



ACTIVATING THE PATIENT'S IMMUNE SYSTEM TO FIGHT CANCER

Company presentation

April 2021



targovax

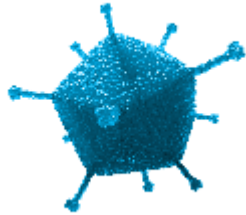
OSE:
TRVX

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.

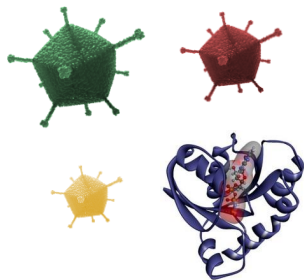
TARGOVAX AT A GLANCE



ONCOS-102

Lead product candidate

- Class-leading data in monotherapy and combinations with chemo and aPD-1
- Powerful immune activation
- Ideal combination partner to aPD-1
- Path to market



Pipeline

- Novel virus approaches
- Novel payloads and modes of action
- Mutant RAS cancer vaccine concepts

Vision:

Unlock greater clinical benefits in cancer patients by deploying multifunctional platforms to target key immune regulators and oncogenic drivers

HIGH AND GROWING MEDICAL NEED FOR IMMUNE ACTIVATORS

*CPIs are revolutionizing
cancer therapy...*

*...but most patients
do not respond...*

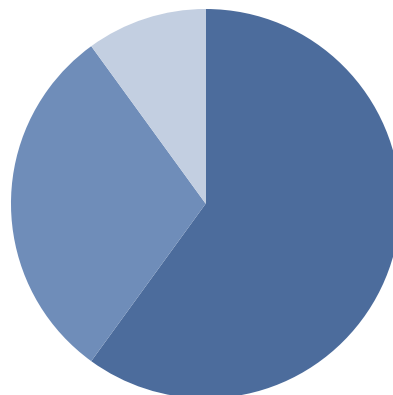
*...leading to a high medical
need for immune activators*

\$25bn

Global CPI market

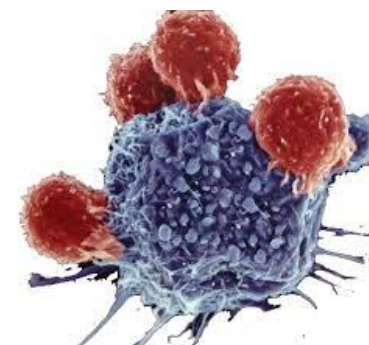
44%

Patients eligible for CPI²:



60 - 90%

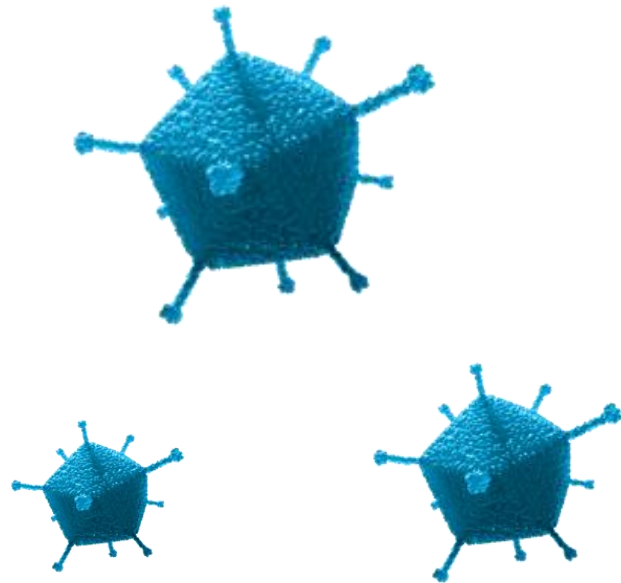
Non-responders



¹ Immune Checkpoint Inhibitors Markets Report, 2020 March, ResearchAndMarkets.com

² Estimation of the Percentage of U.S. 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.

THE SOLUTION: ONCOS-102 IMMUNE ACTIVATION

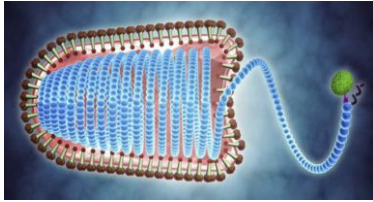


Activates the body's own T-cells against the cancer

Unblinds the tumor to the immune system

Reverses immunosuppressive defense mechanisms in the tumor

ADENOVIRUS IS ONE OF THE MOST PROMISING ONCOLYTIC VIRUSES



Small RNA viruses



- **Highly oncolytic**
- **Highly inflammatory**



- **Limited payload capacity**
- **Poor stability**

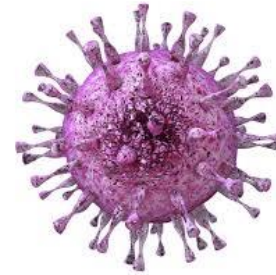


- **Only sporadic evidence** of clinical efficacy



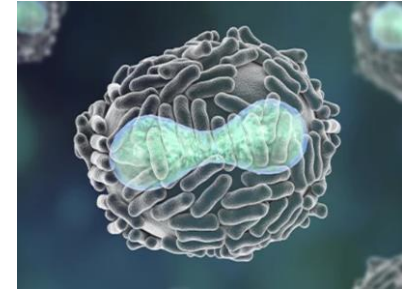
Adenovirus

- **Highly inflammatory**
- **Versatile DNA backbone**
- **Less payload capacity** than Herpes /Vaccinia
- **Promising early data** in several candidates
Vector for several **effective COVID-19 vaccines**



Herpes viruses

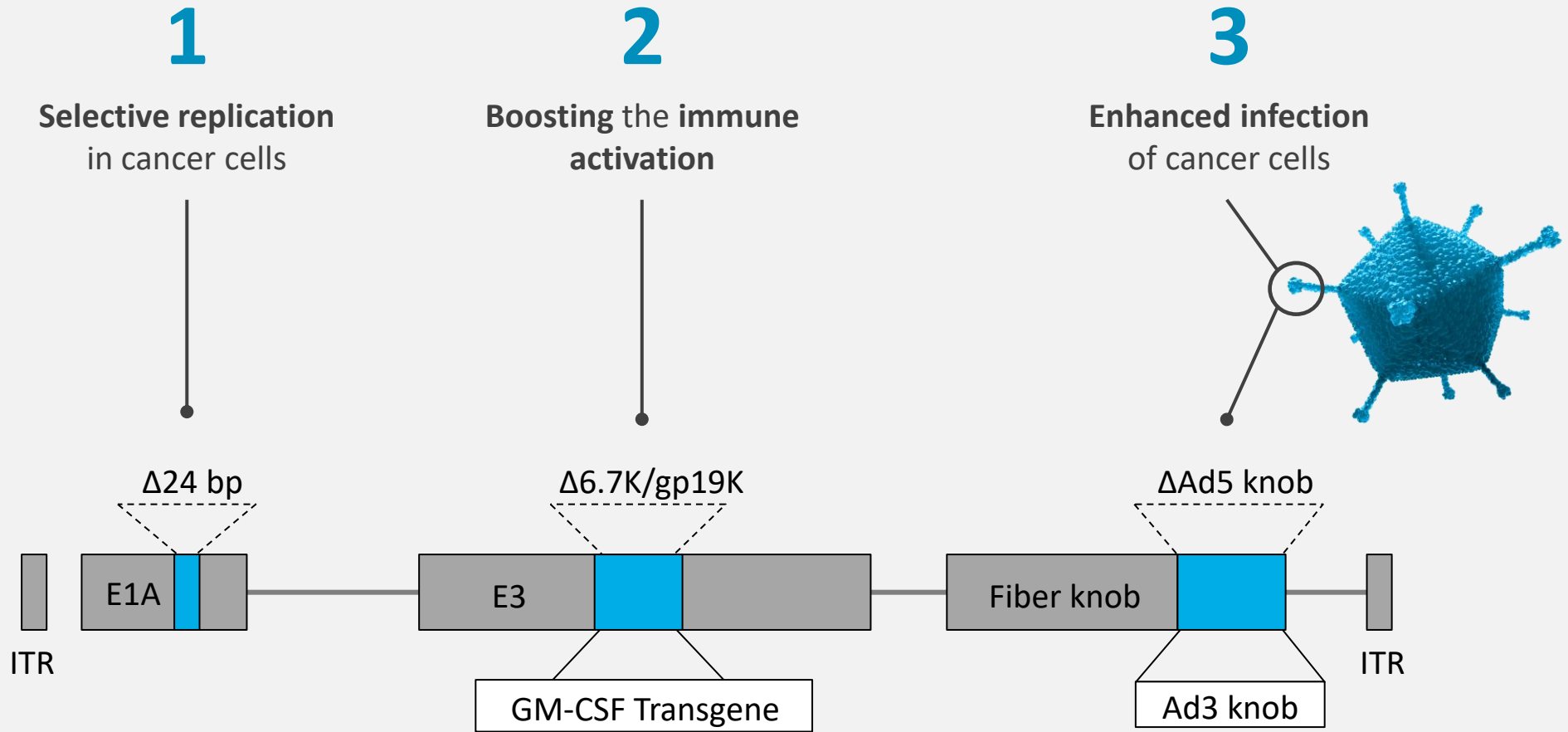
- **Large payload capacity**
- **Only approved virus class**
- **Low immunogenicity**
- **Latent infection cycle**
- **Mixed recent data**
- **Imlygic commercial failure**



Vaccinia virus

- **Large payload capacity**
- **Used as vector** for first, historic vaccines
- **Low immunogenicity**
- **Large size, high complexity**
- **Several recent negative clinical trials**

ONCOS-102 IS AN ONCOLYTIC ADENOVIRUS SEROTYPE 5 ARMED WITH AN IMMUNE ACTIVATING TRANSGENE



EARLY-STAGE DEVELOPMENT SUCCESSFULLY COMPLETED – ENTERING LATE-STAGE DEVELOPMENT

Early-stage development

- ✓ Clinical efficacy
- ✓ Immune activation
- ✓ Well tolerated

Late-stage development

PD-1 refractory melanoma



Expansion opportunities

- Mesothelioma
- Colorectal cancer
- Other indications
- Other IO combinations
- Platform development

CLINICAL AND PRECLINICAL PIPELINE

Product candidate	Preclinical	Phase 1	Phase 2	Collaborator	Next expected event
ONCOS-102	Melanoma Combination w/anti PD1				1H 2022 First patient
	Colorectal cancer Combination w/Imfinzi			AstraZeneca CANCER RESEARCH INSTITUTE	Updates by collaborator expected 1H22
	Mesothelioma Combination w/pemetrexed/cisplatin			MERCK	1H 2021 Survival update
ONCOS-200 series	Next Gen viruses			leidos Papyrus	Updates at conferences
Novel mutRAS concepts				VALO THERAPEUTICS OBLIQUE THERAPEUTICS	

Product candidate	Preclinical	Phase 1	Phase 2	Collaborator	Next expected event
ONCOS-102	Melanoma Combination w/anti PD1				
	Colorectal cancer Combination w/Imfinzi				
	Mesothelioma Combination w/pemetrexed/cisplatin				
ONCOS-200 series	Next Gen viruses				
Novel mutRAS concepts					

ONCOS-102 ANTI-PD1 REFRACTORY MELANOMA

35% ORR AND SYSTEMIC EFFECT

Patient population

- Advanced, unresectable **melanoma**
- Disease **progression** despite prior treatment with anti-PD1
- Poor prognosis, with **few treatment alternatives**
- 20 patients, 11 stage III and 9 stage IV

Treatment regime

- **Part 1: 3 ONCOS-102 injections** followed by 5 months of Keytruda
- **Part 2: 12 ONCOS-102 injections** - priming and concomitantly

Clinical data

- **35% ORR** by RECIST 1.1 and irRECIST
 - 1 Complete Response (CR) (Part 1)
 - 6 Partial Responses (PR) (2 in Part 1, 4 in Part 2)
- Multiple examples of **systemic effect**
- Robust systemic and local **immune activation**
- Well tolerated, no safety concerns

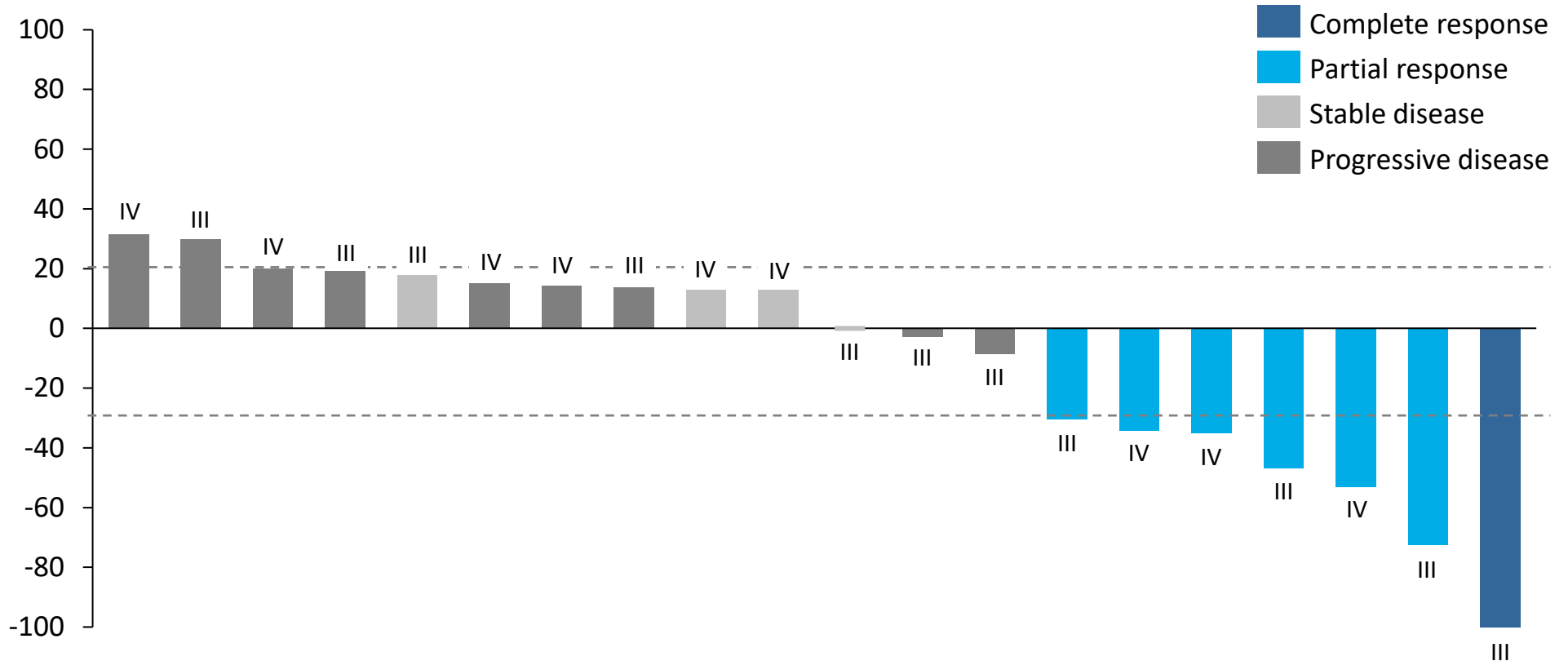
PATIENT DEMOGRAPHICS – MORE ADVANCED DISEASE IN PART 2

Parameters	Part 1 (n=8)	Part 2 (n=12)	Total (N=20)
Age (median)	70.5y	72y	72y
Time from diagnosis to start of ONCOS-102 (median)	6.9y	2.9y	4.5y
Number of treatments prior to study (average)	5.3	5.9	5.6
- Surgery (average)	2.1	1.9	2.0
- Treatments ex. surgery (average)	3.1	3.9	3.6
Time (months) from last anti-PD1 to study start (median)	1.8m	1.9m	1.9m
Number of prior checkpoint treatment regimens (average)	1.8	2.3	2.2
Prior CTLA-4 treatment (number of patients, %)	4 (50%)	8 (67%)	12 (60%)
Baseline number of lesions (median)	4.0	8.5	7.0
Baseline tumor burden RECIST1.1 (mm, median)	37.5	73.5	55.0
Tumor stage at enrollment			
- Stage III	6	5	11
- Stage IV	2	7	9

More advanced disease in Part 2

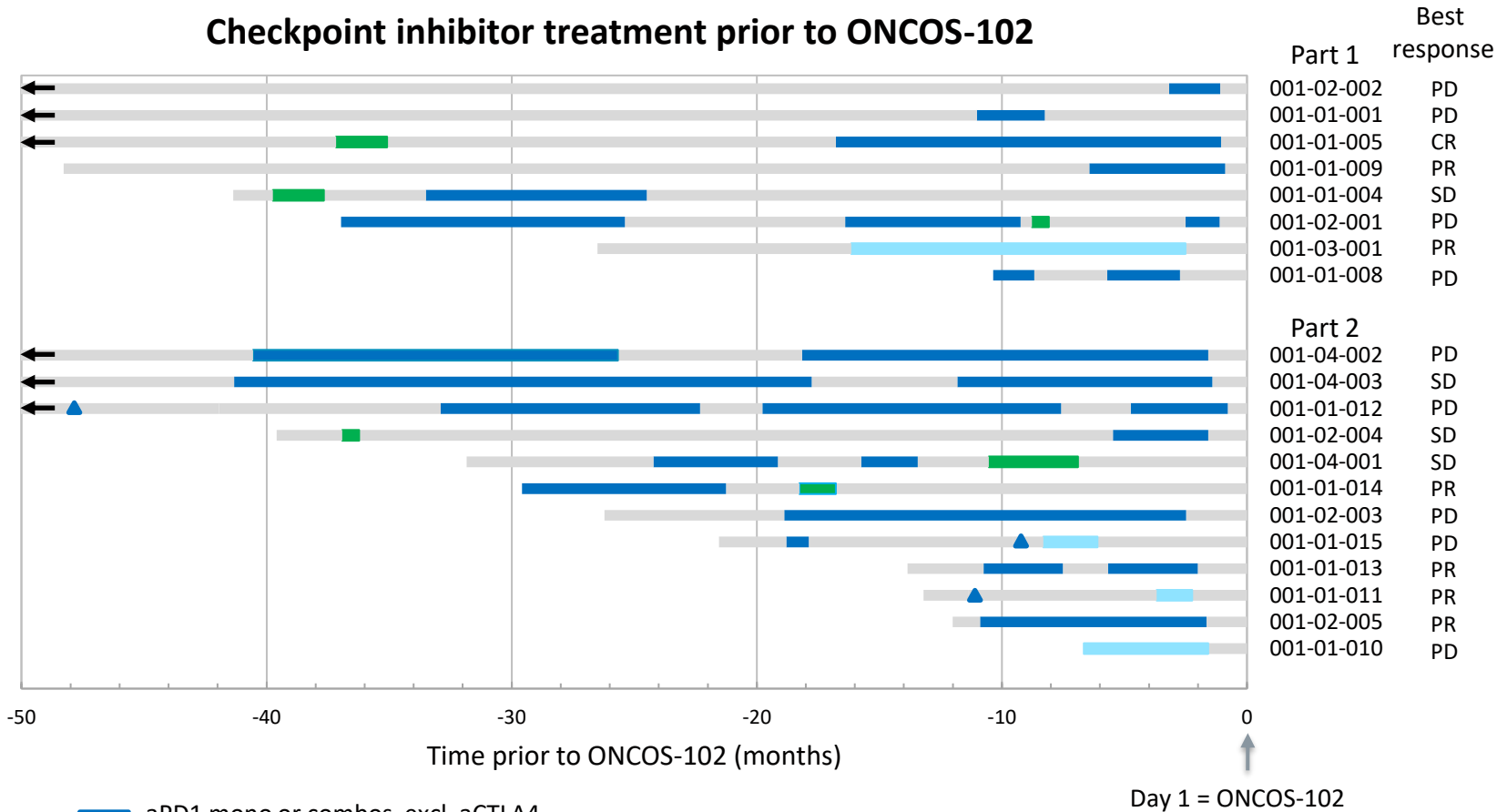
BEST-IN-CLASS RESPONSE RATE WITH ORR OF 35%

Relative change (percent) in tumor burden from baseline to best response



6 OF 7 RESPONDERS HAD LAST ANTI-PD1 TREATMENT LESS THAN 3 MONTHS PRIOR TO ENTERING THE TRIAL

Checkpoint inhibitor treatment prior to ONCOS-102



CPI treatment prior to trial inclusion:

15 / 20 patients last aPD1 treatment < 3 months (6 / 7 PR/CR)

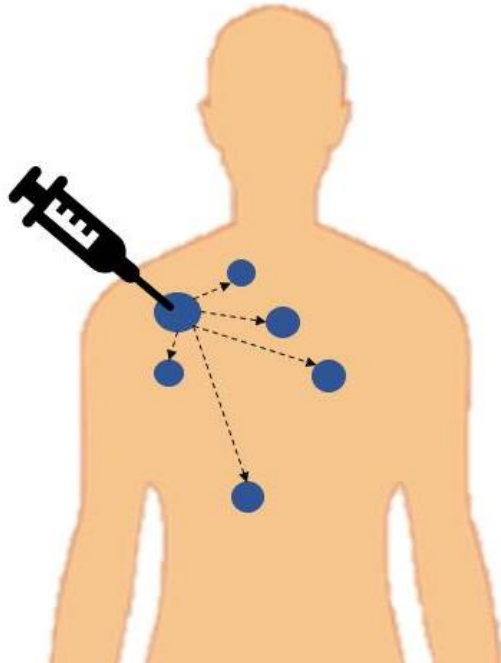
3 / 20 patients last aPD1 treatment > 6 months (no PR)

2 / 20 patients last treatment aCTLA4 monotherapy > 6 months (1 / 7 PR)

- aPD1 mono or combos, excl. aCTLA4
- aPD-1 and aCTLA4 combo
- aCTLA4 monotherapy
- no/other treatment than CPI
- ← Pts very first anti-cancer treatment > 50 months prior to ONCOS-102
- ▲ aPD1 +/- aCTLA4 one dose or unknown treatment period

MULTIPLE EXAMPLES OF SYSTEMIC (ABSCOPAL) EFFECT

TWO PATIENTS WHERE A NON-INJECTED LESION COMPLETELY DISAPPEARED



Conservative definition of abscopal effect per lesion:

- $\geq 30\%$ tumor reduction from baseline
- $\geq 5\text{mm}$ absolute reduction

Abscopal effect observed in 4 / 20 patients (20%)

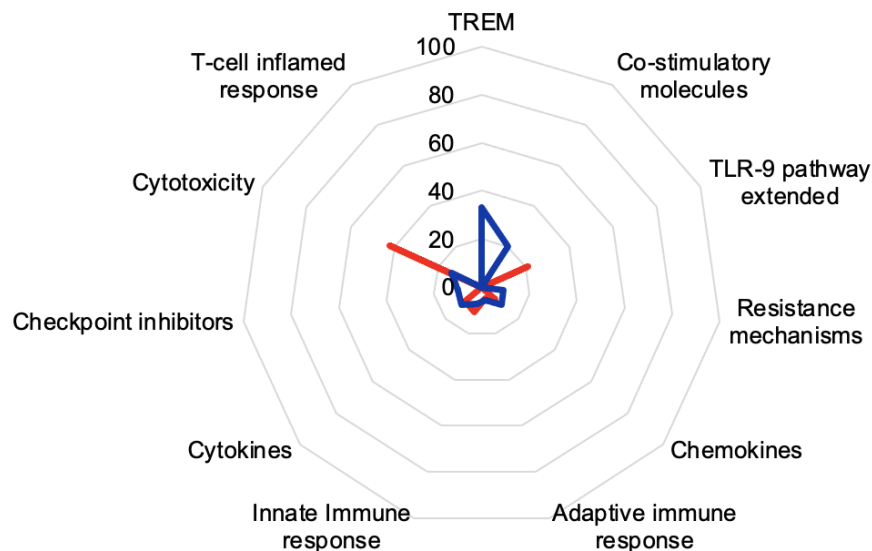
- 1 / 8 patients in Part 1 (12.5%)
- 3 / 12 patients in Part 2 (25%)

Complete regression (100%) of a non-injected lesion observed in two patients

GENE EXPRESSION DATA SHOWS RESHAPING OF THE TUMOR MICROENVIRONMENT

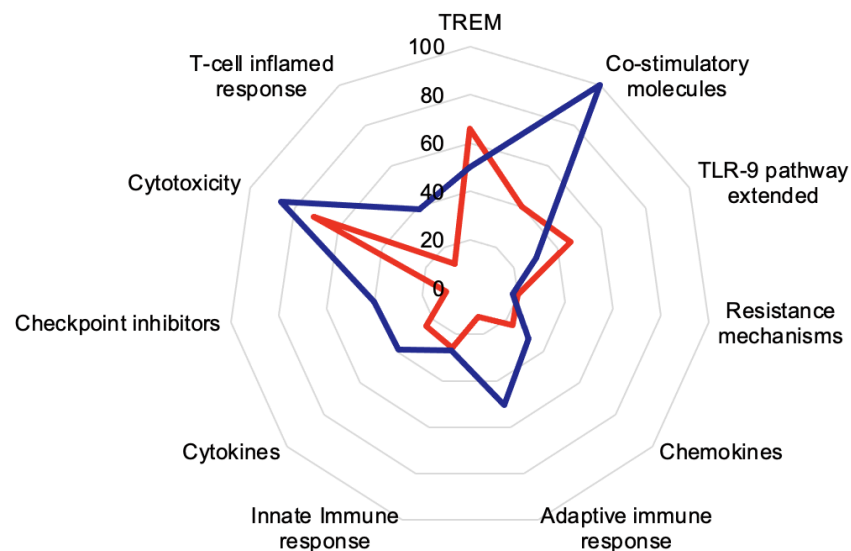
Modulation of gene expression; Fraction (%) of genes modulated within the indicated gene groups

— Day 22 vs. Baseline
— Day 64 vs. Baseline



Part 1

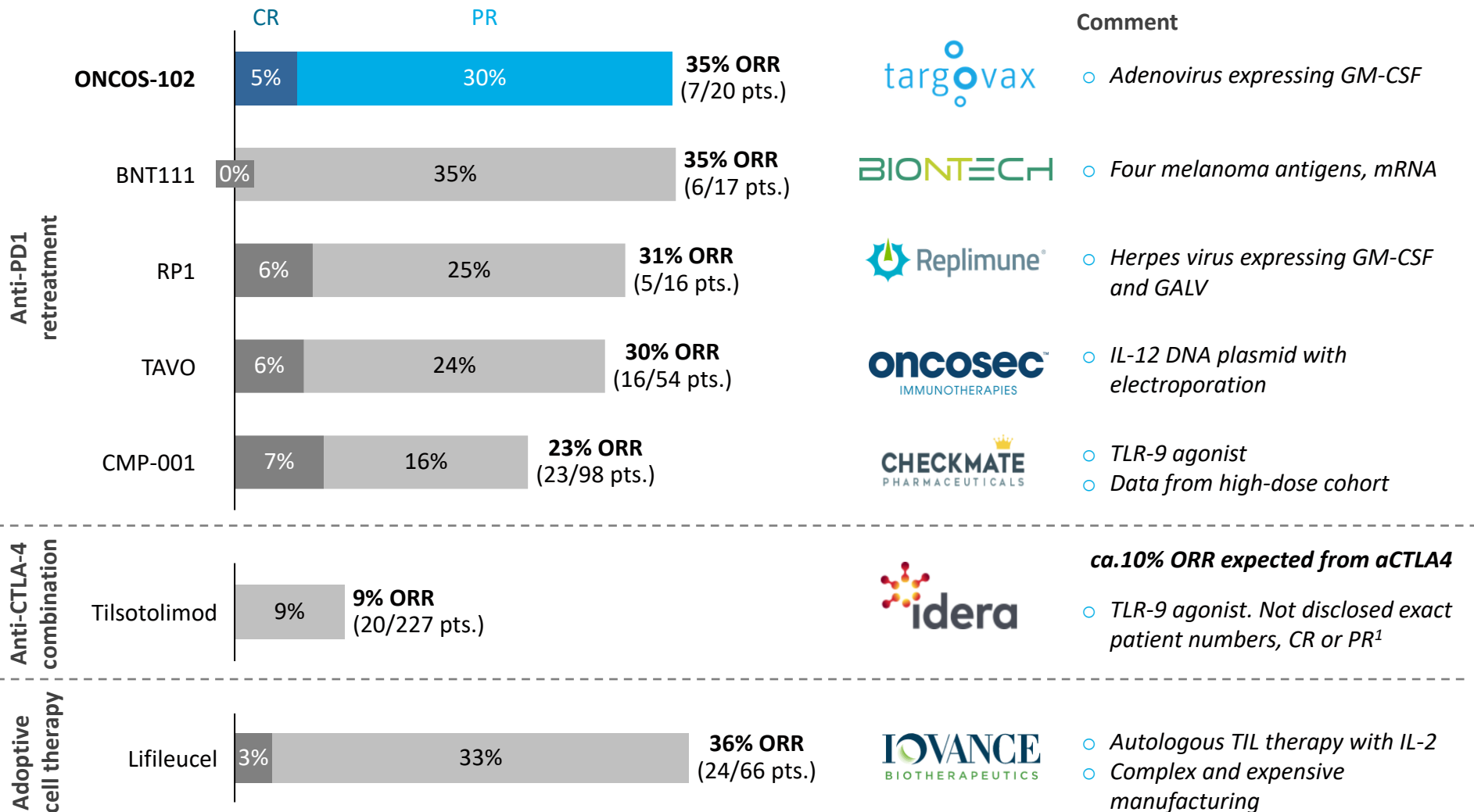
Day 22 & Day 64 (n=2)
Baseline (n=6)



Part 2

Day 22 (n=10) & Day 64 (n=7)
Baseline (n=10)

ONCOS-102 EFFICACY IS COMPETITIVE TO LEADING DRUG CANDIDATES IN ANTI-PD1 REFRACTORY MELANOMA



ACCELERATED APPROVAL IN ANTI-PD1 REFRACTORY MELANOMA IS OUR PRIORITY

Rationale

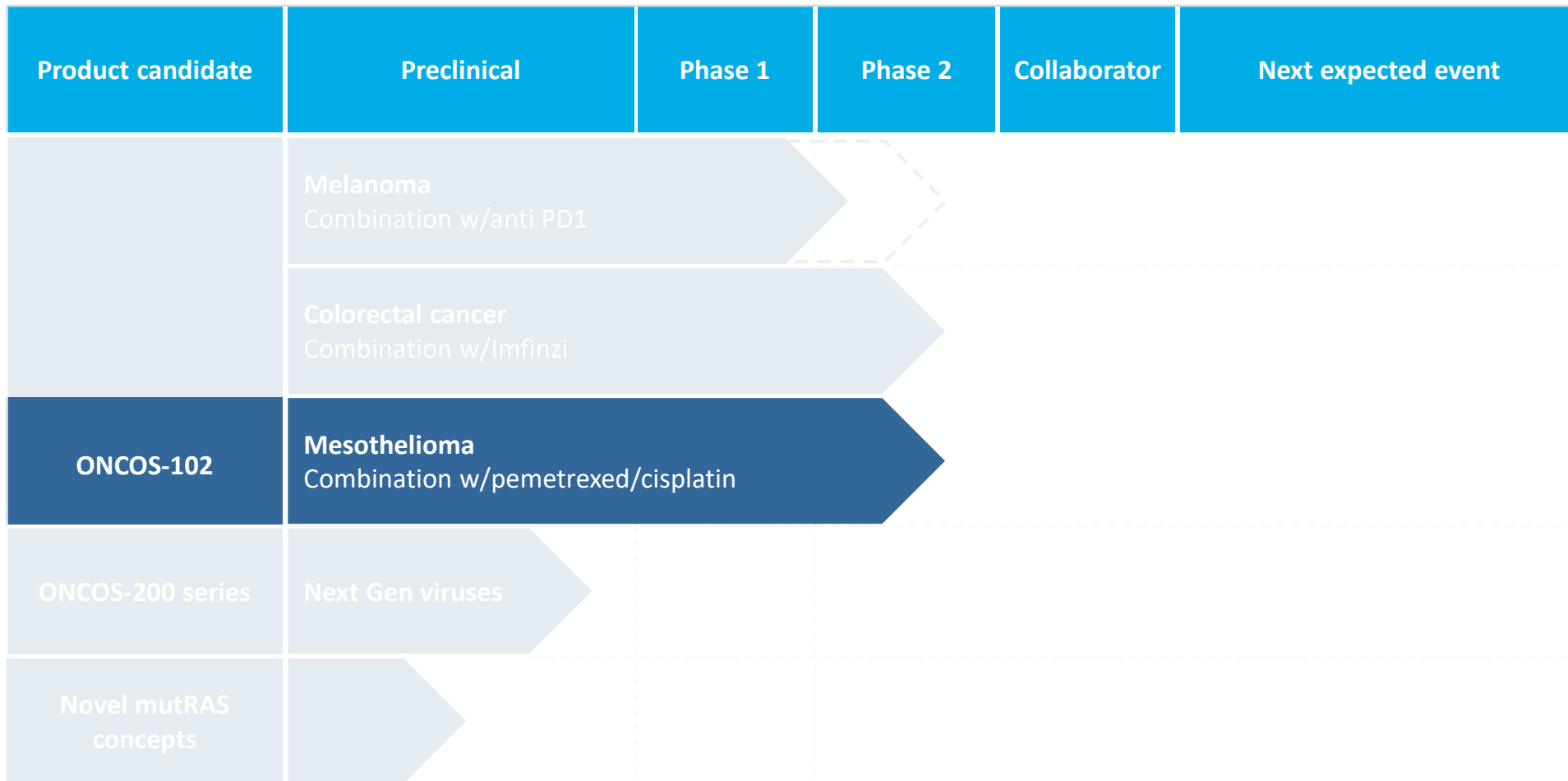
- Highly competitive clinical data
- No standard of care
- Fast route to market

Preliminary trial design – registration directed

- Single arm, < 200 patients
- Refractory status
- Primary endpoint: ORR
- Focus: systemic effect and durability
- Dosing: similar to part 2

Next steps

- Conclude trial design discussions with KOLs in US, EU and Australia
- Consult with FDA & other regulatory authorities to secure path forward
- Explore opportunities for collaboration partners
- Target first patient 1H 2022



HIGH NEED FOR NEW TREATMENT APPROACHES IN MALIGNANT PLEURAL MESOTHELIOMA



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

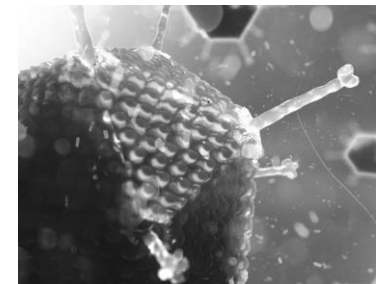
6 months mPFS and 12 months mOS in 1st line

Immunotherapy

Ipi/nivo approved in 1st line disease (US only)

CPIs included in NCCN guidelines as 2nd line option

CPI + SoC trials ongoing

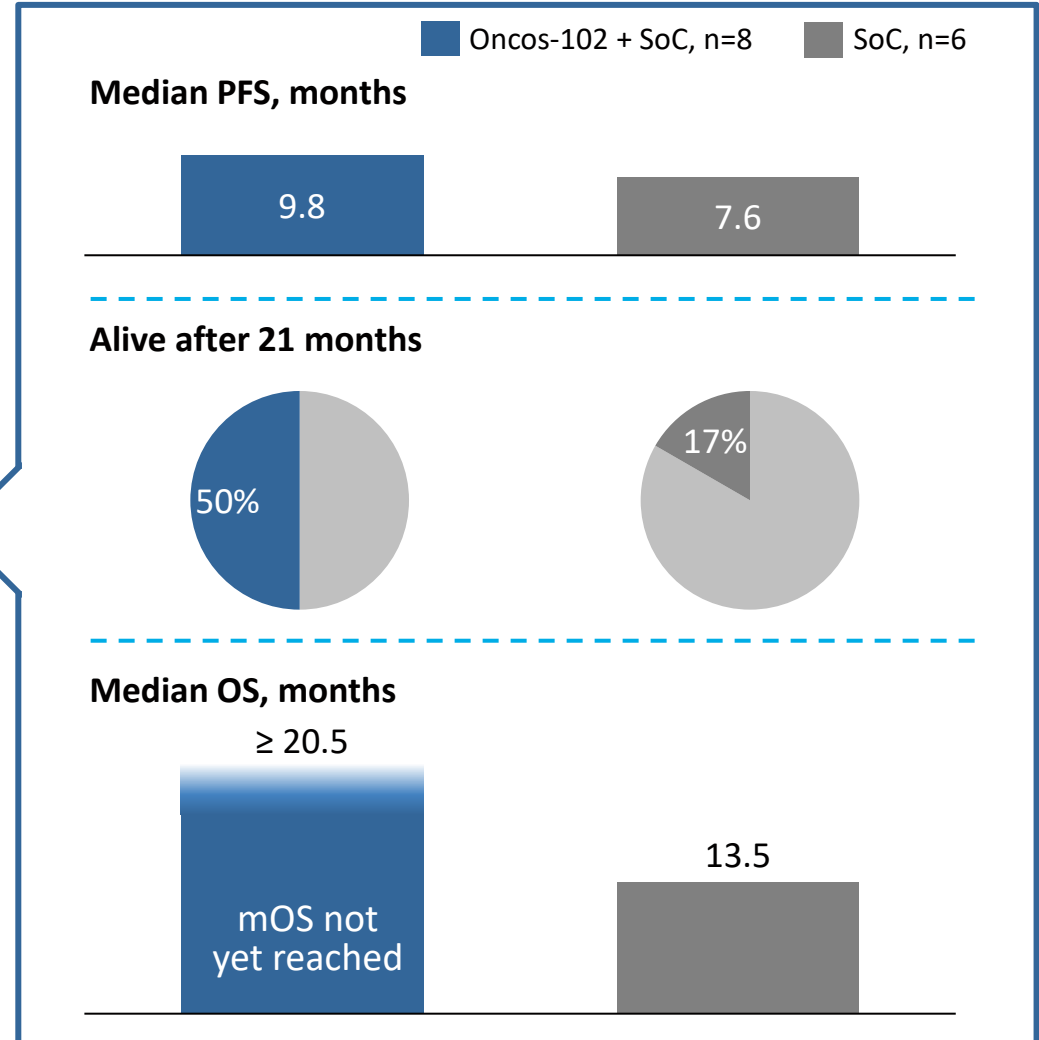


ONCOS-102 MESOTHELIOMA PHASE 1/2 COMBINATION WITH SoC CHEMO ENCOURAGING CLINICAL OUTCOMES IN 1ST LINE

Trial design

- 1st and 2nd (or later) line
- ONCOS-102: 6 intra-tumoral injections
- SoC chemo: pemetrexed and cisplatin, 6 cycles

	Safety lead-in n=6	Experi- mental n=14	Control n=11
1 st line	3	8	6
2 nd line ¹	3	6	5

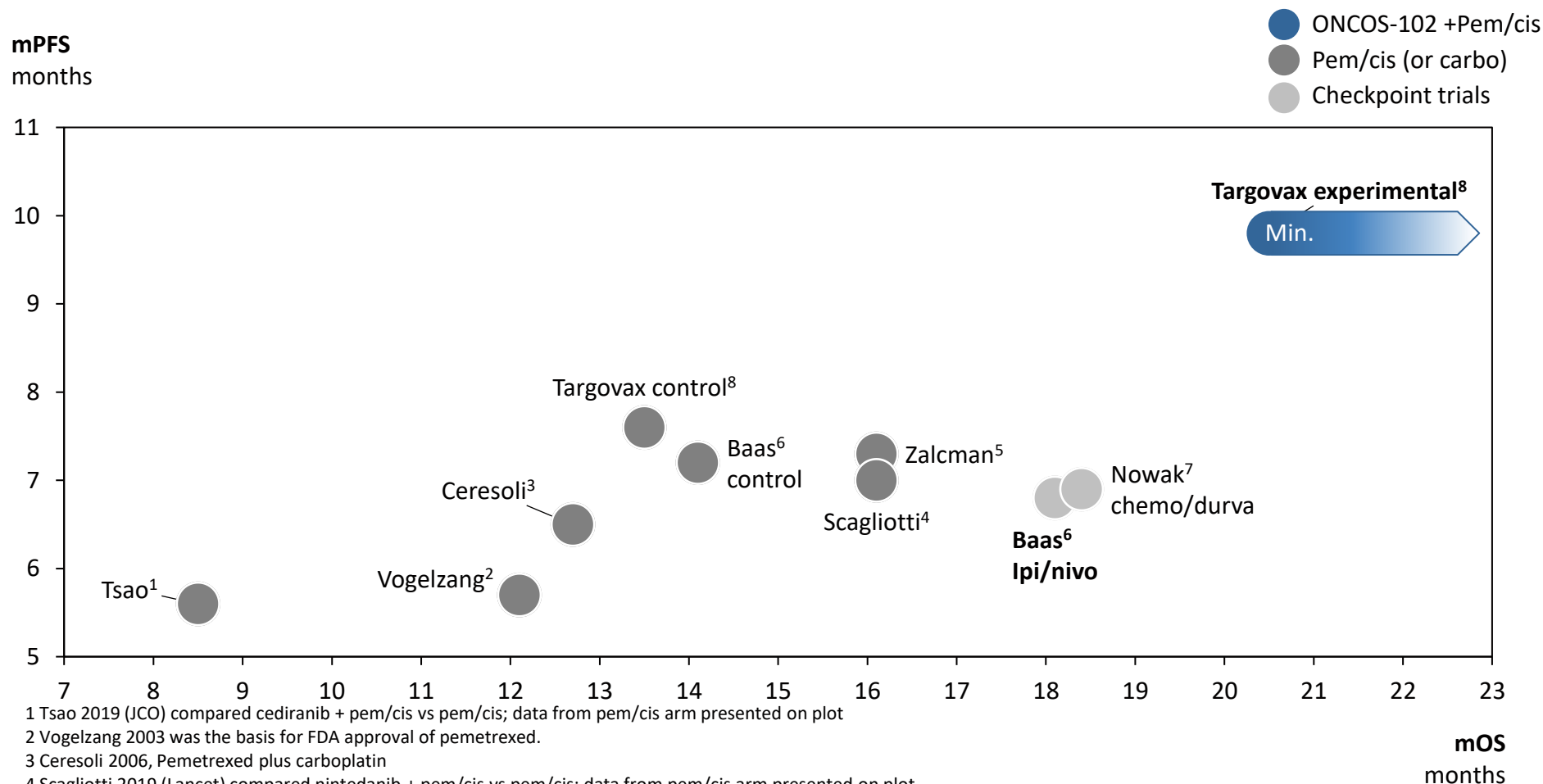


¹ Also including later lines

mOS: median Overall Survival. mPFS: median Progression Free Survival

mPFS when combining safety lead-in and randomized part in first line is 8.9 months

FIRST LINE DATA ARE MATURING AND ALREADY COMPETITIVE - MOS WILL BE 20.5 MONTHS OR MORE



1 Tsao 2019 (JCO) compared cediranib + pem/cis vs pem/cis; data from pem/cis arm presented on plot

2 Vogelzang 2003 was the basis for FDA approval of pemetrexed.

3 Ceresoli 2006, Pemetrexed plus carboplatin

4 Scagliotti 2019 (Lancet) compared nintedanib + pem/cis vs pem/cis; data from pem/cis arm presented on plot

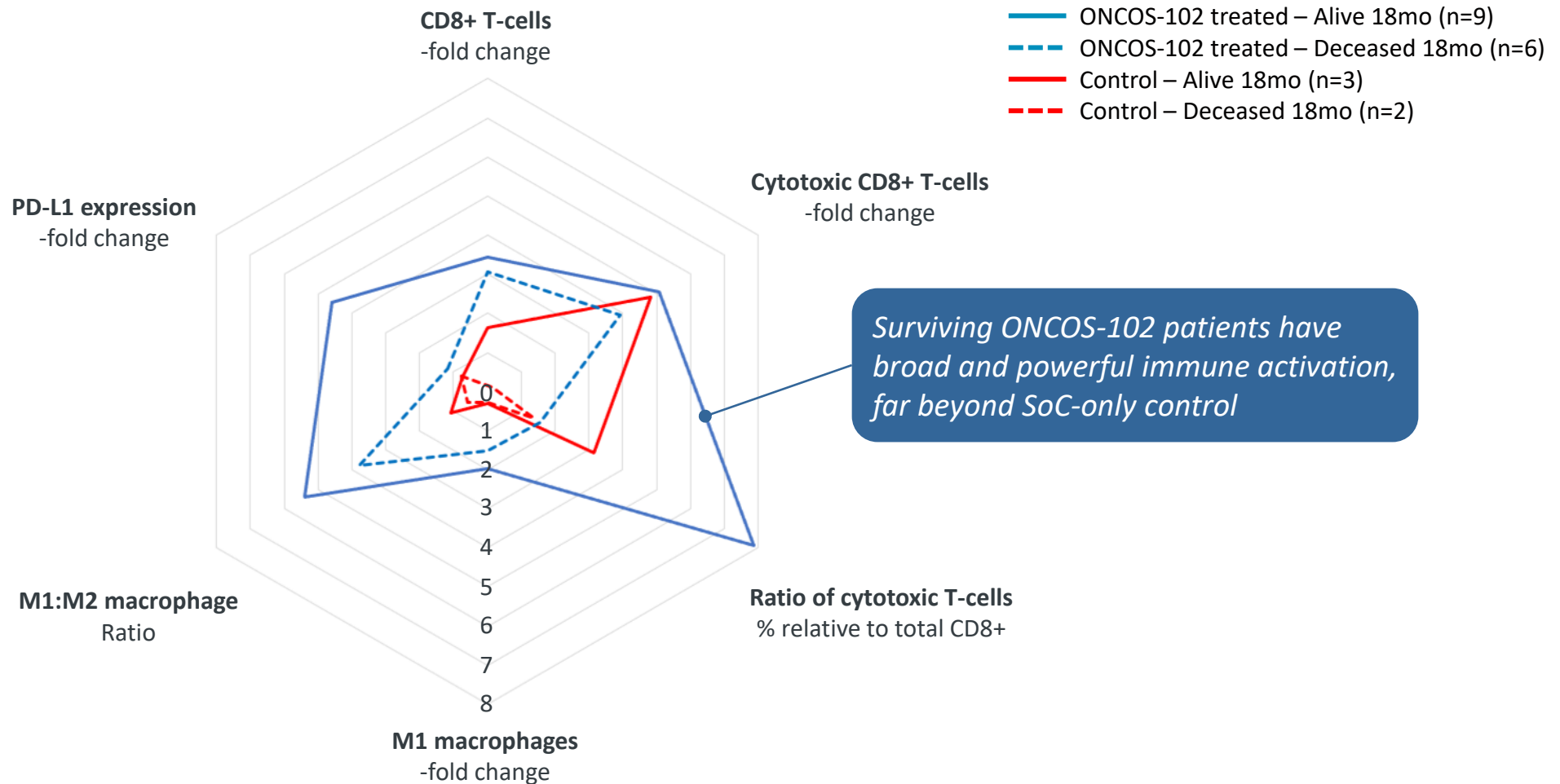
5 Zalcman 2016 (Lancet) compared bevacizumab + pem/cis vs pem/cis; data from pem/cis arm presented on plot.

6 Baas 2020 CheckMate 743. Nivolumab + ipilimumab for two years vs pem/cis (or carboplatin). Ipi/nivo was approved in first line by FDA on October 2, 2020.

7 Nowak 2020 (Lancet Oncology) Pem / cis (6 cycles) + durvalumab (12 months)

8 1L randomized patients mOS will change: Experimental group, 8 patients (4 censored). Control group, 6 patients (1 censored)

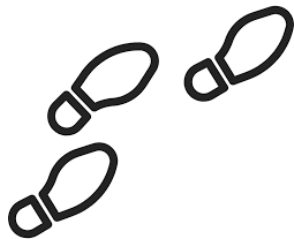
LEVEL OF IMMUNE ACTIVATION PREDICTIVE OF CLINICAL OUTCOME



FAST TRACK DESIGNATION AND EVOLVING SURVIVAL DATA PROVIDE OPPORTUNITIES



Well **tolerated** combination therapy
Clear clinical activity in **1st line** patients
Interim **survival** data promising even without CPI
FDA granted **Fast Track** designation in mesothelioma



Next steps

- Continue follow patients to determine mOS
- Decide development path
- Leverage collaboration partner Merck

Product candidate	Preclinical	Phase 1	Phase 2	Collaborator	Next expected event
	Melanoma Combination w/anti PD1				
ONCOS-102	Colorectal cancer Combination w/Imfinzi				
	Mesothelioma Combination w/pemetrexed/cisplatin				
ONCOS-200 series	Next Gen viruses				
Novel mutRAS concepts					

COLLABORATION IN COLORECTAL CANCER WITH PHASE 1/2 TRIAL COMBINING ONCOS-102 AND IMFINZI



CANCER
RESEARCH
INSTITUTE

LUDWIG
CANCER
RESEARCH

AstraZeneca 

Patients

- Primary colorectal cancer with peritoneal metastases
- Failed prior standard-of-care platinum chemotherapy

Dose escalation

Safety lead-in

ONCOS-102
(6 IP doses) +
Imfinzi (12 cycles)

*Disease control in 2
of 5 patients in full
dose cohort*

Expansion

Part 1

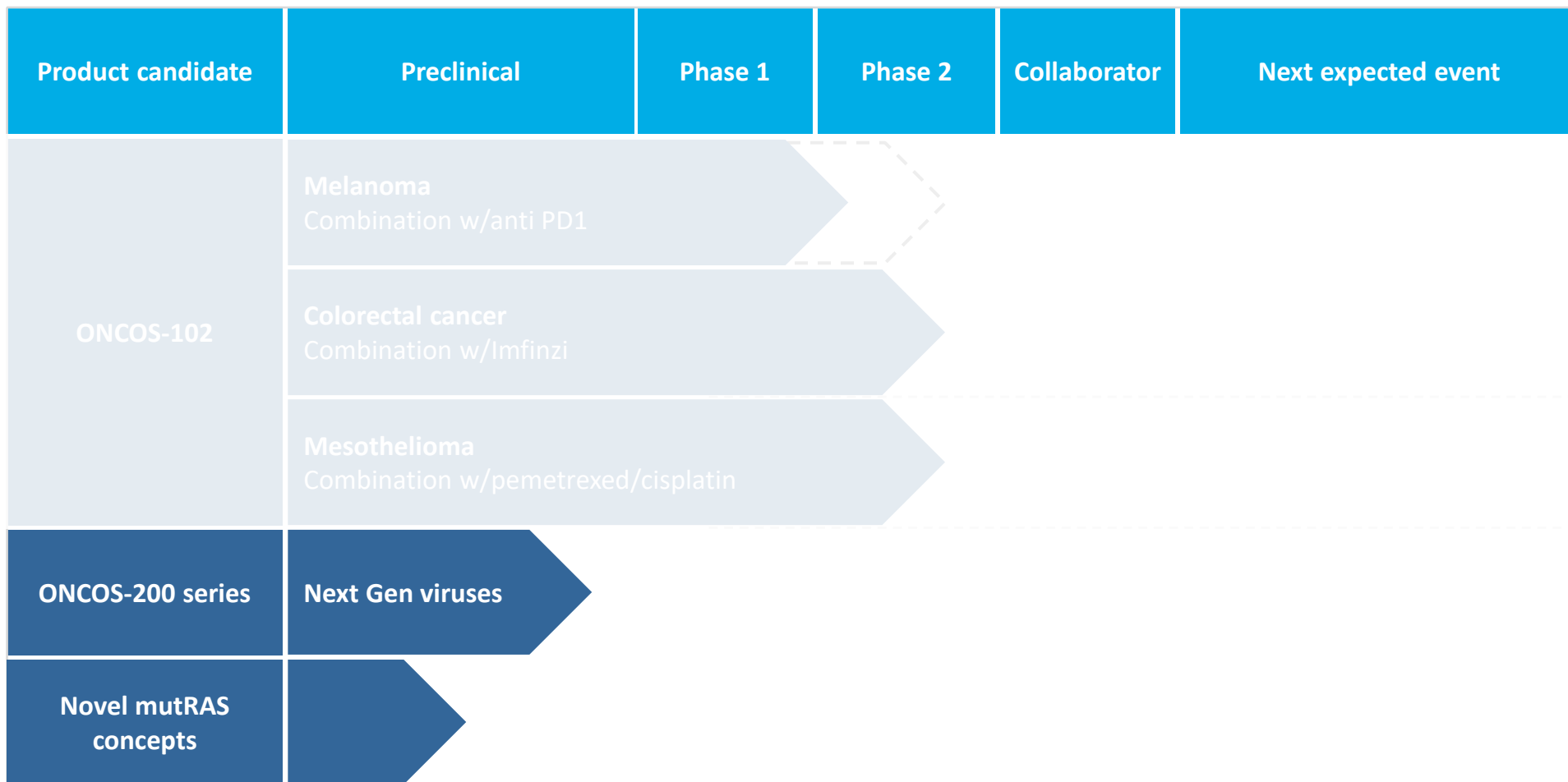
13 patients
Disease control in 3/13

*Simon's two-
stage design*

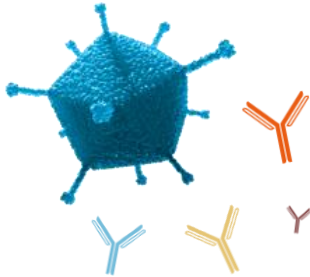
Part 2

14 patients
7 patients recruited

*Expected complete recruitment 1H21
Expected data (27 patients) 1H22*

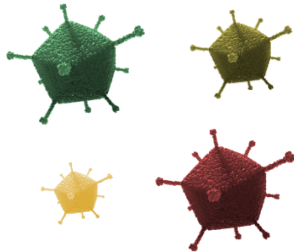


TARGOVAX'S THREE-PILLAR R&D PIPELINE STRATEGY



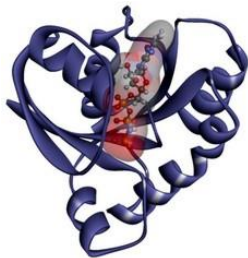
Novel ONCOS-102 combinations

- Maximize clinical impact of ONCOS-102 through novel clinical combinations with complementary mechanism of action
- Strong scientific rationale from existing clinical immune data



Next Generation ONCOS viruses

- Build new functionality into clinically proven ONCOS backbone
- Boosted immunological activity and anti-tumor ammunition
- Proprietary development and external collaborations



Mutant RAS vaccination

- Novel combinations and adjuvant technology for TG vaccines
- Next generation mutant RAS vaccination strategies
- Incorporate immune activation capability of ONCOS technology

CURRENTLY FUNDED INTO 2022

The company

Cash at end of 4Q

122 / 14

NOK million USD million

Net cash flow - total 4Q

45 / 5.3

NOK million USD million

Market cap¹

714 / 84

NOK million USD million

Analyst coverage

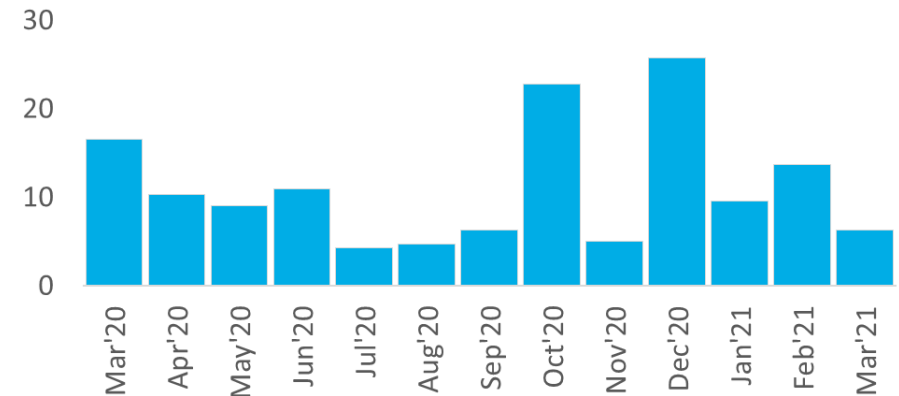
DNB, Carnegie, H.C. Wainwright

Share liquidity

~160% of shares traded last 12 months

Share turnover per month²

Million shares



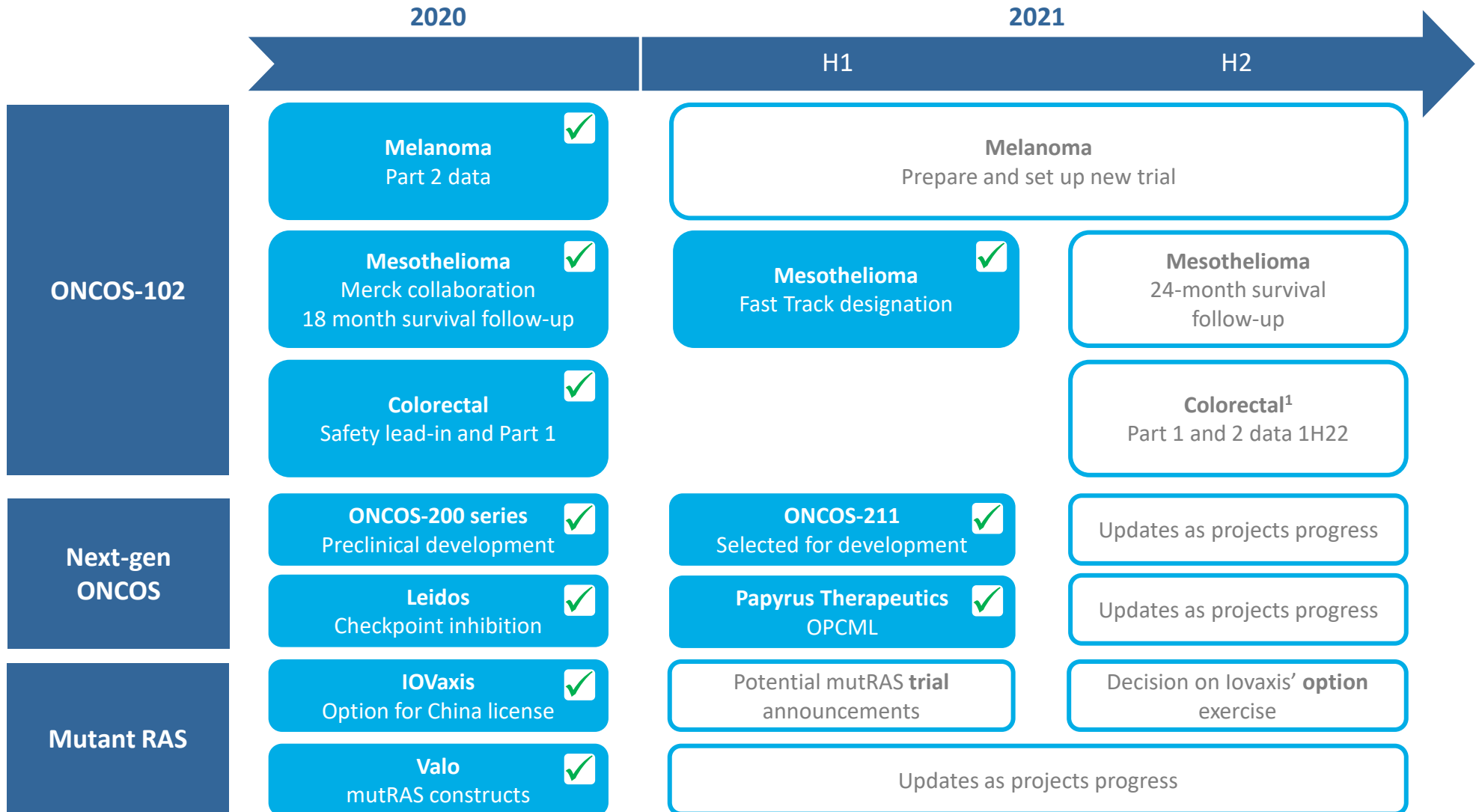
Daily value traded

Average last 12 months

3.6 / 0.4

NOK million USD million

TRACK RECORD OF STRONG EXECUTION WITH UPCOMING VALUE INFLECTION POINTS



IN SUMMARY

Lead product ONCOS-102 directed to the \$25 billion market for checkpoint inhibitors

- Poised to lead and grow the global market for checkpoint inhibitors (CPIs) with lead product, ONCOS-102
- By activating the immune system, ONCOS-102 may enhance CPI sensitivity and expand the market

Entering late stage development with class-leading clinical data

- Entering registrational directed trial in aPD1 refractory melanoma with 35% ORR
- Promising survival data in mesothelioma and Fast Track Designation
- Clinical and immune data in >200 patients as monotherapy, plus in combo with chemo and CPIs

Powerful immune activation supporting IO-combinations

- Documented broad and deep activation of key immune cells and mechanisms
- Potential to enter registrational program in anti-PD1 refractory melanoma
- Potential registrational program in mesothelioma in collaboration with Merck

Pipeline with multiple additional value-creating opportunities

- Several collaborations established
- Exploring novel assets with ONCOS as a payload vehicle for delivering other drugs
- Next-generation mutant RAS targeting compounds with both company- and investigator-sponsored trials

Strong patent position & robust leadership team

- Patent protection on ONCOS-102 through 2036; recently issued European CPI combo patent
- Talented, experienced management team committed to driving success



targovax