2020

novocure®

2020 business highlights

3
FDA-APPROVED INDICATIONS

18,000+
PATIENTS TREATED GLOBALLY[1]

$494M
IN 2020 GLOBAL NET REVENUES

$132M
IN 2020 R&D INVESTMENTS

$843M
CASH ON HAND[2]

5
INDICATIONS IN LATE-STAGE DEVELOPMENT

185+
ISSUED PATENTS AND PENDING PATENT APPLICATIONS GLOBALLY

1. as of December 31, 2020
2. cash, cash equivalents and short-term investments as of December 31, 2020

William Doyle, Executive Chairman ↓

Asaf Danziger, CEO ↓

a letter from our Chairman and CEO

Dear fellow shareholders,

We entered 2020 focused on a clear set of priorities: to drive commercial adoption of our innovative therapy for the treatment of glioblastoma multiforme ("GBM") and malignant pleural mesothelioma ("MPM"); to advance our clinical trials across multiple solid tumor indications; and to optimize the delivery of Tumor Treating Fields ("TTFields") through product innovation – all with the goal of extending survival in some of the most aggressive forms of cancer.

We are proud to have made notable progress on all fronts last year, despite the challenges caused by COVID-19. We opened clinical trials and initiated new clinical trial collaborations. We received regulatory approval for Optune® in China and Optune Lua™ in Europe. With positive decisions to establish national coverage for Optune in Israel, Germany and Switzerland, we secured broad reimbursement for GBM in all of our active markets. And perhaps most importantly, we have now treated nearly 20,000 patients globally.

We believe we are in a virtuous cycle of innovation and execution, as our commercial business generates the financial strength to invest in innovation intended to unlock the full potential of the TTFields platform and fuel the future growth of our company. As we reflect on 2020 and look ahead with optimism, we believe we are only beginning.

a self-reinforcing cycle of execution and innovation

Our performance last year underscores the resilience of our organization. Despite the complexities caused by COVID-19, our GBM business delivered a record $494 million in global net revenues in 2020, a 41% increase from the prior year. This growth was driven by a 17% year-over-year increase in the number of active patients on therapy and improving reimbursement rates in our active markets. We ended the year with more than 3,400 active patients on therapy.

We invested a record $132 million in research and development in 2020, representing 67% growth versus 2019, including $54 million to advance clinical programs. The TTFields platform offers opportunities for broad applicability across solid tumor cancer indications, for use together with other effective oncology treatments and for technological enhancements to therapy delivery systems. Given our clear organic growth opportunities, we are committed to advancing our TTFields science and technology.

Notwithstanding increased investments in clinical and product development, Novocure was profitable throughout 2020, with nearly $20 million in annual net income and $115 million in Adjusted EBITDA[1]. In November, we closed a $575 million convertible bond offering and a $150 million revolving credit facility, resulting in nearly $850 million in cash–on-hand. Our capital structure and improved profitability position us well for a period of significant innovation and growth.

current development programs offer an opportunity for transformative growth

We are focused on advancing a comprehensive clinical development strategy to further extend survival in our approved indications and to establish the safety and efficacy of TTFields in new indications together with existing and emerging standard-of-care therapies. Last year, we launched three new clinical trials, expanding our development pipeline to seven actively enrolling trials targeting more than 2,900 patients.

In December 2020, we enrolled the first patient in our post-marketing TRIDENT trial in newly diagnosed GBM. TRIDENT will determine the potential survival benefit of initiating Optune plus temozolomide concurrent with radiation therapy. The study is designed to detect an extension in overall survival of approximately 6 months, representing our commitment to further improving outcomes for GBM patients.

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Our LUNAR trial is testing the effectiveness of TTFields as a second-line treatment for primary non-small cell lung cancer ("NSCLC"). In April, we announced that LUNAR's pre-specified interim analysis concluded with a favorable recommendation to continue accrual with no new safety signals noted. The Data Monitoring Committee recommended a reduced sample size and reduced time to follow-up. We believe these recommendations support the potential for TTFields to make

a significant difference in treatment outcomes for patients with NSCLC. In 2021, we plan to expand our thoracic cancer program into first-line NSCLC through a clinical collaboration with MSD (a tradename of Merck & Co.). The KEYNOTE B-36 trial to study TTFields together with the anti-PD-1 therapy KEYTRUDA will launch later this year. We are also studying the effect of TTFields on brain metastases from NSCLC in our phase 3 pivotal METIS trial.

We have two ongoing phase 3 pivotal trials in our abdominal cancer program. INNOVATE-3 is testing the effectiveness of TTFields in patients with platinum-resistant ovarian cancer. PANOVA-3 tests the effectiveness of TTFields in patients with unresectable, locally-advanced pancreatic cancer. Almost all patients diagnosed with these cancers face a poor prognosis.

We recently completed a phase 2 pilot trial in liver cancer, the HEPANOVA trial, and are enrolling patients in EF-31, a phase 2 pilot study in gastric cancer in partnership with Zai Lab. The data generated from these studies are intended to inform the design of phase 3 pivotal trials and create the potential to expand our late-stage pipeline into additional indications.

we believe we are only beginning to unlock the potential of the TTFields platform

Beyond our clinical development, we believe there is considerable opportunity to extend survival through product innovation. Our product development teams remain focused on delivering innovations to increase TTFields dose and to improve patient usability. Our teams continue to evaluate opportunities to optimize the TTFields generator, design next generation arrays, and create new patient-centered software intended to support larger populations in multiple indications.

Our belief that the TTFields mechanism of action is broadly applicable to solid tumor cancers is supported by a scientific rationale grounded in more than 20 years of research. In addition to its anti-mitotic effect, TTFields has been shown *in vitro* to inhibit DNA damage repair, to induce autophagy and to induce immunogenic cell death, among other downstream effects.

Our platform therapy is intended principally for use together with other standard-of-care treatments. There is a growing body of evidence that supports TTFields' broad applicability with other therapies, including radiation therapy, and certain chemotherapies and immunotherapies.

We continue to see signals of broadening interest in our therapy among external researchers and clinicians. Last year, TTFields was cited in over 1,600 scientific publications and 82 publications were authored about our therapy. 31 active investigator-sponsored trials are anticipated to further refine our understanding of TTFields' optimal use in the clinic. These external efforts build upon and enrich the TTFields ecosystem and serve to advance our patient-forward mission.

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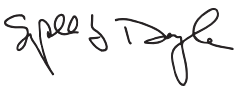
striving to make a difference

We started Novocure with the novel insight that electric fields can be harnessed to disrupt cancer cell division. Two decades later, our mission remains clear. We strive to extend survival in some of the most aggressive forms of cancer through the development and commercialization of TTFields.

Over the last year, we learned firsthand that life can change dramatically overnight. We worked most of the year under extraordinary conditions, adapting many times to the challenges and seeking opportunities before us. We never lost sight of our aspiration to make a difference in cancer. As we look forward, we see an opportunity to make a difference in the lives of many more people diagnosed with some of the most aggressive and prevalent solid tumor cancers. Through the experience of the past year, our resolve and passion have only increased, and we feel even more motivated to move forward on our mission.

Thank you for your continued support.

Asaf Danziger,
CEO



William Doyle,
Executive Chairman

1. Adjusted EBITDA is a non-U.S. GAAP measurement of earnings before interest, taxes, depreciation, amortization and share-based compensation. Reconciliations of non-GAAP financial measures to GAAP financial measures are included in our Form 8-K filed with the SEC on April 29, 2021.

2020 ESG highlights

PATIENTS THAT QUALIFIED FOR OUT-OF-POCKET EXPENSE FOR OUR THERAPY OF LESS THAN

$500

PER YEAR

8%

OF OPTUNE DEMAND WAS MET IN THE FORM OF FREE THERAPY PROVIDED BY US TO PATIENTS, INCLUDING THOSE WITHOUT INSURANCE

100%

OF PATIENTS WERE VERY SATISFIED OR SATISFIED WITH NOVOCURE[1]

87%

OF OUR EMPLOYEES ARE ENGAGED, MORE THAN 14% POINTS ABOVE THE GLOBAL NORM[2]

ROLLING 12 MONTH TURNOVER RATE OF

9%[3]

COMPARED WITH INDUSTRY AVERAGE OF NEARLY 16%[4]

66%

OF ELIGIBLE EMPLOYEES PARTICIPATED IN OUR EMPLOYEE SHARE PURCHASE PROGRAM VS. 30% AVERAGE GLOBAL PARTICIPATION FOR COMPARABLE PLANS

OVER

30

NATIONALITIES REPRESENTED WITHIN OUR WORKPLACE

OVER

15

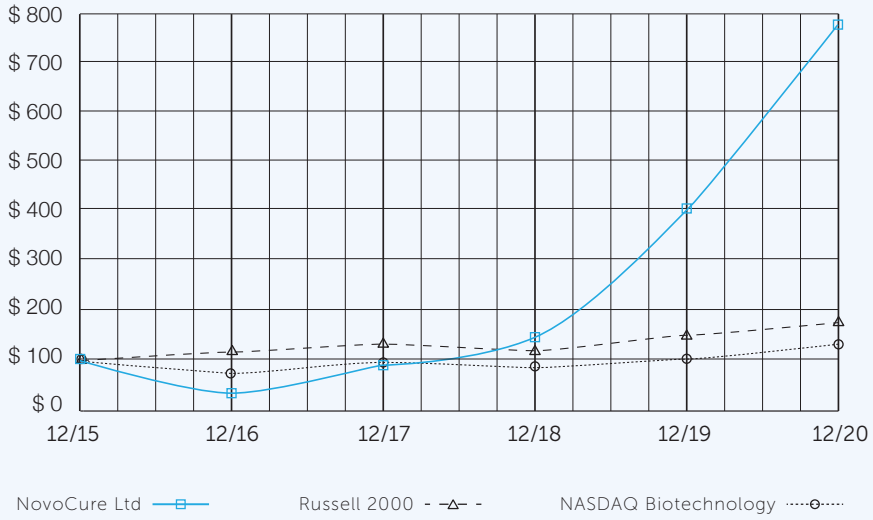
LANGUAGES SPOKEN WITHIN OUR WORKFORCE

1. based on 2020 patient survey results
2. based on 2021 employee survey with an 88% response rate conducted by an independent third party
3. as of December 31, 2020
4. based on the Radford U.S. Life Sciences Trends Report for Q4 2020

comparison of 15 month cumulative total return*

The graph below matches NovoCure Ltd's cumulative 5-Year total shareholder return on common stock with the cumulative total returns of the Russell 2000 index and the NASDAQ Biotechnology index. The graph tracks the performance of a $100 investment in our common stock and in each index (with the reinvestment of all dividends) from 12/31/2015 to 12/31/2020.

Among NovoCure Ltd, the Russell 2000 Index and the NASDAQ Biotechnology Index



*$100 invested on 12/31/15 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

cumulative total return summary

The stock price performance included in this graph is not necessarily indicative of future stock price performance.

	NovoCure Ltd	Russell 2000	NASDAQ Biotechnology
12/15	100.00	100.00	100.00
12/16	35.11	121.31	78.65
12/17	90.34	139.08	95.67
12/18	149.73	123.76	87.19
12/19	376.88	155.35	109.08
12/20	773.88	186.36	137.90

approved indications

Optune is intended as a treatment for adult patients (22 years of age or older) with histologically-confirmed glioblastoma multiforme (GBM).

Optune with temozolomide is indicated for the treatment of adult patients with newly diagnosed, supratentorial glioblastoma following maximal debulking surgery, and completion of radiation therapy together with concomitant standard of care chemotherapy.

For the treatment of recurrent GBM, Optune is indicated following histologically- or radiologically-confirmed recurrence in the supratentorial region of the brain after receiving chemotherapy. The device is intended to be used as a monotherapy, and is intended as an alternative to standard medical therapy for GBM after surgical and radiation options have been exhausted.

important safety information

contraindications

Do not use Optune in patients with GBM with an implanted medical device, a skull defect (such as, missing bone with no replacement), or bullet fragments. Use of Optune together with skull defects or bullet fragments has not been tested and may possibly lead to tissue damage or render Optune ineffective.

Use of Optune for GBM together with implanted electronic devices has not been tested and may lead to malfunctioning of the implanted device.

Do not use Optune for GBM in patients known to be sensitive to conductive hydrogels. Skin contact with the gel used with Optune may commonly cause increased redness and itching, and may rarely lead to severe allergic reactions such as shock and respiratory failure.

warnings and precautions

Optune can only be prescribed by a healthcare provider that has completed the required certification training provided by Novocure®.

The most common (≥10%) adverse events involving Optune in combination with chemotherapy in patients with GBM were thrombocytopenia, nausea, constipation, vomiting, fatigue, convulsions, and depression.

The most common (≥10%) adverse events related to Optune treatment alone in patients with GBM were medical device site reaction and headache. Other less common adverse reactions were malaise, muscle twitching, and falls related to carrying the device.

If the patient has an underlying serious skin condition on the treated area, evaluate whether this may prevent or temporarily interfere with Optune treatment.

Do not prescribe Optune for patients that are pregnant, you think might be pregnant or are trying to get pregnant, as the safety and effectiveness of Optune in these populations have not been established.

forward-looking statements

In addition to historical facts or statements of current condition, this report may contain forward-looking statements. Forward-looking statements provide Novocure's current expectations or forecasts of future events. These may include statements regarding anticipated scientific progress on its research programs, clinical trial progress, development of potential products, interpretation of clinical results, prospects for regulatory approval, manufacturing development and capabilities, market prospects for its products, coverage, collections from third-party payers and other statements regarding matters that are not historical facts. You may identify some of these forward-looking statements by the use of words in the statements such as "anticipate," "estimate," "expect," "project," "intend," "plan," "believe" or other words and terms of similar meaning. Novocure's performance and financial results could differ materially from those reflected in these forward-looking statements due to general financial, economic, environmental, regulatory and political conditions as well as issues arising from the COVID-19 pandemic and other more specific risks and uncertainties facing Novocure such as those set forth in its Annual Report on Form 10-K filed on February 25, 2021 with the U.S. Securities and Exchange Commission. Given these risks and uncertainties, any or all of these forward-looking statements may prove to be incorrect. Therefore, you should not rely on any such factors or forward-looking statements. Furthermore, Novocure does not intend to update publicly any forward-looking statement, except as required by law. Any forward-looking statements herein speak only as of the date hereof. The Private Securities Litigation Reform Act of 1995 permits this discussion.

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