existing equity incentive plans, which we refer to as the Prior Plans, and adopted a new omnibus equity incentive plan under which we have the discretion to grant a broad range of equity-based awards to eligible participants.

Prior Plans: A and C1

Since our inception in 2003, we have had four separate Prior Plans under which stock options were granted (Prior Plans B and C2 have terminated): Plan A, which was established in 2004 and amended in June 2015 and June 2017 and Plan C1, which was established in 2006. Options granted under the C1 Plan from 2013 through the adoption of current 2016 Stock Option and Incentive Plan were taxed upon exercise instead of at grant due to a change in taxation rules.

Furthermore, pursuant to a board resolution on October 13, 2015 all options which were granted to directors and executive officers in connection with our IPO were accelerated upon consummation of the IPO. This resulted in the acceleration of a total of 76,000 unvested options.

Plan Administration. Under each of the Prior Plans (A and C1), an option, which can only be granted with the approval of our board of directors, is evidenced by an option agreement signed by the participant to indicate his or her acceptance of the option and is subject to the terms and conditions of the applicable Prior Plan.

Eligibility. Under Plans A and C1, options were granted to our directors, employees, advisors and agents. Under Plan C2, options were granted only to selected members of our board of directors.

Option Exercise Price. With the exception of Plan A, the exercise price of all options issued under the Prior Plans is CHF 0.15. The original exercise price for options issued under Plan A was CHF 0.93. However, this exercise price was amended in June 2015 with the approval of our board of directors to be CHF 0.15. As a result, as of December 31, 2019, all options outstanding under our Prior Plans have an exercise price of CHF 0.15.

Vesting Period. The vesting periods of options issued under our Prior Plans vary. The options granted under Plan A vested immediately but were subject to a four year lockup period. Under Plan C1, the vesting period for options was four years with 25% of the options vesting each year.

Expiration Period. The expiry dates for each plan are as follows:

Plan A: 15.5 years (amended from 10.5 years)

Plan C1: 10 years

Amendment. Our board of directors has the authority to amend each of the Prior Plans.

2016 Stock Option and Incentive Plan

At the November 15, 2016 AGM of the Company, our board of directors approved the 2016 Stock Option and Incentive Plan (as amended and restated the "2016 Plan"). The maximum number of shares available for issuance under the 2016 Plan is 3,523,000 common shares. The shares available for issuance under the Plan were initially registered with the SEC on a Form S-8 on March 8, 2017, and additional shares were registered on a Form S-8 on August 5, 2019. As of December 31, 2019, there were a total of 602,218 shares underlying options that were exercisable and 1,981,629 shares underlying outstanding options, restricted share awards and restricted share units issued from both our Prior Plans and the 2016 Plan.

Plan Administration. The 2016 Plan is administered by either our board of directors or the compensation committee, or a similar committee performing the functions of the compensation committee. Approval of the plan administrator is required for all grants of awards under the 2016 Plan, but the administer may delegate to our Chief Executive Officer the authority to grant awards, subject to certain limitations set forth on the plan.

Awards. Awards may be granted in the form of incentive stock options, non-qualified stock options, stock appreciation rights, restricted share units, restricted share awards, unrestricted share awards, performance share awards and dividend equivalent rights.

Eligibility. Under the 2016 Plan, full or part-time officers and other employees, non-employee directors and consultants of the Company and its subsidiaries who are selected by the administrator are eligible to participate in the plan.

Option Exercise Price. Under the 2016 Plan, the option exercise price is determined by the plan administrator at the time of grant, but will not be less than fair market value (as defined in the 2016 Plan) on the grant date, and for incentive stock options granted to any employee who is a 10 percent owner in the Company, will not be less than 110 percent of the fair market value on the grant date.

Vesting Period. Vesting conditions are determined by the administrator at the time of grant and are specified in the applicable award certificate.

Accelerated Vesting. The administrator may accelerate the exercisability or vesting of all or any portion of any award in circumstances involving the grantee's death, disability, retirement or termination of employment, or a change in control.

Amendment. Our board of directors has the authority to amend the 2016 Plan.

Amendment and Restatement to the 2016 Stock Option and Incentive Plan

In June 2019, the Board authorized, and the shareholders approved, an increase in the maximum number of shares reserved for issuance under the 2016 Plan. In October 2019, the Board authorized a second amendment and restatement to the 2016 Plan. These amendments were made to align certain elements with Swiss statutory requirements and had no financial impact for the Company in 2019.

Equity Compensation

For the fiscal year ended December 31, 2019, we have granted our directors and executive officers, in the aggregate, options for the right to acquire 636,700 shares at an exercise price of USD 5.39 per share, that vest over a four year period with vesting to occur quarterly. The Company did not grant restricted share units to its directors and executive officers in 2019. Previous restricted share units granted to directors vest over a one-year period. Restricted share units granted to executives have a four year vesting life with vesting to occur quarterly. Please see “Note 17. Share-based compensation” for further detail.

C. Board practices

Board Composition of Directors

Our board of directors is composed of eight directors. Each director is elected for a one-year term. The current members of our board of directors were appointed at a shareholders’ meeting held on June 28, 2019 to serve until the 2020 shareholders’ meeting to be held in June 2020.

We are a foreign private issuer. As a result, in accordance with the Nasdaq stock exchange listing requirements, we rely on home country governance requirements and certain exemptions thereunder rather than relying on the stock exchange corporate governance requirements. For an overview of our corporate governance principles, see “Item 16G. Corporate governance.”

Board Meetings

Our Board of Directors held five physical meetings in 2019 and several additional meetings by conference call. The Board discussed and analyzed the scientific, business, financial and organizational risks of the Company based on the external factors and internal changes impacting the risks for the Company in the future.

Director Independence

As a foreign private issuer, under the listing requirements and rules of Nasdaq, we are not required to have independent directors on our board of directors, except to the extent that our audit and finance committee is required to comply with independence requirements, subject to certain phase-in schedules. However, our board of directors has determined that, under current listing requirements and rules of Nasdaq (which we are not subject to) and taking into account any applicable committee independence standards, Douglas Williams, Martin Velasco, Friedrich von Bohlen Und Halbach, Peter Bollmann, Thomas Graney, Werner Lanthaler and Roy Twyman are “independent directors.” In making such determination, our board of directors considered the relationships that each non-employee director has with us and all other facts and circumstances our board of directors deemed relevant in determining the director’s independence, including the number of ordinary shares beneficially owned by the director and his or her affiliated entities, if any.

Committees of the Board of Directors

Our board of directors established two separate committees: an audit and finance committee and a compensation, nomination and governance committee.

Audit and Finance Committee

The audit and finance committee, which consists of Peter Bollmann (Chair), Thomas Graney, Werner Lanthaler and Martin Velasco, assists our board of directors in overseeing our accounting and financial reporting processes and the audits of our financial statements. In addition, the audit and finance committee is directly responsible for the appointment, compensation, retention and oversight of the work of our independent registered public accounting firm. The audit and finance committee consists exclusively of members of our board who are financially literate, and Peter Bollmann, Thomas Graney, Werner Lanthaler and Martin Velasco are considered to be “audit committee financial experts” as defined by the SEC. Our board of directors has

determined that Peter Bollmann, Thomas Graney, Werner Lanthaler and Martin Velasco satisfy the "independence" requirements set forth in Rule 10A-3 under the Exchange Act.

The audit and finance committee is governed by a charter that complies with Nasdaq rules. The audit and finance committee has the responsibility to, among other things:

- review and assess the qualifications, independence, performance and effectiveness of the independent auditor;
- review the scope of the prospective audit by the independent auditor, the estimated fees, and any other matters pertaining to the audit;
- approve any audit and non-audit services proposed to be provided by the independent auditor to ensure independent auditor independence;
- review and assess the independent auditor's report, management letters and take notice of all comments of the independent auditor on accounting procedures and systems of control, and review the independent auditor's reports with management;
- be responsible for the resolution of disagreements between the management and the independent auditor;
- review and evaluate the lead audit partner of the independent audit team and confirm and evaluate their rotation;
- review, discuss with the chief financial officer and the independent auditor and approve (i) the annual and quarterly financial statements, (ii) reports intended for publication and (iii) any other financial statements intended for publication to consider significant financial reporting issues and judgments made in connection with the preparation of our financial statements, including any significant changes in our selection or application of accounting principles;
- review with the management, personnel responsible for the design and implementation of the internal audit function and the independent auditor in separate meetings any analysis or other written communication prepared by the management and/or the independent auditor setting forth significant financial reporting issues and judgments made in connection with the preparation of the financial statements, including critical accounting policies, the effect of regulatory and accounting initiatives, as well as off-balance sheet transactions and structures on our financial statements;
- review in cooperation with the independent auditor and the management whether the accounting principles applied are appropriate in view of our size and complexity;
- periodically review our policies and procedures for risk management and assess the effectiveness thereof including discussing with management our major financial risk exposures and the steps that have been taken to monitor and control such exposures;
- discuss with management and external advisors any legal matters that may have a material impact on our financial statements and any material reports or inquiries from regulatory or governmental agencies which could materially impact our contingent liabilities and risks;
- review our disclosure controls and procedures and internal control over financial reporting which shall include significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting;
- establish procedures for the receipt, retention and treatment of complaints received regarding accounting, internal accounting controls or auditing matters, and the confidential, anonymous submission by employees of concerns regarding questionable accounting or auditing matters; and
- review and approve or ratify any related person transaction in accordance with our related person transaction policy.

The audit and finance committee will meet as often as it determines is appropriate to carry out its responsibilities, but in any event will meet at least four times per year.

Compensation, Nomination and Governance Committee

The compensation, nomination and governance committee, consists of Douglass Williams (Chair), Martin Velasco and Thomas Graney.

The compensation, nomination and governance committee is governed by a charter that complies with Nasdaq rules. The compensation, nomination and governance committee has the responsibility to, among other things:

- recommend to the board the guidelines for the overall compensation and equity awards for the board of directors and our executive officers along with the rationale for such recommendations;
- recommend to the board the compensation of executive officers;
- propose the maximum total compensation of the board of directors and executive officers for approval at the annual general meeting;
- periodically review policies and principles for the Company's corporate governance;
- establish the process for assessment of the performance of members of the board, its committees and individual members;
- prepare and reviews the Company's succession plan for members of the board and the executive committee;
- periodically review the Company's code of conduct and recommends changes as needed;
- recommend for presentation to our shareholders the compensation report for shareholder vote; and
- define guidelines for the selection of candidates for election or re-election as members of the board and our executive officers.

Swiss law requires that we adopt a compensation committee, so in accordance with Nasdaq Listing Rule 5615(a)(3), we will follow home country requirements with respect to the compensation, nomination and governance committee. As a result, our practice will vary from the requirements of Nasdaq Listing Rule 5605(d), which sets forth certain requirements as to the responsibilities, composition and independence of compensation committees, and from the independent director oversight of director nominations requirements of Nasdaq Listing Rule 5605(e). We will be subject to the Swiss Ordinance Against Executive Compensation ("Say on Pay" Rule). In addition, this committee will also be responsible for director and board committee nominations as well as reviewing and amending, if required, our corporate governance framework and guidelines.

D. Employees

As of December 31, 2019, we employed 132 employees, 17 of whom were part-time employees. 64 of our employees hold Ph.D. degrees and 61 hold M.Sc. degrees. Our 132 employees are from more than 20 countries. The average number of employees (calculated on full time equivalents) in 2019 was 115. As of December 31, 2018 and 2017 we had 104 and 86 employees, respectively. We have never had a work stoppage, and none of our employees are represented by a labor organization or under any collective-bargaining arrangements. We consider our employee relations to be good.

E. Share ownership

See "Item 7. Major Shareholders and Related Party Transactions-A. Major shareholders."

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. Major shareholders

The following table presents information relating to the beneficial ownership of our common shares as of the date of this Annual Report by:

- each person, or group of affiliated persons, known by us to own beneficially 5% or more of our outstanding common shares;
- each of our executive officers and directors; and
- all executive officers and directors as a group.

The number of common shares beneficially owned by each entity, person, executive officer or director is determined in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any common shares over which the individual has sole or shared voting power or investment power as well as any common shares that the individual has the right to acquire within 60 days of March 1, 2020 through the exercise of any option, warrant or other right. Except as otherwise indicated, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all common shares held by that person.

The percentage of outstanding common shares is computed on the basis of 71,859,431 common shares outstanding as of March 1, 2020. Common shares that a person has the right to acquire within 60 days of March 1, 2020 are deemed outstanding for purposes of computing the percentage ownership of the person holding such rights, but are not deemed outstanding for purposes of computing the percentage ownership of any other person, except with respect to the percentage ownership of all executive officers and directors as a group. Unless otherwise indicated below, the address for each beneficial owner is AC Immune, EPFL Innovation Park, Building B, 1015 Lausanne, Switzerland.

Shareholder	Number	Shares Beneficially Owned (%)
5% Shareholders		
dievini Hopp BioTech holding GmbH & Co KG(1)	18,041,000	25.1%
Varuma AG(2)	11,999,999	16.7%
BVF Inc.(3)	11,342,505	15.8%
Eli Lilly and Company(4)	3,615,328	5.0%
Executive Officers and Directors		
Andrea Pfeifer(5)	2,754,299	3.8%
Joerg Hornstein(6)	*	*
Jean-Fabien Monin(7)	*	*
Marie Kosco-Vilbois(8)	*	*
Piergiorgio Donati(9)	*	*
Douglas Williams(10)	*	*
Martin Velasco(11)	*	*
Friedrich von Bohlen und Halbach(12)	*	*
Peter Bollmann(13)	*	*
Thomas Graney(14)	*	*
Werner Lanthaler(15)	*	*
Roy Twyman(16)	*	*
All executive officers and directors as a group (12 persons)	3,841,780	5.3%

* Indicates beneficial ownership of less than 1% of the total issued and outstanding common shares.

1) Represents 18,041,000 shares held by dievini Hopp BioTech holding GmbH & Co KG. Dietmar Hopp controls the voting and investment decisions of the ultimate parent company of dievini Hopp BioTech holding GmbH & Co KG. The shares registered in the name of dievini Hopp BioTech holding GmbH & Co KG may also be deemed to be beneficially owned by Friedrich von Bohlen und Halbach, who is a managing director of dievini Hopp BioTech holding GmbH & Co KG. The address for dievini Hopp BioTech holding GmbH & Co KG and Friedrich von Bohlen und Halbach is Johann-Jakob-Astor Str. 57, 69190 Walldorf, Germany.

2) Represents 11,999,999 shares held by Varuma AG set forth in a Schedule 13G/A filed with the SEC on February 12, 2019. The address for Varuma AG is Aeschenvorstadt 55, CH-4051 Basel, Switzerland. Rudolf Maag controls the voting and investment decisions of Varuma AG.

3) Based on information set forth in a Schedule 13G filed with the SEC by Biotechnology Value Fund on February 14, 2020, these shares consist of 11,342,505 shares held of record by BVF Inc. The address of BVF Inc. is 44 Montgomery St., 40th Floor, San Francisco, California 94104.

4) Represents 3,615,328 common shares that Lilly obtained as part of its conversion in April 2019 of the Convertible Note Agreement which was deemed effective in January 2019. See “Note 9. Share Capital” in our financial statements.

5) Consists of 2,597,931 of our common shares and options to purchase 156,368 of our common shares exercisable within 60 days of March 1, 2020.

6) Consists of 0 of our common shares and options to purchase 176,874 of our common shares exercisable within 60 days of March 1, 2020.

7) Consists of 332,501 of our common shares and options to purchase 14,133 of our common shares exercisable within 60 days of March 1, 2020.

8) Consists of 0 of our common shares and options to purchase 15,496 of our common shares exercisable within 60 days of March 1, 2020.

9) Consists of 4,500 of our common shares and options to purchase 9,548 of our common shares exercisable within 60 days of March 1, 2020.

10) Consists of 10,876 of our common shares with no equity instruments exercisable within 60 days of March 1, 2020.

11) Consists of 456,078 of our common shares and options to purchase 10,250 of our common shares exercisable within 60 days of March 1, 2020.

12) Consists of 11,828 of our common shares, and excludes the 18,041,000 shares registered in the name of dievini Hopp BioTech holding GmbH & Co KG that may also be beneficially owned by Friedrich von Bohlen und Halbach. See note (1) above.

13) Consists of 21,609 of our common shares with no equity instruments exercisable within 60 days of March 1, 2020.

14) Consists of 15,851 of our common shares with no equity instruments exercisable within 60 days of March 1, 2020.

15) Consists of 7,937 of our common shares with no equity instruments exercisable within 60 days of March 1, 2020.

16) Dr. Twyman holds neither common shares nor non-vested equity instruments exercisable within 60 days of March 1, 2020.

Holders

As of March 10, 2020, we had approximately 200 shareholders of record of our common stock. The actual number of stockholders is greater than this number of record holders and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust or by other entities.

Significant Changes in Ownership by Major Shareholders

We have experienced significant changes in the percentage ownership held by major shareholders as a result of our initial public offering. Prior to our initial public offering in September 2016, our principal shareholders were dievini Hopp BioTech holding GmbH & Co KG and Varuma AG, which held shares representing 36.5% and 23.1% prior to our IPO, respectively. As of March 10, 2020, dievini Hopp BioTech holding GmbH & Co KG and Varuma AG held 25.1% and 16.7% of our common shares, respectively. BVF Inc. increased its holdings from 8.4% to 15.8% of our outstanding common shares in 2019. Finally, Lilly automatically converted a convertible note, resulting in the issuance to them of 3,615,328 of our common shares. This represents a 5% beneficial ownership as of March 10, 2020.

In July 2018, we completed three offerings of our common shares. In these offerings, we issued and sold 10,000,000 common shares, including 1,108,695 sold to the underwriters pursuant to the underwriters' over-allotment option. The percentage ownership held by certain shareholders decreased as a result of the issuance of the common shares sold by us in these offerings.

In September 2016, we completed our initial public offering and listed our common shares on the Nasdaq Global Market. In the initial public offering, we issued and sold 6,900,000 common shares, including 900,000 common shares sold to the underwriters pursuant to the underwriters' over-allotment option. While none of our existing shareholders sold common shares in the initial public offering, the percentage ownership held by certain shareholders decreased as a result of the issuance of the common shares sold by us in the initial public offering.

B. Related party transactions

On July 31, 2018, as part of the Company's previously announced second subscription rights offering, a major shareholder and members of the Board and Executive Management purchased an aggregate of 614,147 of the Company's common shares on the same basis and otherwise on the same terms as the other participants in such rights offering.

The above transaction represents the only related party transactions we have entered into since January 1, 2017 with any of our executive officers, directors and holders of more than 10% of any class of our voting securities, or any member of the immediate family of any of the foregoing persons, other than the compensation arrangements we describe under "Item 6. Directors, Senior Management and Employees–B. Compensation."

Registration Rights Agreement

We entered into a registration rights agreement in connection with the Series E Private Placement with certain investors in the Series E Private Placement pursuant to which we granted them certain demand and piggyback registration rights for the resale of the common shares held by them, as described below. The registration rights described below will expire on the earlier to occur of (i) the fifth anniversary of the completion of our initial public offering and (ii) the date on which there are no remaining registrable securities held by the parties to the registration rights agreement. The registration rights agreement provides that we must pay certain registration expenses in connection with any demand, piggyback or shelf registration. The registration rights agreement contains customary indemnification and contribution provisions.

Demand Registration Rights

Pursuant to the terms of the registration rights agreement, a shareholder or group of shareholders holding at least 10% of our outstanding common shares may request that we effect a registration under the Securities Act of all or any portion of such requesting shareholders' registrable securities. As of March 1, 2020 dievini Hopp BioTech holding GmbH & Co KG and Varuma AG were our only shareholders party to the registration rights agreement holding at least 10% of our outstanding commons shares, and together they beneficially held 30,040,099 of our common shares, representing approximately 41.8% of the voting power of our common shares outstanding as of March 1, 2020. At least 10 business days prior to the anticipated filing date of the registration statement relating to such demand registration, we must give all other shareholders party to the registration rights agreement notice of such requested registration. Within five business days of such notice, any of the other shareholders party to the registration rights agreement may request that we also effect the registration of the registrable securities held by them. We will not be required to effect a registration of all such registrable securities unless the aggregate proceeds expected to be received from the sale of such registrable securities equals or exceeds USD 10 million or such lesser amount that constitutes all of the requesting shareholders' registrable securities (*provided* that such lesser amount is at least USD 5 million). In no event will we be required to effect more than two demand registrations or underwritten take downs referred to under "Shelf Registration Rights" below. Depending on certain conditions, we may postpone a demand registration on two occasions during any period of twelve consecutive months for up to 90 days.

Piggyback Registration Rights

Pursuant to the terms of the registration rights agreement, at any time after the trigger date, if we propose to register any of our securities, whether or not for sale for our own account, we must give notice to the shareholders party to the registration rights agreement, and they will be entitled to certain piggyback registration rights allowing them to add any of their remaining registrable securities in the registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the

Securities Act, the holders of these shares are entitled to notice of the registration and to request that we include their shares in the registration.

Shelf Registration Rights

Pursuant to the terms of the registration rights agreement, if we are eligible to use a shelf registration statement, then a shareholder or group of shareholders holding at least 10% of our outstanding common shares may request that we effect a shelf registration on similar terms as the demand registrations described above, except that offerings will be conducted as underwritten takedowns. As of March 1, 2020 dievini Hopp BioTech holding GmbH & Co KG and Varuma AG were our only shareholders party to the registration rights agreement holding at least 10% of our outstanding commons shares, representing approximately 41.8% of the voting power of our common shares outstanding as of March 1, 2020. We will only be required to effect one public offering from such shelf registration statement within any six month period, each of which shall be deemed to constitute a demand registration for purposes of the number of demand registrations we are required to effect as described under "—Demand Registration Rights" above.

In August 2018, we filed a registration statement on Form F-3 to register the resale of one of our shareholder's common shares pursuant to the requirements of the registration rights agreement.

Related Person Transaction Policy

Prior to our initial public offering, we entered into a new related person transaction policy under which any such transaction must be approved or ratified by the audit and finance committee. The Board of Directors reviews the policy on a yearly basis and has, lastly, determined that it adequately covers the requirements of SOX controls mechanisms.

Indemnification Agreements

In connection with our initial public offering, we entered into indemnification agreements with our executive officers and directors. The indemnification agreements and our Articles of Association require us to indemnify our executive officers and directors to the fullest extent permitted by law.

C. Interests of Experts and Counsel

Not applicable.

ITEM 8. FINANCIAL INFORMATION

A. Consolidated statements and other financial information

Financial statements

See "Item 18. Financial Statements," which contains our financial statements prepared in accordance with IFRS.

Legal Proceedings

From time to time we may become involved in legal proceedings that arise in the ordinary course of business. During the period covered by the financial statements contained herein, we have not been a party to or paid any damages in connection with litigation that has had a material adverse effect on our financial position. No assurance can be given that future litigation will not have a material adverse effect on our financial position. When appropriate in management's estimation, we may record reserves in our financial statements for pending litigation and other claims.

Dividends and Dividend Policy

We have never declared or paid cash dividends on our capital stock. We intend to retain all available funds and any future earnings, if any, to fund the development and expansion of our business and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination related to dividend policy will be made at the discretion of our board of directors.

Under Swiss law, any dividend must be proposed by our board of directors and approved by our shareholders. In addition, our auditors must confirm that the dividend proposal of our board of directors conforms to Swiss statutory law and our articles of incorporation. A Swiss corporation may pay dividends only if it has sufficient distributable profits brought forward from the previous business years ("*report des bénéfices*") or if it has distributable reserves ("*réserves à libre disposition*"), each as evidenced by its audited standalone statutory balance sheet prepared pursuant to Swiss law and after allocations to reserves required by Swiss law and its articles of association have been deducted. Distributable reserves are generally booked either as "free reserves" ("*réserves libres*") or as "reserve from capital contributions" ("*apports de capital*"). Distributions out of nominal share capital, which is the aggregate nominal value of a corporation's issued shares, may be made only by way of a share capital reduction.

B. Significant changes

A discussion of the significant changes in our business can be found under "Item 4. Information on the Company–A. History and development of the Company" and "Item 4. Information on the Company–B. Business Overview."

ITEM 9. THE OFFER AND LISTING

A. Offering and listing details

See "–C. Markets" below.

B. Plan of distribution

Not applicable.

C. Markets

Our common shares trade on the Nasdaq Global Market under the symbol "ACIU."

D. Selling shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the issue

Not applicable.

ITEM 10. ADDITIONAL INFORMATION

A. Share capital

Not applicable.

B. Memorandum and articles of association

On July 8, 2019, we adopted updated Articles of Association reflecting the increase of the Company's issued share capital following various exercises of options and the corresponding adjustment of the conditional share capital increase for employee benefit plans. The Articles of Association dated July 8, 2019 were filed as Exhibit 3.1 to the Company's Report on Form 6-K, filed with the SEC on November 13, 2019.

We incorporate by reference into this annual report on Form 20-F the description of our Articles of Association contained in our Registration Statement on Form F-1 (File No. 333-211714) filed with the SEC on September 23, 2016, Form F-3 (File No. 333-224694) filed with the SEC on May 4, 2018 and Form F-3 (File No. 333-227016) filed with the SEC on August 24, 2018. Such description, together with the immediately preceding paragraph, sets forth a summary of certain provisions of our Articles of Association as currently in effect.

C. Material contracts

Except as otherwise disclosed in this Annual Report on Form 20-F (including the Exhibits), we are not currently, and have not been in the last two years, party to any material contract, other than contracts entered into in the ordinary course of business.

D. Exchange controls

There are no Swiss governmental laws, decrees or regulations that restrict, in a manner material to us, the export or import of capital, including any foreign exchange controls, or that generally affect the remittance of dividends or other payments to non-residents or non-citizens of Switzerland who hold our common shares.

E. Taxation

The following summary contains a description of the material Swiss and U.S. federal income tax consequences of the acquisition, ownership and disposition of common shares, but it does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to purchase common shares. The summary is based upon the tax laws of Switzerland and regulations thereunder and on the tax laws of the United States and regulations thereunder as of the date hereof, which are subject to change.

Swiss Tax Considerations

This summary of material Swiss tax consequences is based on Swiss law and regulations and the practice of the Swiss tax administration as in effect on the date hereof, all of which are subject to change (or subject to changes in interpretation), possibly with retroactive effect. The summary does not purport to take into account the specific circumstances of any particular shareholder or potential investor and does not relate to persons in the business of buying and selling common shares or other securities. The summary is not intended to be, and should not be interpreted as, legal or tax advice to any particular potential shareholder, and no representation with respect to the tax consequences to any particular shareholder is made.

Current and prospective shareholders are advised to consult their own tax advisers in light of their particular circumstances as to the Swiss tax laws, regulations and regulatory practices that could be relevant for them in connection with the acquiring, owning and selling or otherwise disposing of common shares and receiving dividends and similar cash or in-kind distributions on common shares (including dividends on liquidation proceeds and stock dividends) or distributions on common shares based upon a capital reduction (*remboursements de la valeur nominale*) or reserves paid out of capital contributions (*réserves sur les apports en capital*) and the consequences thereof under the tax laws, regulations and regulatory practices of Switzerland.

Taxation of AC Immune

AC Immune is subject to corporate Swiss federal, cantonal and communal taxation, respectively in Switzerland, Canton of Vaud, Commune of Ecublens, near Lausanne.

We are entitled under Swiss laws to carry forward any losses incurred for a period of seven years and can offset our losses carried forward against future taxes. As of December 31, 2019, we had tax loss carryforwards totaling CHF 64.1 million. There is no certainty that we will make sufficient profits to be able to utilize these tax loss carryforwards in full.

The effective corporate income tax rate (federal, cantonal and communal) where we are domiciled is currently 13.63% as from January 1, 2020 onwards.

As of January 1, 2020, the Company may request for 2020 a tax relief of 60% which would be applied to income from patents and similar rights at communal and cantonal levels. Additionally, a so called super-deduction may be granted for payroll and other expenses of research and development of Swiss origins.

However, the above mentioned tax relief based on the patent box and deductions for research and development may not exceed 50% of the overall taxable profit before these tax relief and deductions.

Notwithstanding the corporate income tax, the corporate capital is taxed at a rate of 0.13% (cantonal and communal tax only, as there is no federal tax on capital). As of January 1, 2020 the capital attributable to patents and similar rights is taken into account with 50% relief in the capital tax calculation.

Federal, cantonal and communal individual income tax and corporate income tax

Non-Resident Shareholders

Shareholders who are not resident in Switzerland for tax purposes, and who, during the relevant taxation year, have not engaged in a trade or business carried on through a permanent establishment or fixed place of business situated in Switzerland for tax purposes (all such shareholders for purposes of this section, "Non-Resident Shareholders"), will not be subject to any Swiss federal, cantonal and communal income tax on dividends and similar cash or in-kind distributions on Shares (including liquidation proceeds and stock dividends) (for the purposes of this section, "Dividends"), distributions based upon a capital reduction (*remboursements liés à la réduction de la valeur nominale des actions*) and distributions paid out of reserves from capital contributions (*apports de capital*) on Shares, or capital gains realized on the sale or other disposition of Shares (see, however, "—Swiss Federal *Withholding Tax"* below for a summary of Swiss federal withholding tax on Dividends.

Resident Private Shareholders

Swiss resident individuals who hold their Shares as private assets are required to include Dividends, but not distributions based upon a capital reduction (*remboursements liés à la réduction de la valeur nominale des actions*) and distributions paid out of reserves from capital contributions (*apports de capital*), in their personal income tax return and are subject to Swiss federal, cantonal and communal income tax on any net taxable income for the relevant taxation period, including the Dividends, but not the distributions based upon a capital reduction (*remboursements liés à la réduction de la valeur nominale des actions*) and distributions paid out of reserves from capital contributions (*apports de capital)*. Capital gains resulting from the sale or other disposition of Shares are not subject to Swiss federal, cantonal and communal income tax, and conversely, capital losses are not tax-deductible for Resident Private Shareholders (the shareholders referred to in this paragraph for the purposes of this section, "Resident Private Shareholders"). See "*Domestic Commercial Shareholders*" below for a summary of the taxation treatment applicable to Swiss resident individuals, who, for income tax purposes, are classified as "professional securities dealers."

Domestic Commercial Shareholders

Corporate and individual shareholders who are resident in Switzerland for tax purposes, and corporate and individual shareholders who are not resident in Switzerland, and who, in each case, hold their Shares as part of a trade or business carried on in Switzerland, in the case of corporate and individual shareholders not resident in Switzerland, through a permanent establishment or fixed place of business situated, for tax purposes, in Switzerland, are required to recognize Dividends, distributions based upon a capital reduction (*remboursements liés à la réduction de la valeur nominale des actions*) and distributions paid out of reserves from capital contributions (*apports de capital*) received on Shares and capital gains or losses realized on the sale or other disposition of Shares in their income statement for the relevant taxation period and are subject to Swiss federal, cantonal and communal individual or corporate income tax, as the case may be, on any net taxable earnings for such taxation period. The same taxation treatment also applies to Swiss-resident private individuals who, for income tax purposes, are classified as "professional securities dealers" for reasons of, *inter alia*, frequent dealing, or leveraged investments, in shares and other securities (the shareholders referred to in this paragraph for purposes of this section, "Domestic Commercial Shareholders"). Domestic Commercial Shareholders who are corporate taxpayers may be eligible for dividend relief (*réduction pour participations*) in respect of Dividends and distributions based upon a capital reduction (*remboursements liés à la réduction de la valeur nominale des actions*) and distributions paid out of reserves from capital contributions (*apports de capital*) if the Shares held by them as part of a Swiss business have an aggregate market value of at least CHF 1 million.

Swiss cantonal and communal private wealth tax and capital tax

Non-Resident Shareholders

Non-Resident Shareholders are not subject to Swiss cantonal and communal private wealth tax or capital tax.

Resident Private Shareholders and Domestic Commercial Shareholders

Resident Private Shareholders and Domestic Commercial Shareholders who are individuals are required to report their Shares as part of their private wealth or their Swiss business assets, as the case may be, and will be subject to Swiss cantonal and communal private wealth tax on any net taxable wealth (including Shares), in the

case of Domestic Commercial Shareholders to the extent the aggregate taxable wealth is allocable to Switzerland. Domestic Commercial Shareholders who are corporate taxpayers are subject to Swiss cantonal and communal capital tax on taxable capital to the extent the aggregate taxable capital is allocable to Switzerland.

Swiss Federal Withholding Tax

Dividends that the Company pays on the Shares are subject to Swiss Federal withholding tax *(impôt anticipé)* at a rate of 35% on the gross amount of the Dividend. The Company is required to withhold the Swiss federal withholding tax from the Dividend and remit it to the Swiss Federal Tax Administration. Distributions based upon a capital reduction (*remboursements liés à la réduction de la valeur nominale des actions*) and distributions paid out of reserves from contributions (*apports de capital*) are not subject to Swiss federal withholding tax.

The Swiss federal withholding tax on a Dividend will be refundable in full to a Resident Private Shareholder and to a Domestic Commercial Shareholder, who, in each case, *inter alia*, as a condition to a refund, duly reports the Dividend in his individual income tax return as income or recognizes the Dividend in his income statement as earnings, as applicable.

A Non-Resident Shareholder may be entitled to a partial or full refund, as the case may be, of the Swiss federal withholding tax on a Dividend if the country of his or her residence for tax purposes has entered into a bilateral treaty for the avoidance of double taxation with Switzerland and the conditions of such treaty are met. Such shareholders should be aware that the procedures for claiming treaty benefits (and the time required for obtaining a refund) might differ from country to country. For example, a shareholder who is a resident of the U.S. for the purposes of the bilateral tax treaty between the U.S. and Switzerland is eligible for a partial refund of the amount of the withholding tax in excess of the 15% treaty rate, provided such shareholder: (i) qualifies for benefits under this treaty and qualifies as beneficial owner of the Dividends; (ii) holds, directly or indirectly, less than 10% of the voting stock of the Company; (iii) does not qualify as a pension scheme or retirement arrangement for the purpose of the bilateral treaty; and (iv) does not conduct business through a permanent establishment or fixed base in Switzerland to which the Shares are attributable. Such an eligible U.S. shareholder may apply for a refund of the amount of the withholding tax in excess of the 15% treaty rate. The applicable refund request form may be filed with the Swiss Federal Tax Administration following receipt of the Dividend and the relevant deduction certificate, however no later than 31 December of the third year following the calendar year in which the Dividend was payable.

Swiss Federal Stamp Taxes

The Company will be subject to and pay to the Swiss Federal Tax Administration a 1% Swiss federal issuance stamp tax (*taxe sur les émissions*) on the consideration received for the issuance of the Shares less certain costs incurred in connection with the issuance. The issuance and delivery of the Shares to the initial shareholders at the offering price is not subject to Swiss federal securities turnover tax (*droit de timbre de négociation*).

Any subsequent dealings in the Shares, where a bank or another securities dealer in Switzerland, as defined in the Swiss Federal Stamp Tax Act, acts as an intermediary, or is a party, to the transaction, are, subject to certain exemptions provided for in the Swiss Federal Stamp Tax Act, subject to Swiss securities transfer stamp duty tax at an aggregate tax rate of up to 0.15% of the consideration paid for such Shares.

Material U.S. Federal Income Tax Considerations for U.S. Holders

The following is a description of the material U.S. federal income tax consequences to U.S. Holders, as defined below, of owning and disposing of our common shares. It does not describe all tax considerations that may be relevant to a particular person’s decision to acquire common shares.

This discussion applies only to a U.S. Holder that holds common shares as capital assets for U.S. federal income tax purposes. In addition, it does not describe all of the U.S. federal income tax consequences that may be relevant in light of a U.S. Holder’s particular circumstances, including alternative minimum tax consequences, the potential application of the provisions of the Code known as the Medicare contribution tax and tax consequences applicable to U.S. Holders subject to special rules, such as:

- certain financial institutions;
- dealers or traders in securities who use a mark-to-market method of tax accounting;

- persons holding common shares as part of a hedging transaction, straddle, wash sale, conversion transaction or other integrated transaction or persons entering into a constructive sale with respect to the common shares;
- U.S. Holders whose functional currency for U.S. federal income tax purposes is not the U.S. dollar;
- entities classified as partnerships for U.S. federal income tax purposes;
- tax-exempt entities, including an "individual retirement account" or "Roth IRA";
- persons that own or are deemed to own ten percent or more of our shares, by vote or value; or
- persons holding common shares in connection with a trade or business conducted outside of the United States.

If an entity that is classified as a partnership for U.S. federal income tax purposes holds common shares, the U.S. federal income tax treatment of a partner will generally depend on the status of the partner and the activities of the partnership. Partnerships holding common shares and partners in such partnerships should consult their tax advisers as to the particular U.S. federal income tax consequences of owning and disposing of the common shares.

This discussion is based on the Code, administrative pronouncements, judicial decisions, final, temporary and proposed Treasury regulations, and the income tax treaty between Switzerland and the United States (the "Treaty") all as of the date hereof, any of which is subject to change or differing interpretations, possibly with retroactive effect.

A "U.S. Holder" is a holder who, for U.S. federal income tax purposes, is a beneficial owner of common shares, who is eligible for the benefits of the Treaty and who is:

- a citizen or individual resident of the United States;
- a corporation, or other entity taxable as a corporation, created or organized in or under the laws of the United States, any state therein or the District of Columbia; or
- an estate or trust the income of which is subject to U.S. federal income taxation regardless of its source.

U.S. Holders should be aware that the Company has determined that is was likely a PFIC for 2019, and may be a PFIC in 2020 or one or more future years, which could result in adverse U.S. federal income tax consequences for U.S. Holders. See "—Passive Foreign Investment Company Rules" below. U.S. Holders should consult their tax advisers concerning the U.S. federal, state, local and non-U.S. tax consequences of owning and disposing of common shares in their particular circumstances, including the consequences to them under the PFIC rules discussed below.

Taxation of Distributions

As discussed above under "Dividends and Dividend Policy," we do not currently expect to make distributions on our common shares. In the event that we do make distributions of cash or other property, subject to the passive foreign investment company rules described below, distributions paid on common shares, other than certain pro rata distributions of common shares, will generally be treated as dividends to the extent paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Because we do not maintain calculations of our earnings and profits under U.S. federal income tax principles, we expect that distributions generally will be reported to U.S. Holders as dividends. For so long as our common shares are listed on Nasdaq or we are eligible for benefits under the Treaty, dividends paid to certain non-corporate U.S. Holders will be eligible for taxation as "qualified dividend income" and therefore, subject to applicable limitations, will be taxable at rates not in excess of the long-term capital gain rate applicable to such U.S. Holder.

U.S. Holders should consult their tax advisers regarding the availability of the reduced tax rate on dividends in their particular circumstances. The amount of a dividend will include any amounts withheld by us in respect of Swiss income taxes. The amount of the dividend will be treated as foreign-source dividend income to U.S.

Holders and will not be eligible for the dividends-received deduction generally available to U.S. corporations under the Code. Dividends will be included in a U.S. Holder's income on the date of the U.S. Holder's receipt of the dividend. The amount of any dividend income paid in Swiss Francs will be the U.S. dollar amount calculated by reference to the exchange rate in effect on the date of actual or constructive receipt, regardless of whether the payment is in fact converted into U.S. dollars at that time. If the dividend is converted into U.S. dollars on the date of receipt, a U.S. Holder should not be required to recognize foreign currency gain or loss in respect of the dividend income. A U.S. Holder may have foreign currency gain or loss if the dividend is converted into U.S. dollars after the date of receipt.

Subject to applicable limitations, some of which vary depending upon the U.S. Holder's particular circumstances, Swiss income taxes withheld from dividends on common shares at a rate not exceeding the rate provided by the Treaty will be creditable against the U.S. Holder's U.S. federal income tax liability. The rules governing foreign tax credits are complex and U.S. Holders should consult their tax advisers regarding the creditability of foreign taxes in their particular circumstances. In lieu of claiming a foreign tax credit, U.S. Holders may, at their election, deduct foreign taxes, including any Swiss income tax, in computing their taxable income, subject to generally applicable limitations under U.S. law. An election to deduct foreign taxes instead of claiming foreign tax credits applies to all foreign taxes paid or accrued in the taxable year.

Sale or Other Disposition of Common Shares

Subject to the passive foreign investment company rules described below, gain or loss realized on the sale or other disposition of common shares will be capital gain or loss, and will be long-term capital gain or loss if the U.S. Holder held the common shares for more than one year. The amount of the gain or loss will equal the difference between the U.S. Holder's tax basis in the common shares disposed of and the amount realized on the disposition, in each case as determined in U.S. dollars. This gain or loss will generally be U.S.-source gain or loss for foreign tax credit purposes. The deductibility of capital losses is subject to various limitations.

Passive Foreign Investment Company Rules

Under the Code, we will be a PFIC for any taxable year in which, after the application of certain "look-through" rules with respect to subsidiaries, either (i) 75% or more of our gross income consists of "passive income," or (ii) 50% or more of the average quarterly value of our assets consists of assets that produce, or are held for the production of, "passive income." For purposes of the above calculations, we will be treated as if we hold our proportionate share of the assets of, and receive directly our proportionate share of the income of, any other corporation in which we directly or indirectly own at least 25%, by value, of the shares of such corporation. Passive income generally includes interest, dividends, rents, certain non-active royalties and capital gains. Although we have not obtained independent valuations of our assets during 2019 and thus are not in a position to make a definitive determination whether we were a PFIC in 2019, based on our income and assets during 2019 and certain estimates and assumptions, including as to both the total value and the relative value of our assets as implied by our market capitalization during 2019, we believe that it is likely that we were a PFIC in 2019. In addition, it is possible that we may also be a PFIC in 2020 or one or more future years because, among other things, (i) we may not generate a substantial amount of non-passive gross income, for U.S. federal income tax purposes, in any year, (ii) we currently own, and expect to continue to own, a substantial amount of passive assets, including cash, and (iii) the estimated valuation, for PFIC purposes, of our assets that generate non-passive income for PFIC purposes, including our intangible assets, is likely to be dependent in large part on our market capitalization and is therefore uncertain and may vary substantially over time. Accordingly, there can be no assurance that we will not be a PFIC in 2020 or any future taxable year.

If we were a PFIC in 2019 or in any future year during which a U.S. investor held or holds common shares, we generally would continue to be treated as a PFIC with respect to that U.S. Holder for all succeeding years during which the U.S. Holder holds common shares, even if we ceased to meet the threshold requirements for PFIC status.

If we were a PFIC in 2019 or in any future year during which a U.S. investor held or holds common shares (assuming such U.S. Holder has not made a timely mark-to-market election, as further described below), gain recognized by a U.S. Holder on a sale or other disposition (including certain pledges) of the common shares would be allocated ratably over the U.S. Holder's holding period for the common shares. The amounts allocated to the taxable year of the sale or other disposition and to any year before we became a PFIC would be taxed as ordinary income. The amount allocated to each other taxable year would be subject to tax at the highest rate in effect for individuals or corporations, as appropriate, for that taxable year, and an interest charge would be imposed on the amount allocated to that taxable year. Further, to the extent that any distribution received by a U.S. Holder on its common shares exceeds 125% of the average of the annual distributions on the common

shares received during the preceding three years or the U.S. Holder's holding period, whichever is shorter, that distribution would be subject to taxation in the same manner as gain, described immediately above.

A U.S. Holder can avoid certain of the adverse rules described above by making a mark-to-market election with respect to its common shares, provided that the common shares are "marketable." Common shares will be marketable if they are "regularly traded" on a "qualified exchange" or other market within the meaning of applicable Treasury regulations. If a U.S. Holder makes the mark-to-market election, it generally will recognize as ordinary income any excess of the fair market value of the common shares at the end of each taxable year over their adjusted tax basis, and will recognize an ordinary loss in respect of any excess of the adjusted tax basis of the common shares over their fair market value at the end of the taxable year (but only to the extent of the net amount of income previously included as a result of the mark-to-market election). If a U.S. Holder makes the election, the holder's tax basis in the common shares will be adjusted to reflect the income or loss amounts recognized. Any gain recognized on the sale or other disposition of common shares in a year when we are a PFIC will be treated as ordinary income and any loss will be treated as an ordinary loss (but only to the extent of the net amount of income previously included as a result of the mark-to-market election).

In addition, in order to avoid the application of the foregoing rules, a United States person that owns stock in a PFIC for U.S. federal income tax purposes may make a "qualified electing fund" election (a "QEF Election") with respect to such PFIC if the PFIC provides the information necessary for such election to be made. If a United States person makes a QEF Election with respect to a PFIC, the United States person will be currently taxable on its pro rata share of the PFIC's ordinary earnings and net capital gain (at ordinary income and capital gain rates, respectively) for each taxable year that the entity is classified as a PFIC and will not be required to include such amounts in income when actually distributed by the PFIC. We do not intend to provide information necessary for U.S. Holders to make qualified electing fund elections.

In addition, if we were a PFIC or, with respect to particular U.S. Holder, were treated as a PFIC for the taxable year in which we paid a dividend or for the prior taxable year, the preferential dividend rates discussed above with respect to dividends paid to certain non-corporate U.S. Holders would not apply.

If a U.S. Holder owns common shares during any year in which we are a PFIC, the holder generally must file annual reports containing such information as the U.S. Treasury may require on IRS Form 8621 (or any successor form) with respect to us, generally with the holder's federal income tax return for that year.

U.S. Holders should consult their tax advisers concerning our potential PFIC status and the potential application of the PFIC rules.

Information Reporting and Backup Withholding

Payments of dividends and sales proceeds that are made within the United States or through certain U.S.-related financial intermediaries generally are subject to information reporting, and may be subject to backup withholding, unless (i) the U.S. Holder is a corporation or other exempt recipient or (ii) in the case of backup withholding, the U.S. Holder provides a correct taxpayer identification number and certifies that it is not subject to backup withholding.

The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against the holder's U.S. federal income tax liability and may entitle it to a refund, provided that the required information is timely furnished to the IRS.

Information With Respect to Foreign Financial Assets

Certain U.S. Holders who are individuals (and, under proposed regulations, certain entities) may be required to report information relating to an interest in our common shares, subject to certain exceptions (including an exception for common shares held in accounts maintained by certain U.S. financial institutions). U.S. Holders should consult their tax advisers regarding the effect, if any, of this legislation on their ownership and disposition of the common shares.

F. Dividends and paying agents

Not applicable.

G. Statement by experts

Not applicable.

H. Documents on display

We are subject to the informational requirements of the Exchange Act. Accordingly, we are required to file reports and other information with the SEC, including annual reports on Form 20-F and reports on Form 6-K. You may inspect and copy reports and other information filed with the SEC at the Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet website that contains reports and other information about issuers, like us, that file electronically with the SEC. The address of that website is www.sec.gov.

Additionally, pursuant to Swiss law, any shareholder of record has the right to receive a free copy of this Annual Report and to inspect this Annual Report at any time at our registered office in Ecublens, near Lausanne, Canton of Vaud, Switzerland.

As a foreign private issuer, we are exempt under the Exchange Act from, among other things, the rules prescribing the furnishing and content of proxy statements, and our executive officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we will not be required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act.

I. Subsidiary information

Not applicable.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company's activities expose it to the following financial risks: market risk (currency and interest rate risk), credit risk and liquidity risk. The Company's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Company's financial performance.

Market risk arises from our exposure to fluctuation in currency exchange rates. We are exposed to market risks in the ordinary course of our business, which are principally limited to foreign currency exchange rate fluctuations and to a lesser degree, interest rate fluctuations.

Market Risk

Foreign exchange risk

The Company is exposed to foreign exchange risk arising from currency exposures, primarily with respect to the EUR, USD and to a lesser extent to GBP, DKK and SEK. The currency exposure is not hedged. However, the Company has the policy of matching its cash holdings to the currency structure of its expenses. As of December 31, 2019, the Company holds almost 82% of its overall cash and cash equivalents balance in CHF with the remainder predominantly in EUR and USD (see Note 6 "Cash and cash equivalents and financial assets" of the financial statements). The Company holds almost 88% of its liquidity (cash and cash equivalents plus short-term financial assets) in CHF.

We have a number of collaboration agreements where the upfront payments, milestone payments and future royalty payments are not denominated in Swiss Francs, our reporting currency. Furthermore, many of our research and development activities are subcontracted to parties outside of Switzerland and we purchase materials from suppliers outside of Switzerland. As a result, we are exposed to foreign exchange risk. Approximately 50% of our total costs are incurred in currencies other than the Swiss Franc. Due to the size of some of the income received from collaboration agreements but also the high percentage of our costs indirectly being in foreign currencies, a hypothetical 10% change in exchange rates relative to the Swiss Franc could have a material impact on our financial statements.

Interest rate risk

We maintain financial instruments in accordance with our treasury management policy. The primary objectives of our policy are to preserve principal, maintain proper liquidity and meet operating needs. Our financial assets are subject to interest rate risk and will decrease in value if market interest rates increase due to the current negative interest rates in Switzerland and our policy to maintain the majority of our cash and cash equivalents in our functional currency. However, due to the conservative nature of our investments and relatively short duration, interest rate risk is mitigated. We do not own derivative financial instruments. Accordingly, we do not believe that there is any material market risk exposure with respect to derivative or other financial instruments.

Credit risk

The Company maintains a formal treasury risk and investment management policy to limit counterparty credit risk. As of December 31, 2019, the Company's cash and cash equivalents and short-term financial assets are held with four financial institutions each with a high credit-rating assigned by international credit-rating agencies. The maximum amount of credit risk is the carrying amount of the financial assets. Receivables are fully performing, not past due and not impaired (see Note 6 "Cash and cash equivalents and financial assets" and Note 8 "Other current receivables").

Liquidity risk

Inherent in the Company's business are various risks and uncertainties, including its limited operating history and the high uncertainty that new therapeutic concepts will succeed. AC Immune's success may depend in part upon its ability to (i) establish and maintain a strong patent position and protection, (ii) enter into collaborations with partners in the biotech and pharmaceutical industry, (iii) acquire and keep key personnel employed, and (iv) acquire additional capital to support its operations.

The Company's approach of managing liquidity is to ensure sufficient cash to meet its liabilities when due. Therefore, management closely monitors the cash position on rolling forecasts based on expected cash flow to enable the Company to finance its operations for at least 18 months.

Based on the Company's current liquidity position, comprised of cash and cash equivalents and short-term financial assets, the Company is well financed through Q1 2024, excluding any potential milestones

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

A. Debt securities

Not applicable.

B. Warrants and rights

Not applicable.

C. Other securities

Not applicable.

D. American Depositary Shares

Not applicable.

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

A. Defaults

No matters to report.

B. Arrears and delinquencies

No matters to report.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

E. Use of Proceeds

Not applicable.

ITEM 15. CONTROLS AND PROCEDURES

A. Disclosure Controls and Procedures

As of December 31, 2019, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we performed an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act). There are inherent limitations to the effectiveness of any disclosure controls and procedures system, including the possibility of human error and circumventing or overriding them. Even if effective, disclosure controls and procedures can provide only reasonable assurance of achieving their control objectives.

Based on such evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective in recording, processing, summarizing and reporting on a timely basis, information required to be included in periodic filings under the Exchange Act and that such information is accumulated and communicated to management, including our Chief Executive and Chief Financial Officers, as appropriate to allow timely decisions regarding required disclosure.

B. Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) of the Exchange Act. Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based upon criteria established in *Internal Control – Integrated Framework* (2013) by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our internal control over financial reporting was effective as of December 31, 2019.

C. Attestation Report of the Registered Public Accounting Firm

This Annual Report does not include an attestation report of our registered public accounting firm due to an exemption provided to emerging growth companies under the JOBS Act.

D. Changes in Internal Control over Financial Reporting

There have been no changes in the Company's internal control over financial reporting during the year ended December 31, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 16. [RESERVED]

ITEM 16A. Audit committee financial experts

Our board of directors has determined that Peter Bollmann, Thomas Graney, Werner Lanthaler and Martin Velasco are audit committee financial experts, as that term is defined by the SEC, and are independent for the purposes of SEC and Nasdaq rules.

ITEM 16B. Code of ethics

Code of business conduct and ethics

We have adopted a Code of Business Conduct and Ethics which covers a broad range of matters including the handling of conflicts of interest, compliance issues and other corporate policies such as insider trading and equal opportunity and non-discrimination standards. Our Code of Business Conduct applies to all of our directors, executive officers and employees. We have published our Code of Business Conduct and Ethics on our website, *www.acimmune.com*. The information contained on our website is not a part of this Annual Report.

ITEM 16C. Principal accountant fees and services

in CHF thousands	For the Years Ended December 31, 2019	2018
Audit Fees	300	390
Audit-related Fees	44	20
Total Fees	344	410

For the year ended December 31, 2019, PricewaterhouseCoopers SA ("PwC") was the Company's auditor for the IFRS and statutory accounts. At the ordinary annual general meeting on June 28, 2019, the shareholders appointed PwC as the Company's auditor for a term of office of one year.

Audit fees for services provided by PwC in 2019 include the standard audit work performed each fiscal year necessary to allow the auditor to issue an opinion on our Financial Statements and to issue an opinion on the local statutory financial statements. Audit fees also include services that can be provided only by the external auditor such as reviews of quarterly financial results and review of our shelf registration statements and prospectus offerings.

Audit-related fees consisted of fees billed for assurance and related services that were reasonably related to the performance of the audit or review of our financial statements or for services that were traditionally performed by the external auditor.

Pre-Approval Policies and Procedures

In accordance with the requirements of the U.S. Sarbanes-Oxley Act of 2002 and rules issued by the SEC, we review and pre-approve of any services performed by PwC. The procedure requires that all proposed future engagements of PwC for audit and permitted non-audit services are submitted to the Audit and Finance Committee for approval prior to the beginning of any such services. In accordance with this policy, all services performed by and fees paid to PwC in this Item 16C, were approved by the Audit and Finance Committee.

ITEM 16D. Exemptions from the listing standards for audit committees

Not applicable

ITEM 16E. Purchases of equity securities by the issuer and affiliated purchasers

In 2019, no purchases of our equity securities were made by or on behalf of AC Immune SA or any affiliated purchaser.

ITEM 16F. Change in registrant's certifying accountant

Not applicable.

ITEM 16G. Corporate governance

Summary of Significant Corporate Governance Differences from Nasdaq Listing Standards

Our common shares are listed on the Nasdaq Global Market. We are therefore required to comply with certain of the Nasdaq's corporate governance listing standards, or the Nasdaq Standards. As a foreign private issuer, we may follow our home country's corporate governance practices in lieu of certain of the Nasdaq Standards. Our corporate governance practices differ in certain respects from those that U.S. companies must adopt in order to maintain a Nasdaq listing. A brief, general summary of those differences is provided as follows.

Independent Directors

Swiss law does not require that a majority of our board of directors consist of independent directors. Our board of directors therefore may include fewer independent directors than would be required if we were subject to Nasdaq Listing Rule 5605(b)(1). In addition, we are not subject to Nasdaq Listing Rule 5605(b)(2), which requires that independent directors must regularly have scheduled meetings at which only independent directors are present.

Compensation Committee

Although Swiss law also requires that we have a compensation committee, we will follow home country requirements with respect to such committee. As a result, our practice will vary from the requirements of Nasdaq Listing Rule 5605(d), which sets forth certain requirements as to the responsibilities, composition and independence of compensation committees.

Quorum requirements

In accordance with Swiss law and generally accepted business practices, our articles of association do not provide quorum requirements generally applicable to general meetings of shareholders. Our practice thus varies from the requirement of Nasdaq Listing Rule 5620(c), which requires an issuer to provide in its bylaws for a generally applicable quorum, and that such quorum may not be less than one-third of the outstanding voting stock.

Solicitation of proxies

Our articles of association provide for an independent proxy holder elected by our shareholders, who may represent our shareholders at a general meeting of shareholders, and we must provide shareholders with an agenda and other relevant documents for the general meeting of shareholders. However, Swiss law does not have a regulatory regime for the solicitation of proxies and company solicitation of proxies is prohibited for public companies in Switzerland. Thus, our practice will vary from the requirement of Nasdaq Listing Rule 5620(b), which sets forth certain requirements regarding the solicitation of proxies.

Shareholder approval

We have opted out of shareholder approval requirements for the issuance of securities in connection with certain events such as the acquisition of stock or assets of another company, the establishment of or amendments to equity-based compensation plans for employees, a change of control of us and certain private placements. To this extent, our practice varies from the requirements of Nasdaq Listing Rule 5635, which generally requires an issuer to obtain shareholder approval for the issuance of securities in connection with such events.

ITEM 16H. Mine safety disclosure

Not applicable.

PART III

ITEM 17. Financial statements

We have responded to Item 18 in lieu of this item.

ITEM 18. Financial statements

Financial Statements are filed as part of this Annual Report, see page F-1.

ITEM 19. Exhibits

(a) The following documents are filed as part of Annual Report on Form 20-F:

2.1	Registration Rights Agreement (incorporated herein by reference to Exhibit 4.1 to the Company's Registration Statement on Form F-1 (File No. 333-211714) filed with the SEC on May 31, 2016)
3.1	Articles of Association of AC Immune SA (incorporated herein by reference to Exhibit 3.1 to the Company's Report on Form 6-K, filed with the SEC on November 13, 2019)
4.1	Research Collaboration and License Agreement between AC Immune SA Corporation and Genentech, Inc. dated November 6, 2006 (incorporated herein by reference to Exhibit 10.1 to the Company's Registration Statement on Form F-1 (File No. 333-211714) filed with the SEC on May 31, 2016)
4.2	Amendment to the Research Collaboration and License Agreement between AC Immune SA Corporation and Genentech, Inc. dated May 7, 2015 (incorporated herein by reference to Exhibit 10.2 to the Company's Registration Statement on Form F-1 (File No. 333-211714) filed with the SEC on May 31, 2016)
4.3	Research Collaboration and License Agreement between AC Immune SA Corporation and Genentech, Inc. dated June 15, 2012 (incorporated herein by reference to Exhibit 10.3 to the Company's Registration Statement on Form F-1 (File No. 333-211714) filed with the SEC on May 31, 2016)
4.4	License and Collaboration Agreement between Piramal Imaging Ltd., Piramal Imaging SA and AC Immune SA, dated May 9, 2014 (incorporated herein by reference to Exhibit 10.4 to the Company's Registration Statement on Form F-1 (File No. 333-211714) filed with the SEC on May 31, 2016)
4.5	License, Development and Commercialization Agreement between Janssen Pharmaceuticals, Inc. and AC Immune SA, dated December 24, 2014 (incorporated herein by reference to Exhibit 10.5 to the Company's Registration Statement on Form F-1 (File No. 333-211714) filed with the SEC on May 31, 2016)
4.6	Form of Indemnity Agreement (incorporated herein by reference to Exhibit 10.6 to the Company's Registration Statement on Form F-1 (File No. 333-211714) filed with the SEC on May 31, 2016)
4.7	AC Immune SA 2013 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.7 to the Company's Registration Statement on Form F-1 (File No. 333-211714) filed with the SEC on May 31, 2016)
4.8	Subscription Agreement among Fidelity entities and AC Immune SA, dated October 16, 2015 (incorporated herein by reference to Exhibit 10.8 to the Company's Registration Statement on Form F-1 (File No. 333-211714) filed with the SEC on May 31, 2016)
4.9	Subscription Agreement among Temasek entities and AC Immune SA, dated October 16, 2015 (incorporated herein by reference to Exhibit 10.9 to the Company's Registration Statement on Form F-1 (File No. 333-211714) filed with the SEC on May 31, 2016)
4.10	Stock Option Plan - AC Immune of December 31, 2004 (incorporated herein by reference to Exhibit 99.03 to the Company's Registration Statement on Form S-8, filed with the SEC on September 29, 2016)
4.11	Employee Stock Option and Share Plan of AC Immune (2005 Plan) (incorporated herein by reference to Exhibit 99.02 to the Company's Registration Statement on Form S-8, filed with the SEC on September 29, 2016)
4.12	AC Immune SA 2013 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.7 to the Company's Registration Statement on Form F-1, filed with the SEC on May 31, 2016)
4.13	AC Immune SA 2016 Stock Option and Incentive Plan (incorporated herein by reference to Exhibit 99.08 to the Company's Report on Form 6-K, filed with the SEC on October 13, 2016)
4.14	License Agreement between AC Immune SA and Eli Lilly and Company, dated December 11, 2018 (incorporated herein by reference to Exhibit 4.14 to the Amendment No. 1 to the Company's Annual Report on Form 20-F/A, filed with the SEC on April 19, 2019)
4.15	First Amendment to License Agreement between AC Immune SA and Eli Lilly and Company, dated September 19, 2019 (incorporated herein by reference to Exhibit 10.1 to the Company's Report on Form 6-K, filed with the SEC on September 20, 2019)
4.16	Convertible Note Agreement between AC Immune SA and Eli Lilly and Company, dated December 11, 2018 (incorporated herein by reference to Exhibit 4.15 to the Company's Annual Report on Form 20-F, filed with the SEC on March 21, 2019)
4.17	Second Amendment to License Agreement between AC Immune SA and Eli Lilly and Company, dated March 20, 2020 (incorporated herein by reference to Exhibit 10.1 to the Company's Report in Form 6-K, filed with the SEC on March 20, 2020)
4.18*	Description of Securities
12.1*	Certification of Andrea Pfeifer pursuant to 17 CFR 240.13a-14(a)
12.2*	Certification of Joerg Hornstein pursuant to 17 CFR 240.13a-14(a)
13.1*	Certification of Andrea Pfeifer pursuant to 17 CFR 240.13a-14(b) and 18 U.S.C.1350
13.2*	Certification of Joerg Hornstein pursuant to 17 CFR 240.13a-14(b) and 18 U.S.C.1350
15.1*	Consent of Ernst & Young AG
15.2*	Consent of PricewaterhouseCoopers SA

101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

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* Filed herewith

(b) Financial Statement Schedules

None.

Signatures

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this Annual Report on its behalf.

AC IMMUNE SA

Date: March 30, 2020

By: /s/ Andrea Pfeifer
Name: Andrea Pfeifer
Title: Chief Executive Officer

By: /s/ Joerg Hornstein
Name: Joerg Hornstein
Title: Chief Financial Officer

INDEX TO FINANCIAL STATEMENTS

Audited Financial Statements — AC IMMUNE SA

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of AC Immune SA

Opinion on the Financial Statements

We have audited the accompanying balance sheets of AC Immune SA (the "Company") as of December 31, 2019 and 2018, and the related statements of income/(loss), comprehensive income/(loss), changes in equity and cash flows for each of the two years in the period ended December 31, 2019, including the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2019 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Change in Accounting Principle

As discussed in Notes 3 and 5 to the financial statements, the Company changed the manner in which it accounts for leases in 2019.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers SA

Lausanne, Switzerland
March 30, 2020

We have served as the Company's auditor since 2018.

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of AC Immune SA

Opinion on the Financial Statements

We have audited the accompanying statement of income, comprehensive income, changes in equity and cash flows for the year ended December 31, 2017, of AC Immune SA (the Company), and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the results of operations and cash flows for the year ended December 31, 2017, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

/s/ Ernst & Young AG

We served as the Company's auditor from 2009 to 2018.

Petit-Lancy, Switzerland

March 20, 2018

Financial Statements (IFRS)

Balance Sheets
(in CHF thousands)

	Note	As of December 31, 2019	2018
ASSETS			
Non-current assets			
Property, plant and equipment	4	3,917	3,324
Right-of-use assets	5	2,255	—
Long-term financial assets	6	304	304
Total non-current assets		6,476	3,628
Current assets			
Prepaid expenses	7	2,788	2,364
Accrued income	7	1,095	3,667
Finance receivable	11	—	199
Other current receivables	8	304	236
Short-term financial assets	6	95,000	30,000
Cash and cash equivalents	6	193,587	156,462
Total current assets		292,774	192,928
Total assets		299,250	196,556
SHAREHOLDERS' EQUITY AND LIABILITIES			
Shareholders' equity			
Share capital	9	1,437	1,351
Share premium	9	346,526	298,149
Accumulated losses		(75,521)	(121,877)
Total shareholders' equity		272,442	177,623
Non-current liabilities			
Long-term financing obligation	11	—	186
Long-term lease liabilities	5	1,813	—
Net employee defined benefit liabilities	16	7,485	5,665
Total non-current liabilities		9,298	5,851
Current liabilities			
Trade and other payables	10	142	1,979
Accrued expenses	10	11,797	10,420
Short-term deferred income	12	4,477	351
Short-term financing obligation	11	652	332
Short-term lease liabilities	5	442	—
Total current liabilities		17,510	13,082
Total liabilities		26,808	18,933
Total shareholders' equity and liabilities		299,250	196,556

The accompanying notes are an integral part of these financial statements.

Statements of Income/(Loss)
(in CHF thousands except for per share data)

	Note	For the Years Ended December 31, 2019	2018	2017
Revenues				
Contract revenue	12	111,026	7,194	20,255
Total revenue		111,026	7,194	20,255
Operating expenses				
Research & development expenses	13	(50,432)	(44,277)	(32,663)
General & administrative expenses	13	(16,058)	(12,467)	(10,131)
Total operating expenses		(66,490)	(56,744)	(42,794)
Operating income/(loss)		44,536	(49,550)	(22,539)
Finance income/(expense), net	13	(2,046)	(1,132)	(4,055)
Change in fair value of conversion feature	13	4,542	—	—
Interest income	13	304	29	330
Interest expense	13	(1,894)	(298)	(147)
Finance result, net		906	(1,401)	(3,872)
Income/(loss) before tax		45,442	(50,951)	(26,411)
Income tax expense	15	—	—	—
Income/(loss) for the period		45,442	(50,951)	(26,411)
Earnings/(loss) per share (EPS):				
Basic income/(loss) for the period attributable to equity holders	19	0.64	(0.82)	(0.46)
Diluted income/(loss) for the period attributable to equity holders	19	0.64	(0.82)	(0.46)

Statements of Comprehensive Income/(Loss)
(in CHF thousands)

	For the Years Ended December 31, 2019	2018	2017
Income/(loss) for the period	45,442	(50,951)	(26,411)
Other comprehensive loss not to be reclassified to income or loss in subsequent periods (net of tax)			
Re-measurement losses on defined benefit plans (net of tax)	(1,304)	(302)	(780)
Total comprehensive income/(loss), net of tax	44,138	(51,253)	(27,191)

The accompanying notes are an integral part of these financial statements.

Statements of Changes in Equity
(in CHF thousands)

	Note	Share capital	Share premium	Accumulated losses	Total
Balance as of January 1, 2017		1,135	188,166	(46,921)	142,380
Net loss for the period		—	—	(26,411)	(26,411)
Other comprehensive loss		—	—	(780)	(780)
Total comprehensive loss		—	—	(27,191)	(27,191)
Share-based payments	17	—	—	1,579	1,579
Issuance of shares:					
Restricted Share Awards	17	—	74	(74)	—
Exercise of options		12	59	—	71
Balance as of December 31, 2017		1,147	188,299	(72,607)	116,839

	Share capital	Share premium	Accumulated losses	Total
Balance as of January 1, 2018	1,147	188,299	(72,607)	116,839
Net loss for the period	—	—	(50,951)	(50,951)
Other comprehensive loss	—	—	(302)	(302)
Total comprehensive loss	—	—	(51,253)	(51,253)
Proceeds from public offerings, net of underwriting fees	200	111,329	—	111,529
Transaction offering costs	—	(2,015)	—	(2,015)
Share-based payments			2,518	2,518
Issuance of shares:				
Restricted Share Awards	1	535	(535)	1
Exercise of options	3	1	—	4
Balance as of December 31, 2018	1,351	298,149	(121,877)	177,623

	Share capital	Share premium	Accumulated losses	Total
Balance as of January 1, 2019	1,351	298,149	(121,877)	177,623
Net loss for the period	—	—	45,442	45,442
Other comprehensive loss	—	—	(1,304)	(1,304)
Total comprehensive loss	—	—	44,138	44,138
Share-based payments	—	—	2,834	2,834
Issuance of shares:				
Conversion of note agreement, net of transaction costs	73	47,705	—	47,778
Restricted Share Awards	1	616	(616)	1
Exercise of options	12	56	—	68
Balance as of December 31, 2019	1,437	346,526	(75,521)	272,442

The accompanying notes are an integral part of these financial statements.

Statements of Cash Flows
(in CHF thousands)

	Note	For the Years Ended December 31, 2019	2018	2017
Operating activities				
Net income/(loss) for the period		45,442	(50,951)	(26,411)
Adjustments to reconcile net income/(loss) for the period to net cash flows:				
Depreciation of property, plant and equipment	4	1,274	961	580
Depreciation of right-of-use assets	5	420	—	—
Finance result, net	13	1,739	1,401	3,872
Share-based compensation expense	17	2,834	2,518	1,579
Changes in net employee defined benefit liability	16	516	437	348
Change in fair value of conversion feature	9	(4,542)	—	—
Interest expense	11	1,894	50	99
Changes in working capital:				
(Increase) in prepaid expenses	7	(424)	(924)	(162)
Decrease/(increase) in accrued income	7	2,572	(868)	(1,910)
Decrease/(increase) in other current receivables	8	(68)	698	(401)
Increase in accrued expenses	10	1,289	2,113	2,940
Increase/(decrease) in deferred income	10	4,126	(18)	(156)
Increase/(decrease) in financing obligation	11	—	(53)	204
Increase/(decrease) in trade and other payables	10	(1,845)	864	(2,853)
Cash provided by/(used in) operating activities		55,227	(43,772)	(22,271)
Interest income	13	304	29	330
Interest paid	5	(296)	—	—
Finance costs	13	(15)	(335)	(153)
Net cash flows provided by/(used in) operating activities		55,220	(44,078)	(22,094)
Investing activities				
Short-term financial assets	6	(65,000)	(30,000)	—
Purchases of property, plant and equipment	4	(1,885)	(1,858)	(1,802)
Rental deposits	6	—	(178)	(40)
Net cash flows used in investing activities		(66,885)	(32,036)	(1,842)
Financing activities				
Proceeds from issuance of convertible loan	9	50,278	—	—
Principal payments of lease obligations	5	(420)	—	—
Proceeds from public offerings of common shares, net of underwriting fees	9	—	111,529	—
Transaction costs on public offerings of common shares	9	—	(2,015)	—
Transaction costs on issuance of shares	9	(510)	—	—
Proceeds from issuance of common shares – option plan	9	69	5	71
Proceeds from long-term financing obligation	11	199	198	200
Repayment of short-term financing obligation	11	—	(339)	—
Net cash flows provided by financing activities		49,616	109,378	271
Net increase/(decrease) in cash and cash equivalents		37,951	33,264	(23,665)
Cash and cash equivalents at January 1		156,462	124,377	152,210
Exchange gains on cash and cash equivalents		(826)	(1,179)	(4,168)
Cash and cash equivalents at December 31		193,587	156,462	124,377
Net increase/(decrease) in cash and cash equivalents		37,951	33,264	(23,665)

Supplementary non-cash activity include the following:

For the year ended December 31, 2019, the Company settled its convertible loan via equity for CHF 48.3 million, gross of CHF 510 thousand for transaction costs.

The accompanying notes are an integral part of these financial statements.

Notes to the Financial Statements

1. General information

AC Immune SA (the "Company," "AC Immune," "ACIU," "we," "our," "ours," or "us") is a clinical stage biopharmaceutical company leveraging our two proprietary technology platforms to discover, design and develop novel, proprietary medicines and diagnostics for prevention and treatment of neurodegenerative diseases associated with protein misfolding. Misfolded proteins are generally recognized as the leading cause of neurodegenerative diseases, such as Alzheimer's disease, or AD, and Parkinson's disease, or PD, with common mechanisms and drug targets, such as Abeta, Tau and alpha-synuclein. Our corporate strategy is founded upon a three-pillar approach that targets Alzheimer's disease, non-Alzheimer's neurodegenerative diseases including NeuroOrphan indications and diagnostics. We use our two unique proprietary platform technologies, SupraAntigen™ (conformation-specific biologics) and Morphomer™ (conformation-specific small molecules), to discover, design and develop novel medicines and diagnostics to target misfolded proteins.

The Company was initially incorporated as a limited liability company on February 13, 2003 in Basel and effective August 25, 2003 was transitioned into a stock company. The Company's corporate headquarters are located at EPFL Innovation Park Building B, 1015 Lausanne, Switzerland.

2. Basis of preparation

Going concern

The financial statements have been prepared on the basis that the Company will continue as a going concern after considering the Company's cash position of CHF 193.6 million and short-term financial assets of CHF 95 million as of December 31, 2019. This total derives from multiple capital raising efforts and revenues from license and collaboration agreements. In 2019, the Company received CHF 80 million for an upfront payment and CHF 30 million for a development milestone. The Company also received USD 50 (CHF 50.3) million from a convertible loan with Lilly. In Q3 2018, the Company completed three offerings, raising USD 117.5 (CHF 116.3) million in gross proceeds before underwriting discounts and expenses.

To date, the Company has financed its cash requirements primarily from its public offerings, share issuances and revenues from license and collaboration agreements. The Company is a clinical stage company and is exposed to all the risks inherent to establishing a business. Inherent to the Company's business are various risks and uncertainties, including the substantial uncertainty as to whether current projects will succeed. The Company's success may depend in part upon its ability to (i) establish and maintain a strong patent position and protection, (ii) enter into collaborations with partners in the biotech and pharmaceutical industry, (iii) successfully move its product candidates through clinical development, (iv) attract and retain key personnel, and (v) acquire capital to support its operations.

Statement of compliance

The financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). These financial statements have been approved for issue by the Board of Directors on March 27, 2020.

Basis of measurement

The financial statements have been prepared under the historical cost convention except for items that are required to be accounted for at fair value.

Functional currency

The financial statements of the Company are presented in Swiss Francs (CHF), which is also the functional currency of the Company. All financial information presented in Swiss Francs (except for share capital and earnings per share data) has been rounded to the nearest thousand CHF (CHF thousands), unless otherwise indicated.

3. Summary of significant accounting policies

The principal accounting policies adopted in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

Current vs. non-current classification

The Company presents assets and liabilities in the balance sheet based on current/non-current classification. The Company classifies all amounts to be realized or settled within 12 months after the reporting period to be current and all other amounts to be non-current.

Foreign currency transactions

Foreign currency transactions are translated into the functional currency, CHF, using prevailing exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated into CHF at rates of exchange prevailing at reporting date. Any gains or losses from these translations are included in the statements of income/(loss) in the period in which they arise.

Revenue recognition

Effective January 1, 2018, the Company adopted IFRS 15 *Revenue from Contracts with Customers*, without though deeming any adjustments necessary in the transition to the new standard. This standard applies to all contracts with customers, except for contracts that are within the scope of other standards, such as leases, insurance, collaboration arrangements and financial instruments. Under IFRS 15, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of IFRS 15, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The Company only applies the five-step model to contracts when it is probable that the entity will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception, once the contract is determined to be within the scope of IFRS 15, the Company assesses the goods or services promised within each contract and determines those that are performance obligations, and assesses whether each promised good or service is distinct. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied. For a complete discussion of accounting for contract revenue, see Note 12 “Revenues.”

Licenses on intellectual property

If the license to the Company’s intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, the Company recognizes revenues from non-refundable, upfront fees allocated to the license when the license is transferred to the customer and the customer is able to use and benefit from the license. For licenses that are sold in conjunction with a related service, the Company uses judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time. If the performance obligation is settled over time, the Company determines the appropriate method of measuring progress for purposes of recognizing revenue from non-refundable, upfront fees. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

Milestone payments

At the inception of each arrangement that includes development, regulatory and/or commercial milestone payments, the Company evaluates whether the milestones are considered highly probable of being reached and estimates the amount to be included in the transaction price using the most likely amount method. If it is highly probable that a significant revenue reversal would not occur in future periods, the associated milestone value is included in the transaction price. These amounts for the performance obligations under the contract are recognized as they are satisfied. At the end of each subsequent reporting period, the Company re-evaluates the probability of

achievement of such milestones and any related constraint, and if necessary, adjusts its estimate of the overall transaction price. Any such adjustments recorded would affect contract revenues and earnings in the period of adjustment.

Research and development services

The Company has certain arrangements with our collaboration partners that include contracting our full-time employees for research and development programs. The Company assesses if these services are considered distinct in the context of each contract and, if so, they are accounted for as separate performance obligations. These revenues are recorded in contract revenue as the services are performed.

Sublicense revenues

The Company has certain arrangements with our collaboration partners that include provisions for sublicensing. The Company recognizes any sublicense revenues at the point in time it is highly probable to obtain and not subject to reversal in the future.

Royalties

For arrangements that include sales-based royalties, including milestone payments based on the level of sales, and the license is deemed to be the predominant item to which the royalties relate, the Company recognizes revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). To date, the Company has not recognized any royalty revenue resulting from any of its licensing and collaboration agreements.

Contract balances

The Company receives payments and determines credit terms from its customers for its various performance obligations based on billing schedules established in each contract. The timing of revenue recognition, billings and cash collections results in billed other current receivables, accrued income (contract assets), and deferred income (contract liabilities) on the balance sheets. Amounts are recorded as other current receivables when the Company's right to consideration is unconditional. The Company does not assess whether a contract has a significant financing component if the expectation at contract inception is such that the period between payment by the licensees and the transfer of the promised goods or services to the licensees will be one year or less.

Research and development expenses

Given the stage of development of the Company's products, all research expenditure is recognized as expense when incurred. Research and development expenditures include:

- the cost of acquiring, developing and manufacturing active pharmaceutical ingredients for product candidates that have not received regulatory approval, clinical trial materials and other research and development materials;
- fees and expenses incurred under agreements with contract research organizations, investigative sites, and other entities in connection with the conduct of clinical trials and preclinical studies and related services, such as administrative, data management, and laboratory services;
- fees and costs related to regulatory filings and activities;
- costs associated with preclinical and clinical activities; and
- employee-related expenses, including salaries and bonuses, benefits, travel and stock-based compensation expense

For external research contracts, expenses include those associated with CROs. The invoicing from CROs for services rendered do not always align with work performed. We accrue the cost of services rendered in connection

with CRO activities based on our estimate of the "stage of completion" for such contracted services. We maintain regular communication with our CRO vendors to gauge the reasonableness of our estimates and accrue expenses as of the balance sheet date in the financial statements based on facts and circumstances known at the time.

Registration costs for patents are part of the expenditure for research and development projects. Therefore, registration costs for patents are expensed when incurred as long as the research and development project concerned does not meet the criteria for capitalization.

Property, plant and equipment

Equipment is shown at historical acquisition cost, less accumulated depreciation and any accumulated impairment losses. Historical costs include expenditures that are directly attributable to the acquisition of the property, plant and equipment. Depreciation is calculated using a straight-line method to write off the cost of each asset to its residual value over its estimated useful life as follows:

IT equipment	3 years
Laboratory equipment	5 years
Leasehold improvements/furniture	5 years

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each balance sheet date. Where an asset's carrying amount is greater than its estimated recoverable amount, it is written down to its recoverable amount.

Gains and losses on disposals are determined by comparing the disposal proceeds with the carrying amount and are included in the statements of income/(loss).

Fair value of financial assets and liabilities

The Company's financial assets and liabilities are comprised of receivables, short-term financial assets, cash and cash equivalents, trade payables and financing obligations. The fair value of these financial instruments approximate their respective carrying values due to the short term maturity of these instruments and are held at their amortized cost in accordance with IFRS 9.

Receivables

Receivables are recognized at their billing value. An allowance for doubtful accounts is recorded for potential estimated losses when there is evidence of the debtor's inability to make required payments and the Company assesses on a forward-looking basis the expected credit losses associated with these receivables held at amortized cost.

Short-term financial assets

Short-term financial assets are held with external financial institutions and comprise fixed-term deposits with maturities ranging from more than 3 until 12 months in duration.

Cash and cash equivalents

Cash and cash equivalents include deposits held with external financial institutions and cash on hand. All cash and cash equivalents are either in cash or in deposits with original duration of less than 3 months.

The Company assesses at each period whether there is objective evidence that financial assets are impaired.

Trade payables

Trade payables are amounts due to third parties in the ordinary course of business.

Financing obligation

The Company's financing obligation relates to its agreement with a third party.

Share capital and public offerings

Ordinary (Common) Shares are classified as equity, as were all Preferred Shares previously outstanding prior to the IPO. Expenses directly attributable to the issuance of new shares are shown in equity as a deduction, net of tax, from the proceeds. See Note 9 "Share Capital."

Employee benefits

Post-employment benefits

The Company operates the mandatory pension schemes for its employees in Switzerland. The schemes are generally funded through payments to insurance companies. The Company has a pension plan designed to pay pensions based on accumulated contributions on individual savings accounts. However, this plan is classified as a defined benefit plan under IAS 19.

The net defined benefit liability is the present value of the defined benefit obligation at the balance sheet date minus the fair value of plan assets. Significant estimates are used in determining the assumptions incorporated in the calculation of the pension obligations, which is supported by input from independent actuaries. The defined benefit obligation is calculated annually with the assistance of an independent actuary using the projected unit credit method, which reflects services rendered by employees to the date of valuation, incorporates assumptions concerning employees' projected salaries, pension increases as well as discount rates of highly liquid corporate bonds which have terms to maturity approximating the terms of the related liability.

Remeasurements of the net defined benefit liability, which comprise actuarial gains and losses, the return on plan assets (excluding interest), are recognized immediately in other comprehensive income/(loss). Past service costs, including curtailment gains or losses, are recognized immediately as a split in research and development and general and administrative expenses within the operating results. Settlement gains or losses are recognized in either research and development and/or general and administrative expenses within the operating results. The Company determines the net interest expense (income) on the net defined benefit liability for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period or in case of any significant events between measurement dates to the then-net defined benefit liability, taking into account any changes in the net defined benefit liability during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognized in the statements of income/(loss).

Share-based compensation

The Company operates an equity-settled, share-based compensation plan. The fair value of the employee services received in exchange for the grant of equity based awards is recognized as an expense. The total amount to be expensed over the vesting period is determined by reference to the fair value of the instruments granted, excluding the impact of any non-market vesting conditions. Non-market vesting conditions are included in assumptions about the number of instruments that are expected to become exercisable. At each balance sheet date, the Company revises its estimates of the number of instruments that are expected to become exercisable. It recognizes the impact of the revision of original estimates, if any, prospectively in the statements of income/(loss), and a corresponding adjustment to equity over the remaining vesting period.

Stock options granted under the Company's stock option plans A, B, C and the 2016 Stock Option and Incentive Plan are valued using the Black-Scholes option pricing model (see Note 17 "Share-based compensation"). This valuation model as well as parameters used such as expected volatility and expected term of the stock options are partially based on management's estimates.

The proceeds received net of any directly attributable transaction costs are credited to share capital (nominal value) and share premium when the options are exercised.

We estimate the fair value of non-vested stock awards (restricted shares and restricted share units) using a reasonable estimate of market value of the common stock on the date of the award. We classify our share-based payments as equity-classified awards as they are settled in shares of our common stock. We measure equity-classified awards at their grant date fair value and do not subsequently remeasure them. Compensation costs related to equity-classified awards are equal to the fair value of the award at grant-date amortized over the vesting period of the award using the graded method. We reclassify that portion of vested awards to share premium as the awards vest.

Provisions

Provisions are recognized when the Company has a present legal or constructive obligation as a result of past events where it is more likely than not that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made.

Taxation

Current income tax assets and liabilities for the period are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the tax amounts are those that are enacted or substantively enacted, at the reporting date in accordance with the fiscal regulations of the respective country where the Company operates and generates taxable income. Deferred tax is provided using the liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date. If required, deferred taxation is provided in full using the liability method, on all temporary differences at the reporting dates. It is calculated at the tax rates that are expected to apply to the period when it is anticipated the liabilities will be settled, and it is based on tax rates (and laws) that have been enacted or substantively enacted at the reporting date.

Deferred income tax assets are recognized to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized. Although the Company has substantial tax loss carryforwards, historically, due to the fact that the Company had limited certainty on the achievement of key milestones, it has not recognized any deferred tax assets as the probability for use is low.

Income taxes

As disclosed in Note 15 “Income taxes,” the Company has tax losses that can generally be carried forward for a period of seven years from the period the loss was incurred. These tax losses represent potential value to the Company to the extent that the Company is able to create taxable profits before the expiry period of these tax losses. The Company has not recorded any deferred tax assets in relation to these tax losses.

Earnings per share

The Company presents basic earnings per share for each period in the financial statements. The earnings per share is calculated by dividing the earnings of the period by the weighted average number of shares (common and preferred) outstanding during the period. Diluted earnings per share reflect the potential dilution that could occur if dilutive securities such as share options were vested or exercised into common shares or resulted in the issuance of common shares that would participate in net income. Anti-dilutive shares are excluded from basic and dilutive earnings per share calculation.

Critical judgments and accounting estimates

The preparation of financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses.

The areas where AC Immune has had to make judgments, estimates and assumptions relate to (i) revenue recognition on licensing and collaboration agreements, (ii) clinical development accruals, (iii) net employee defined benefit liability, (iv) income taxes, (v) share-based compensation and (vi) right-of-use assets and lease liabilities. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Segment reporting

The Company has one segment. The Company currently focuses all of its resources on discovering and developing therapeutic and diagnostic products targeting misfolded proteins.

The Company is managed and operated as one business. A single management team that reports to the chief operating decision maker comprehensively manages the entire business. Accordingly, the Company views its business and manages its operations as one operating segment. Non-current assets are located in and revenue is attributable to the Company's country of domicile, Switzerland.

Accounting pronouncements – recently adopted

IFRS 16 – Leases

Effective January 1, 2019, the Company adopted IFRS 16 Leases which provides a new model for lessee accounting in which all leases, other than short-term and low-value leases, are accounted for by the recognition on the balance sheet of a right-of-use asset and a lease liability, and the subsequent amortization of the right-of-use asset over the earlier of the end of the useful life or the lease term. The Company applied the modified retrospective approach, which requires the recognition of the cumulative effect of initially applying IFRS 16 as of January 1, 2019 to accumulated losses and not to restate prior years. Since the Company recognized the right-of-use assets at the amount equal to the lease liabilities there was no impact to accumulated losses. For a complete discussion of accounting, see Note 5 "Right-of-use assets and lease liabilities."

The Company has elected to apply the following practical expedients in adopting IFRS 16: (i) not to recognize right-of-use assets and lease liabilities for leases of low value (i.e. approximate fair value of USD 5,000), (ii) to apply a single discount rate to our property leases and to our portfolio of office equipment leases, respectively, (iii) to apply hindsight in determining the lease term for contracts which contain certain options to extend or terminate the lease, (iv) to account for each lease component and any non-lease components as a single lease component and (v) to rely on our assessment of whether leases were onerous by applying IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* immediately before the date of application. The Company's weighted average incremental borrowing rate calculated as of January 1, 2019 was 2.54%.

The following table reconciles the Company's operating lease obligations at December 31, 2018, as previously disclosed in the Company's consolidated financial statements on Form 20-F, to the lease obligations recognized on initial application of IFRS 16 at January 1, 2019.

	(in CHF thousands)
Operating lease commitments at December 31, 2018	861
Discounted using the incremental borrowing rate at January 1, 2019	847
Recognition exemption for short-term leases	(535)
Recognition exemption for leases of low value	—
Extension options reasonably certain to be exercised	1,873
Lease obligation recognized at January 1, 2019	2,185

In accordance with the adoption of IFRS 16 *Leases* as of January 1, 2019, the Company recorded at initial recognition a CHF 2.2 million right-of-use asset and corresponding lease liability. Comparative information has not

been restated. The Company's statements of income/(loss) for the year ended December 31, 2019 was impacted by an increase for depreciation of right-of-use of leased assets CHF 0.4 million. The impact for interest expense was CHF 0.1 million. During the same period, the Company's cash flow statement was impacted by a shift from the cash generated from operations of CHF 0.4 million to the net cash used in financing activities. Overall, IFRS 16 was cash flow neutral for the Company.

The Company made the following changes in presentation: in the balance sheets, additional line items to reflect the right-of-use assets, the non-current and the current lease liabilities and in the statements of cash flows, additional line items related to the depreciation of the right-of-use of leased assets and repayment of the principal portion of the lease payments.

Impact on accounting for leases

At inception of a leasing contract, the Company assesses whether a contract is, or contains, a lease based on whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Company recognizes a right-of-use asset and a lease liability at the lease commencement date. The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. Lease payments generally are fixed for the contract term. The lease liability is measured at amortized cost using the effective interest method. The lease liability is remeasured if there is change in the estimated lease term, a change in future lease payments arising from a change in an index or rate, a change in the Company's estimate of the amount expected to be payable under a residual value guarantee, or a change in assessment of whether it will exercise a purchase, extension or termination option.

The estimated lease term by right-of-use asset categories are as follows:

Buildings	5 years
Office equipment	5 years
IT equipment	5 years

At inception, the right-of-use asset comprises the initial lease liability and any initial direct costs. The right-of-use asset is depreciated over the shorter of the lease term or the useful life of the underlying asset. The right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability. When the lease liability is remeasured, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

Both the right-of-use-assets and lease liabilities are recognized in the balance sheets.

Accounting pronouncements – not yet adopted

There are no standards that are not yet effective and that would be expected to have a material impact on the entity in the current or future reporting periods or on foreseeable future transactions.

4. Property, plant and equipment

in CHF thousands	Furniture	IT Equipment	Lab Equipment	Leasehold Improvements	Total
Acquisition Cost:					
Balance at December 31, 2018	126	1,025	5,367	350	6,868
Acquisitions	65	291	1,470	59	1,885
Disposals	(33)	(129)	(139)	(7)	(308)
Balance at December 31, 2019	158	1,187	6,698	402	8,445
Accumulated depreciation:					
Balance at December 31, 2018	(77)	(455)	(2,857)	(155)	(3,544)
Depreciation expense	(24)	(285)	(899)	(66)	(1,274)
Disposals	33	113	137	7	290
Balance at December 31, 2019	(68)	(627)	(3,619)	(214)	(4,528)
Carrying Amount:					
December 31, 2018	49	570	2,510	195	3,324
December 31, 2019	90	560	3,079	188	3,917

in CHF thousands	Furniture	IT Equipment	Lab Equipment	Leasehold Improvements	Total
Acquisition Cost:					
Balance at December 31, 2017	85	569	4,161	272	5,087
Acquisitions	41	456	1,357	78	1,932
Disposals	—	—	(151)	—	(151)
Balance at December 31, 2018	126	1,025	5,367	350	6,868
Accumulated depreciation:					
Balance at December 31, 2017	(59)	(259)	(2,311)	(105)	(2,734)
Depreciation expense	(18)	(196)	(697)	(50)	(961)
Disposals	—	—	151	—	151
Balance at December 31, 2018	(77)	(455)	(2,857)	(155)	(3,544)
Carrying Amount:					
December 31, 2017	26	310	1,850	167	2,353
December 31, 2018	49	570	2,510	195	3,324

For the years ended December 31, 2019, 2018 and 2017, the Company incurred CHF 1.3 million, 1.0 million and CHF 0.6 million in depreciation expense, respectively.

5. Right-of-use assets and lease liabilities

As of January 1, 2019, the Company recognized CHF 2.2 million of right-of-use of leased assets and lease liabilities. Thereof CHF 2.1 million was related to buildings and CHF 0.1 million to office equipment.

For the year ended December 31, 2019, the Company recognized depreciation expense of CHF 0.4 million for buildings and an immaterial amount for office and IT equipment. As of December 31, 2019, the Company remeasured the lease liability associated with its buildings due to a change in the estimated lease term. The Company therefore increased its lease liability with a corresponding adjustment to the right-of-use asset by CHF 0.4 million in Q4 2019.

Regarding lease liabilities, the amortization depends on the rate implicit in the contract or the incremental borrowing rate for the respective lease component. The weighted averages of the incremental borrowing rates are 2.5% for buildings, 4.2% for office equipment and 2.6% for IT equipment, respectively.

The following table shows the movements in the net book values of right-of-use of leased assets for the year ended December 31, 2019:

	Buildings	Office Equipment	IT Equipment	Total
	(in CHF thousands)			
Balance as of January 1, 2019	2,106	79	—	2,185
Additions	400	29	71	500
Disposals	—	(10)	—	(10)
Depreciation	(400)	(17)	(3)	(420)
Balance as of December 31, 2019	2,106	81	68	2,255

The Company's total expense for short-term leases and leases of low-value was CHF 0.6 million for the year ended December 31, 2019. There are no variable lease payments which are not included in the measurement of lease obligations. All extension options have been included in the measurement of lease liabilities.

The following table presents the contractual undiscounted cash flows for lease liabilities as of December 31, 2019:

	(in CHF thousands)
Within one year	485
Between one and three years	970
Between three and five years	948
Total	2,403

6. Cash and cash equivalents and financial assets

The following tables summarize the Company's cash and cash equivalents and short-term financial assets as of December 31, 2019 and 2018:

	As of December 31,	
in CHF thousands	**2019**	**2018**
Cash and cash equivalents	193,587	156,462
Total	193,587	156,462

	As of December 31,	
in CHF thousands	**2019**	**2018**
Short-term financial assets due in one year or less	95,000	30,000
Total	95,000	30,000

The Company's cash and cash equivalents are maintained in the following respective currencies as of December 31, 2019 and 2018:

	As of December 31,	
in CHF thousands	**2019**	**2018**
Cash and cash equivalents	193,587	156,462
Total	193,587	156,462
By currency		
CHF	158,173	126,218
EUR	10,169	11,471
USD	25,245	18,773
Total cash and cash equivalents	193,587	156,462

At the balance sheet dates, Company funds were held in CHF, EUR and USD currencies. As of December 31, 2019 and 2018, funds in EUR and USD were translated into CHF at a rate of 1.096 and 0.978 and 1.125 and 0.983, respectively for each currency and year.

The Company also has two deposits in escrow accounts totaling CHF 0.3 million for the lease of the Company's premises as of December 31, 2019 and 2018, respectively.

7. Prepaid expenses and accrued income

in CHF thousands	As of December 31, 2019	2018
Prepaid expenses	2,788	2,364
Accrued income	1,095	3,667
Total	3,883	6,031

The prepaid expenses relate mainly to research contracts with down-payments at contract signature and the related activities will start or continue into 2020.

Accrued income consists of CHF 1.1 million as of December 31, 2019 associated with our Janssen collaboration (see Note 12 "Revenues"). This amount represents 100% of our total accrued income as of December 31, 2019.

8. Other current receivables

in CHF thousands	As of December 31, 2019	2018
Other receivables	—	17
Swiss VAT	234	209
Withholding tax	70	10
Total	304	236

The maturity of these assets is less than three months. The Company considers the counterparty risk as low and the carrying amount of these receivables is considered to approximate their fair value.

9. Share capital

As of December 31, 2019 and 2018, the issued share capital amounted to CHF 1,437,351 and CHF 1,351,364 respectively and comprised of Common Shares of 71,859,431 and 67,562,333, respectively.

The table below summarizes the Company's capital structure:

	Common Shares	in CHF thousands	
	Number	Share Capital	Share Premium
December 31, 2017	57,355,188	1,147	188,299
Issuance of Shares – Incentive Plans	207,145	4	537
Issuance of Shares – Public offering, net of transaction costs	10,000,000	200	109,313
December 31, 2018	67,562,333	1,351	298,149
Issuance of Shares – Incentive Plans	681,770	13	672
Conversion of Note Agreement, net of transaction costs	3,615,328	73	47,705
December 31, 2019	71,859,431	1,437	346,526

The Common Shares nominal values of CHF 0.02 per share are fully paid in.

Convertible Note Agreement

The Company and Lilly entered into a convertible note agreement effective January 23, 2019 for USD 50.0 (CHF 50.3) million. On April 25, 2019, the Convertible Note Agreement with Lilly automatically converted in line with the terms of the agreement. As a result of this conversion, 3,615,328 of our common shares were issued to Lilly. This note is now fully settled and there is no further equity or cash consideration due to Lilly thereunder.

Follow-On Offerings

On July 24, 2018, the Company announced that it had closed the first subscription rights offering and underwritten primary offering of its common shares, and that the underwriters had exercised in full their option to purchase an additional 1,108,695 shares at a price per share of USD 11.75. The underwriters' exercise of the option to purchase additional shares brought the total number of common shares sold by the Company to 8,500,000 shares, resulting in total gross proceeds raised in these offerings, before underwriting discounts and estimated expenses of the offering, to approximately USD 99.9 (CHF 98.9) million. On July 20, 2018, the Company commenced a second subscription rights offering of up to 1,500,000 shares. At closing of the second subscription rights offering on July 31, 2018, the Company issued 1,500,000 additional common shares, resulting in gross proceeds of approximately USD 17.6 (CHF 17.4) million.

At the conclusion of these three offerings, the Company raised gross proceeds of USD 117.5 (CHF 116.3) million. Net underwriting fees and transaction costs totaled CHF 6.8 million for a net total of CHF 109.5 million. Transaction costs associated with these offerings and related to the issuance of new shares were charged directly against the share premium account thereby reducing the total equity reported.

Shelf Registration Statement

On May 4, 2018, the Company filed a shelf registration statement on Form F-3 (Reg. No. 333-2246694) (the "Shelf Registration Statement") with the SEC. The Shelf Registration Statement was declared effective by the SEC on June 8, 2018.

The Shelf Registration Statement allows the Company to offer and sell, from time to time, up to USD 350,000,000 of common stock, debt securities, warrants, purchase contracts, units, subscription rights or any combination of the foregoing in one or more future public offerings. The terms of any future offering would be determined at the time of the offering and would be subject to market conditions and approval by the Company's Board of Directors. Any offering of securities covered by the Shelf Registration Statement will be made only by means of a written prospectus and prospectus supplement authorized and filed by the Company.

Since the Company raised USD 117.5 (CHF 116.3) million in its three offerings completed in July 2018, the Company may execute one or more future offering of securities covered by the Shelf Registration Statement up to USD 232.5 million.

10. Trade payables and accrued liabilities

	As of December 31,	
in CHF thousands	**2019**	**2018**
Trade and other payables	142	1,979
Total trade and other payables	142	1,979
Accrued research and development costs	7,228	6,803
Accrued payroll expenses	2,896	2,482
Other accrued expenses	1,673	1,135
Total accrued expenses	11,797	10,420

An accrual of CHF 1.8 million and CHF 1.8 million was recognized for performance-related remuneration within Accrued payroll expenses for 2019 and 2018, respectively.

11. Financing obligation

On January 4, 2016, September 13, 2016 and January 26, 2018 for fiscal years 2016, 2017 and 2018, respectively, AC Immune obtained separate funding commitment notices from the LuMind Research Down Syndrome Foundation ("LuMind") totaling USD 200 thousand in each instance. Per the Research Grant Agreement, AC Immune has an obligation to reimburse LuMind for an amount equal to 125% of the then funding commitment made by LuMind to AC Immune.

On October 31, 2018, LuMind and the Company modified the repayment terms in an effort to fund a Down Syndrome Clinical Trials Network. The repayment terms were modified such that the Company will repay the outstanding balance in three installments in 2018, 2019 and 2020, with the total repayment to equal the total the Company is to receive in funding with the additional 25% interest.

The Company reclassified a certain portion of long-term financing obligation from non-current to current liabilities in the balance sheets to reflect the amended repayment terms. Additionally, per this modified payment term, the Company and LuMind memorialized the receipt of one final USD 200 (CHF 200) thousand payment due from LuMind in 2019. The Company recorded this as a finance receivable and an increase to the obligation accordingly. As of December 31, 2019 and December 31, 2018, we had finance receivables of nil and USD 200 (CHF 199) thousand, respectively.

As of December 31, 2019 and December 31, 2018, AC Immune has recorded in current liabilities a short-term financing obligation for the total USD 667 (CHF 652) thousand and USD 333 (CHF 332) thousand committed, respectively. As of December 31, 2019 and December 31, 2018, the Company recorded a long-term financing obligation of nil and USD 187 (CHF 186) thousand, respectively.

12. Revenues

The Company enters into licensing and collaboration agreements which are within the scope of IFRS 15, under which it licenses certain rights to its product candidates and IP to third parties. The terms of these arrangements typically include payment to the Company of one or more of the following: non-refundable, upfront license fees; development, regulatory and/or commercial milestone payments; payments for research and clinical services the Company provides through either its full-time employees or third-party vendors; and royalties on net sales of licensed products commercialized from the Company's IP. Each of these payments results in license, collaboration and other revenues, which are classified as contract revenue on the statements of income/(loss), except for revenues from royalties on net sales of products commercialized from the Company's IP, which are classified as royalty revenues.

Licenses on intellectual property: If the license to the Company's intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, the Company recognizes revenues from non-refundable, upfront fees allocated to the license when the license is transferred to the customer and the customer is able to use and benefit from the license. For licenses that are sold in conjunction with a related service, the Company uses judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time. If the performance obligation is settled over time, the Company determines the appropriate method of measuring progress for purposes of recognizing revenue from non-refundable, upfront fees. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

Milestone payments: At the inception of each arrangement that includes development, regulatory and/or commercial milestone payments, the Company evaluates whether the milestones are considered highly probable of being reached and estimates the amount to be included in the transaction price using the most likely amount method. If it is highly probable that a significant revenue reversal would not occur in future periods, the associated milestone value is included in the transaction price. These amounts for the performance obligations under the contract are recognized as they are satisfied. At the end of each subsequent reporting period, the Company re-evaluates the probability of achievement of such milestones and any related constraint, and if necessary, adjusts its estimate of the overall transaction price. Any such adjustments recorded would affect contract revenues and earnings in the period of adjustment.

Research and development services: The Company has certain arrangements with our collaboration partners that include contracting our full-time employees for research and development programs. The Company assesses if

these services are considered distinct in the context of each contract and, if so, they are accounted for as separate performance obligations. These revenues are recorded in contract revenue as the services are performed.

Sublicense revenues: The Company has certain arrangements with our collaboration partners that include provisions for sublicensing. The Company recognizes any sublicense revenues at the point in time it is highly probable to obtain and not subject to reversal in the future.

Royalties: For arrangements that include sales-based royalties, including milestone payments based on the level of sales, and the license is deemed to be the predominant item to which the royalties relate, the Company recognizes revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). To date, the Company has not recognized any royalty revenue resulting from any of its licensing and collaboration agreements.

Contract balances: The Company receives payments and determines credit terms from its licensees for its various performance obligations based on billing schedules established in each contract. The timing of revenue recognition, billings and cash collections results in billed other current receivables, accrued income (contract assets), and deferred income (contract liabilities) on the Balance Sheet. Amounts are recorded as other current receivables when the Company's right to consideration is unconditional. The Company does not assess whether a contract has a significant financing component if the expectation at contract inception is such that the period between payment by the licensees and the transfer of the promised goods or services to the licensees will be one year or less.

The following table presents changes in the Company's contract assets and liabilities during the years ended December 31, 2019 and 2018 (in CHF thousands):

	Balance at the beginning of the reporting period	Additions	Deductions	Balance at the end of the reporting period
Twelve months ended December 31, 2019:				
Accrued Income	3,667	2,211	(4,783)	1,095
Deferred Income	351	7,686	(3,560)	4,477
Twelve months ended December 31, 2018:				
Accrued Income	2,799	5,846	(4,978)	3,667
Deferred Income	355	1,533	(1,537)	351

During the years ended December 31, 2019 and 2018, the Company recognized the following revenues as a result of changes in the contract asset and the contract liability balances in the respective periods (in CHF thousands):

	For the Years Ended December 31,	
	2019	2018
Revenues recognized in the period from:		
Amounts included in the contract liability at the beginning of the period	351	1,551
Performance obligations satisfied in previous periods	2,206	—

The following tables provide contract revenue amounts by year indicated included in the Company's accompanying financial statements attributable to transactions arising from its licensing arrangements.

	For the Years Ended December 31,		
in CHF thousands	**2019**	**2018**	**2017**
Lilly	105,662	—	—
Genentech	—	—	14,000
Janssen	1,173	2,157	1,239
Life Molecular Imaging	2,206	—	1,080
Biogen	1,063	4,024	3,930
Other	922	1,013	6
Total contract revenue	111,026	7,194	20,255

Lilly accounted for 95% of our contract revenues in 2019. Biogen and Janssen accounted for 56% and 30% of our contract revenues in 2018, respectively. Genentech and Biogen accounted for 69% and 19% of our contract revenues in 2017, respectively.

Tau Morphomer Small Molecule – 2018 license agreement with Eli Lilly and Company

In December 2018, we entered into an exclusive, worldwide licensing agreement with Eli Lilly and Company ("Lilly") to research and develop Tau Morphomer small molecules for the treatment of Alzheimer's disease and other neurodegenerative diseases. More specifically, this is an exclusive license with the right to grant sublicenses, under the ACIU Patents, the ACIU Know-How, and ACIU's interests in the Joint Patents and the Joint Know-How to Exploit the Licensed Compounds and Licensed Products The agreement became effective on January 23, 2019 (the "Effective Date") when the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, expired. On September 19, 2019, the Company and Lilly entered into the first amendment to divide the first discretionary milestone payment under the agreement of CHF 60 million into two installments with the first CHF 30 million paid in Q3 2019 and the second CHF 30 million to be paid on or before March 31, 2020 unless Lilly earlier terminates the agreement. On March 20, 2020, the Company and Lilly entered into a second amendment to replace the second CHF 30 million to be paid on or before March 31, 2020 with two milestone payments, a CHF 10 million milestone payment to be paid on or before March 31, 2020 and a CHF 60 million milestone payment following the first patient dosed in a Phase 2 clinical study of a licensed product in the U.S. or European Union.

Per the terms of the agreement, the Company received an initial upfront payment of CHF 80 million in February 2019 for the rights granted by the Company to Lilly. The Company is conducting the development of ACI-3024, our lead candidate from our Tau Morphomer small molecules program through the completion of Phase 1, which commenced in the first half of 2019. Lilly will lead and fund further clinical development and will retain global commercialization rights for all indications, including Alzheimer's disease, Progressive Supranuclear Palsy and other neurodegenerative diseases. As it relates to our lead compound, ACI-3024, Lilly will lead development after the completion of Phase 1 and retain commercialization rights. As of December 31, 2019, Lilly is engaged in certain Preclinical activities of its own as defined in the agreement, which are intended to provide further data in support of the Phase 2 clinical study design.

Per the terms of the agreement, the Company may become eligible to receive additional milestone payments totaling up to approximately CHF 880 million for clinical and regulatory milestones and CHF 900 million upon achievement of certain commercial milestones. In addition to milestones, we will be eligible to receive royalties on sales at a percentage rate ranging from the low-double digits to the mid-teens. The agreement will terminate by the date of expiration of the last royalty term for the last licensed product. However, under the terms of the agreement, Lilly may terminate the agreement at any time after March 31, 2020 by providing three months' notice to us.

AC Immune assessed this arrangement in accordance with IFRS 15 and concluded that Lilly is a customer. The Company identified the following significant performance obligations under the contract: (i) a right-of-use license and (ii) research and development activities outlined in the development plan. Per the agreement, the Company is responsible for the preclinical and Phase 1 activities, which the Company determined are distinct and capable of being completed by Lilly or a third party. Preclinical activities for which AC Immune was responsible prior to their completion in May 2019 included final manufacturing of materials for use in the Phase 1 and regulatory submission of the protocols. For the current Phase 1, AC Immune is responsible for leading the study design, obtaining relevant regulatory agency approvals, arranging necessary third party contracts, completing patient selection, ensuring patient treatment, following up with patients, drafting the clinical study report development and other relevant clinical activities to ensure that the primary objective of the study is completed. The Company used CMOs for certain of its preclinical activities and is currently using CROs to complete certain Phase 1 activities.

The Company's preclinical and Phase 1 activities do not represent integrated services with the licensed IP for which Lilly contracted. Lilly purchased a license to the Company's Tau therapeutic small molecule program, which was delivered at commencement of the agreement and AC Immune's preclinical and Phase 1 activities do not affect the form or functionality of this license. The Company's objective of the current Phase 1 activity is to assess safety

and tolerability and does not modify or customize the lead compound and the completion of these preclinical and Phase 1 activities does not affect the licensed IP.

Finally, per the agreement, each party has three representatives in a joint steering committee ("JSC"); depending upon the agenda, additional field experts can attend the JSC to provide the technical and scientific contribution required. The JSC meets on a regular basis depending on agreements between the representatives. The JSC is responsible for (i) serving as the forum to discuss, review and approve certain activities by reviewing and discussing the development progress and updates to make, (ii) discuss, review and approve all amendments to the global development plan, (iii) periodically serve as forum to discuss and review commercialization of licensed products and (iv) review and approve reports related to development costs among other activities. The JSC is intended to ensure that communication between the parties remains consistent and that the development plan is both agreed to and progressing as intended.

The valuation of each performance obligation involves estimates and assumptions with revenue recognition timing to be determined either by delivery or the provision of services.

The Company used the residual approach to estimate the selling price for the right-of-use license and an expected cost plus margin approach for estimating the research and development activities. The right-of-use license was delivered on the effective date. The research and development activities are expected to be delivered over time as the services are performed. For these services, revenue will be recognized over time using the input method, based on costs incurred to perform the services, since the level of costs incurred over time is thought to best reflect the transfer of services to Lilly. The Company determined the value of the research and development activities to be CHF 6.9 million and deferred this balance from the effective date. As of December 31, 2019, the Company has recognized CHF 2.6 million in revenue, resulting in a deferred income (contract liability) balance of CHF 4.3 million which is all classified on the balance sheet as current within "Deferred income." The remaining CHF 73.1 million from the upfront payment was allocated to the right-of-use license and recognized on the effective date.

At inception of the agreement, none of the clinical, regulatory or commercial milestones had been included in the transaction price, as all milestone amounts were fully constrained. As acknowledged in the first amendment completed between the Company and Lilly in Q3 2019, the Company earned and received a CHF 30 million milestone payment related to the right-of-use license for IP. The Company recognized contract revenues in Q3 2019 as there were no further constraints related to this milestone. In assessing that future clinical, regulatory or commercial milestones are fully constrained, the Company considered numerous factors to determine that these milestones are not highly probable to obtain, including that receipt of the milestones is outside the control of the Company and contingent upon success in future clinical trials and the licensee's efforts. Any consideration related to sales-based milestones (including royalties) will be recognized when the related sales occur as they were determined to relate predominantly to the license granted to Lilly and therefore have also been excluded from the transaction price. The Company will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

Anti-Abeta antibody in AD – 2006 agreement with Genentech

In November 2006, we signed an exclusive, worldwide licensing agreement for crenezumab, our humanized monoclonal therapeutic antibody targeting misfolded Abeta. The agreement was amended March 2009, January 2013, May 2014 and May 2015). The agreement also provides for the development of a second therapeutic product for a non-Alzheimer's disease indication based on the same intellectual property and anti-Abeta antibody compound. The value of this partnership is potentially greater than USD 340 (CHF 333) million.

The term of the agreement commenced on the Effective Date and, unless sooner terminated by mutual agreement or pursuant to any other provision of the agreement, terminates on the date on which all obligations between the Parties with respect to the payment of milestones or royalties with respect to Licensed Products have passed or expired. Either party may terminate the agreement for any material breach by the other Party, provided a cure period of 90 days from the date that notice is given.

Genentech commenced a first Phase 3 clinical study in March 2016 for crenezumab (CREAD). In March 2017, Genentech started a second Phase 3 clinical trial (CREAD 2). Since 2013, Crenezumab is also studied in a Phase 2 trial in individuals who carry the PSEN1 E280A autosomal-dominant mutation and do not meet the criteria for mild cognitive impairment due to AD or dementia due to AD and are, thus, in a preclinical phase of AD (autosomal

dominant AD (ADAD)). In 2019, Genentech initiated a Tau Positron Emission Tomography (PET) substudy to the ongoing Phase 2 trial in ADAD to evaluate the effect of crenezumab on tau burden which may also increase the understanding of disease progression in the preclinical stage of ADAD.

If crenezumab receives regulatory approval, we will be entitled to receive royalties that are tied to annual sales volumes with different royalty rates applicable in the U.S. and Europe. To date, we have received total milestone payments of USD 65 million (CHF 70.1 million) comprised of a USD 25 (CHF 31.6) million upfront payment and USD 40 (CHF 38.2) million for clinical development milestones achieved all in prior to January 1, 2017. Genentech may terminate the agreement at any time by providing three months' notice to us. In such event all costs incurred are still refundable.

AC Immune assessed this arrangement in accordance with IFRS 15 and concluded that Genentech is a customer. The Company identified the following performance obligations under the contract: (i) a right-of-use license and (ii) conduct of research under a research plan. The Company considered the research and development capabilities of Genentech and Genentech's right to sublicense to conclude that the license has stand-alone functionality and is distinct. The Company's obligation to perform research does not significantly impact or modify the licenses' granted functionality.

At execution of the agreement, the transaction price included the USD 25 (CHF 31.6) million upfront consideration received. At inception, none of the clinical or regulatory milestones had been included in the transaction price, as all milestone amounts were fully constrained. The Company has received three milestone payments since inception totaling USD 40 (CHF 38.2) million. The Company could receive greater than USD 275 (CHF 269) million or more for further regulatory milestones for this exclusive, worldwide alliance. In assessing that future regulatory milestones are fully constrained, the Company considered numerous factors, including that receipt of the milestones is outside the control of the Company and contingent upon success in future clinical trials and the licensee's efforts. Any consideration related to royalties will be recognized when the related sales occur as they were determined to relate predominantly to the license granted to Genentech and therefore have also been excluded from the transaction price. The Company will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

On January 30, 2019, we announced that Roche, the parent of Genentech, is discontinuing the CREAD and CREAD 2 (BN29552 and BN29553) Phase 3 studies of crenezumab in people with prodromal to mild sporadic AD. The decision came after an interim analysis conducted by the Independent Data Monitoring Center ("IDMC") indicated that crenezumab was unlikely to meet its primary endpoint of change from baseline in Clinical Dementia Rating-Sum of Boxes (CDR-SB) Score. This decision was not related to the safety of the investigational product. No safety signals for crenezumab were observed in this analysis and the overall safety profile was similar to that seen in previous trials.

Crenezumab continues to be studied in the Phase 2 preventive trial, which began in 2013, of cognitively healthy individuals in Columbia who carry the PSEN1 E280A autosomal-dominant mutation and are in a preclinical phase of ADAD. This study will determine if treating people carrying this mutation with crenezumab prior to the onset of AD symptoms will slow or prevent the decline of cognitive and functional abilities.

For the years ended December 31, 2019, 2018 and 2017, we have recognized no revenues from this arrangement.

Anti-Tau antibody in AD – 2012 agreement with Genentech

In June 2012, we entered into a second agreement with Genentech to research, develop and commercialize our anti-Tau antibodies for use as immunotherapeutics and diagnostics. The agreement was amended in December 2015. The value of this exclusive, worldwide alliance is potentially greater than CHF 400 million and includes upfront and clinical, regulatory and commercial milestone payments. In addition to milestones, we will be eligible to receive royalties on sales at a percentage rate ranging from the mid-single digits to the high-single digits. The agreement also provides for collaboration on at least an additional therapeutic indication outside of Alzheimer's disease built on the same anti-Tau antibody program as well an anti-Tau diagnostic products for Alzheimer's disease.

The term of the agreement commenced on the Effective Date and, unless sooner terminated by mutual agreement or pursuant to any other provision of the agreement, terminates on the date on which all obligations

between the Parties with respect to the payment of milestones or royalties with respect to Licensed Products have passed or expired. Either party may terminate the agreement for any material breach by the other Party, provided a cure period of 90 days from the date that notice is given.

To date, we have received payments totaling CHF 59 million, including a CHF 14 million milestone payment received and recognized in Q4 2017 associated with the first patient dosing in a Phase 2 clinical trial for AD with an anti-Tau monoclonal body known as semorinemab, a CHF 14 million milestone payment recognized in Q2 2016 and received in July 2016, associated with the announcement of the commencement of the Phase 1 clinical study of semorinemab and a CHF 14 million milestone payment received in 2015 in connection with the ED-GO decision. As we met all performance obligations on reaching these milestones, we have recognized revenue in the respective periods. Genentech may terminate the agreement at any time by providing three months' notice to us.

AC Immune assessed this arrangement in accordance with IFRS 15 and concluded that Genentech is a customer. The Company identified the following performance obligations under the contract: (i) a right-of-use license and (ii) conduct of research under a research plan. The Company considered the research and development capabilities of Genentech and Genentech's right to sublicense to conclude that the license has stand-alone functionality and is distinct. The Company's obligation to perform research does not significantly impact or modify the licenses' granted functionality.

At execution of the agreement, the transaction price included CHF 17 million upfront consideration received. At inception, none of the clinical or regulatory milestones had been included in the transaction price, as all milestone amounts were fully constrained. The Company has received three milestones since inception totaling CHF 42 million. The Company could also receive up to an additional CHF 368.5 million in clinical, regulatory and commercial milestones. In assessing that future clinical, regulatory or commercial milestones are fully constrained, the Company considered numerous factors, including that receipt of the milestones is outside the control of the Company and contingent upon success in future clinical trials. Any consideration related to sales-based milestones (including royalties) will be recognized when the related sales occur as they were determined to relate predominantly to the license granted to Genentech and therefore have also been excluded from the transaction price. The Company will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

For the years ended December 31, 2019, 2018 and 2017, we have recognized nil, nil and CHF 14 million from this arrangement, respectively.

Tau Vaccine in AD – 2014 agreement with Janssen Pharmaceuticals

In December 2014, we entered into an agreement with Janssen Pharmaceuticals, Inc. ("Janssen") one of the Janssen Pharmaceutical Companies of Johnson & Johnson, to develop and commercialize therapeutic anti-Tau vaccines for the treatment of AD and potentially other Tauopathies. The value of this partnership is potentially up to CHF 500 million and includes upfront and clinical, regulatory and commercial milestones. In addition to milestones, we will be eligible to receive royalties on sales at a percentage rate ranging from the low-double digits to the mid-teens. In April 2016, July 2017, January 2019 and November 2019, the companies entered into the First, Second, Third and Fourth amendments, respectively. These amendments allow for the alignment of certain payment and activity provisions with the Development Plan and Research Plan activities. We and Janssen will co-develop second generation lead therapeutic vaccines, ACI-35.030 and JACI-35.054, through Phase 1b/2a completion. AC Immune and Janssen will jointly share research and development costs until the completion of the first Phase 2b. From Phase 2b and onwards, Janssen will assume responsibility for the clinical development, manufacturing and commercialization of the second generation vaccines.

Under the terms of the agreement, Janssen may terminate the agreement at any time after completion of the first Phase 1b clinical study in 2016 by providing 90 days' notice to us. If not otherwise terminated, the agreement shall continue until the expiration of all royalty obligations as outlined in the contract.

The agreement also allows for the expansion to a second indication based on the same anti-Tau vaccine program and based on intellectual property related to this program.

The Company received a CHF 25.9 million upfront, non-refundable license fee which we recognized as revenue in 2014. In May 2016, we received a CHF 4.9 million payment for reaching a clinical milestone in the first Phase 1b

study. As we met all performance obligations on reaching the milestone, we have recognized this income as revenue.

AC Immune assessed this arrangement in accordance with IFRS 15 and concluded that Janssen is a customer. The Company identified the following performance obligations under the contract: (i) a right-of-use license and (ii) research and development services including a Development and CMC work plan. The Company considered the research and development capabilities of Janssen, Janssen's right to sublicense, and the fact that the research and development services are not proprietary and can be provided by other vendors, to conclude that the license has stand-alone functionality and is distinct. The Company's obligation to perform research and development services does not significantly impact or modify the licenses' granted functionality. Based on these assessments, the Company identified the license and the research and development services as the performance obligations at the inception of the arrangement, which were deemed to be distinct in the context of the contract.

At execution of the agreement, the transaction price included only the CHF 25.9 million upfront consideration received. At inception, none of the clinical, regulatory or commercial milestones has been included in the transaction price, as all milestone amounts were fully constrained. The Company did receive a CHF 4.9 million payment for reaching a clinical milestone in the first Phase 1b study in May 2016. The Company could also receive up to more than CHF 458 million in clinical, regulatory and commercial milestones as well as tiered, low-double digit to mid-teen royalties on aggregate net sales of products. In assessing that future clinical, regulatory or commercial milestones are fully constrained, the Company considered numerous factors to determine that these milestones are not highly probable to obtain, including that receipt of the milestones is outside the control of the Company and contingent upon success in future clinical trials and the licensee's efforts. Any consideration related to sales-based milestones (including royalties) will be recognized when the related sales occur as they were determined to relate predominantly to the license granted to Janssen and therefore have also been excluded from the transaction price. The Company will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

For the years ended December 31, 2019, 2018 and 2017, we have recognized revenues totaling CHF 1.2 million, CHF 2.2 million and CHF 1.2 million, respectively.

Tau-PET imaging agent in AD –2014 agreement with Life Molecular Imaging (formerly Piramal Imaging SA)

In May 2014, we entered into an agreement, our first diagnostic partnership, with Life Molecular, the former Piramal Imaging SA. The partnership with Life Molecular is an exclusive, worldwide licensing agreement for the research, development and commercialization of the Company's Tau protein Positron Emission Tomography (PET) tracers supporting the early diagnosis and clinical management of AD and other Tau-related disorders and includes upfront and sales milestone payments totaling up to EUR 159 (CHF 175) million, plus royalties on sales at a percentage rate ranging from mid-single digits to low double digits. Life Molecular may terminate the LCA at any time by providing three months' notice to us.

In connection with this agreement, AC Immune received a EUR 500 (CHF 664) thousand payment which was fully recognized in 2015. In Q1 2017, we recorded a EUR 1 (CHF 1.1) million milestone related to the initiation of "Part B" of the first-in-man Phase 1 study. In Q3 2019, the Company recognized EUR 2 (CHF 2.2) million in connection with the initiation of a Phase 2 Trial of Tau-PET Tracer in patients with mild cognitive impairment (MCI) and mild to moderate AD in comparison with non-demented control (NDC) participants. The Company is eligible to receive variable consideration related to the achievement of certain clinical milestones totaling EUR 8 (CHF 9) million should the compound make it through Phase 3 clinical studies. We are also eligible to receive potential regulatory and sales based milestones totaling EUR 148 (CHF 162) million. Finally, the Company is eligible for royalties from the mid-single digits to low-double digits.

AC Immune assessed this arrangement in accordance with IFRS 15 and concluded that Life Molecular is a customer. The Company has identified that the right-of-use license as the only performance obligation. The Company determined that transaction price based on the defined terms allocated to each performance obligation specified in the contract.

The upfront payment constitutes the amount of consideration to be included in the transaction price and has been allocated to the license. None of the clinical, regulatory and commercial milestones have been included in the transaction price as these variable consideration elements are considered fully constrained. As part of its evaluation

of the constraint, the Company considered numerous factors, including that receipt of the milestones is outside the control of the Company and contingent upon success in future clinical trials and the licensee's efforts.

Any consideration related to sales-based milestones (including royalties) will be recognized when the related sales occur as these amounts have been determined to relate predominantly to the license granted to Life Molecular and therefore are recognized at the later of when the performance obligation is satisfied or the related sales occur. The Company considered Life Molecular's right to sublicense and develop the Tau Protein PET tracers, and the fact that Life Molecular could perform the research and development work themselves within the license term without AC Immune, to conclude that the license has stand-alone functionality and is distinct. The Company believes that the contracted amount represents the fair value. The Company will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

For the years ended December 31, 2019, 2018 and 2017, the Company has recognized CHF 2.2 million, nil and CHF 1.1 million, respectively.

Alpha-synuclein and TDP-43 PET tracers in AD – 2016 agreement with Biogen

On April 13, 2016, we entered into a non-exclusive research collaboration agreement with Biogen International GmbH, ("Biogen"). Under the agreement, we and Biogen have agreed to collaborate in the research and early clinical development of our alpha-synuclein PET tracer program for Parkinson's disease and other synucleinopathies, and a second program for the identification, research and development of novel PET ligands against TDP-43, a protein recently linked to neurodegeneration in diseases such as amyotrophic lateral sclerosis (ALS). In addition, we have agreed to share the costs of the collaboration, with Biogen primarily funding the majority of research costs, subject to a cap, which includes an upfront technology access fee and funding towards research and development personnel. We own all intellectual property rights to any invention relating to alpha-synuclein or TDP-43 PET tracers.

AC Immune assessed this arrangement in accordance with IFRS 15 and concluded that Biogen is a customer. The Company has identified two performance obligations in our Biogen collaboration: (i) technology access fee and (ii) research and development services. The Company determined the transaction price based on the defined terms allocated to each performance obligation specified in the contract. In instances where the Company is reimbursed for research and development contributions procured from third parties such as negotiated terms with clinical research organizations, AC Immune records revenues for such services as it is acting as a principal in procuring the goods or services. The Company has the primary responsibility for fulfilling the promise to provide the specified good or service, it has inventory risk before transfer to the customer and it has discretion in negotiating the price with third parties. For other research and development services, revenues are recognized as work is performed, which correspond with, and best depict the transfer of control to the customer in line with the terms outlined in the contract.

For the years ended December 31, 2019, 2018 and 2017, the Company has recognized CHF 1.1 million, CHF 4.0 million and CHF 3.9 million, respectively. This collaboration ended in April 2019.

Recombinant protein therapeutic candidate –2017 agreement with Essex Bio-Technology Limited

On May 19, 2017, we entered into a Research Project agreement with Essex to develop a recombinant protein therapeutic candidate acting on a unique neuroprotective mechanism for treatment of neurological diseases, such as AD and FTLD. Essex will provide joint research commitment as well as financial support to AC Immune for the pre-IND development of the biological agent.

As part of this agreement, the parties have agreed to an initial two-year Research Plan, which intends to develop a basic Fibroblast Growth Factor as a therapeutic for the treatment of neurodegenerative diseases and to generate novel antibody therapeutics.

Subject to the terms of this agreement, Essex and the Company have the right to terminate by providing 60 days' notice to the other Party. Otherwise, the agreement shall remain in force until the later of the (i) completion of the Research and Development program or (ii) five years from the Effective date.

AC Immune assessed this arrangement in accordance with IFRS 15 and concluded that Essex Bio-Technology is a customer. AC Immune has identified that its performance obligation is for full-time employees to provide research support.

The transaction price consists of the contractual amounts to recognize for the full-time employee charges. For the full-time employee charges, we recorded revenues throughout the period based on the contractual rates over the service period as this best depicts the transfer of control to Essex.

The transaction price consists of the contractual amounts to recognize for the full-time employee charges. For the full-time employee charges, we recorded revenues throughout the period based on the contractual rates over the service period as this best depicts the transfer of control to Essex. For the years ended December 31, 2019, 2018 and 2017, the Company has recognized CHF 0.4 million, CHF 0.7 million and CHF 0.1 million, respectively.

Grants from the Michael J. Fox Foundation

On September 16, 2017, we formally signed a grant continuation with the Michael J. Fox Foundation for Parkinson's disease research ("MJFF"). This grant provides funds for the development of PET tracers for pathological forms of the protein alpha-synuclein, to support the early diagnosis and clinical management of Parkinson's disease. We have since received two additional grants. The first in November 2018 was to conduct a first-in-human ("FiH") study in 2019. This grant aimed to facilitate the execution of a FiH study for a potential alpha-synuclein PET tracer ("PET tracer") with the current lead compound. The second in August 2019 is a supplement for the further development of the PET tracer. The Company retains its intellectual property rights for these programs.

As part of both the November 2018 and August 2019 grants, the MJFF expects that AC Immune will complete tasks according to the agreed timelines. AC Immune's funding is variable depending on the satisfactory achievement of specific tasks. The Company identified various milestones to achieve and these are outputs of the Company's standard services to develop its PET tracer. The services themselves over time are considered the performance obligation and not each a distinct performance obligation. Therefore, AC Immune has determined it has one performance obligation in the arrangement: the clinical and regulatory services in support of the development of the alpha-synuclein PET tracer.

The transaction price consists of the contractual amount of CHF 0.3 million and CHF 0.6 million for the two grants, respectively which is allocated to the services performed. However, the consideration is variable dependent upon AC Immune's completion of key milestones. Using the most likely amount method, AC Immune assessed the project funding and likelihood of milestone obtainment. Our deliverables under the November 2018 grant have been completed. Management estimated a 100% likelihood of completing all milestones under the terms of the August 2019 grant and no discount of the transaction price is taken. The Company therefore recognizes the revenues associated with these grants as services are performed. Quarterly, the Company estimates its progress and whether to constrain further revenue recognition. There are no constraints assessed as of December 31, 2019.

For the years ended December 31, 2019, 2018 and 2017, the Company has recognized CHF 0.6 million, CHF 0.3 million and CHF 0.1 million, respectively.

13. Expenses by category

Research and Development

	For the Years Ended December 31,		
in CHF thousands	**2019**	**2018**	**2017**
Operating expenses	37,465	32,921	23,822
Payroll expenses	12,382	10,662	8,552
Share-based compensation	585	694	289
Total research and development expenses	50,432	44,277	32,663

General and Administrative

in CHF thousands	For the Years Ended December 31, 2019	2018	2017
Operating expenses	6,637	4,903	3,857
Payroll expenses	7,172	5,740	4,984
Share-based compensation	2,249	1,824	1,290
Total general and administrative expenses	16,058	12,467	10,131

Financial Result, net

in CHF thousands	For the Years Ended December 31, 2019	2018	2017
Interest income/(expense)	(1,590)	(269)	184
Change in fair value of conversion feature	4,542	—	—
Foreign currency remeasurement gain/(loss), net	(2,013)	(1,194)	(4,049)
Other finance income/(expense)	(33)	62	(7)
Finance result, net	906	(1,401)	(3,872)

The CHF 4.5 million gain on the conversion feature related to the Company's convertible loan due to Lilly. This gain was mainly related to the change in value of the shares between the share price determined in the convertible loan and the share price at the date of the conversion. Additionally, the Company incurred CHF 1.6 million in net interest expense of which CHF 1.4 million was effective interest recorded to amortize the host debt per the convertible loan due to Lilly.

14. Related-party transactions

Key management, including the Board of Directors (seven individuals excluding the CEO) and the Executive Management (five individuals including the CEO), compensation was:

in CHF thousands	For the Years Ended December 31, 2019	2018	2017
Short-term employee benefits	3,526	2,681	2,463
Post-employment benefits	215	160	166
Share-based compensation	2,155	1,683	1,267
Total	5,896	4,524	3,896

In 2018, as part of the Company's subscription rights offering, a major shareholder and members of the Board and Executive Management purchased an aggregate of 614,147 of the Company's common shares on the same basis and otherwise on the same terms as the other participants in such rights offering.

15. Income taxes

The Company recognized no income tax expense or deferred tax asset or liability positions for the years ended December 31, 2019, 2018, and 2017.

The income tax expense for each year can be reconciled to loss before tax as follows:

in CHF thousands	For the Years Ended December 31, 2019	2018	2017
Income/(loss) before income tax	45,442	(50,951)	(26,411)
Tax expense/(benefit) calculated at the statutory rate of 13.6% (20.6% for 2018 and 20.5% for 2017)	6,194	(10,507)	(5,420)
Permanent differences	(62)	334	40
Effect of unused tax losses and tax offsets not recognized as deferred tax assets	(6,132)	10,173	5,380
Effective income tax rate benefit/(expense)	—	—	—

The tax rate used for the 2019 reconciliations above is the corporate tax rate of 13.6% (20.6%: 2018 and 20.5%: 2017) payable by corporate entities in the Canton of Vaud, Switzerland on taxable profits under tax law in that jurisdiction.

	As of December 31,		
in CHF thousands	**2019**	**2018**	**2017**
Unrecognized deductible temporary differences, unused tax losses and unused tax credits			
Deductible temporary differences, unused tax losses and unused tax credits for which no deferred tax assets have been recognized are attributable to the following:			
- Tax losses	64,125	109,294	62,575
- Deductible temporary differences related to:			
Right-of-use assets and lease liabilities, net	—	—	—
Retirement benefit plan	7,485	5,665	4,926
Total	71,610	114,959	67,501

Deductible temporary differences do not expire. Tax losses expiry dates are shown in the table below:

	As of December 31,		
in CHF thousands	**2019**	**2018**	**2017**
Tax losses split by expiry date			
December 31, 2018	—	—	2,175
December 31, 2019	—	16,566	16,566
December 31, 2020	—	10,338	10,338
December 31, 2021	—	—	—
December 31, 2022	—	—	—
December 31, 2023	—	7,628	7,628
December 31, 2024	15,231	25,868	25,868
December 31, 2025	48,894	48,894	—
December 31, 2026	—	—	—
Total	64,125	109,294	62,575

The tax losses available for future offset against taxable profits have decreased by CHF 45.2 million from 2018, representing the amount of tax losses used in 2019.

Consistent with prior years, the Company has not recorded any deferred tax assets in relation to the past tax losses available for offset against future profits as the recognition criteria have not been met at the balance sheet date.

16. Retirement benefit plan

The Company participates in a collective foundation covering all of its employees including its executive officers. In addition to retirement benefits, the plan provides death or long-term disability benefits.

Contributions paid to the plan are computed as a percentage of salary, adjusted for the age of the employee and shared approximately 47% and 53% by employee and employer, respectively.

This plan is governed by the Swiss Law on Occupational Retirement, Survivors and Disability Pension Plans (BVG), which requires contributions to be made to a separately administered fund. The fund has the legal form of a foundation and it is governed by the board of trustees, which consists of an equal number of employer's and employee's representatives. The board of trustees is responsible for the administration of the plan assets and for the definition of the investment strategy.

The collective foundation is governed by a foundation board. The board is made up of an equal number of employee and employer representatives of the different affiliated companies. The Company has no direct influence on the investment strategy of the foundation board.

The assets are invested by the pension plan, to which many companies contribute, in a diversified portfolio that respects the requirements of the Swiss BVG. Therefore disaggregation of the pension assets and presentation of plan assets in classes that distinguish the nature and risks of those assets is not possible. Under the Plan, both the Company and the employee share the costs equally. The structure of the plan and the legal provisions of the BVG mean that the employer is exposed to actuarial risks. The main risks are investment risk, interest risk, disability risk and the life expectancy of pensioners. Through our affiliation with the pension plan, the Company has minimized these risks, since they are shared between a much greater number of participants. On leaving the Company, a departing employee's retirement savings are transferred to the pension institution of the new employer or to a vested benefits institution. This transfer mechanism may result in pension payments varying considerably from year to year.

The pension plan is exposed to Swiss inflation, interest rate risks and changes in the life expectancy for pensioners. For accounting purposes under IFRS, the plan is treated as a defined benefit plan.

As of January 1, 2019 the Company changed from a fully insured plan to a plan where the company now bears investment and old age risks. The new plan has a higher statutory coverage ratio, which led to an increase in plan assets of 10% (CHF 1.2 million), which is presented in the table under B as part of the line "return on plan assets excluding interest income."

The following table sets forth the status of the defined benefit pension plan and the amount that is recognized in the balance sheet:

	As of December 31,		
in CHF thousands	**2019**	**2018**	**2017**
Defined benefit obligation	(26,624)	(17,942)	(14,278)
Fair value of plan assets	19,139	12,277	9,352
Total liability	(7,485)	(5,665)	(4,926)

The following amounts have been recorded as net pension cost in the statement of income:

	For the Years Ended December 31,		
in CHF thousands	**2019**	**2018**	**2017**
Service cost	1,313	1,095	912
Interest cost	195	100	81
Interest income	(133)	(65)	(55)
Net pension cost	1,375	1,130	938

The changes in defined benefit obligation, fair value of plan assets and unrecognized gains/(losses) are as follows:

A. Change in defined benefit obligation

in CHF thousands	For the Years Ended December 31, 2019	2018	2017
Defined benefit obligation as of January 1	(17,942)	(14,278)	(11,596)
Service cost	(1,313)	(1,095)	(912)
Interest cost	(195)	(100)	(81)
Change in demographic assumptions	1,138	—	—
Change in financial assumptions	(2,171)	750	—
Change in experience assumptions	(2,003)	(888)	(735)
Benefits deposited	(3,382)	(1,710)	(426)
Employees' contributions	(756)	(621)	(528)
Defined benefit obligation as of December 31	(26,624)	(17,942)	(14,278)

B. Change in fair value of plan assets

in CHF thousands	For the Years Ended December 31, 2019	2018	2017
Fair value of plan assets as of January 1	12,277	9,352	7,798
Interest income	133	65	55
Employees' contributions	756	621	528
Employer's contributions	859	693	590
Benefits deposited	3,382	1,710	426
Return on plan assets excluding interest income	1,732	(164)	(45)
Fair value of plan assets as of December 31	19,139	12,277	9,352

Expected contributions by the employer to be paid to the post-employment benefit plans during the annual period beginning after the end of the reporting period amount to approximately CHF 930 thousand.

C. Change in net defined benefit liability

in CHF thousands	For the Years Ended December 31, 2019	2018	2017
Net defined benefit liabilities as of January 1	5,665	4,926	3,798
Net pension cost through statement of income	1,375	1,130	938
Re-measurement through other comprehensive loss	1,304	302	780
Employer's contribution	(859)	(693)	(590)
Net defined benefit liabilities as of December 31	7,485	5,665	4,926

D. Change in other comprehensive loss

in CHF thousands	For the Years Ended December 31, 2019	2018	2017
Other comprehensive loss as of January 1	(4,283)	(3,981)	(3,201)
Effect of changes in demographic assumptions	1,138	—	—
Effect of changes in financial assumptions	(2,171)	750	—
Effect of changes in experience assumptions	(2,003)	(888)	(735)
Return on plan assets excluding interest income	1,732	(164)	(45)
Other comprehensive loss as of December 31	(5,587)	(4,283)	(3,981)

The fair value of the plan assets is the cash surrender value of the insurance with AXA. The investment strategy defined by the board of trustees follows a conservative profile.

The plan assets are primarily held within instruments with quoted market prices in an active market, with the exception of real estate and mortgages.

The weighted average duration of the defined benefit obligation is 19.3 and 20.5 years as of December 31, 2019 and 2018 respectively.

The actuarial assumptions used for the calculation of the pension cost and the defined benefit obligation of the defined benefit pension plan for the years ended December 31, 2019, 2018 and 2017, respectively are as follows:

	For the Years Ended December 31,		
	2019	**2018**	**2017**
Discount rate	0.20%	0.90%	0.70%
Rate of future increase in compensations	1.75%	1.50%	1.50%
Rate of future increase in current pensions	0.00%	0.50%	0.50%
Interest rate on retirement savings capital	0.50%	0.90%	0.70%
Mortality and disability rates	BVG 2015-CMI	BVG 2015G	BVG 2015G

In defining the benefits, the minimum requirements of the Swiss Law on Occupational Retirement, Survivors and Disability Pension Plans (BVG) and its implementing provisions must be observed. The BVG defines the minimum pensionable salary and the minimum retirement credits.

A quantitative sensitivity analysis for significant assumptions as of December 31, 2019 is shown below:

	Discount rate		**Future salary increase**		**Future pension cost**		**Interest rate on savings capital**	
Assumptions	**0.5% increase**	**0.5% decrease**	**0.5% increase**	**0.5% decrease**	**0.5% increase**	**0.5% decrease**	**0.5% increase**	**0.5% decrease**
	in CHF thousands							
Potential defined benefit obligation	24,248	29,396	27,317	25,930	27,993	25,393	27,447	25,848
Decrease/(increase) from actual defined benefit obligation	2,376	(2,772)	(693)	694	(1,369)	1,231	(823)	776

The sensitivity analyses above is subject to limitations and has been determined based on a method that extrapolates the impact on net defined benefit obligation as a result of reasonable changes in key assumptions occurring at the end of the reporting period.

17. Share-based compensation

Share based option awards

Through the year ended December 31, 2019, there are equity-based instruments outstanding that the Company has granted under four different plans.

The Company's 2016 Share Option and Incentive Plan ("Plan") was approved by the shareholders at the Ordinary Shareholder's meeting in November 2016. The 2016 Plan authorizes the grant of incentive and non-qualified share options, share appreciation rights, restricted share awards, restricted share units, unrestricted share awards, performance share awards, performance-based awards to covered employees and dividend equivalent rights. The Company only grants equity-based instruments from this Plan as of December 31, 2019.

The following table summarizes equity settled share option grants since inception under each plan:

PLAN	Number of options awarded (since inception)	Vesting conditions	Contractual life of options
Share option plan A	362,750	At grant	15.5 years
Share option plan B	819,000	At grant	10.5 years
Share option plan C1	6,775,250	4 years' service from grant date	10 years
2016 Share Option and Incentive Plan:			
Executives and Directors	1,208,522	4 years' service from the date of grant, quarterly	10 years
Employees	605,952	4 years' service from the date of grant, annually	10 years

The number and weighted average exercise prices (in CHF) of options under the share option programs for Plans A, B, C1 and 2016 share option and incentive plan are as follows:

	Number of Options	Weighted Average Exercise Price (CHF)	Weighted Average Remaining Term (Years)
Outstanding at January 1, 2017	1,687,900	0.15	5.6
Forfeited during the year	(1,750)	0.15	—
Cancelled during the year	(31,250)	0.15	—
Exercised during the year	(571,775)	0.15	—
Granted during the year	276,766	9.70	—
Outstanding at December 31, 2017	1,359,891	2.09	5.8
Exercisable at December 31, 2017	900,474	0.39	4.3
Outstanding at January 1, 2018	1,359,891	2.09	5.8
Forfeited during the year	(73,624)	9.16	—
Exercised during the year	(151,814)	0.15	—
Granted during the year	484,403	9.79	—
Outstanding at December 31, 2018	1,618,856	4.25	6.3
Exercisable at December 31, 2018	932,175	1.25	4.4
Outstanding at January 1, 2019	1,618,856	4.25	6.3
Forfeited during the year	(73,699)	6.71	—
Exercised during the year	(616,833)	0.15	—
Granted during the year	1,053,305	5.24	—
Outstanding at December 31, 2019	1,981,629	5.93	8.3
Exercisable at December 31, 2019	602,218	4.94	6.5

The outstanding stock options as of December 31, 2019 have the following range of exercise prices. In fiscal year 2018, we began to grant awards solely with USD denominated exercise prices and discontinued granting awards with a CHF denominated exercise price.

	Total Options	Range of Expiration Dates
Range of Exercise Prices		
CHF 0.15	301,750	2020-2026
CHF 9.53	234,355	2027
USD 5.15 to USD 12.30	1,445,524	2028-2029
Total outstanding options	1,981,629	

The weighted average exercise price for options granted in 2019, 2018 and 2017 is USD 5.41 (CHF 5.24), USD 9.97 (CHF 9.79) and CHF 9.70, respectively. The range of exercise prices for outstanding options was CHF 0.15 to CHF 9.53 for awards previously granted in CHF and USD 5.15 to USD 12.30 for awards granted in USD as of December 31, 2019.

Prior to the IPO, the exercise price was set by the Board of Directors. The volatility is based on the historical trend of an appropriate sample of companies operating in the biotech and pharmaceutical industry. The risk-free interest rate is based on the CHF swap rate for the expected life of the option. The weighted average share price of common share options exercised in 2019 is USD 4.36 (CHF 4.22).

The weighted average grant date fair values of the options granted in 2019, 2018 and 2017 are USD 3.71 (CHF 3.59), USD 6.66 (CHF 6.54) and CHF 7.29, respectively. The following table illustrates the weighted-average assumptions for the Black-Scholes option-pricing model used in determining the fair value of these awards:

	For the Years Ended December 31,		
	2019	**2018**	**2017**
Exercise price	USD 5.15-5.54	USD 8.33-12.30	CHF 9.53-12.00
Share Price (weighted average)	5.41	9.87	8.77
Risk-free interest rate	0%	0%	0%
Expected volatility	80%	80%	80%
Expected term	6 years	6 years	6 years
Dividend yield	—	—	—

Restricted share awards

A summary of non-vested share awards (restricted share and restricted share units) activity as of December 31, 2019 and changes during the year then ended is presented below:

Grantee Type	Number of non-vested share awards granted	Vesting conditions	Contractual life of non-vested share awards
Restricted Share Units			
Directors	83,864	1 year service from date of grant, annually	10 years
Executives	110,839	4 years' service from the date of grant, quarterly	10 years
Restricted Share Awards	4,023	2.75 years' service from date of grant, quarterly	10 years

	Number of non-vested shares	Weighted average grant date fair value (CHF)
Non-vested at December 31, 2017	122,014	9.59
Forfeited during the year	(25,673)	9.48
Granted during the year	69,371	9.43
Vested during the year	(56,671)	9.60
Non-vested at December 31, 2018	109,041	9.51
Vested and expected to vest at December 31, 2018	64,012	9.65
Non-vested at December 31, 2018	109,041	9.51
Forfeited during the year	—	—
Granted during the year	—	—
Vested during the year	(66,278)	9.51
Non-vested at December 31, 2019	42,763	9.52
Vested and expected to vest at December 31, 2019	130,290	9.58

The Company did not grant restricted share awards in 2019. The weighted average grant date fair value of the restricted share awards granted (restricted shares and restricted share units) was CHF 9.43 and CHF 9.62 for the years ended December 31, 2018 and 2017, respectively. The weighted average grant date fair values of the non-

vested share awards as of the respective year end (restricted shares and restricted share units) was CHF 9.51 and CHF 9.59 for the years ended December 31, 2018 and 2017, respectively. These fair values of non-vested share awards granted have been determined using a reasonable estimate of market value of the common stock on the date of the award.

The expense charged against the income statement was CHF 2,834, CHF 2,518 thousand and CHF 1,579 thousand for the years ended December 31, 2019, 2018 and 2017, respectively. The expense is revised by the Company based on the number of instruments that are expected to become exercisable.

18. Commitments and contingencies

In the normal course of business, we conduct product research and development programs through collaborative programs that include, among others, arrangements with universities, contract research organizations and clinical research sites. We have contractual arrangements with these organizations. As of December 31, 2019, external research projects included in the schedule below for 2020 total CHF 19.6 million that have been committed.

We lease our corporate, laboratory and other facilities under multiple operating leases at the EPFL Innovation Park in Ecublens, near Lausanne, Canton of Vaud, Switzerland. Our lease agreements have no termination clauses longer than a 12-month contractual notice period. For the commitments and contingencies related to 2018, the Company disclosed its committed lease obligations in accordance with IAS 17 *Leases*, which has been superseded in 2019 by IFRS 16 *Leases.* See Note 5 “Right-of-use assets and lease liabilities” for the contractual undiscounted cash flows for lease obligations.

	As of December 31,	
in CHF thousands	**2019**	**2018**
Within one year	19,907	19,880
Between one and three years	12,993	6,995
Between three and five years	4,816	5,009
More than five years	2,193	1,190
Total	39,909	33,074

19. Earnings per share

	For the Years Ended December 31,		
	2019	**2018**	**2017**
	(in CHF thousands except for share and per share data)		
Basic income/(loss) per share (EPS):			
Numerator:			
Net income/(loss) attributable to equity holders of the Company	45,442	(50,951)	(26,411)
Denominator:			
Weighted-average number of shares outstanding to equity holders	70,603,611	61,838,228	57,084,295
Basic income/(loss) for the period attributable to equity holders	0.64	(0.82)	(0.46)
Numerator:			
Net income/(loss) attributable to equity holders of the Company	45,442	(50,951)	(26,411)
Denominator:			
Weighted-average number of shares outstanding to equity holders	70,603,611	61,838,228	57,084,295
Effect of dilutive securities from equity incentive plans	499,730	—	—
Weighted-average number of shares outstanding – diluted to equity holders	71,103,341	61,838,228	57,084,295
Diluted income/(loss) for the period attributable to equity holders	0.64	(0.82)	(0.46)

In periods for which we have a loss, basic net loss per share is the same as diluted net loss per share. We have excluded from our calculation of diluted loss per share all potentially dilutive in-the-money (i) share options and (ii) shares which were issued upon conversion of the convertible note as their inclusion would have been anti-dilutive. Potentially dilutive securities that were not included in the diluted per share calculations because they would be anti-dilutive were as follows:

	As of December 31,		
	2019	**2018**	**2017**
Share options issued and outstanding (in-the-money)	1,081,836	1,472,589	1,341,042
Restricted share awards subject to future vesting	—	109,041	122,014
Convertible shares	911,261	—	—
Total	1,993,097	1,581,630	1,463,056

20. Financial instruments and risk management

The Company's activities expose it to the following financial risks: market risk (foreign exchange and interest rate risk), credit risk and liquidity risk. The Company's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Company's financial performance.

The following table shows the carrying amounts of financial assets and financial liabilities:

	As of December 31,	
in CHF thousands	**2019**	**2018**
Financial assets		
Long-term financial assets	304	304
Other current receivables	304	236
Short-term financial assets	95,000	30,000
Cash and cash equivalents	193,587	156,462
Total financial assets	289,195	187,002

	As of December 31,	
in CHF thousands	**2019**	**2018**
Financial liabilities		
Long-term financing obligation	—	186
Long-term lease liabilities	1,813	—
Trade and other payables	142	1,979
Accrued expenses	11,797	10,420
Short-term financing obligation	652	332
Short-term lease liabilities	442	—
Total financial liabilities	14,846	12,917

Foreign exchange risk

The Company is exposed to foreign exchange risk arising from currency exposures, primarily with respect to the EUR, USD and to a lesser extent to GBP, DKK and SEK. The currency exposure is not hedged. However, the Company has a policy of matching its cash holdings to the currency structure of its expenses, which means that the Company holds predominately CHF, EUR and USD (see Note 6 "Cash and cash equivalents and financial assets"). In the Company's statements of income/(loss) for the years ended December 31, 2019, 2018 and 2017 a loss of CHF 0.8 million, a loss of CHF 1.2 million and a loss of CHF 4.2 million, respectively, has been recognized within "Finance result, net."

As of December 31, 2019, if the CHF had strengthened/weakened by 10% against the EUR and the USD with all other variables held constant, the net loss for the period would have been lower/higher by CHF 3.5 million (2018: CHF 3.0 million), mainly as a result of foreign exchange gains/losses on predominantly EUR/USD denominated cash and cash equivalents and short-term financial assets.

Interest rates

The Company's CHF cash holdings (inclusive of those held in short-term financial assets) are subject to negative interest rates at certain counterparty thresholds. As of December 31, 2019, if the interest rates charged by the counterparties had increased/decreased by 10%, the net income for the period would have been higher/lower by less than CHF 0.1 million. Interest income and interest expense are recorded within Finance results, net in our statements of income/(loss).

Credit risk

The Company maintains a formal treasury risk and investment management policy to limit counterparty credit risk. As of December 31, 2019, the Company's cash and cash equivalents and short-term financial assets are held with four financial institutions each with a high credit-rating assigned by international credit-rating agencies. The maximum amount of credit risk is the carrying amount of the financial assets. Trade and other receivables are fully performing, not past due and not impaired (see Note 6 "Cash and cash equivalents and financial assets" and Note 8 "Other current receivables").

Liquidity risk

Inherent in the Company's business are various risks and uncertainties, including its limited operating history and the high uncertainty that new therapeutic concepts will succeed. AC Immune's success may depend in part upon its ability to (i) establish and maintain a strong patent position and protection, (ii) enter into collaborations with partners in the biotech and pharmaceutical industry, (iii) acquire and keep key personnel employed, and (iv) acquire additional capital to support its operations.

The Company's approach of managing liquidity is to ensure sufficient cash to meet its liabilities when due. Therefore, management closely monitors the cash position on rolling forecasts based on expected cash flow to enable the Company to finance its operations for at least 18 months. The Company has a financing obligation due to LuMind and projects CHF 0.7 million to be paid within 12 months from the reporting date. See Note 11 "Financing obligation" for further details. Additionally, the Company has CHF 0.1 million in Trade and other payables which are due within 12 months from the reporting date. Finally, as it relates to the Company's lease liabilities please see Note 5 "Right-of-use assets and lease liabilities" for detail of when corresponding lease liabilities are due.

21. Capital risk management

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern and to preserve the capital on the required statutory level in order to succeed in developing a cure against Alzheimer's disease.

22. Subsequent events

Management has evaluated subsequent events after the balance sheet date, through the issuance of these financial statements, for appropriate accounting and disclosures. On March 20, 2020, the Company and Lilly entered into a second amendment to replace the second CHF 30 million to be paid on or before March 31, 2020 with two milestone payments, a CHF 10 million milestone payment to be paid on or before March 31, 2020 and a CHF 60 million milestone payment following the first patient dosed in a Phase 2 clinical study of a licensed product in the U.S. or European Union.

Additionally, the potential disruption of the coronavirus outbreak on the Company's business operations will depend on certain developments, including the duration, spread and severity of the outbreak. As of March 30, 2020, the Company is actively implementing specific precautionary measures to mitigate any potential disruptions accordingly.

The Company has determined that there were no other such events that warrant disclosure or recognition in these financial statements.

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

The following is a summary of the material terms of our securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as of March 20, 2020. The following description of the terms of our common shares is not meant to be complete and is qualified by reference to our articles of association ("articles of association"), which is incorporated by reference as an exhibit to our Annual Report on Form 20-F, of which this exhibit is a part. We encourage you to read our articles of association and the applicable provisions of Swiss law for additional information.

The Company

We are a Swiss stock corporation (*société anonyme*) organized under the laws of Switzerland. We were formed as a Swiss limited liability company (*société à responsabilité limitée*) on February 13, 2003 with our registered office and domicile in Basel, Switzerland. We converted to a Swiss stock corporation (*société anonyme*) under the laws of Switzerland on August 4, 2003. Our domicile and registered office is in Ecublens, near Lausanne, Canton of Vaud, Switzerland. Our head office is currently located at EPFL Innovation Park, Building B, Lausanne, Switzerland.

Share Capital

As of March 20, 2020, our issued share capital is CHF 1,434,825.70, consisting of 71,741,285 common shares with a nominal value of CHF 0.02 each. We have no dividend rights certificates (*bons de jouissance*).

Articles of Association

On March 3, 2020, we adopted the articles of association and when we refer to our articles of association, we refer to the articles of association as filed as Exhibit 3.1 to our Annual Report on Form 20-F.

Purpose

Under our articles of association, our purpose is the research, study, development, manufacture, promotion, sale and marketing of products and substances within the pharmaceutical and nutrition industry as well as the purchase, sale and exploitation of patents and licenses in this field. We may engage in any activities which are apt to favor our purpose directly or indirectly. We may also acquire and sell real estate. We may open branch offices in Switzerland and abroad and may also acquire participations in other companies. We may provide securities to our subsidiaries and supply guarantees.

Ordinary Capital Increase, Authorized and Conditional Share Capital

Under Swiss law, we may increase our share capital (*capital-actions*) with a resolution of the general meeting of shareholders (ordinary capital increase) that must be carried out by the board of directors within three months of the general meeting of shareholders in order to become effective. Under our articles of association, in the case of an increase of capital against payment of contributions in cash, a resolution passed by a simple majority of the votes cast at the general meeting of shareholders regardless of abstentions and empty or invalid votes is required. In the case of the limitation or withdrawal of subscription rights or in the case of an increase of capital out of equity, against contribution in kind, or for the purpose of acquisition of assets and the granting of special benefits, a resolution passed by at least two-thirds of the shares represented at a general meeting of shareholders and the absolute majority of the nominal amount of the shares represented is required.

Furthermore, under the Swiss Code of Obligations, or the CO, our shareholders, by a resolution passed by at least two-thirds of the shares represented at a general meeting of shareholders and the absolute majority of the nominal amount of the shares represented, may empower our board of directors to issue shares of a specific aggregate nominal amount up to a maximum of 50% of the share capital in the form of:

- conditional capital (*capital conditionnel*) for the purpose of issuing shares in connection with, among other things, (i) the exercise of conversion and/or option or warrant rights granted in connection with bonds or similar instruments, issued or to be issued by the Company or by one of our subsidiaries or (ii) the exercise of option rights granted to employees of the Company or a subsidiary, members of our board of directors or any consultant of the Company, or other persons providing services to the Company or a subsidiary; or

- authorized capital (*capital-actions autorisé*) to be utilized by the board of directors within a period determined by the shareholders but not exceeding two years from the date of the shareholder approval.

Pre-Emptive Rights

Pursuant to the CO, shareholders have in principle pre-emptive subscription rights (*droits de souscription*). With respect to conditional capital in connection with the issuance of conversion rights, convertible bonds or similar debt instruments, shareholders have in principle advance subscription rights (*droit de souscrire préalablement*).

A resolution passed at a general meeting of shareholders by at least two-thirds of the shares represented and the absolute majority of the nominal value of the shares represented may authorize our board of directors to withdraw or limit pre-emptive subscription rights or advance subscription rights in certain circumstances.

If pre-emptive subscription rights are granted, but not exercised, the board of directors may allocate the non-exercised pre-emptive subscription rights as it elects but has to follow the principle of equal treatment of the shareholders.

Our Authorized Share Capital

Under Article 3a of our articles of association, the authorization granted to our board of directors to increase our share capital has expired.

Our Conditional Share Capital

Conditional Share Capital for Bonds and Similar Debt Instruments

Under Article 3b of our articles of association, our share capital may be increased by a maximum aggregate amount of CHF 19,560.94 through the issue of a maximum of 978,047 common shares, payable in full, each with a nominal value of CHF 0.02, through the exercise of conversion and/or option or warrant rights granted in connection with bonds or similar instruments, issued or to be issued by the Company or by one of our subsidiaries. Shareholders do not have pre-emptive subscription rights in such circumstances.

Shareholders' advance subscription rights with regard to new bonds or similar instruments may be restricted or excluded by decision of the board of directors in order to finance or re-finance the acquisition of companies or holdings, or new investments planned by the Company, or in order to issue convertible bonds and warrants on the international capital markets or through private placement. If advance subscription rights are excluded, then (i) the instruments are to be placed at market conditions; (ii) the exercise period is not to exceed ten years from the date of issue for warrants and twenty years for conversion rights; and (iii) the conversion or exercise price for the new shares is to be set at least in line

with the market conditions prevailing at the date on which the instruments are issued. The respective holders of conversion and/or option or warrant rights are entitled to subscribe the new shares.

Conditional Share Capital for Employee Benefit Plans

Under Article 3c of our articles of association, our share capital may, to the exclusion of the pre-emptive subscription rights of shareholders, be increased by a maximum aggregate amount of CHF 68,877.60 through the issue of a maximum of 3,443,880 common shares, payable in full, each with a nominal value of CHF 0.02, in connection with the exercise of option rights granted to employees of the Company or one of our subsidiaries, members of the board of directors or any consultant, or other persons providing services to the Company or one of our subsidiaries. The board of directors specifies the precise conditions of issue including the issue price of the shares.

Uncertificated Securities

Our shares are uncertificated securities (*droits-valeurs*, within the meaning of Article 973c of the CO) and, when administered by a financial intermediary (*dépositaire*, within the meaning of the Federal Act on Intermediated Securities, "FISA"), qualify as intermediated securities (*titres intermédiés*, within the meaning of the FISA). In accordance with Article 973c of the CO, we maintain a non-public register of uncertificated securities (*registre des droits-valeurs*). We may at any time convert uncertificated securities into share certificates (including global certificates), one kind of certificate into another, or share certificates (including global certificates) into uncertificated securities. Following entry in our share register, a shareholder may at any time request from us a written confirmation in respect of the shares held by such shareholder, as reflected in the share register.

General Meeting of Shareholders

Ordinary/Extraordinary Meetings, Powers

The general meeting of shareholders is our supreme corporate body. Under Swiss law, ordinary and extraordinary general meetings of shareholders may be held. Under Swiss law, an ordinary general meeting of shareholders must be held annually within six months after the end of a Company's financial year. In our case, this generally means on or before June 30.

The following powers are vested exclusively in the general meeting of shareholders:

- adopting and amending the articles of association, including change of a company's purpose or domicile;
- electing the members of the board of directors, the chairman of the board of directors, the members of the compensation committee, the auditors and the independent proxy;
- approving the management report and the consolidated accounts;
- approving the annual accounts and resolutions on the allocation of the disposable profits, and in particular setting the dividend and the shares of profit to board members;
- approving the total compensation paid to members of the board of directors and executive management;
- discharging the members of the board of directors and executive management from liability with respect to their tenure in the previous financial year;
- dissolving a company with or without liquidation; and

- passing resolutions concerning all matters which are reserved to the authority of the general meeting of shareholders by law or by the articles of association.

An extraordinary general meeting of shareholders may be called by a resolution of the board of directors or, under certain circumstances, by a company's auditor, liquidator or the representatives of convertible bond holders, if any. In addition, the board of directors is required to convene an extraordinary general meeting of shareholders if shareholders representing at least 10% of the share capital request such general meeting of shareholders in writing. Such request must set forth the items to be discussed and the proposals to be acted upon. The board of directors must convene an extraordinary general meeting of shareholders and propose financial restructuring measures if, based on a company's stand-alone annual statutory balance sheet, half of the share capital and reserves are not covered by its assets.

Voting and Quorum Requirements

Shareholder resolutions and elections (including elections of members of the board of directors) require the affirmative vote of the simple majority of the votes cast at the general meeting of shareholders regardless of abstentions or empty or invalid votes, unless statutory law or the articles of association state otherwise.

A resolution of the general meeting of the shareholders passed by at least two-thirds of the shares represented at the meeting, and the absolute majority of the nominal value of the shares represented is required for:

- amending a company's corporate purpose;
- creating shares with privileged voting rights;
- restricting the transferability of common shares;
- creating authorized or conditional share capital;
- increasing the share capital out of equity, against contributions in-kind or for the purpose of acquiring assets and granting of special benefits;
- limiting or withdrawing shareholder's pre-emptive subscription rights;
- changing a company's domicile;
- alleviating or withdrawing of restrictions upon the transfer of common shares and the removal of the voting cap of 33 1⁄3% as contained in article 4 of the articles of association;
- removing the indemnification provision for the board of directors and executive management as contained in article 29 of the articles of association;
- converting common shares into bearer shares and vice versa;
- dissolving or liquidating a company; and
- amending or eliminating article 17 (*resolutions and elections*) of the articles of association.

The same voting requirements apply, subject to mandatory law, to resolutions regarding transactions among corporations (including a merger, demerger or conversion of a corporation) based on Switzerland's Federal Act on Mergers, Demergers, Transformations and Transfer of Assets, or the Merger Act, see "—Compulsory Acquisitions; Appraisal Rights."

In accordance with Swiss law and generally accepted business practices, our articles of association do not provide quorum requirements generally applicable to general meetings of shareholders. To this extent, our practice varies from the requirement of NASDAQ Listing Rule 5620(c), which requires an issuer to provide in its bylaws for a generally applicable quorum, and that such quorum may not be less than one-third of the outstanding voting stock.

Notice

General meetings of shareholders must be convened by the board of directors at least 20 days before the date of the meeting. The general meeting of shareholders is convened by way of a notice appearing in our official publication medium, currently the Swiss Official Gazette of Commerce. Registered shareholders may also be informed by ordinary mail or e-mail. The notice of a general meeting of shareholders must state the items on the agenda, the proposals to be acted upon and, in case of elections, the names of the nominated candidates. Except in the limited circumstances listed below, a resolution may not be passed at a general meeting without proper notice. This limitation does not apply to proposals to convene an extraordinary general meeting of shareholders or to initiate a special investigation. No previous notification is required for proposals concerning items included in the agenda or for debates that do not result in a vote.

All of the owners or representatives of our shares may, if no objection is raised, hold a general meeting of shareholders without complying with the formal requirements for convening general meetings of shareholders (a universal meeting). This universal meeting of shareholders may discuss and pass binding resolutions on all matters within the purview of the ordinary general meeting of shareholders, provided that the owners or representatives of all the shares are present at the meeting.

Agenda Requests

Pursuant to Swiss law, one or more shareholders, whose combined shareholdings represent the lower of (i) at least one tenth of the share capital or (ii) an aggregate nominal value of at least CHF 1,000,000, may request that an item be included in the agenda for an ordinary general meeting of shareholders. A request for inclusion of an item on the agenda must in principle be requested in writing delivered to or mailed and received at the registered office of the Company at least 120 calendar days before the first anniversary of the date that the Company's proxy statement was released to shareholders in connection with the previous year's ordinary general meeting of shareholders. The request must contain, for each of the agenda items, the following information:

- a brief description of the business desired to be brought before the ordinary general meeting of shareholders and the reasons for conducting such business at the ordinary general meeting of shareholders;
- the name and address, as they appear in our share register, of the shareholder proposing such business;
- the number of shares of the Company which are beneficially owned by such shareholder;
- the dates upon which the shareholder acquired such shares;
- documentary support for any claim of beneficial ownership;
- any material interest of such shareholder in such business; and
- A statement in support of the matter and, for proposals sought to be included in the Company's proxy statement, any other information required by Securities and Exchange Commission Rule 14a-8.

In addition, if the shareholder intends to solicit proxies from the shareholders of the Company, such shareholder shall notify the Company of this intent in accordance with Securities and Exchange Commission Rule 14a-4 and/or Rule 14a-8.

Our annual business report, the compensation report and the auditor's report must be made available for inspection by the shareholders at our registered office no later than 20 days prior to the general meeting of shareholders. Shareholders of record may be notified of this in writing.

Voting Rights

Each of our shares entitles its holder to one vote, regardless of its nominal value. The shares are not divisible. The right to vote and the other rights of share ownership may only be exercised by shareholders (including any nominees) or usufructuaries who are entered in our share register at cut-off date determined by the board of directors. Those entitled to vote in the general meeting of shareholders may be represented by the independent proxy holder (annually elected by the general meeting of shareholders), another registered shareholder or third person with written authorization to act as proxy or the shareholder's legal representative. The chairman has the power to decide whether to recognize a power of attorney.

Our articles of association state that no individual or legal entity may, directly or indirectly, formally, constructively or beneficially own or otherwise control voting rights ("Controlled Shares") with respect to 33 1⁄3% or more of the registered share capital recorded in the Commercial Register except if such individual or legal entity submits prior to the acquisition of such Controlled Shares an orderly tender offer to all shareholders with a minimum price of the higher of (i) the volume weighted average price of the last 60 trading days prior to the publication of the tender offer or (ii) the highest price paid by such individual or legal entity in the 12 months preceding to the publication of the tender offer. Those associated through capital, voting power, joint management or in any other way, or joining for the acquisition of shares, will be regarded as one person. The common shares exceeding the limit of 33 1/3% and not benefitting from the exemption regarding a tender offer will be entered in our share registered as shares without voting rights. The board of directors may in special cases approve exceptions to the above regulations. Additional voting caps apply to shareholders acquiring shares for other persons (nominees).

Dividends and Other Distributions

Our board of directors may propose to shareholders that a dividend or other distribution be paid but cannot itself authorize the distribution. Dividend payments require a resolution passed by a simple majority of the votes cast at a general meeting of shareholders regardless of abstentions or empty or invalid votes. In addition, our auditors must confirm that the dividend proposal of our board of directors conforms to Swiss statutory law and our articles of association.

Under Swiss law, we may pay dividends only from the disposable profit and from reserves formed for this purpose, each as evidenced by our audited stand-alone statutory balance sheet prepared pursuant to Swiss law, and after allocations to reserves required by Swiss law and the articles of association have been deducted. We are not permitted to pay interim dividends out of profit of the current business year.

Distributable reserves are generally booked either as "free reserves" (*réserves libres*) or as "reserve from capital contributions" (*apports de capital*). Under the CO, if our general reserves (*réserve générale*) amount to less than 20% of our share capital recorded in the Commercial Register (i.e., 20% of the aggregate nominal value of our issued capital), then at least 5% of our annual profit must be retained as general reserves. The CO permits us to accrue additional general reserves. Further, a purchase of our own shares (whether by us or a subsidiary) reduces the distributable reserves in an amount corresponding to the purchase price of such own shares. Finally, the CO under certain circumstances requires the creation of revaluation reserves which are not distributable.

Distributions out of issued share capital (i.e. the aggregate nominal value of our issued shares) are not allowed and may be made only by way of a share capital reduction. Such a capital reduction requires a

resolution passed by a simple majority of the votes cast at a general meeting of shareholders regardless of abstentions or empty or invalid votes. The resolution of the shareholders must be recorded in a public deed and a special audit report must confirm that claims of our creditors remain fully covered despite the reduction in the share capital recorded in the Commercial Register. The share capital may be reduced below CHF 100,000 only if and to the extent that at the same time the statutory minimum share capital of CHF 100,000 is reestablished by sufficient new fully paid-up capital. Upon approval by the general meeting of shareholders of the capital reduction, the board of directors must give public notice of the capital reduction resolution in the Swiss Official Gazette of Commerce three times and notify creditors that they may request, within two months of the third publication, satisfaction of or security for their claims. The reduction of the share capital may be implemented only after expiration of this time limit.

Our board of directors determines the date on which the dividend entitlement starts. Dividends are usually due and payable shortly after the shareholders have passed the resolution approving the payment, but shareholders may also resolve at the ordinary general meeting of shareholders to pay dividends in quarterly or other installments.

Transfer of Shares

Shares in uncertificated form (*droits-valeurs*) may only be transferred by way of assignment. Shares that constitute intermediated securities (*titres intermédiés*) may only be transferred when a credit of the relevant intermediated securities to the acquirer's securities account is made in accordance with the relevant provisions of the FISA. Article 5 of our articles of association provides that the transfer of intermediated securities and the pledging of these intermediated securities are based on the provisions of the FISA and that transfer of propriety as collateral by means of written assignment are not permitted.

Voting rights may be exercised only after a shareholder (or usufructuaries) has been entered in our share register (*registre des actions*) with his or her name, first name and address (in the case of legal entities, the registered office) as a shareholder with voting rights. Our articles of association state that no individual or legal entity may, directly or indirectly, formally, constructively or beneficially own or otherwise control voting rights ("Controlled Shares") with respect to 33 1⁄3% or more of the registered share capital recorded in the Commercial Register except if such individual or legal entity submits prior to the acquisition of such Controlled Shares an orderly tender offer to all shareholders with a minimum price of the higher of (i) the volume weighted average price of the last 60 trading days prior to the publication of the tender offer or (ii) the highest price paid by such individual or legal entity in the 12 months preceding to the publication of the tender offer. Those associated through capital, voting power, joint management or in any other way, or joining for the acquisition of shares, will be regarded as one person. The common shares exceeding the limit of 33 1/3% and not benefitting from the exemption regarding a tender offer will be entered in our share registered as shares without voting rights.

Additional voting caps apply to shareholders acquiring shares for other persons (nominees).

Inspection of Books and Records

Under the CO, a shareholder has a right to inspect our share register with respect to his own shares and otherwise to the extent necessary to exercise his shareholder rights. No other person has a right to inspect our share register. Our books and correspondence may be inspected with the express authorization of the general meeting of shareholders or by resolution of the board of directors and subject to the safeguarding of our business secrets.

Special Investigation

If the shareholders' inspection rights as outlined above prove to be insufficient in the judgment of the shareholder, any shareholder may propose to the general meeting of shareholders that specific facts be examined by a special commissioner in a special investigation. If the general meeting of shareholders approves the proposal, we or any shareholder may, within 30 calendar days after the general meeting of shareholders, request the competent court sitting in Lausanne, Switzerland, our registered office, to appoint

a special commissioner. If the general meeting of shareholders rejects the request, one or more shareholders representing at least 10 percent of the share capital or holders of shares in an aggregate nominal value of at least CHF 2,000,000 may request that the court appoint a special commissioner. The court will issue such an order if the petitioners can demonstrate that the board of directors, any member of the board of directors or our executive management infringed the law or our articles of association and thereby caused damages to the Company or the shareholders. The costs of the investigation would generally be allocated to us and only in exceptional cases to the petitioners.

Compulsory Acquisitions; Appraisal Rights

Business combinations and other similar transactions (i.e. mergers, demergers, transformations and certain asset transfers) that are governed by the Swiss Merger Act are, if approved in accordance with the applicable provisions of the Swiss Merger Act, binding on all shareholders of the involved companies. A statutory merger or demerger requires approval by at least two-thirds of the shares represented at a general meeting of shareholders and the absolute majority of the nominal value of the shares represented. If the merger agreement provides, however, only for a compensation payment, or in the event of an asymmetrical demerger, at least 90 percent of all shareholders of the transferring company who are entitled to vote must approve the merger agreement and the asymmetrical demerger, respectively.

Swiss corporations may be acquired by an acquirer through the direct acquisition of shares of the Swiss corporation. The Swiss Merger Act provides for the possibility of a so-called “cash-out” or “squeeze-out” merger if the acquirer controls 90% of the outstanding shares. If such a squeeze-out merger under the Swiss Merger Act occurs, a minority shareholder subject to the squeeze-out merger could seek to claim, within two months of the publication of the squeeze-out merger, that the consideration offered is “inadequate” and petition a Swiss competent court to determine what “adequate” consideration is.

In addition, under Swiss law, the sale of “all or substantially all of our assets” by us may require the approval of at least two-thirds of the number of shares represented at a general meeting shareholders and the absolute majority of the nominal value of the shares represented. Whether a shareholder resolution is required depends on the particular transaction, including whether the following test is satisfied:

- a core part of our business is sold without which it is economically impracticable or unreasonable to continue to operate the remaining business;
- our assets, after the divestment, are not invested in accordance with our statutory business purpose; and
- the proceeds of the divestment are not earmarked for reinvestment in accordance with our business purpose but, instead, are intended for distribution to our shareholders or for financial investments unrelated to our business.

If in a merger, demerger or transformation, equity or shareholder rights are not adequately preserved or the compensation paid is unreasonable, within two months after the publication of the merger, demerger or transformation resolution, each shareholder may demand that the competent court determines what is a reasonable amount of compensation. The decision of the court is legally binding on all shareholders of the company involved, provided that they are in the same legal position as the plaintiff. The costs of proceedings shall be borne by the acquiring company. If the particular circumstances justify it, the court may decide that the plaintiff shall bear all or part of the cost. An action to obtain a review of the protection of equity or shareholder rights does not affect the legal validity of the merger, demerger or transformation resolution.

Board of Directors

Our articles of association provide that the board of directors shall consist of at least three and not more than nine members.

The members of the board of directors and the chairman are elected annually by the general meeting of shareholders for a period until the completion of the subsequent ordinary general meeting of shareholders and are eligible for re-election. Each member of the board of directors must be elected individually.

Powers

The board of directors has the following non-delegable and inalienable powers and duties:

- the overall management of the Company and the issuing of all necessary directives;
- the determination of the Company's organization;
- the organization of the accounting, financial control and financial planning systems are required for management of the Company;
- the appointment an dismissal of persons entrusted with managing and representing the Company;
- the overall supervision of the persons entrusted with managing the Company, in particular with regard to compliance with the law, articles of association, operational regulations and directives;
- the compilation of the annual report, and the preparation for the general meeting of shareholders and implementing its resolutions;
- the preparation of the compensation report and to request approval by the general meeting of shareholders regarding the compensation of the board of directors and the executive committee; and
- the notification of the court in the event that the Company is over-indebted.

The board of directors may assign responsibility for preparing and implementing its resolutions or monitoring transactions to committees or individual members. It must ensure appropriate reporting to its members. Furthermore, the board of directors may, while retaining such non-delegable and inalienable powers and duties, delegate, in part or entirely, the management and the representation of the Company, within the limits of the law, to a one or more individual directors (Delegates) or to third parties pursuant to the organizational regulations issued by the board of directors.

Pursuant to Swiss law and Article 25 of our articles of association, details of the delegation and other procedural rules such as quorum requirements must be set in the organizational rules issued by the board of directors.

The board of directors assigns the persons with signatory power for the Company and the kind of signatory power.

Indemnification of Executive Management and Directors

Subject to Swiss law, Article 29 of our articles of association provides for indemnification of the current and former members of the board of directors, executive management and their heirs, executors and administrators, against liabilities arising in connection with the performance of their duties in such capacity, and permits us to advance the expenses of defending any act, suit or proceeding to our directors and members of the executive management.

In addition, under general principles of Swiss employment law, an employer may be required to indemnify an employee against losses and expenses incurred by such employee in the proper execution of their duties under the employment agreement with the employer.

We have entered into indemnification agreements with each of the members of our board of directors and executive management.

Conflict of Interest, Management Transactions

Swiss law does not have a general provision regarding conflicts of interest. However, the CO contains a provision that requires our directors and the members of the executive management to safeguard the Company's interests and imposes a duty of loyalty and duty of care on our directors and the members of the executive management. This rule is generally understood to disqualify directors and members of the executive management from participating in decisions that directly affect them. Our directors and executive officers are personally liable to us for any breach of these provisions. In addition, Swiss law contains provisions under which directors and all persons engaged in the Company's management are liable to the Company, each shareholder and the Company's creditors for damages caused by an intentional or negligent violation of their duties. Furthermore, Swiss law contains a provision under which payments made to any of the Company's shareholders or directors or any person associated with any such shareholder or director, other than payments made at arm's length, must be repaid to the Company if such shareholder or director acted in bad faith.

Our board of directors has adopted a Code of Business Conduct and Ethics that covers a broad range of matters, including the handling of conflicts of interest.

Principles of the Compensation of the Board of Directors and the Executive Management

Pursuant to Swiss law, our shareholders must annually approve the compensation of the board of directors and the persons whom the board of directors has, fully or partially, entrusted with the management of the Company. The board of directors must issue, on an annual basis, a written compensation report that must be reviewed together with a report on our business by our auditor. The compensation report must disclose all compensation (as defined in section 14 of the Swiss Ordinance against Excessive Compensation in Listed Companies) granted by the Company, directly or indirectly, to current members of the board of directors and executive management as well as to former members of the board of directors and executive management but in the latter case only to the extent if such compensation is related to their former role within the Company or if such compensation is not on customary market terms.

The disclosure concerning compensation must in particular include the aggregate amount for the board of directors and the aggregate amount for the executive management, as well as the particular amount of compensation for each member of the board of directors and the highest paid member of the executive management, specifying the name and function of each person.

Certain forms of compensation are prohibited for members of our board of directors and executive management, such as:

- severance payments provided for either contractually or in the articles of association (compensation due until the termination of a contractual relationship does not qualify as severance payment);
- advance compensation;
- incentive fees for the acquisition or transfer of corporations, or parts thereof, by the Company or by companies being, directly or indirectly, controlled by the us;
- loans, other forms of indebtedness, pension benefits not based on occupational pension schemes and performance-based compensation not provided for in the articles of association; and

- equity securities and conversion and option rights awards not provided for in the articles of association.

Compensation to members of the board of directors and executive management for activities in entities that are, directly or indirectly, controlled by the Company is prohibited if the compensation (i) would have been prohibited if it was paid directly by the Company, (ii) is not provided for in the articles of association or (iii) has not been approved by the general meeting of shareholders.

The general meeting of shareholders annually votes on the proposals of the board of directors with respect to:

- the maximum aggregate amount of non-performance-related compensation of the board of directors for the next term of office;
- the maximum aggregate amount of a possible additional compensation of the board of directors for the preceding business year;
- the maximum aggregate amount of non-performance-related compensation of the executive management for the 12-month period starting on 1 July following the ordinary general meeting of shareholders;
- the maximum aggregate amount of variable compensation for the executive management for the current year; and
- the maximum aggregate amount of options or shares in the Company granted to the board of directors and the executive management.

The respective total compensation amounts include social security and occupational pension contributions for the benefit of the members of the board of directors, the executive management and the Company.

If the general meeting of shareholders refuses to approve a respective motion by the board of directors, the board of directors may either submit a new motion at the same meeting or determine a maximum total remuneration or several maximum partial remunerations, subject to the relevant principles of the compensation, or submit a new motion to the next general meeting of shareholders for approval.

In addition to fixed compensation, members of the executive management may be paid in cash a variable compensation, depending on the achievement of certain performance criteria. The performance criteria may include individual targets, targets of the Company or parts thereof and targets in relation to the market, other companies or comparable benchmarks, taking into account the position and level of responsibility of the recipient of the variable compensation. The board of directors or, where delegated to it, the compensation committee determines the relative weight of the performance criteria and the respective target values.

Compensation may be paid in cash or granted in form of options or shares in the Company. The board of directors or, to the extent delegated to it, the compensation committee determines grant, vesting, exercise and forfeiture conditions.

Borrowing Powers

Neither Swiss law nor our articles of association restrict in any way our power to borrow and raise funds. The decision to borrow funds is made by or under the direction of our board of directors, and no approval by the shareholders is required in relation to any such borrowing.

Repurchases of Shares and Purchases of Own Shares

The CO limits our right to purchase and hold our own shares. We and our subsidiaries may purchase shares only if and to the extent that (i) we have freely distributable reserves in the amount of the purchase price; and (ii) the aggregate nominal value of all shares held by us does not exceed 10 percent of our share capital. Pursuant to Swiss law, where shares are acquired in connection with a transfer restriction set out in the articles of association, the foregoing upper limit is 20 percent. If we own shares that exceed the threshold of 10 percent of our share capital, the excess must be sold or cancelled by means of a capital reduction within two years.

Shares of the Company held by us or our subsidiaries are not entitled to vote at the general meeting of shareholders but are entitled to the economic benefits applicable to the shares generally, including dividends and pre-emptive subscription rights in the case of share capital increases.

In addition, selective share repurchases are only permitted under certain circumstances. Within these limitations, as is customary for Swiss corporations, we may purchase and sell our own shares from time to time in order to meet imbalances of supply and demand, to provide liquidity and to even out variances in the market price of shares.

Notification and Disclosure of Substantial Share Interests

The disclosure obligations generally applicable to shareholders of Swiss corporations under the Swiss Financial Market Infrastructure Act, FinMIA, do not apply to us since our shares are not listed on a Swiss stock exchange.

Pursuant to Article 663c of the CO, Swiss corporations whose shares are listed on a stock exchange must disclose their significant shareholders and their shareholdings in the notes to their balance sheet, where this information is known or ought to be known. Significant shareholders are defined as shareholders and groups of shareholders linked through voting rights who hold more than five percent of all voting rights.

Stock Exchange Listing

Our common shares are listed on the NASDAQ Global Market under the symbol “ACIU.”

Transfer Agent and Registrar of Shares

Computershare Trust Company, N.A. acts as transfer agent and registrar for our common shares. The share register reflects only record owners of our shares. Swiss law does not recognize fractional share interests.

Exhibit 12.1

CERTIFICATION

I, Andrea Pfeifer, certify that:

1. I have reviewed this annual report on Form 20-F of AC Immune SA;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 30, 2020

/s/ Andrea Pfeifer
Andrea Pfeifer
Chief Executive Officer

Exhibit 12.2

CERTIFICATION

I, Joerg Hornstein, certify that:

1. I have reviewed this annual report on Form 20-F of AC Immune SA;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 30, 2020

/s/ Joerg Hornstein
Joerg Hornstein
Chief Financial Officer

Exhibit 13.1

CERTIFICATION

The certification set forth below is being submitted in connection with AC Immune SA's annual report on Form 20-F for the year ended December 31, 2019 (the "Report") for the purpose of complying with Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code.

Andrea Pfeifer, the Chief Executive Officer of AC Immune SA, certifies that, to the best of her knowledge:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and

2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of AC Immune SA.

Date: March 30, 2020

/s/ Andrea Pfeifer
Name: Andrea Pfeifer
Chief Executive Officer

Exhibit 13.2

CERTIFICATION

The certification set forth below is being submitted in connection with AC Immune SA's annual report on Form 20-F for the year ended December 31, 2019 (the "Report") for the purpose of complying with Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code.

Joerg Hornstein, the Chief Financial Officer of AC Immune SA, certifies that, to the best of his knowledge:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and

2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of AC Immune SA.

Date: March 30, 2020

/s/ Joerg Hornstein
Name: Joerg Hornstein
Chief Financial Officer

EXHIBIT 15.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement (Form S-8 No. 333-213865) pertaining to the AC Immune SA 2013 Equity Incentive Plan, the Employee Stock Option and Share Plan of AC Immune (2005), and the Stock Option Plan – AC Immune of December 31, 2004 of AC Immune SA,

(2) Registration Statement (Form S-8 No. 333-216539) pertaining to the AC Immune SA 2016 Stock Option and Incentive Plan of AC Immune SA;

(3) Registration Statement (Form F-3 No. 333-224694) of AC Immune SA; and

(4) Registration Statement (Form F-3 No. 333-227016) of AC Immune SA.

of our report dated March 20, 2018, with respect to the financial statements of AC Immune SA, included in this Annual Report (Form 20-F) for the year ended December 31, 2017.

/s/ Ernst & Young AG

Petit-Lancy, Switzerland
March 30, 2020

EXHIBIT 15.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form F-3 (No. 333-224694 and No. 333-227016) and on Form S-8 (No. 333-233019, No. 333-216539 and No. 333-213865) of AC Immune SA of our report dated March 23, 2020, relating to the financial statements, which appears in this Form 20-F.

/s/ PricewaterhouseCoopers SA

Lausanne, Switzerland
March 30, 2020