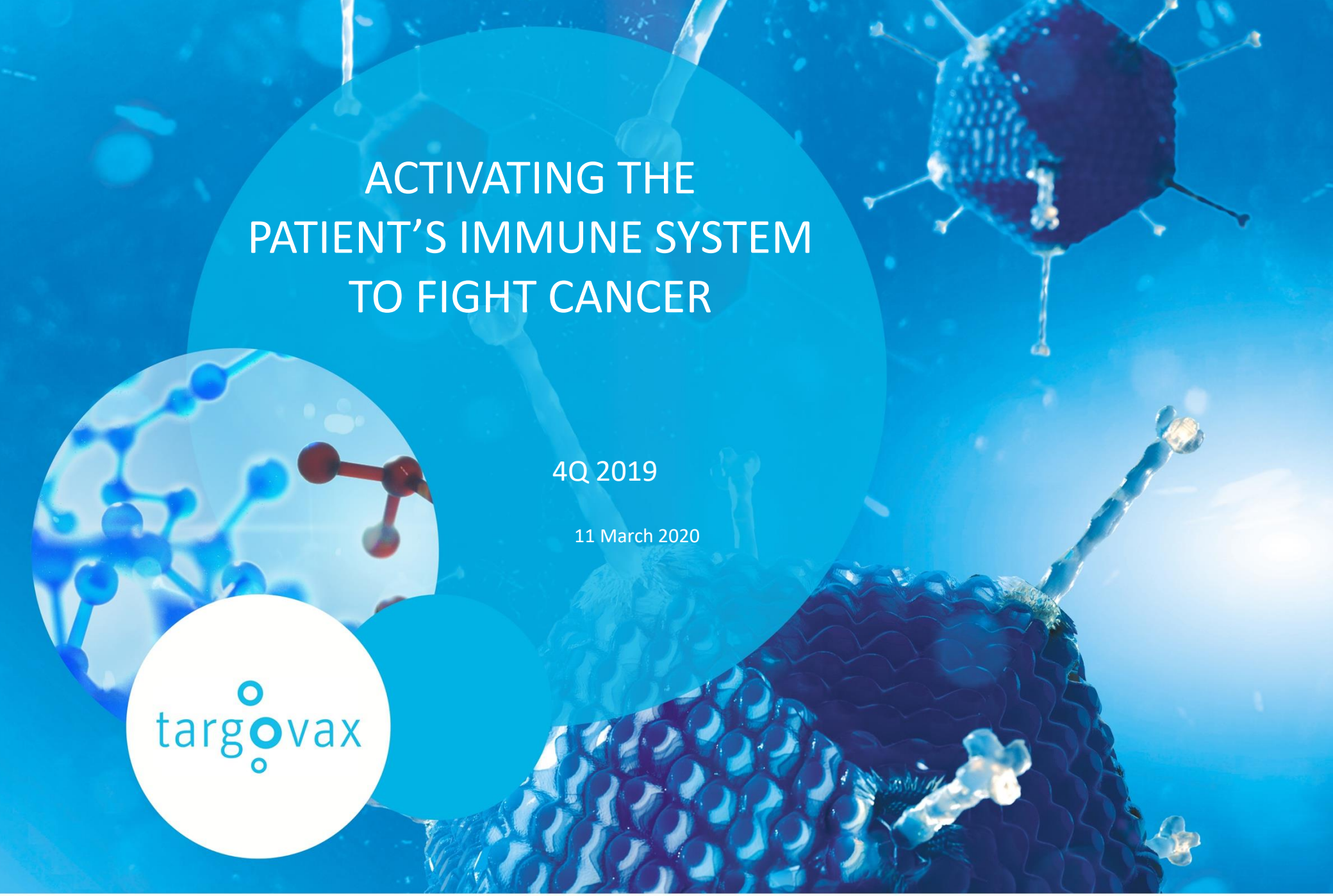

ACTIVATING THE PATIENT'S IMMUNE SYSTEM TO FIGHT CANCER

4Q 2019

11 March 2020

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IMPORTANT NOTICE AND DISCLAIMER

This report contains certain forward-looking statements based on uncertainty, since they relate to events and depend on circumstances that will occur in future and which, by their nature, will have an impact on the results of operations and the financial condition of Targovax. Such forward-looking statements reflect the current views of Targovax and are based on the information currently available to the company. Targovax cannot give any assurance as to the correctness of such statements.

There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied in these forward-looking statements. These factors include, among other things, risks or uncertainties associated with the success of future clinical trials; risks relating to personal injury or death in connection with clinical trials or following commercialization of the company's products, and liability in connection therewith; risks relating to the company's freedom to operate (competitors patents) in respect of the products it develops; risks of non-approval of patents not yet granted and the company's ability to adequately protect its intellectual property and know-how; risks relating to obtaining regulatory approval and other regulatory risks relating to the development and future commercialization of the company's products; risks that research and development will not yield new products that achieve commercial success; risks relating to the company's ability to successfully commercialize and gain market acceptance for Targovax' products; risks relating to the future development of the pricing environment and/or regulations for pharmaceutical products; risks relating to the company's ability to secure additional financing in the future, which may not be available on favorable terms or at all; risks relating to currency fluctuations; risks associated with technological development, growth management, general economic and business conditions; risks relating to the company's ability to retain key personnel; and risks relating to the impact of competition.

1

Intro & Highlights

2. Mesothelioma
3. Melanoma
4. Financials and IOVaxis deal
5. Newsflow

GROWING NEED FOR IMMUNE ACTIVATORS

CPIs are revolutionizing cancer treatment…

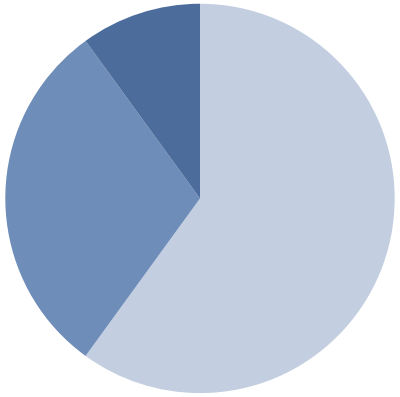
22 bn USD

Global CPI market[1]

44 %

Patients eligible for CPI[2]:

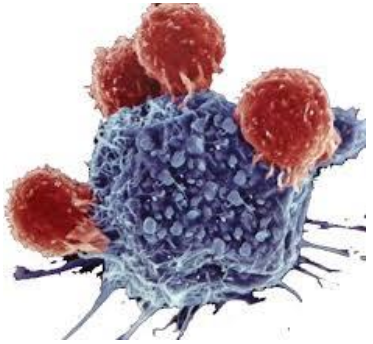
…but not all patients respond to CPIs…



10 - 40 %

Responders

…leading to high medical need for immune activators



[1] Immune Checkpoint Inhibitors Markets Report, 2020 January, ResearchAndMarkets.com

[2] Estimation of the Percentage of US Patients With Cancer Who Are Eligible for and Respond to Checkpoint Inhibitor Immunotherapy Drugs, JAMA Netw Open. 2019 May; 2(5), Haslam A., Prasad V.

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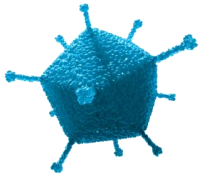
ACTIVATING THE IMMUNE SYSTEM

TO FIGHT CANCER



ONCOS-102 lead clinical asset

- ONCOS oncolytic adenovirus platform targets hard-to-treat **solid tumors**
- One of the **furthest developed** OVs with >180 patients treated to date
- Four ongoing combination trials ensuring **rich news flow** in 2020

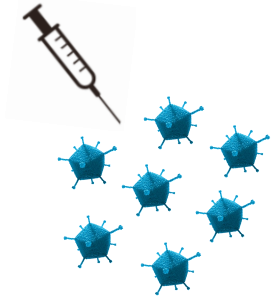
Encouraging clinical efficacy demonstrated

- Strong **single agent** immune activation and clinical data
- **33% ORR** in anti PD-1 refractory melanoma in combination with Keytruda
- Encouraging first set of **clinical and immune data in mesothelioma**

ONCOS-102 MODE OF ACTION MAKES AN IDEAL COMBINATION PARTNER FOR CHECKPOINT INHIBITORS

1 Virus injection
Local delivery

- Intratumoral or intra-peritoneal injection
- Tumor cell infection

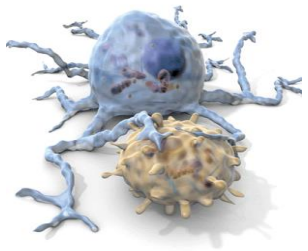


2 Oncolysis
Immune activation

- Lysis of tumor cells
- Inflammatory response
- Tumor antigen release

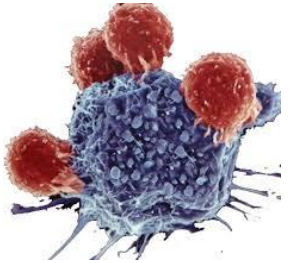
3 Antigen processing
T-cell activation

- Antigen processing
- T-cell activation in lymph nodes

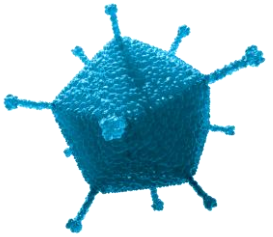


4 T-cell response
Anti-tumor immunity

- T-cell tumor infiltration
- Tumor antigen recognition
- CPIs “releasing brakes”



BENEFITS OF ONCOS-102 ADENOVIRUS



Highly immunogenic, TLR-9 agonist, stimulates inflammation

Well-characterized, well-tolerated and few safety concerns

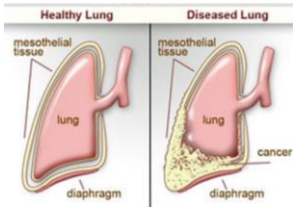
Versatile DNA backbone, ability to carry multiple transgenes

SEVERAL SIGNIFICANT BD TRANSACTIONS IN THE ONCOLYTIC VIRUS SPACE IN 2018-2019

	Target	Type of deal	Deal value
Takeda	TURNSTONE BIOLOGICS	**Strategic collaboration** Co-development of multiple vaccinia viruses, Pre-clinical	**USD 120m** near-term **USD >900m** total value
MERCK	Viralytics Developers of Oncolytic Immunotherapies	**M&A** RNA virus, Phase II	**USD 400m** cash acquisition
janssen PHARMACEUTICAL COMPANIES OF Johnson&Johnson	BeneVir	**M&A** Herpes virus, Pre-clinical	**USD 140m** up-front **USD 1b** total value
Boehringer Ingelheim	ViraTherapeutics	**M&A** VSV virus, Pre-clinical	**USD 250m** cash acquisition
AstraZeneca	transgene	**R&D partnership** Co-development of novel vaccinia viruses, Pre-clinical	**USD 10m** up-front Unknown total value

ONCOS DEVELOPMENT STRATEGY

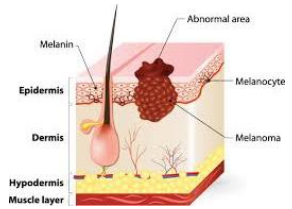
1 Establish path-to-market



Mesothelioma

- ~15.000 patients
- Potential for first line, limited competition

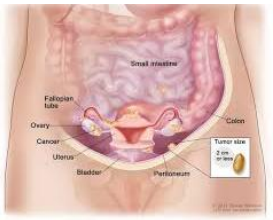
2 Activate refractory tumors



Anti-PD1 refractory melanoma

- Few alternatives for ~50.000 patients
- Benchmarking arena for immune activators

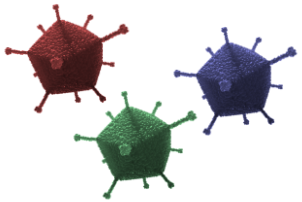
3 Expand CPI indications



Peritoneal malignancies

- Metastases from ovarian and colorectal cancers
- >100.000 patients not responding to CPIs

4 Expand platform



Next generation oncolytic viruses

- Double transgenes
- Novel targets and modes of action

Patient numbers are yearly incidence in EU5, US and Japan, Company estimates based on Global Data

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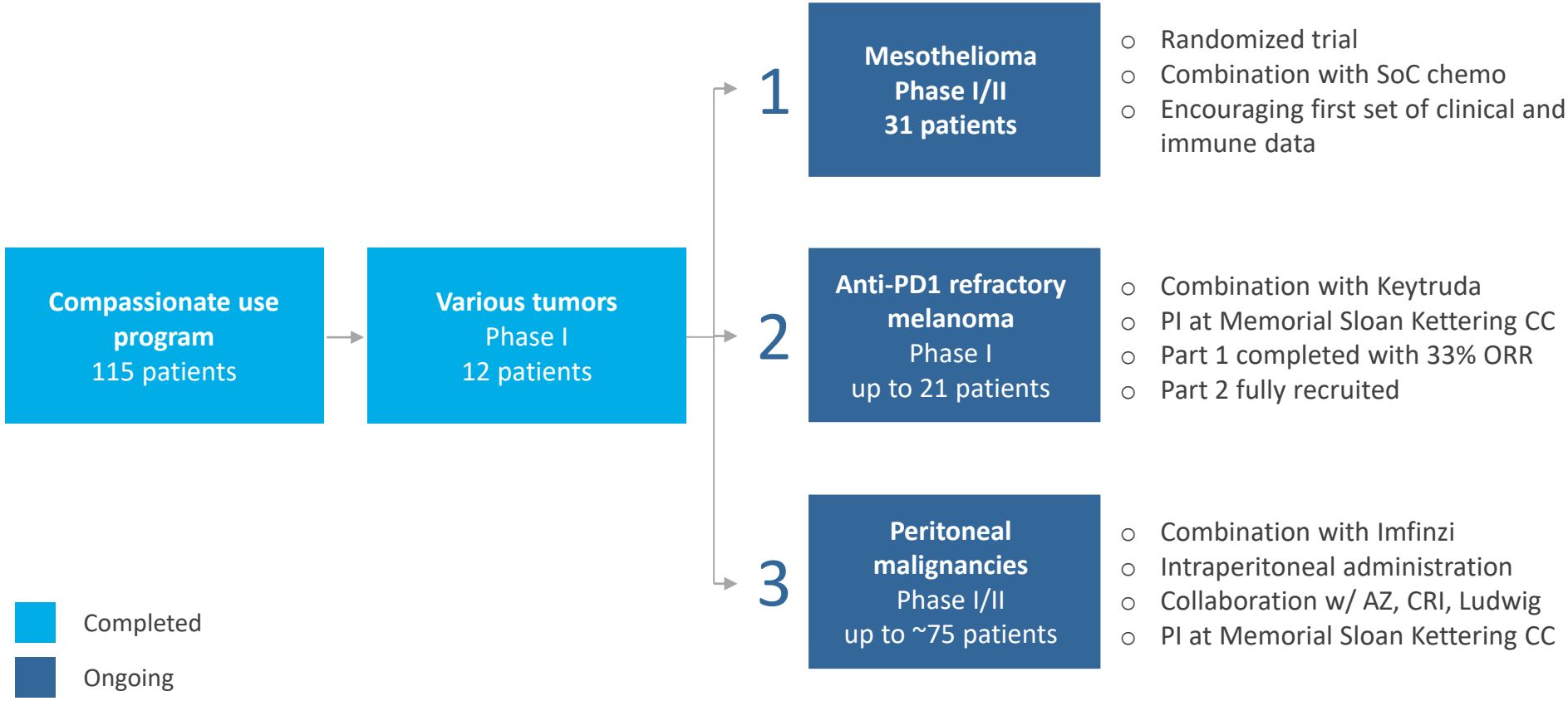
ONCOS-102 CLINICAL DEVELOPMENT PROGRAM



Targovax is also involved in an ongoing combination trial in Prostate cancer were ONCOS-102 is combined with a dendritic cell vaccine (DCVAC). This trial is sponsored by Sotio, a Czech biotech company

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RECENT HIGHLIGHTS

ONCOS

- Showed encouraging data in mesothelioma trial combining ONCOS-102 and SoC chemo
- Completed enrollment of melanoma trial
- Presented melanoma data at Society for Immunotherapy of Cancer

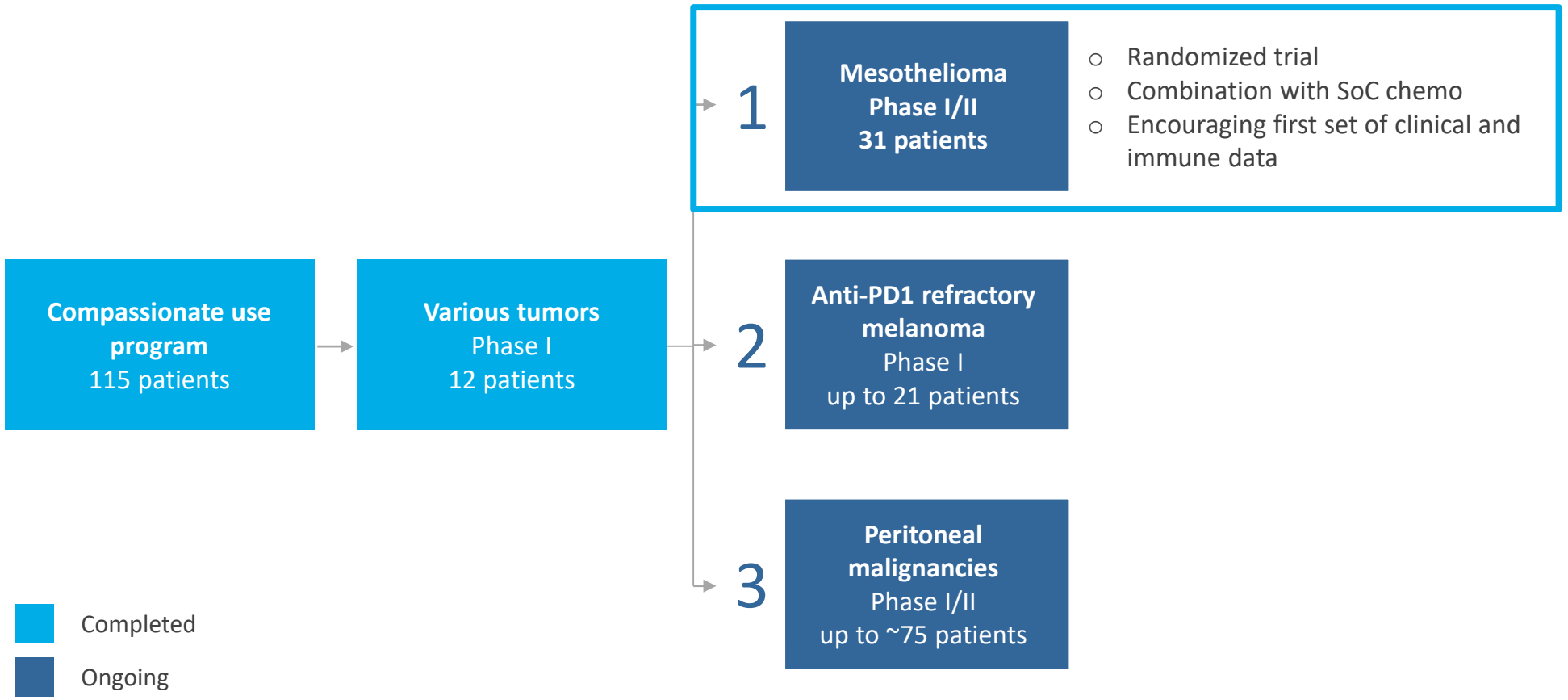
TG

- Entered into an option agreement with IOVaxis Therapeutics for an TG mutant RAS vaccine license and clinical development agreement in China

Corporate

- Completed a private placement, raising gross proceeds of approx. NOK 101 million (USD 11.2 million)

ONCOS-102 CLINICAL DEVELOPMENT PROGRAM



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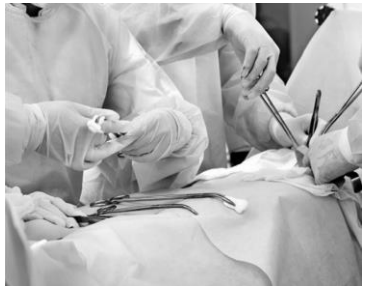
Mesothelioma

3. Melanoma
4. Financials and IOVaxis deal
5. Newsflow

MALIGNANT PLEURAL MESOTHELIOMA

HIGH NEED FOR NEW TREATMENT APPROACHES



Surgery

Only 10% of patients suitable for resection

Often diagnosed too late for surgery

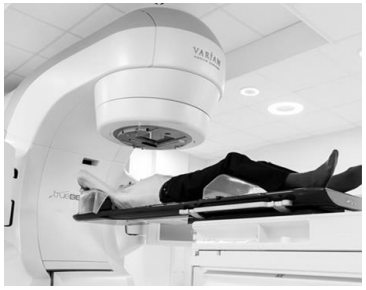
Technically challenging

Radiotherapy

Rarely effective due to tumor shape

Hard to focus radiation

Mainly palliative care



Chemotherapy

Standard of care (SoC) with limited efficacy

Only approved option is pemetrexed/cisplatin

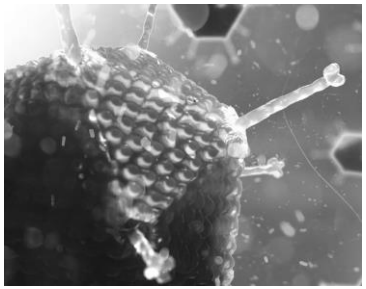
6 month PFS and 12 month median OS in 1st line

Immunotherapy

Mixed signals from early CPI trials

CPIs included in NCCN guidelines as 2nd line option

Possible frontline therapy with orphan drug designation



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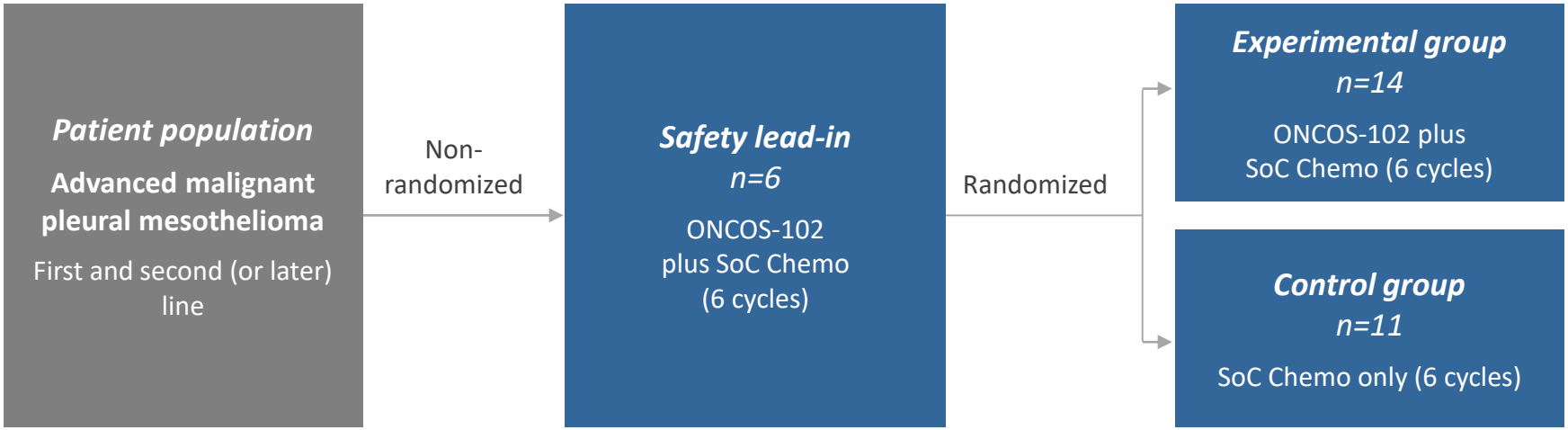
ONCOS-102 MESOTHELIOMA PHASE I/II TRIAL IN COMBINATION WITH CHEMO

STUDY DESIGN



ONCOS-102 MESOTHELIOMA PHASE I/II COMBINATION WITH SOC

PATIENT CHARACTERISTICS AND OUTCOMES

ITT: N = 31 (20+11) PP: N = 30 (19+11)	**Experimental** n= 20	**Control** n= 11	***Comments***
Tumor and disease characteristics at enrollment - Number of lesions - Tumor burden mm (RECIST 1.1) - Stage III - Stage IV	 4.3 87 30% 60%	 3.5 46 27% 46%	*Generally more progressed disease in experimental group*
First line patients (number)	11 of 20	6 of 11	*No previous chemotherapy*
Median Progression Free Survival (mPFS)	8.9 months	6.8 months	*Early data, many patients censored*
Overall Response Rate (ORR, n=10 / n=6)	30%	33%	
Disease Control Rate (DCR, n= 10 / n=6)	90%	83%	
Second (or later) line patients (number)	9 of 20	5 of 11	*Received previous chemotherapy*
Median Progression Free Survival (mPFS)	4.5 months	ND	*Early data, many patients censored*
Overall Response Rate (ORR, n=9 / n=5)	11%	60%	
Disease Control Rate (DCR, n=9 / n=5)	67%	80%	

ITT: Intention to treat
PP: Per protocol

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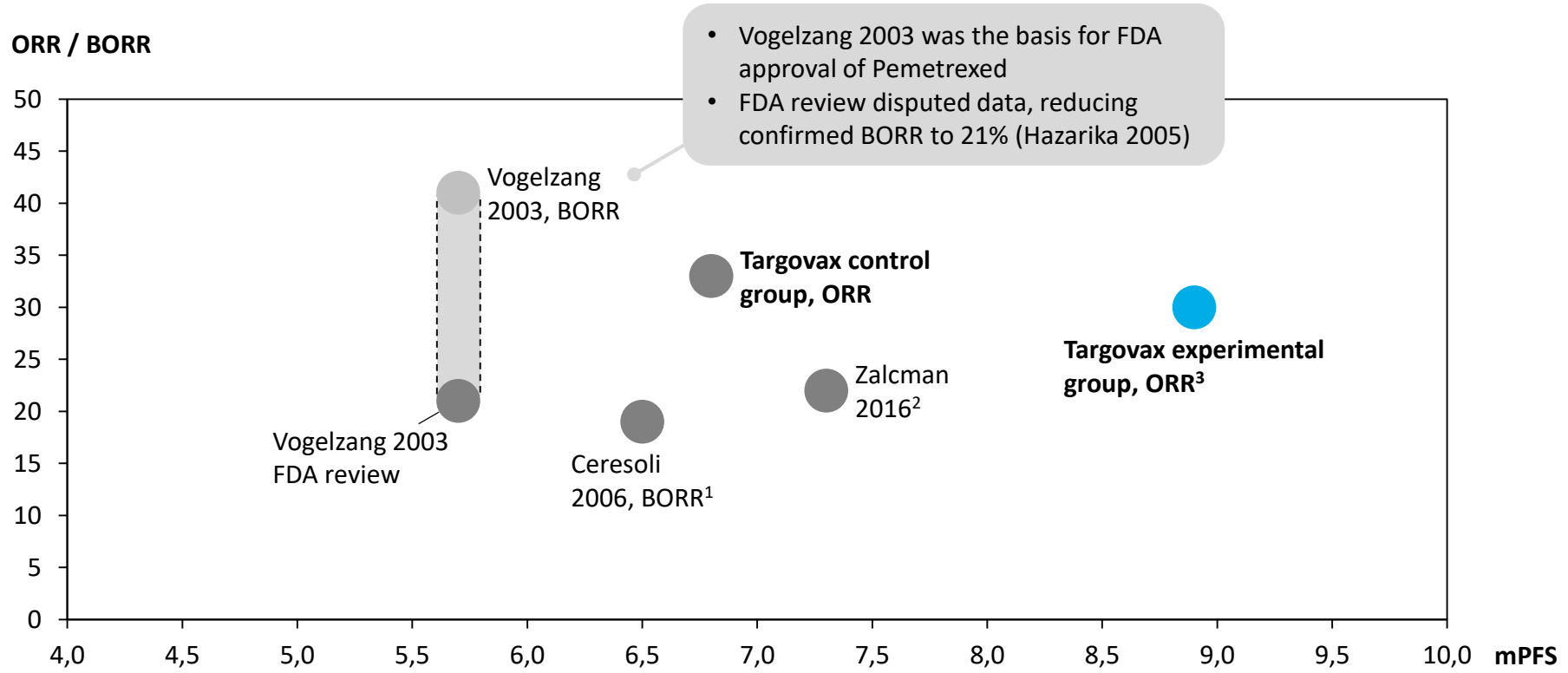
FIRST LINE ONCOS-102 ORR AND EARLY PFS DATA COMPARE FAVORABLY TO HISTORICAL CONTROL

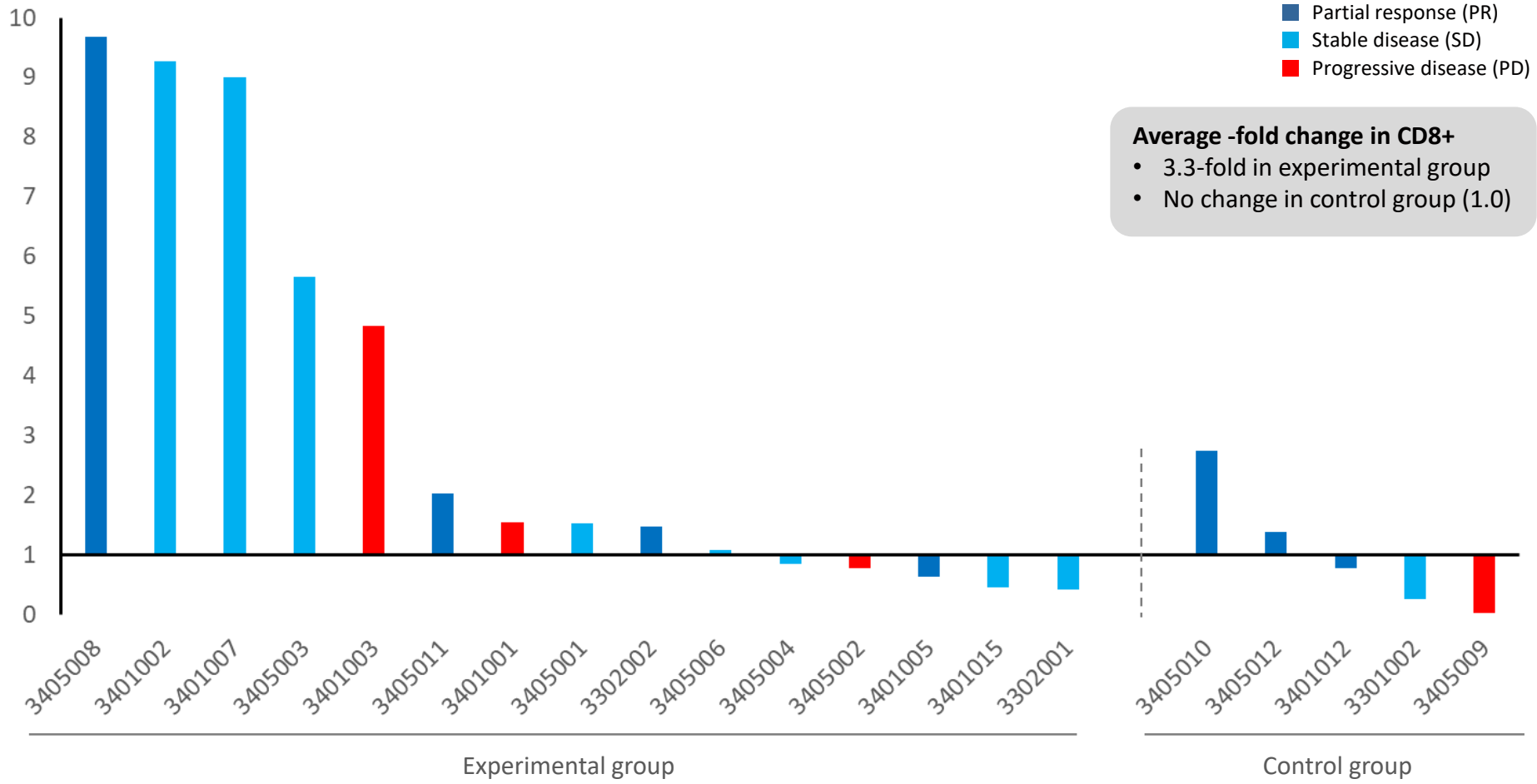


1 Pemetrexed plus carboplatin
2 Zalcman 2016 (Lancet) compared bevacizumab + pem/cis vs pem/cis; data from pem/cis arm only presented on plot. Not specified if ORR or BORR.
3 mPFS in Targovax trial is early and will change: Control group 6 patients (3 censored), Experimental group 11 patients (7 censored)

ONCOS-102 MESOTHELIOMA IMMUNE ACTIVATION

INCREASED T-CELL INFILTRATION IN EXPERIMENTAL GROUP

CD8+ T-cell infiltration -fold change from baseline to day 36 (n=20[1])



Average -fold change in CD8+

- 3.3-fold in experimental group
- No change in control group (1.0)

1: 20 patients with evaluable pre/post biopsies, experimental group n=15 and control group n=5

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ONCOS-102 MESOTHELIOMA PHASE I/II TRIAL

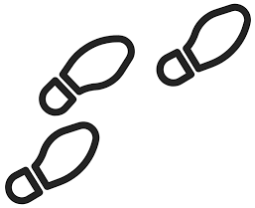
SUMMARY AND NEXT STEPS

Excellent safety profile

- ONCOS-102 and SoC chemotherapy **combination is well-tolerated**

Clinical activity observed

- Emerging data suggest **benefit for ONCOS-102 treated patients** and **compare favorably** to historical control
- Increased **T-cell infiltration** and **PD-L1 expression**
- Robust immune activation **associated with clinical benefit**

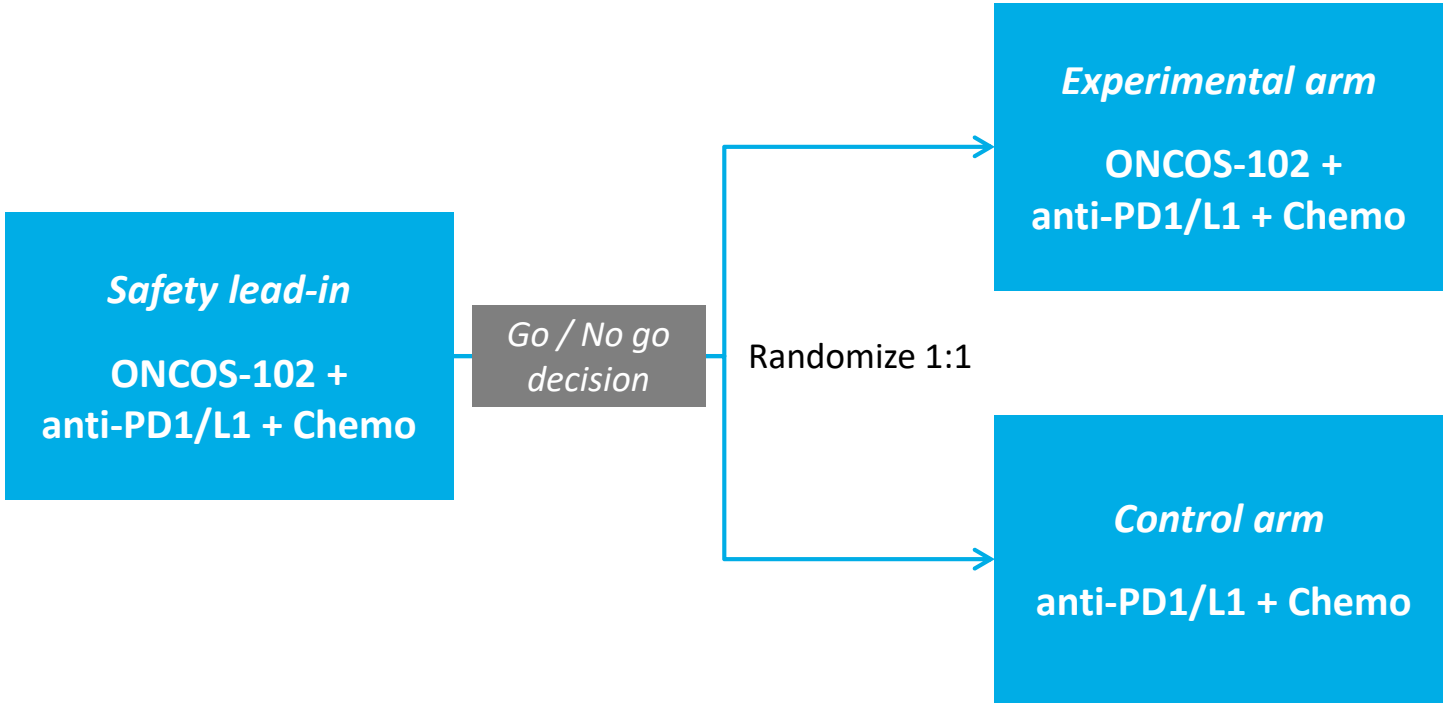


Next steps defined

- **First line** identified as **target population** for follow-up trial
- **Strong rationale** for combination with anti-PD1/L1 CPI
- **Discussion ongoing with pharma partner** for trial collaboration

NEXT STEP: ONCOS-102 + ANTI-PD1/L1 + CHEMO
TRIPLE COMBINATION IN FIRST LINE MESOTHELIOMA

Study population – malignant pleural mesothelioma:
First line, unresectable, advanced and/or metastatic disease
ca. 100 patients



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Melanoma

4. Financials and IOVaxis deal
5. Newsflow

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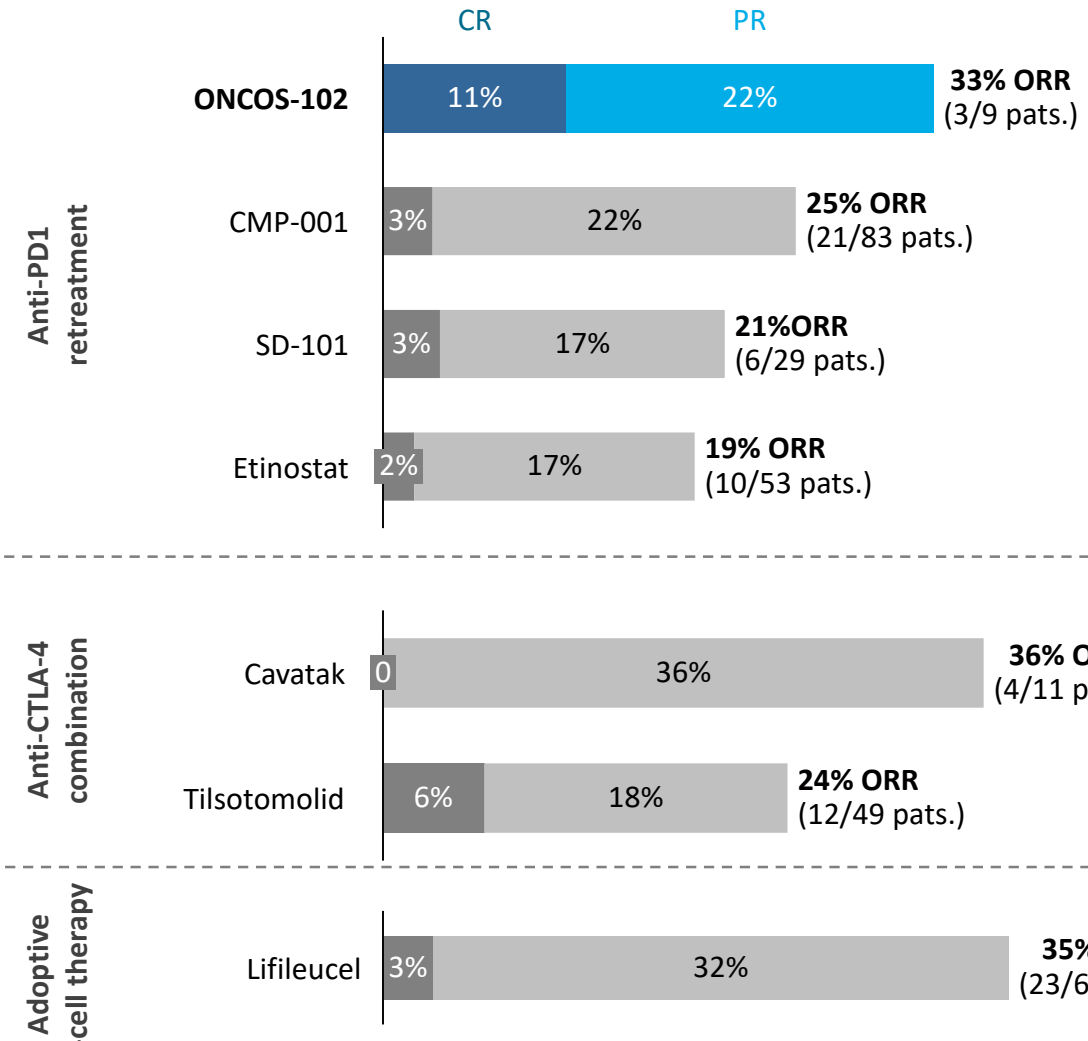
ANTI-PD1 REFRACTORY MELANOMA

ONCOS-102 AND KEYTRUDA COMBINATION
PART 2: FULLY RECRUITED

	Part 1	Part 2
Patients	9	12
ONCOS-102 injections	3	12
Overall response rate (ORR)	33%	*2H20*

ONCOS-102 + KEYTRUDA DATA IN CONTEXT

ANTI-PD1 REFRACTORY MELANOMA BENCHMARK DATA



Comment

- *Checkmate Pharma, TLR-9 agonist*
- *Data from high dose cohort*
- *Dynavax, TLR-9 agonist*
- *Syndax Pharma, HDAC inhibitor*

Most pats CTLA4 naïve, 10-20% ORR expected

- *Merck (Viralytics), Oncolytic virus, up to 20 injections*
- *Idera, TLR-9 agonist*
- *IOvance, autologous TIL therapy with IL-2*
- *Complex and expensive manufacturing*

SOURCE: Targovax market analysis, November 2019

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4

Financials and IOVaxis deal

5. Newsflow

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PROFIT AND LOSS

NOK m	4Q18	1Q19	2Q19	3Q19	4Q19
Total revenue	**0**	**0**	**0**	**0**	**2**
External R&D expenses	-21	-19	-22	-14	-25
Payroll and related expenses	-14	-14	-18	-8	-11
Other operating expenses	-7	-7	-5	-5	-5
Total operating expenses	**-42**	**-40**	**-45**	**-27**	**-42**
Operating loss	-42	-40	-45	-27	-39
Net financial items	1	-1	-1	0	5
Loss before income tax	-41	-41	-46	-26	-35
Net change in cash	-22	-46	30	-31	-34
Net cash EOP	**151**	**105**	**135**	**104**	**70**

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SUFFICIENTLY FUNDED TO ADVANCE CLINICAL PROGRAM BEYOND VALUE INFLECTION POINTS

The company

Cash end of 4Q

70 / **8**

NOK million **USD million**

Raised NOK 101m / USD 12 in Jan 2020

Net cash flow - total 4Q

-34 / **-4**

NOK million **USD million**

Market cap

370 / **38**

NOK million **USD million**

Analyst coverage

DNB, H.C. Wainwright, Arctic, ABG Sundal Collier, Redeye, Edison

The shareholders

	Estimated ownership[1]	
Shareholder	**Shares million**	**Ownership**
HealthCap	12.4	16.3 %
RadForsk	4.4	5.8 %
Nordea	4.3	5.7 %
AP4	2.6	3.4 %
Thorendahl Invest	1.5	2.0 %
Danske Bank (nom.)	1.0	1.3 %
Sundt	1.0	1.3 %
Morgan Stanley & Co. Int	0.9	1.2 %
ABN AMRO Global (nom.)	0.9	1.2 %
MP Pensjon	0.9	1.1 %
10 largest shareholders	**29.9**	**39.3 %**
Other shareholders (4 997)	46.1	60.7 %
Total shareholders	**76.0**	**100.0 %**

[1] As per 25 February 2020

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TG01/02 IOVAXIS OPTION AGREEMENT

IOVAXIS THERAPEUTICS

Fighting Cancer with Your Own Weapons

CEO: John Wang

HQ: Nantong, China

Founded: 2018

R&D focus: Shared and personalized cancer vaccines

Description

- Exclusive option to license TG01/02 vaccines for Greater China and Singapore
- License option to be executed upon approval to start first clinical trial
- IOVaxis clinical trial sponsor and responsible for local regulatory filings

Terms

- US$250.000 option fee
- US$3m up-front fee upon option exercise
- Up to US$100m total development and commercial milestones
- Tiered royalties on net sales up to mid teens

Next steps

- File for China IND
- Establish full license agreement
- Define regional development plan
- Initiate one or more China and Singapore TG clinical trials, incl. IO combinations

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5 Newsflow

PIPELINE WITH RICH NEAR-TERM NEWS FLOW

Product candidate	Preclinical	Phase I	Phase II	Phase III	Next expected event
ONCOS-102	**Mesothelioma** Combination w/ pemetrexed/cisplatin				**1H 2020** Updated clinical and immune data
	Melanoma Combination w/Keytruda				**2H 2020** Clinical and immune activation data
	Peritoneal malignancies Collaborators: Ludwig, CRI & AstraZeneca Combination w/Imfinzi				*Update by collaborators*
	Prostate Collaborator: Sotio Combination w/DCvac				*Update by collaborator*
ONCOS-200 series	**Next Gen viruses**				**1H 2020** Pre-clinical data

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Upcoming events

19-21 Apr	H.C. Wainwright Conference, London, UK	Investor presentation
26-29 Apr	AACR, San Diego, US	Next-gen virus poster
5-6 May	Annual Cancer Progress Conference, NYC, US	Panel discussion
6 May	1Q presentation, Oslo, Norway	1Q presentation
26 May	ABGSC Life Science Summit, Stockholm, SWE	Investor presentation
27 May	Life Science Investor seminar, Copenhagen, DK	Investor presentation

Upcoming milestones

1H 2020	ONCOS-102 phase I/II trial in unresectable malignant pleural mesothelioma	*– Updated clinical and immune data*
2H 2020	ONCOS-102 phase I trial in checkpoint inhibitor refractory advanced melanoma	*– Part 2 data*

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ACTIVATING THE IMMUNE SYSTEM

TO FIGHT CANCER

CLINICALLY PROVEN

One of the furthest developed oncolytic viruses

Strong single agent data

Activation of anti-PD1 refractory tumors

INNOVATIVE PIPELINE

Next generation virus platform in pre-clinical testing

RICH NEWS FLOW

Clinical and immune activation from mesothelioma and melanoma trials

Potential readouts from peritoneal trial