Novocure (NVCR) Deutsche Bank fireside chat

May 9, 2018

patientforward

forward-looking statements

This presentation contains certain forward-looking statements with respect to the business of Novocure and certain of its plans and objectives, including with respect to the development and commercialization of its lead product candidate, Optune, for a number of oncology indications. These forward-looking statements can be identified in this presentation by the fact that they do not relate only to historical or current facts. Forward-looking statements often use words “expect”, “intend”, “anticipate”, “plan”, “may”, “should”, “would”, “could” or other words of similar meaning. These statements are based on assumptions and assessments made by Novocure in light of industry experience and perception of historical trends, current conditions, expected future developments and other appropriate factors. By their nature, forward-looking statements involve risk and uncertainty, and Novocure's performance and financial results could differ materially from those expressed or implied in these forward-looking statements due to general financial, economic, regulatory and political conditions as well as more specific risks and uncertainties facing Novocure such as those set forth in its Annual Report on Form 10-K filed on February 22, 2018, or in subsequent quarterly filings with the U.S. Securities and Exchange Commission. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in this presentation. Novocure assumes no obligation to update or correct the information contained in this presentation, whether as a result of new information, future events or otherwise, except to the extent legally required.

The statements contained in this presentation are made as at the date of this presentation, unless some other time is specified in relation to them, and service of this presentation shall not give rise to any implication that there has been no change in the facts set out in this presentation since such date. Nothing contained in this presentation shall be deemed to be a forecast, projection or estimate of the future financial performance of Novocure, except where expressly stated.

As of the date of this presentation, Optune is only FDA-approved for the treatment of adults with supratentorial glioblastoma, or GBM, and its approval for other indications is not certain. Novocure can provide no assurances regarding market acceptance of Optune or its successful commercialization, and can provide no assurances regarding the company’s results of operations or financial condition in the future. This presentation is for informational purposes only and may not be relied upon in connection with the purchase or sale of any security.

novocure™

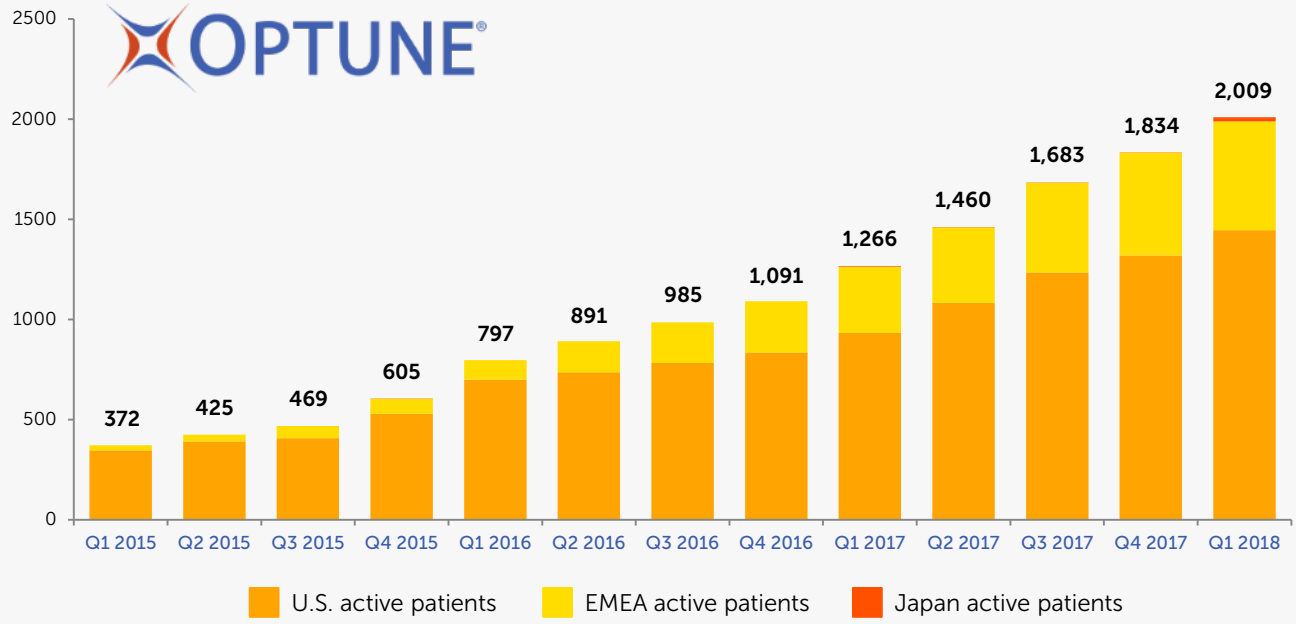
a global oncology company with a proprietary platform

GROWING COMMERCIAL BUSINESS	SIGNIFICANT UPSIDE POTENTIAL
• More than 2,000 patients on therapy • 13 consecutive quarters of patient growth • $194 million trailing twelve month revenues	• Increase adoption and average reimbursement in GBM • Advance clinical pipeline in five additional solid tumor indications

Information above as of March 31, 2018

growing commercial business

active patients at period end



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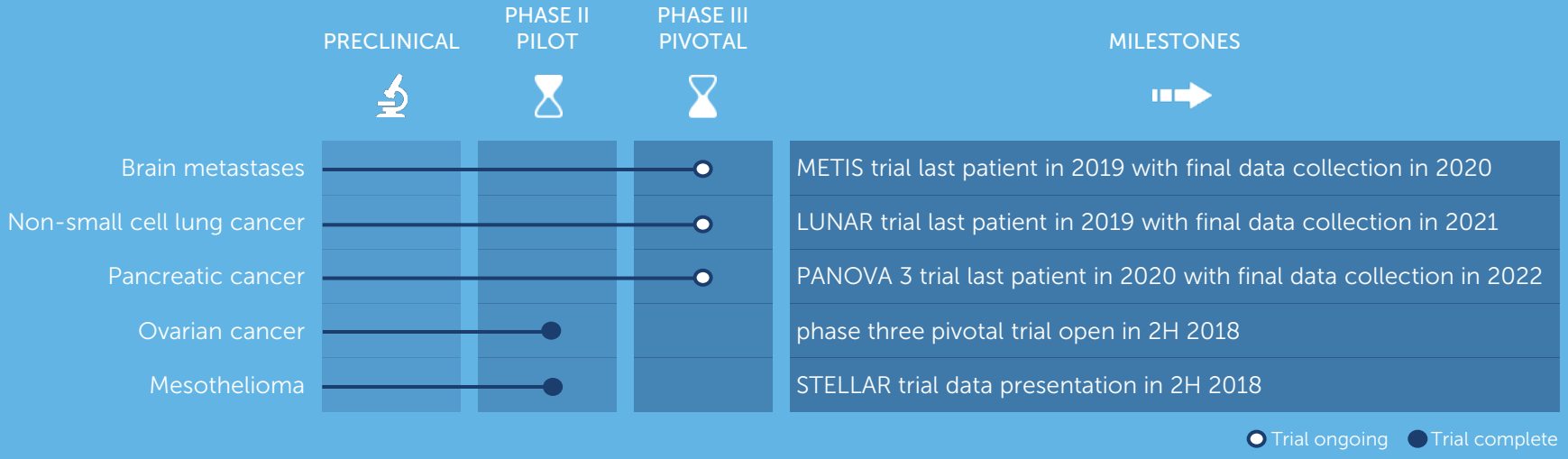
CONSECUTIVE QUARTERS OF ACTIVE PATIENT GROWTH SINCE INITIAL PRESENTATION OF EF-14 DATA

7,000+

PATIENTS TREATED TO DATE GLOBALLY

patientforward

advancing clinical pipeline



FIRST LINE TREATMENT OF MALIGNANT PLEURAL MESOTHELIOMA

phase 2 pilot STELLAR trial

A prospective, open label, single-arm, non-randomized, multicenter study testing safety and preliminary efficacy of TTFields at 150 kHz in combination with pemetrexed and cisplatin or carboplatin in patients with previously untreated malignant pleural mesothelioma versus historical controls

- 80 patients in Europe with unresectable, previously untreated malignant mesothelioma
- Last patient enrolled March 2017 with twelve month follow-up
- Endpoints:
  - Primary endpoint — overall survival (OS)
  - Secondary endpoints — progression free survival (PFS), response rate, treatment-emergent toxicity

Novocure, Ltd. Safety and Efficacy of TTFields (150 kHz) Concomitant With Pemetrexed and Cisplatin or Carboplatin in Malignant Pleural Mesothelioma (STELLAR) In: ClinicalTrials.gov [Internet]. Bethesda (MD): National Library of Medicine (US). 2000-[cited 2018 May]. Available from: https://clinicaltrials.gov/ct2/show/NCT02397928. NLM Identifier: NCT02397928

FIRST LINE TREATMENT OF MALIGNANT PLEURAL MESOTHELIOMA

phase 2 pilot STELLAR trial interim results

EFFICACY ENDPOINTS	TTFIELDS WITH PEMETREXED AND CISPLATIN OR CARBOPLATIN[1]	PEMETREXED AND CISPLATIN-ALONE HISTORICAL RESULTS[2]
Median PFS	7.3 months	5.7 months
Median OS	Not yet reached	12.1 months
One-year survival rate	79.7%	50.3%

- Interim data for the first 42 patients, with average follow-up of 11.5 months, presented at IASLC 2016
- Final top-line results, announced April 2018, exceeded interim analysis for all efficacy endpoints
  - Anticipate presentation of final results at a medical conference in 2H 2018
  - Plan to submit Humanitarian Device Exemption application to the FDA in 2H 2018

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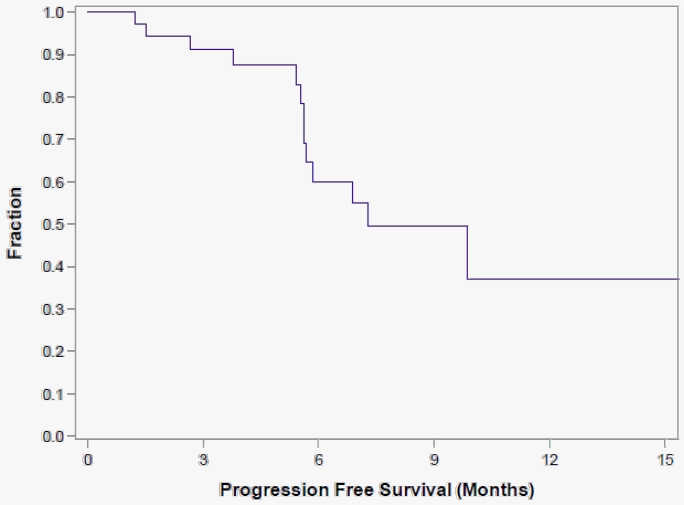
1. Cerasoli, G.L. International Association for the Study of Lung Cancer. OA22.01 – STELLAR – Interim Results of a Phase 2 Trial of TTFields with Chemotherapy for First Line Treatment of Malignant Mesothelioma. Oral Session: Novel Trials and Biomarkers in Malignant Pleural Mesothelioma. Wednesday, Dec. 7, 2016, 2:20 p.m. CET
2. Vogelzang N.J., Rusthoven J.J., Symanowski J., et al. Phase III Study of Pemetrexed in Combination With Cisplatin Versus Cisplatin Alone in Patients With Malignant Pleural Mesothelioma *J Clin Oncol*. 2003 Jul 15;21(14):2636–44. doi: 10.1200/JCO.2003.11.136

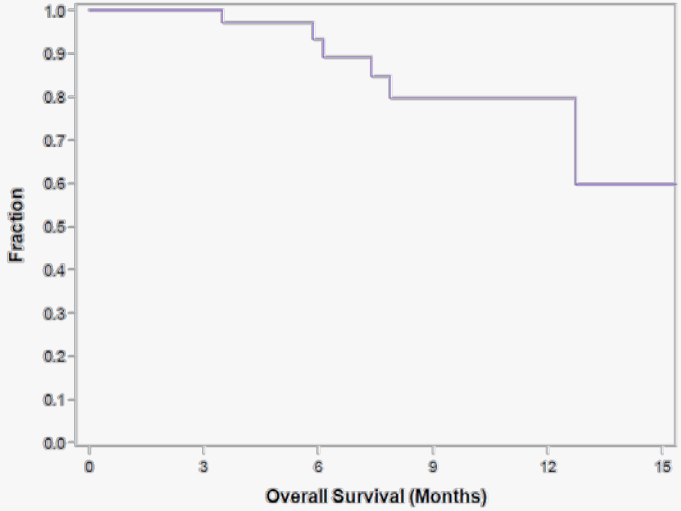
FIRST LINE TREATMENT OF MALIGNANT PLEURAL MESOTHELIOMA

phase 2 pilot STELLAR trial interim results

PROGRESSION-FREE SURVIVAL (N=42)[1]



OVERALL SURVIVAL (N=42)[1]



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