

### **NovoCure (NVCR) Summary**

Curing cancer using an electromagnetic device

September 7, 2016

#### **Key Takeaways**

For information, please contact:

Erik Kobayashi-Solomon

+1 646 801.2464

Market Capitalization: \$667.3 million

- NovoCure's product does extend life of cancer patients according to FDA trials. Sounds like voodoo, but the proof is in the tests peer-reviewed studies and FDA approval as a medical device.
- Present tests have shown good efficacy for a certain type of brain cancer: The company believes the mechanism should work on other forms of cancer as well.
- This technology is very different from what Western doctors are used to. The
  medical community is conservative, and a device-based solution to cancer meets with
  suspicion amongst doctors. It might take time to overcome the inertia in the field.
- NovoCure is still working to gain the acceptance of national medical systems for payment. Medicare in the U.S. still does not pay. Seeking defined reimbursement in Germany and Switzerland. No prescriptions yet in Japan. Only 2 quarters of revenues.

#### Overview

Technology developed by an Israeli professor in 2000. The device disrupts the ability of cancer cells to divide using an electromagnetic frequency matching the cancer type; normal cells are not affected by the "TTFields." The first FDA approval is for a type of brain cancer – subjects wear a cap with an array of transducers that continuously emit waves, powered by a portable battery pack (see photos at end of report).

Great advantage to patients is the lack of side effects that characterize chemotherapy and traditional radiation treatments. The battery pack can be put into a pack and carried around so patents' quality of life improves. Doctors are at least not disadvantaged by the introduction of this technology – NovoCure device can be used to supplement other treatments. Oncologists must be trained in placement of transducer array, but training is on the order of hours long, so not onerous.

Realized revenue per month per prescription is \$14,000. Charge in US is \$22,000 per month. Discrepancy is charitable treatments and Medicare patients (20%-25% of US patient population). Private US insurance companies are paying for the device. Germany and Switzerland form the European bulkhead for the company, but so far, the reimbursment level has not been determined. In Japan, company believes that its efforts to win over key thought leaders in the field have been successful, but so far there have been no Japanese prescriptions.

FDA approval in December 2015 so revenue history is very short, even though the research and patient testing has been underway for 15 years.

Information provided by IOI Investment Services, LLC, should not be used as investment advice. IOI Investment Services, LLC does not act in the capacity of a Registered Investment Advisor. For investment advice geared towards your specific needs, we encourage you to contact your financial planner or advisor.



# **Valuation Drivers**

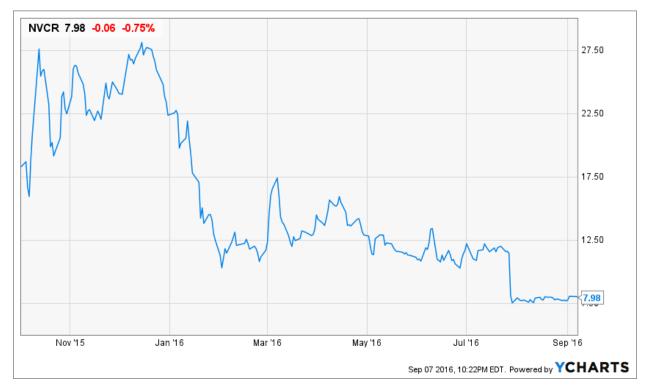
### **Revenues and Profits**

No annual data. \$17.9 million in 2Q16 revenues less \$6.4 million in "Impairment of field equipment." Year-over-year quarteryly revenue growth of 174%. Firm generated a \$40.6 million net loss in 2Q16 after a \$29.4 million loss in 2Q15. \$200 million of cash and short-term investments. An investor at this stage may be diluted if revenue trajectory is low. (Below numbers provided by company in presentation).

U.S. DOLLARS IN THOUSANDS	q2 2016	q2 2015	% GROWTH
Net revenues	\$ 17,919	\$ 6,543	174%
Cost of revenues	9,797	4,750	106%
Impairment of field equipment	6,412		
Gross profit	1,710	1,793	-5%
Research, development and clinical trials	11,318	12,765	-11%
Sales and marketing	14,598	8,866	65%
General and administrative	13,031	7,368	77%
Total operating costs and expenses	38,947	28,999	34%
Operating income (loss)	(37,237)	(27,206)	-37%
Financial expenses, net	555	876	-37%
Income (loss) before income taxes	(37,792)	(28,082)	-35%
Income tax expense	2,820	1,275	121%
Net income (loss)	\$ (40,612)	\$ (29,357)	-38%
Cash and cash equivalents	80,871	106,508	
Short-term investments	119,979	56,996	

### **Price and PS Ratio**

The number of doctors getting approved to prescribe NovoCure not as high as market hoped when firm reported 2Q results, leading to the sharp drop off in price in August. No PSR data available



# **Valuation Drivers**



## **Product Photos**



Device pictured above is first generation machine. Newer machine is slimmer and uses most advanced rechargeable battery technology – about as heavy as carrying around a full-sized laptop around (2.5 pounds or so).



Original Optune® System

Second Generation Optune® System

© 2016 Novocure. All rights reserved.

Patient needs to have pick-ups reapplied around three times a week, but otherwise, is able to move around. Quality of life is better and side effects are minimal – mild skin irritation in some patients.

NovoCure Investor Relations Presentation

# **Next Steps**



• Virtually no way to value this company without resorting to imaginary projections.

Options involve risk and are not suitable for all investors. For more information, please read the <u>Characteristics and Risks of Standardized Options</u>.

Seminars and reports are provided to you for educational purposes only. No information presented constitutes a recommendation to buy, sell or hold any security, financial product or instrument discussed therein or to engage in any specific investment strategy. The content neither is, nor should be construed as, an offer, or a solicitation of an offer, to buy, sell, or hold any securities. IOI Investment Services, LLC does not offer or provide any opinion regarding the nature, potential, value, suitability or profitability of any particular investment or investment strategy, and you are fully responsible for any investment decisions you make. Such decisions should be based solely on your evaluation of your financial circumstances, investment objections, risk tolerance and liquidity needs.