novocure™

a profoundly different approach to cancer treatment

NOVOCURE 2016
ANNUAL REPORT

who we are

450+
EMPLOYEES

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FDA-APPROVED INDICATIONS

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CURRENTLY ACTIVE MARKETS

INNOVATIVE BREAKTHROUGHS

Novocure is developing a profoundly different cancer treatment centered on a proprietary therapy called TTFields, the use of alternating electric fields tuned to specific frequencies to disrupt solid tumor cancer cell division. The basic mechanism behind TTFields may be broadly applicable and is not limited to a specific solid tumor type or genetic marker. Importantly, we believe TTFields has the potential to increase survival when used in combination with other cancer therapies without significantly increasing side effects.

For over 15 years, Novocure's researchers have explored a different approach to cancer treatment that puts the patient first.

Medical advancements have led to dramatic improvements in cancer survival in the last 50 years. In the United States, five-year survival for all cancers rose from 49 percent in the 1970s to 69 percent in this decade.

Despite meaningful advancements in cancer treatment, we believe a significant unmet need to improve survival and quality of life remains. Of the 22,280 women diagnosed with ovarian cancer in the U.S. each year, only 46.2 percent live past five years. Of the 224,390 Americans diagnosed with lung cancer annually, only 17.7 percent are alive five years later. Of the 53,070 people diagnosed with pancreatic cancer in the U.S. each year, only 7.7 percent survive past the five-year mark.

For patients facing some of the most aggressive forms of cancer, these grim statistics are their reality. The five-year survival rates are simply unacceptable. We believe a profoundly different approach to cancer treatment is needed.

Cover:
Moshe Giladi, PhD
Head of Preclinical Research

Novocure's Director of Preclinical Research, Moshe Giladi, joined the company in August 2005. Dr. Giladi's team in Israel researches the mechanism of action and the biological application of alternating electric fields.

to our fellow shareholders,

Asaf Danziger, CEO (left)
William Doyle, Executive Chairman

During our first full year as a public company, we achieved many important milestones that we believe leave us well positioned for our future success.

We had nearly 1,100 active Optune patients on treatment at the end of 2016 and have made great strides in our GBM business. During 2016, we added more than 400 certified treatment centers globally and expanded our sales force in the United States and Germany. We completed the rollout of our second generation Optune System, which weighs less than 2.7 pounds. We took steps forward in market access and in contracting with major payers, entering 2017 with more than 180 million U.S. covered lives.

We also made strides in advancing our clinical pipeline. In October 2016, we enrolled the first patient in our phase 3 pivotal METIS trial studying TTFields in patients with brain metastases from non-small cell lung cancer. In February 2017, we enrolled the first patient in our phase 3 pivotal LUNAR trial studying TTFields in patients with advanced non-small cell lung cancer. We completed phase 2 pilot trials in pancreatic cancer and ovarian cancer, and shared the topline results at our research and development day in December 2016. We also presented what we believe are promising interim results from our phase 2 pilot trial in mesothelioma at the International Association for the Study of Lung Cancer World Conference. In our preclinical and clinical experience to date, TTFields have consistently shown anti-mitotic activity with no known systemic toxicity, and we are encouraged by the preliminary evidence from these pilot studies.

A HISTORY OF STRONG LEADERSHIP

Asaf Danziger, Novocure's Chief Executive Officer, and Bill Doyle, Novocure's Executive Chairman, have been working together since 2002, bringing low-intensity, alternating electric fields from preclinical concept to a clinically-validated and FDA-approved commercial product for the treatment of glioblastoma.

NEARLY

1,100

ACTIVE PATIENTS AT 2016 YEAR END

5

INDICATIONS IN OUR CLINICAL PIPELINE

$220

MILLION IN CASH, CASH EQUIVALENTS, AND SHORT TERM INVESTMENTS AT 2016 YEAR END

Financially, we ended the year in a position of strength to support our commercial business and our clinical pipeline.

We recorded revenues of $82.9 million for the full year 2016, representing more than 150 percent of year-over-year revenue growth. On December 31, 2016, we had almost $220 million in cash, cash equivalents and short term investments on our balance sheet.

Looking forward to 2017, we are acutely focused on our simple, two-pronged strategy that we believe will enable us to responsibly sustain the growth of our business while bringing our therapy to patients. First, we are committed to driving commercial adoption of Optune within our GBM business. Second, we are dedicated to advancing our clinical pipeline to indications beyond GBM. We strive to achieve both of these strategies while improving operating leverage. With discipline and focus, we are committed to bringing our profoundly different approach to cancer treatment to as many patients as possible who may benefit from it.

Thank you for your continued support of Novocure.

Asaf Danziger,
CEO

William Doyle,
Executive Chairman

"Even after 15+ years of research, there is still more being learned about treatment with alternating electric fields. We are excited about the promising application of this profoundly different approach to solid tumor cancer treatment, for glioblastoma and beyond."

— **Eilon Kirson MD, PhD**
Chief Science Officer and
Head of Research and Development

low-intensity alternating electric fields

USED ALONE OR IN COMBINATION TO TREAT SOLID TUMORS

surgery

- Most frequently employed therapy
- Reduces size of a tumor prior to initiation of additional therapies

radiation

- Kills cells when delivered at high doses
- Injures healthy tissues with numerous potential toxic side effects

pharmacological treatments

- Includes chemotherapy, targeted therapies and immuno-oncology
- Limited by potential side effects
- Resistance can develop over time

tumor treating fields (TTFields)

- Low-intensity, alternating electric fields
- Mild side effect profile
- No known resistance or cumulative toxicity
- Can be used in combination with other treatment modalities

THE SCIENCE OF NOVOCURE

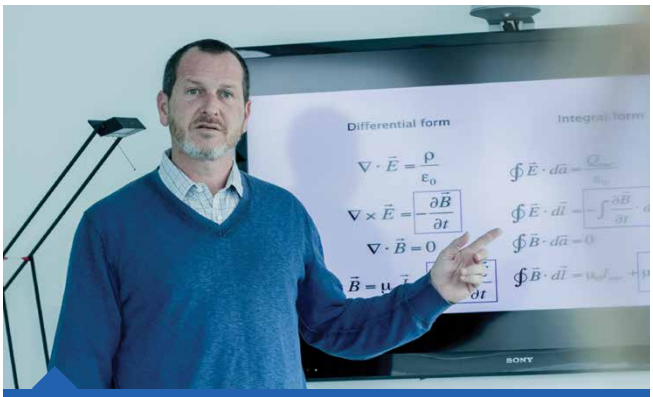
a message from our chief science officer, Eilon Kirson MD, PhD

For more than a century, advances in cancer treatment have depended upon innovative researchers and clinicians and hard-fought breakthroughs. Each step forward was sparked by an idea or a hypothesis. Today's traditional treatments–surgery, radiation and chemotherapy—were once thought of as radical, and each therapy evolved over time. Throughout medical history, advancements small and large led to improved survival rates and quality of care over prior treatments. Every several decades, a major breakthrough made a significant enough impact to change the course of cancer treatment for countless patients.

Yet for many people diagnosed with some of the most aggressive forms of cancer, traditional treatments aren't enough, as is evident from low and stagnant survival rates in certain forms of cancer. In order to make a meaningful impact in the lives of these patients, we believe that we need a different approach to solid tumor cancer treatment.

In 2000, Yoram Palti, Novocure's founder and professor emeritus of physiology and biophysics at the Technion-Israel Institute of Technology, hypothesized and began testing such an approach. Instead of searching for ways to improve upon existing cancer therapies, he employed his knowledge of physics to influence biological processes in cancer cells, particularly mitosis. Professor Palti proposed that alternating electric fields tuned to specific frequencies could disrupt cancer cell division without causing many of the life-altering side effects associated with other traditional treatments. Over a decade of preclinical and clinical research in more than 15 cancer cell lines has proven he was right.

Professor Palti viewed the problems with traditional cancer treatments through an innovative lens. He assessed the need for improved outcomes and his own knowledge in physics and biology, and questioned what people think about existing treatments and where they might be stuck in their thought patterns. By thinking of killing cancer from a new perspective, he discovered another way.



ADVANCING ALTERNATING ELECTRIC FIELD THERAPY

Novocure's Chief Science Officer and Head of Research and Development Eilon Kirson was one of the first employees to join the company in 2002. Dr. Kirson has global responsibility for Novocure's preclinical and clinical and product development programs, as well as the company's regulatory strategy.

The spirit of Professor Palti's original hypothesis remains a core pillar of Novocure today. As innovators ourselves, we carried Professor Palti's original idea forward. Like the many innovators in cancer research who've come before, we see the limitations of current treatments not as a challenge, but as an opportunity to approach the problem—and find a solution—in a profoundly different way.

Eilon Kirson MD, PhD
Chief Science Officer and Head of Research and Development

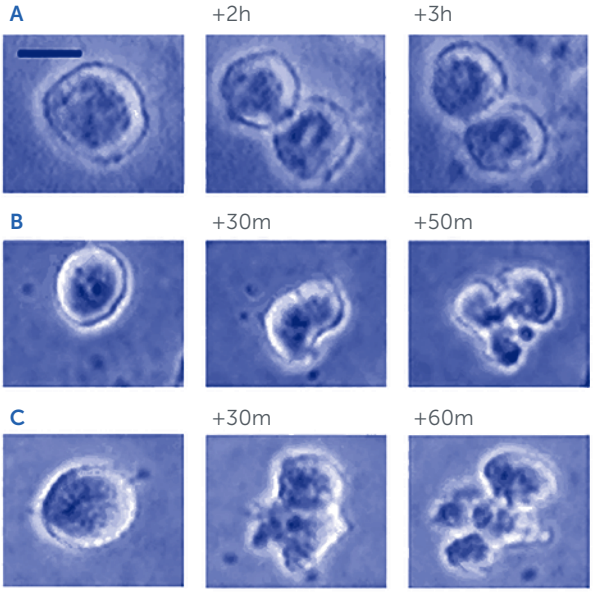
mechanism of action

Einav Zeevi, Preclinical Researcher

an effective anti-mitotic treatment

In order to understand treatment with TTFields, one must first be familiar with electric fields and how they can be utilized for medical applications. All fields exert forces on specific objects that are spatially located inside the field. For example, gravitational fields exert forces on masses, and magnetic fields exert forces on iron. Similarly, electric fields exert forces on polarized molecules and can be used across multiple medical applications at specific frequencies. Low frequency or pulsed electric fields can depolarize cell membranes, as seen in artificial pacemakers, while high frequency electric fields can generate heat, as seen in radiofrequency ablation. Intermediate frequency electric fields, long thought to have no significant biological effect, have now been shown to inhibit the growth rate of a variety of cancer cell lines and cause cancer cell death.

TTFields use low-intensity, alternating electric fields tuned to specific frequencies to disrupt the highly choreographed mitotic process essential to tumor growth. While many intracellular molecules are slightly polarized or neutral, some are highly polarized and strongly affected by intermediate-frequency, alternating electric fields. For example, tubulin is a highly polarized molecule that must orient spatially to form the mitotic spindle, which segregates chromosomes into two daughter cells during mitosis. In the presence of electric fields, tubulin aligns with the direction of the electric field, causing disruption of mitotic spindle formation and eventual cell death. Septin is another highly polarized molecule that must orient spatially to form the contractile ring needed to split daughter cells during mitosis. In the presence of electric fields, septin aligns with the direction of the electric field, leading to improper localization of the contractile ring. This process causes membrane blebbing and eventual cell death.



LOW INTENSITY ALTERNATING ELECTRIC FIELDS AND THEIR EFFECT ON MITOSIS

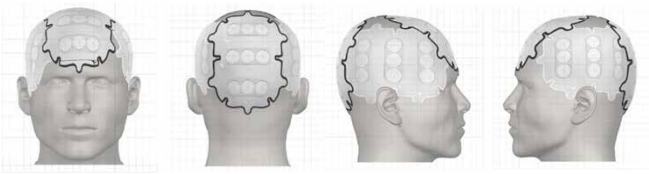
Alternating electric fields affect tumor cells by arresting mitosis, slowing TTFields-treated cell division time from less than one hour to more than three hours (a). Some cells in the field may also disintegrate in the later stages of cell division (b,c).

Credit: Physics Today, adapted from Kirson et al. Cancer Res. 64, 3288, 2004

application of therapy

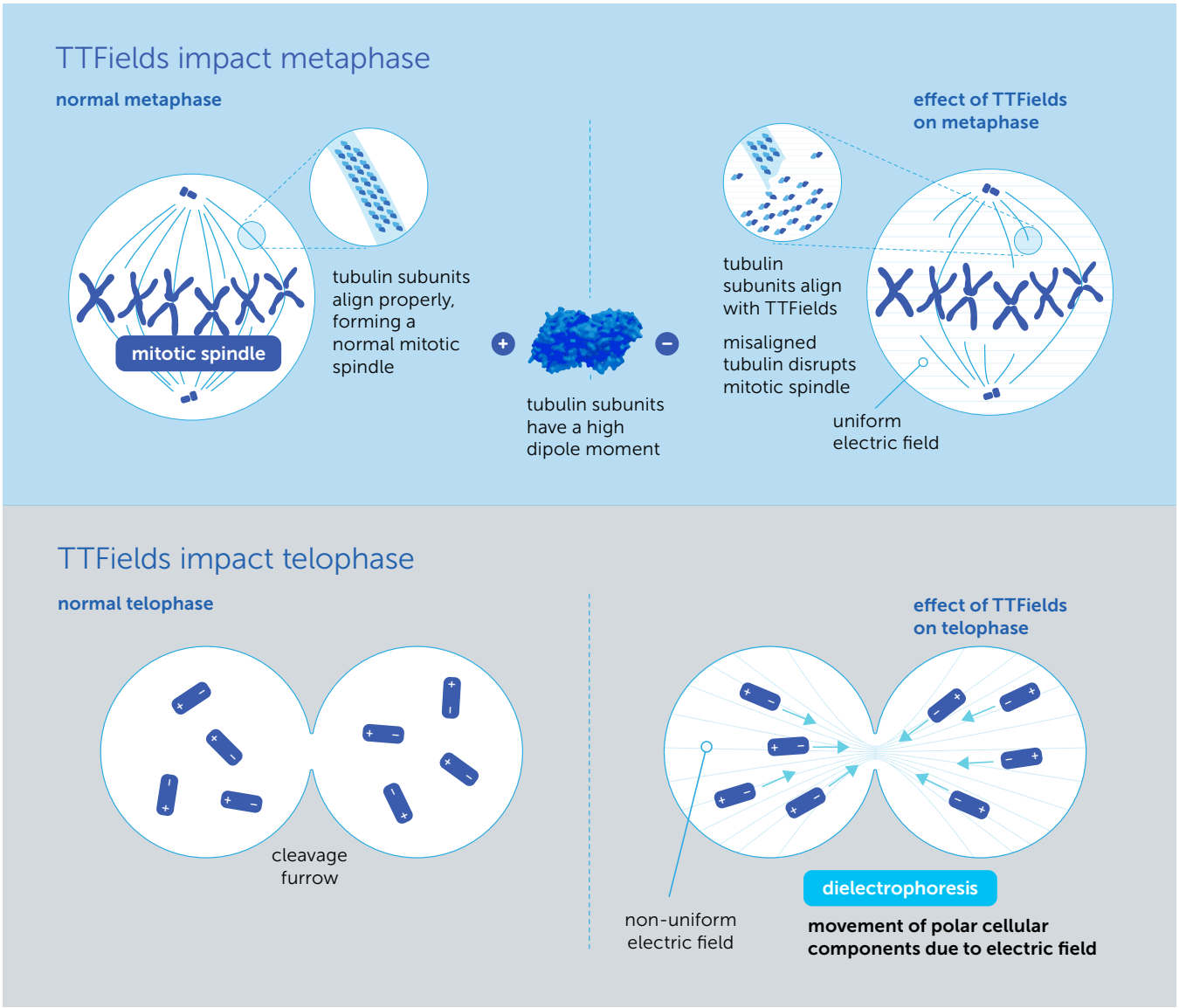
Novocure's profoundly different approach to cancer treatment utilizes low-intensity, alternating electric fields tuned to a specific frequency with the goal of disrupting cancer cell division and tumor growth. To apply these electric fields to the body, two sets of transducer arrays are placed front to back and side to side to surround the region of treatment. The arrays are connected to an electric field generator, and the direction of the electric field oscillates rapidly between each set of arrays. The electric field penetrates the entire volume of tissue between the arrays and, at the right frequency, into the cells inside the field.

The cell membrane serves as an effective filter for electric fields unless tuned to a specific frequency, with the frequency required to penetrate the membrane principally linked to cell size. Cancer cells tend to be smaller than normal healthy cells and, as a result, the frequency of the electric field can be tuned to the specific size of the targeted tumor cell.



ELECTRODE PLACEMENT IS OPTIMIZED FOR EACH PATIENT

The distribution of the field depends on the exact layout of the transducer arrays and the passive electrical properties, mainly resistance, of the different tissues between them. Array placement is optimized for each patient using proprietary software called NovoTAL™, based on morphometric measurements of the patient's anatomy according to a recent MRI scan and the location of the tumor.



Q&A

ZE'EV BOMZON
DIRECTOR OF SCIENCE

Physicist Ze'ev Bomzon and his team of researchers aim to optimize the delivery of alternating electric fields to solid tumor cancers and further the understanding of the mechanism of action.

EFFECTIVELY COMMUNICATING NOVOCURE'S SCIENCE

Director of Science Ze'ev Bomzon recognizes the necessity of effectively explaining Novocure's technology—which bridges physics and biology—to researchers of various scientific backgrounds. "We're always developing new tools to educate people."

Ze'ev Bomzon,
Director of Science

What type of research do you conduct?

We do a lot of physics research. Our main focus has been on optimizing the delivery of TTFields. We do a lot of simulation, numerical work and experimental work as well, such as measuring TTFields in various situations. We also continue our research into the mechanism of action of TTFields. That includes a lot of work with our preclinical teams and looking at things such as electric properties of cells, which are relevant to enhancing our understanding of how TTFields penetrate into the cells.

What are some of the challenges of working with a profoundly different technology?

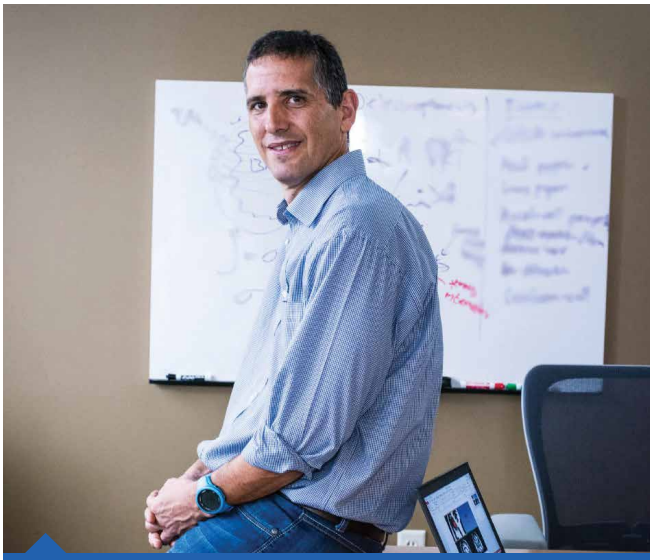
Although Novocure has been researching TTFields for more than 15 years, that's not a long time in the grand scheme of things. We continue to deepen our understanding of the mechanism of action of TTFields. Because our therapy is so different, it has taken time for the broader scientific community to begin researching TTFields. However, a number of institutions have started to study TTFields in the last several years.

Additional research, whether done internally or externally, will help inform our therapy and could result in better outcomes for patients.

Our technology bridges physics with biology, and we have to communicate information to people with various scientific backgrounds. The way physicists describe the world is very different from the way biologists describe the world. For many people, the concept of an electric field is abstract. You can't see it. It's not intuitive to people what the electric field is and what it does, so you have to explain that and you can't do it with equations. It's not easy for everyone to comprehend the physics and theory behind it.

What do you like about science?

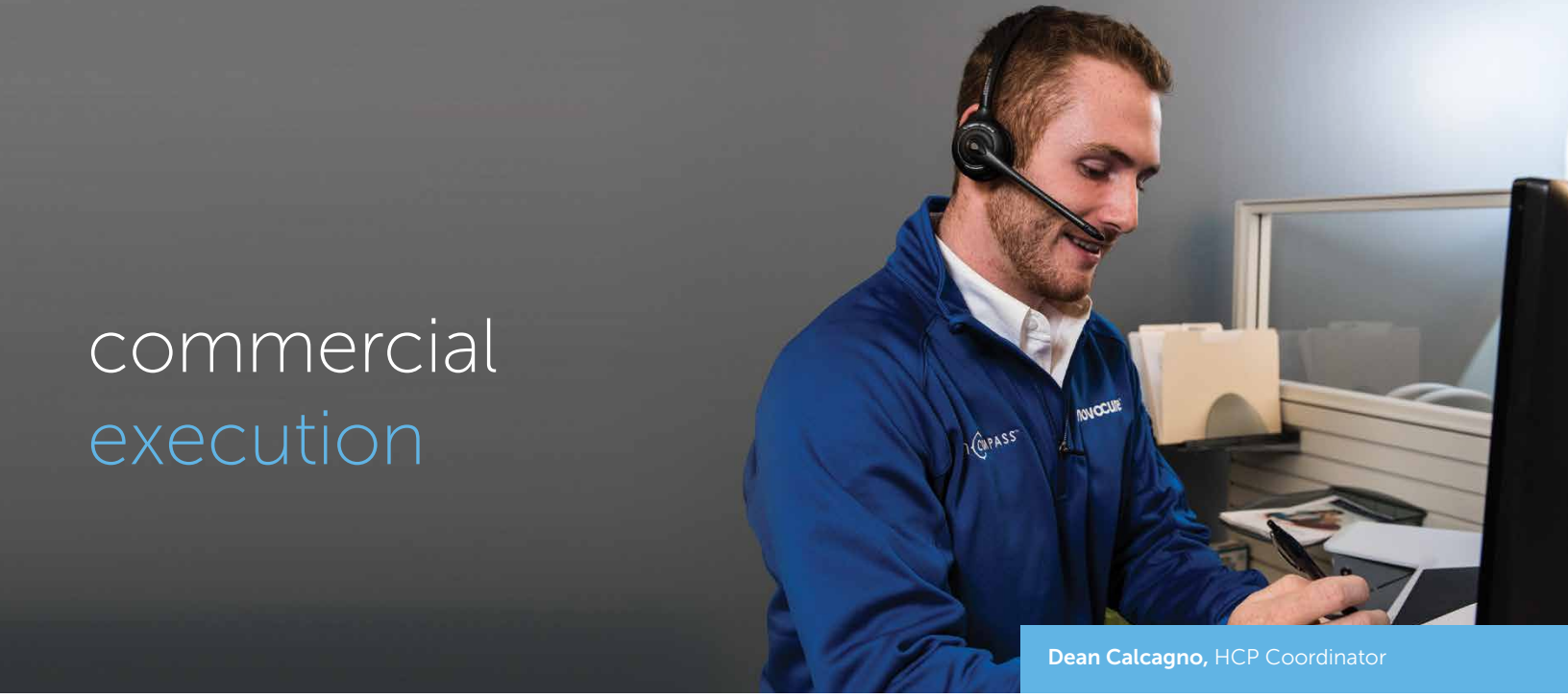
I like the sense of discovery. I like that science involves exploring new territory and doing new things. Within the scientific community, you're always working with this huge global community of scientists. That's an aspect I love.



DEEPENING OUR UNDERSTANDING OF THE MECHANISM

Novocure's Director of Science Ze'ev Bomzon joined the company in April 2014. He uses his background in physics and cell mechanics to lead a team of researchers at Novocure's facility in Israel.

commercial execution



Dean Calcagno, HCP Coordinator

our commercial business

The first indication we pursued for TTFields was GBM, the most common form of primary brain cancer. We initially received FDA approval for Optune, our first TTFields delivery system, in 2011 for use as a monotherapy treatment for adult patients with GBM, following confirmed recurrence after chemotherapy. In October 2015, we received FDA approval of Optune for the treatment of adult patients with newly diagnosed GBM in combination with temozolomide, the standard of care chemotherapy.

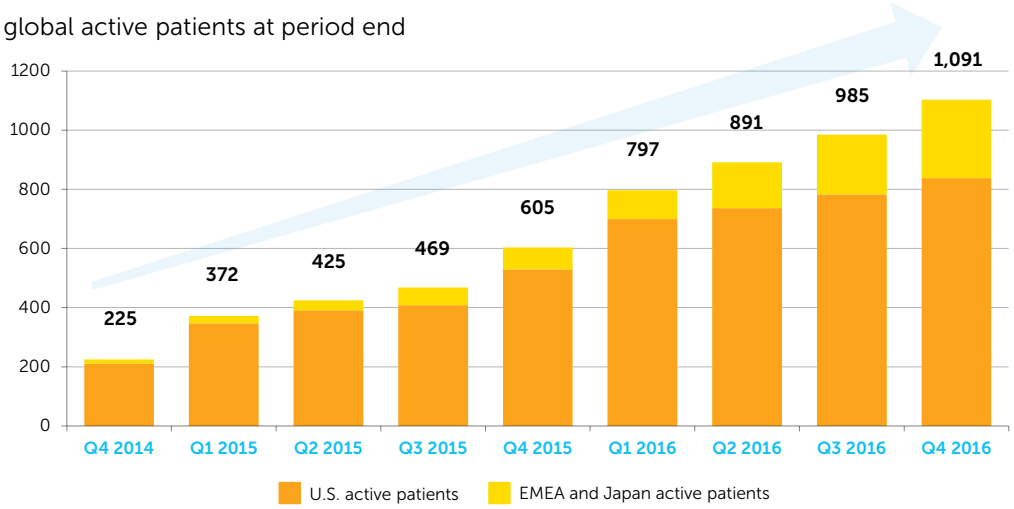
Since these approvals, we have built a commercial organization to support the launch of Optune for the treatment of GBM in the United States, Germany, Switzerland and Japan. As of December 31, 2016, we had nearly 1,100 patients on treatment with Optune. We provide technical training for patients and caregivers, 24/7 technical support, compliance monitoring and assistance with all aspects of billing and reimbursement.

OPTUNE SYSTEM

TTFields therapy is delivered using non invasive, insulated transducer arrays that are placed directly on the skin in the region surrounding the tumor. The complete delivery system includes a portable electric field generator, transducer arrays, rechargeable batteries and accessories. It is designed to allow patients to go about their daily activities while receiving continuous cancer treatment.

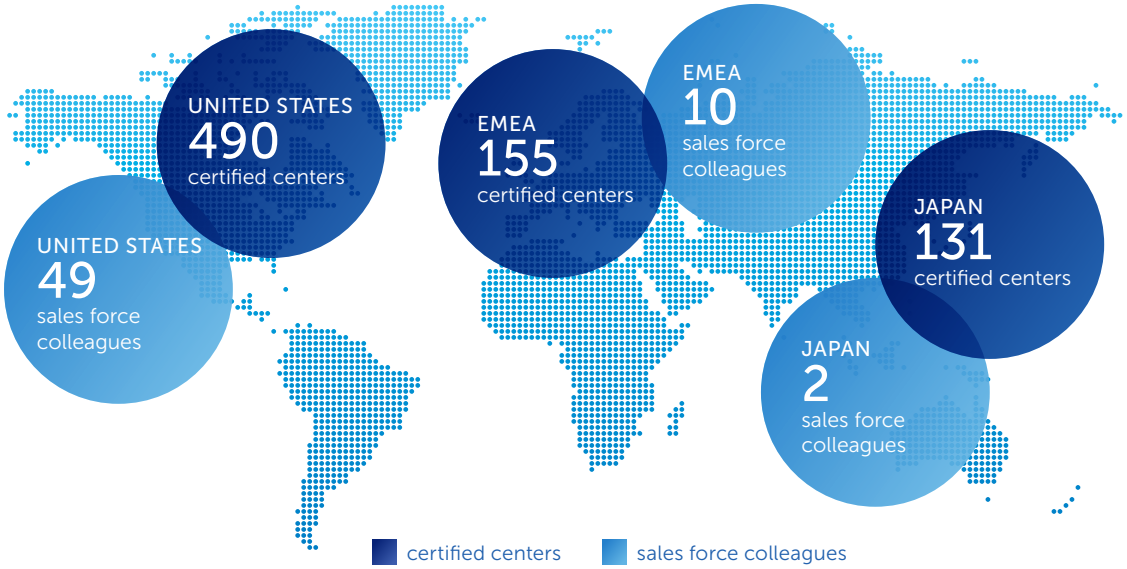
active patient growth

global active patients at period end



commercial footprint

as of December 31, 2016



"This career takes patience and compassion. We are doing more than just telling a patient and their family what to expect or how to stop alarms on the device. We are giving them our full attention to ensure that they know that we are here for them, 100%, 24/7, to support their treatment with Optune."

— **Kate Beddie,**
Patient Care Coordinator

Q&A

TOBIAS WEIZEL
GENERAL MANAGER GERMANY

Tobias Weizel, Novocure's General Manager Germany, leads the company's commercial business in Germany and said he feels lucky to be a part of Novocure's mission of bringing a profoundly different cancer treatment to patients worldwide.

Tobias Weizel,
General Manager Germany

What are some of the challenges you face in leading Novocure's commercial team in Germany?

It's getting physicians to buy into a different technology in order for it to hopefully become standard of care. We've made a great deal of advancement here, and we continue to increase education and exposure for key physicians.

How do you go about introducing Optune to patients and physicians?

The most important key player here is the physician. If physicians don't believe in the therapy, German patients are still largely listening to what a doctor says, especially when you have such a devastating diagnosis of GBM. We have a lot of physicians who are excited by the opportunity of Optune and the EF-14 phase 3 pivotal trial data in newly diagnosed GBM. These are the ones who tell their patients about Optune. We continue to educate physicians on the survival benefits of the therapy and believe they will increasingly share this treatment option with their patients.

How is Novocure different from other companies where you've worked?

I believe that to be successful at Novocure, you have to have a passion for helping patients along with flexibility. Being a part of a growing organization, employees have a chance to help define the best processes to move the company forward.

It's more than thinking outside of the box. There is no other company that does what we do–there's no box we fit in, so we often have to create new ways of doing things.

What do you enjoy about working for Novocure?

If you have a chance to introduce a different therapy, to change mindsets and to change the way cancer is treated, then I believe I'm really lucky. The possibility to see what we can do with this therapy gives me a lot of energy. Many companies in this industry say they put their patients first. For me, this is the first time that I actually feel it's true.

OUR MISSION-DRIVEN CULTURE

Tobias Weizel, Novocure's General Manager Germany, joined the company in July 2016 and said he thrives off of the entrepreneurial, startup spirit inherent in Novocure. "The company has grown substantially in the last several years, but we've managed to preserve this."

A GROWING GLOBAL PRESENCE

Tobias Weizel, Novocure's General Manager Germany who has a background of working in sales and marketing for biotech and pharmaceutical companies, leads Novocure's commercial activities in Germany.

pipeline development

Yaara Porat, Preclinical Researcher

advancing our clinical pipeline in indications with significant unmet need

For more than 15 years, Novocure has performed research and published multiple peer-reviewed articles with preclinical data in more than 15 different solid tumor types in culture and eight different tumor models in vivo.

Preclinical and clinical data continue to suggest broad applicability of the mechanism of action behind TTFields, and we have developed a pipeline strategy to advance TTFields through phase 2 pilot and phase 3 pivotal trials across a variety of solid tumor cancers.

We currently have two ongoing phase 3 pivotal trials, in brain metastases and non-small cell lung cancer (NSCLC), as well as three ongoing or completed phase 2 pilot trials investigating TTFields in pancreatic cancer, ovarian cancer and mesothelioma.

Novocure trials

PANCREATIC CANCER:

Pancreatic cancer is one of the most lethal forms of cancer globally, killing more than 330,000 individuals worldwide each year. At the end of 2016, we concluded our first phase 2 pilot trial in advanced pancreatic cancer—our PANOVA trial—and data will be presented at the AACR Annual Meeting 2017.

In January 2016, we presented data from an initial 20 patient cohort treated with TTFields plus gemcitabine. These data demonstrated progression free survival and overall survival of patients treated with TTFields combined with gemcitabine were more than double those of gemcitabine-alone historical controls.

In December 2016, we announced topline results from a second 20 patient cohort treated with TTFields plus nab-paclitaxel and gemcitabine. In this second cohort, median progression free survival and one-year survival rate of advanced pancreatic cancer patients treated with TTFields plus nab-paclitaxel and gemcitabine were more than double those of nab-paclitaxel and gemcitabine-treated historical controls.

Based on these results, we plan to open a phase 3 pivotal trial in advanced pancreatic cancer in 2017.

LUNG CANCER:

Lung cancer is the most common cause of cancer-related death worldwide, and NSCLC accounts for approximately 85 percent of all lung cancers. We published data for our first completed phase 2 pilot trial in advanced NSCLC in July 2013.

These results suggested more than doubling of median progression free survival and a 66% improvement in median overall survival in non-small cell lung cancer patients treated with TTFields plus pemetrexed compared to pemetrexed-alone historical controls.

Based on these results, we opened a phase 3 pivotal trial for the second-line treatment of NSCLC—our LUNAR trial–that incorporates the latest standard of care treatment. We enrolled our first patient in February 2017 and anticipate data will be available for presentation approximately 18 months following last patient enrollment.

MESOTHELIOMA:

Mesothelioma is a rare, solid tumor cancer affecting the lining of the lungs that is strongly linked to asbestos exposure. We currently have an ongoing phase 2 pilot trial in mesothelioma—our STELLAR trial—in which we expect to complete enrollment in 2017.

We presented interim data of the first 42 patients in December 2016. These data suggested that one-year survival rates of patients treated with TTFields combined with pemetrexed and cisplatin or carboplatin were more than 58 percent greater than historical control data of patients treated with pemetrexed and cisplatin alone.

With a minimum of 12 month follow-up after all 80 patients are enrolled, we expect data in 2018.

OVARIAN CANCER:

In the United States, ovarian cancer accounts for approximately 3 percent of cancers among women, but causes more deaths than any other cancer of the female reproductive system. At the end of 2016, we concluded our first phase 2 pilot trial in recurrent ovarian cancer—our INNOVATE trial—and data will be presented at the AACR Annual Meeting 2017.

We announced topline results from this 30 patient trial at our R&D Day in December 2016. These data suggested a more than doubling of the median progression free survival versus historical controls when treatment with TTFields is added to weekly paclitaxel.

Based on these results, we are developing the trial design for a phase 3 pivotal trial in recurrent ovarian cancer.

clinical milestones and next steps

	FIRST PATIENT IN	LAST PATIENT IN	DATA	NEXT STEPS
brain metastases	• Enrolled in October 2016	• Expected in 2019	• Expected 12 months following last patient enrollment	• Continued expansion of investigator and investigating site footprint
non-small cell lung cancer	• Enrolled in February 2017	• Expected in 2019	• Expected 18 months following last patient enrollment	• Continued expansion of investigator and investigating site footprint
pancreatic cancer	• Expected 2H 2017	• Expected 2 years following first patient enrolled	• Expected 18 months following last patient enrollment	• Phase 3 pivotal trial first patient in • Presentation of phase 2 pilot second cohort data at AACR in April 2017 • Publication of PANOVA data targeted for 2017
ovarian cancer				• Finalization of phase 3 pivotal trial design • Presentation of INNOVATE data at AACR in April 2017 • Publication of INNOVATE data targeted for 2017
mesothelioma	• Enrolled in February 2015	• Expected in 2017	• Expected 12 months following last patient enrollment	• Last patient enrollment anticipated in 2017

Novocure engineering

We plan to use the same field generator technology across all indications for which TTFields are approved, but we can specifically target individual solid tumor types by tuning the field generator to the appropriate frequency based upon tumor cell size and adjusting the output power to treat the required tumor tissue volume. As technology for components of our device improves, we have the flexibility to incorporate these advances into our product, subject to applicable regulatory approvals.

Within our GBM indication, our engineering research and development team looks for ways to improve our Optune System by directly incorporating feedback from the patients who receive our treatment. After introducing our lighter, smaller second generation Optune System in mid-2016, we plan to reduce the footprint of our device's transducer arrays and wires. We hope to launch a less conspicuous, tan colored transducer array in 2017 and we then plan to develop a next-generation transducer array that minimizes the impact of wires to improve overall aesthetics.

incidence metrics

	glioblastoma	brain metastases	non-small cell lung cancer	pancreatic cancer	ovarian cancer	mesothelioma
United States	12,500 new cases annually	98,000–170,000 new cases annually	214,000 new cases annually	53,000 new cases annually	22,000 new cases annually	3,000 new cases annually
Europe	3,600 new cases annually in Germany alone	75,000 new cases annually	350,000 new cases annually	110,000 new cases annually	65,000 new cases annually	western europe predicted peak of 9,000 male deaths around the year 2018
Japan	1,500 new cases annually	13,000 new cases annually	95,000 new cases annually	33,000 new cases annually	9,000 new cases annually	estimated 1,000 new cases annually

DEDICATION TO CONTINUAL IMPROVEMENT

Victor Kaikov, Electronics Engineer, has been with the company since April 2003. He and the engineering team develop improvements in our treatment systems (subject to applicable regulatory approval), incorporating feedback from our global patient base and advancements in electronics.

BROAD APPLICABILITY OF THE MECHANISM OF ACTION

Roza Shnayderman, Head of Novocure's Israel Biology Lab, joined Novocure in March 2000. During her seventeen years with Novocure, she and the preclinical team have researched the effects of TTFields on a variety of solid tumor cancer cell lines and laid the foundation for Novocure's expansion into additional clinical trials.

Q&A

SHARYN RUPERTI
ASSISTANT CLINICAL TRIAL MANAGER

Sharyn first started working with Novocure about 10 years ago as a Device Support Specialist supporting patients on the company's EF-11 trial in recurrent GBM. She joined the Clinical Operations Team after receiving her Masters in Clinical Research Administration in 2012.

Sharyn Ruperti,
Assistant Clinical Trial Manager

What does your job entail?

I am responsible for the day to day management of the company's METIS trial in brain metastases from non-small cell lung cancer. I provide oversight of our clinical research organization and work to ensure study metrics are met. I also visit doctors at participating trial sites and train them on the science of alternating electric field therapy and how to explain the therapy to potential study participants.

How has Novocure changed since your early days with the company?

Novocure has grown significantly in the past several years. When I first started, I was one of six Device Support Specialists hired in the U.S. to support clinical patients in the company's first phase 3 pivotal study. We are now a global company with more than 450 employees, two FDA approvals and a robust clinical pipeline.

As we continue to develop our clinical pipeline, we are also making connections with and educating doctors interested in our clinical trials from areas of oncology outside of GBM. Today, along with our FDA approvals, we have data published in peer-reviewed medical journals to present to physicians when we introduce our therapy.

There is more excitement today about alternating electric field therapy. There are many doctors who have been waiting to clinically study our therapy for other indications that are difficult to treat.

We also have observed an increased interest from investigators who want to be a part of our studies.

In what ways is Novocure's approach to cancer treatment different?

I'll tell you what many doctors tell us. We care. We go out of our way to help patients, and we are closely connected with our doctors. They know that if they have a question, we will respond quickly. I know that every patient matters. Patients on our therapy are not viewed only as a "subject" or study ID number—they are people with loved ones and the company works hard to help each individual patient.

DEVELOPING OUR CLINICAL PIPELINE

With two FDA-approved indications, three ongoing or completed phase 2 pilot trials and two phase 3 pivotal trial under way, Sharyn Ruperti, Assistant Clinical Trial Manager, said it's an exciting time to be a part of Novocure.

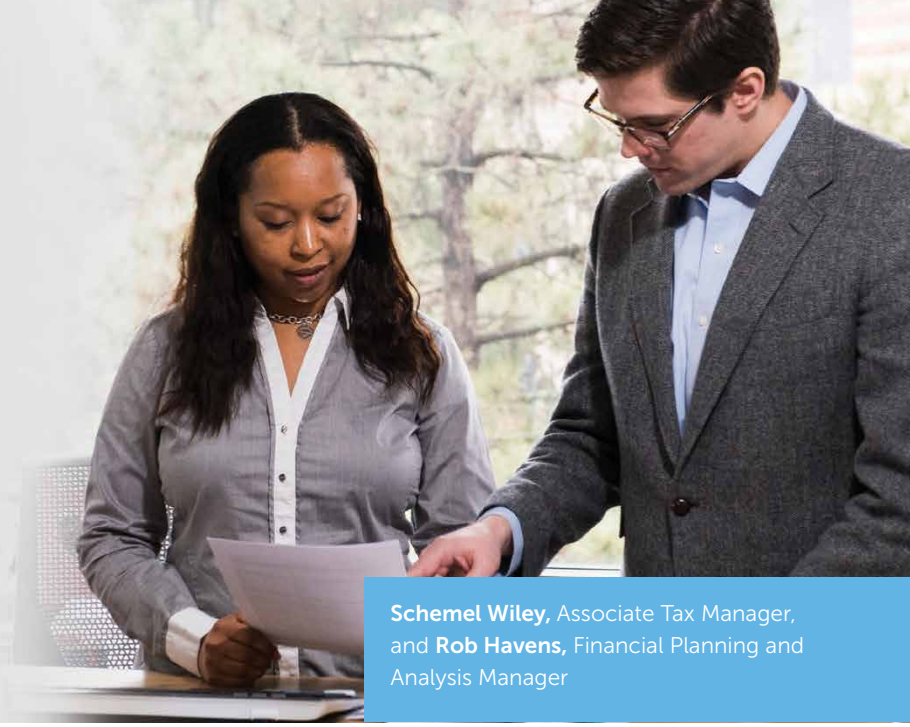
A PATIENT-FORWARD MISSION

Assistant Clinical Trial Manager Sharyn Ruperti said she enjoys making a difference. "I feel like I am truly making a difference for patients and their families by providing physicians an additional possible tool to use in their battle against cancer."

"With a growing commercial business in two FDA-approved indications and an advancing clinical pipeline in additional solid tumor cancers, we believe we are establishing Novocure as a global oncology business."

— **Wilco Groenhuysen,**
Chief Financial Officer

selected financials



Schemel Wiley, Associate Tax Manager, and **Rob Havens,** Financial Planning and Analysis Manager

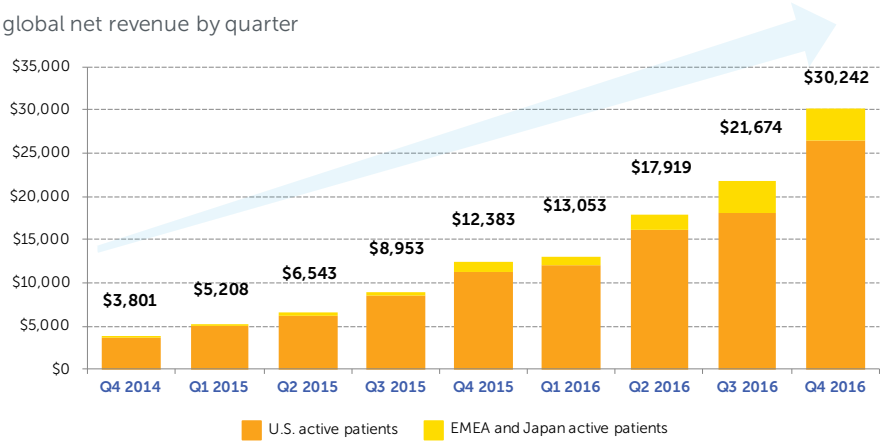
CONTINUED FOCUS ON REVENUE GENERATION AND OPERATING LEVERAGE

Entering 2017, we believe we have established a strong foundation upon which we are building a global oncology business. We realized 2016 net revenues of $82.9 million, an increase of more than 150% versus the prior year. We improved our ability to collect payment by improving coverage and contracting in the U.S., and we saw significant active patient and revenue growth in EMEA.

Regardless of the trajectory of the adoption curve in GBM, our management team strives to improve operating leverage. We believe that our SG&A organization is substantially built and able to support the commercialization of Optune in our currently active markets. Ending the year with $220 million cash on hand and with our infrastructure substantially built, we believe that we have the resources to reach profitability in our GBM business alone and to fund our clinical pipeline to build our business for the future.

revenue growth

global net revenue by quarter



80%

ACTIVE PATIENT GROWTH SINCE 2015

151%

REVENUE GROWTH 2016 VERSUS 2015

8

CONSECUTIVE QUARTERS OF ACTIVE PATIENT GROWTH SINCE PRESENTATION OF EF-14 DATA

consolidated statement of operations

USD Thousands	Year ended December 31, 2016	2015	2014
Net revenues	$ 82,888	$ 33,087	$ 15,490
Cost of revenues	39,870	20,610	10,036
Impairment of field equipment	6,412	–	–
Gross profit	36,606	12,477	5,454
Operating costs and expenses:			
Research, development and clinical trials	41,467	43,748	40,381
Sales and marketing	59,449	38,861	21,177
General and administrative	51,007	33,864	24,052
Total operating costs and expenses	151,923	116,473	85,610
Operating loss	(115,317)	(103,996)	(80,156)
Financial expenses, net	(6,147)	(3,151)	(144)
Loss before income taxes	(121,464)	(107,147)	(80,300)
Income taxes	10,381	4,434	382
Net loss	$ (131,845)	$ (111,581)	$ (80,682)

leadership

corporate officers and executive leadership

William F. Doyle
Executive Chairman

Asaf Danziger
Chief Executive Officer

Mike Ambrogi
Chief Operating Officer

Wilco Groenhuysen
Chief Financial Officer

Eilon Kirson, M.D., Ph.D.
Chief Science Officer and Head of Research and Development

Todd Longsworth
General Counsel

Yoram Palti, M.D., Ph.D.
Founder

board of directors

William F. Doyle
Executive Chairman

William Burkoth

Asaf Danziger

Louis Lavigne, Jr.

Kinyip Gabriel Leung

Robert J. Mylod, Jr.

Yoram Palti, M.D., Ph.D.

Gert Lennart Perlhagen

Charles G. Phillips III

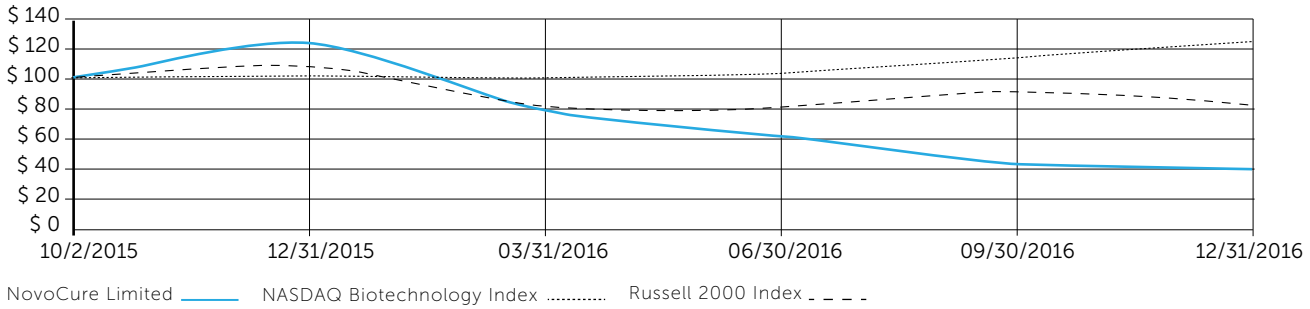
William A. Vernon

market price of and dividends on the registrants' common equity and related stockholder matters

The following graph shows the total shareholder return of an investment of $100 in cash at market close on October 2, 2015 (the first day of trading of our ordinary shares) through December 31, 2016 for (1) our ordinary shares, (2) the Russell 2000 Index, and (3) the Nasdaq Biotechnology Index. Pursuant to applicable SEC rules, all values assume reinvestment of the full amount of all dividends; however, no dividends have been declared on our ordinary shares to date. The shareholder return shown on the graph below is not necessarily indicative of future performance, and we do not make or endorse any predictions as to future stockholder returns.

comparison of cumulative total return

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



Assumes $100 invested on October 2, 2015
Assumes dividend reinvested
Fiscal year ending December 31, 2015

total return annual comparison cumulative total return summary

		10/2/2015	12/31/2015	03/31/2016	06/30/2016	09/30/2016	12/31/2016
NovoCure Limited	Return%		22.32	-35.24	-19.41	-26.82	-8.08
	Cum $	100.00	122.32	79.21	63.84	46.72	42.94
NASDAQ Biotechnology Index	Return%		7.29	-22.88	-1.12	12.50	-8.31
	Cum $	100.00	107.29	82.74	81.81	92.03	84.38
Russell 2000 Index	Return%		2.33	-1.52	3.79	9.05	8.83
	Cum $	100.00	102.33	100.78	104.60	114.06	124.14

Indications For Use

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.

Summary of Important Safety Information

Contraindications

Do not use Optune if you have an active implanted medical device, a skull defect (such as, missing bone with no replacement), or bullet fragments. Use of Optune together with implanted electronic devices has not been tested and may theoretically lead to malfunctioning of the implanted device. 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.

Do not use Optune if you are known to be sensitive to conductive hydrogels. In this case, skin contact with the gel used with Optune may commonly cause increased redness and itching, and rarely may even lead to severe allergic reactions such as shock and respiratory failure.

Warnings and Precautions

Use Optune only after receiving training from qualified personnel, such as your doctor, a nurse, or other medical personnel who have completed a training course given by Novocure (the device manufacturer).

Do not use Optune if you are pregnant, you think you might be pregnant or are trying to get pregnant. It is not known if Optune is safe or effective in these populations.

The most common (≥10%) adverse events involving Optune in combination with temozolomide were low blood platelet count, nausea, constipation, vomiting, fatigue, scalp irritation from device use, headache, convulsions, and depression.

All servicing procedures must be performed by qualified and trained personnel.

Do not use any parts that do not come with the Optune Treatment Kit, or that were not sent to you by the device manufacturer or given to you by your doctor.

Do not wet the device or transducer arrays.

If you have an underlying serious skin condition on the scalp, discuss with your doctor whether this may prevent or temporarily interfere with Optune treatment.

Please visit **www.optune.com/safety** for Optune Instructions for Use (IFU) for complete information regarding the device's indications, contraindications, warnings, and precautions.

looking ahead

As far as we've come in the last 16 years, we are intensely focused on the future. Treatment with TTFields offers a profoundly different approach to cancer treatment.

We believe that the basic mechanism behind treatment of solid tumor cancers with TTFields may be broadly applicable and is not limited to a specific tumor type or genetic marker. Importantly, we believe TTFields has the potential to increase survival when used in combination with other cancer therapies without significantly increasing side effects. Treatment with TTFields is FDA approved for the treatment of GBM, and we are committed to developing our promising therapy for a broad range of solid tumor types.

Le Masurier House
La Rue Le Masurier
St Helier, Jersey JE2 4YE

www.novocure.com