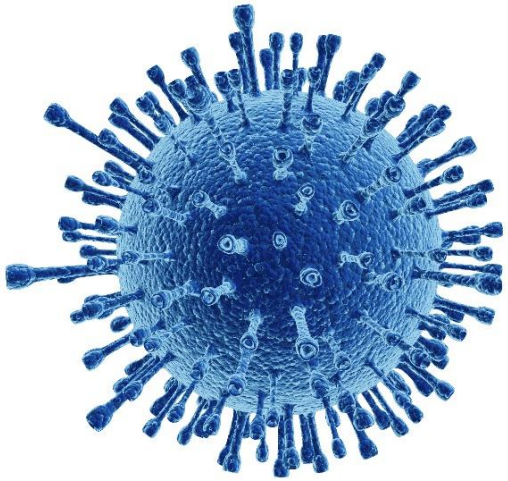
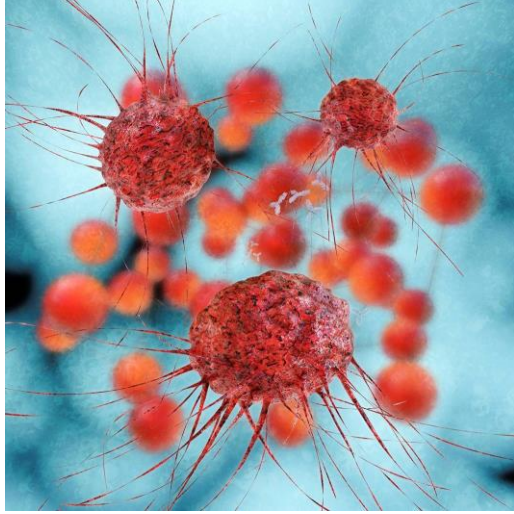




Arming the patient's immune system to fight cancer

Gunnar Gårdemyr, CEO

DNB's 6th Annual Health Care Conference | Oslo, 15 December 2015

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's 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.

“Arming the patient’s immune system to fight cancer”

1 An emerging immuno-oncology leader

- ✓ Oncolytic adenoviruses targeted at all solid, injectable tumors
- ✓ RAS-mutated peptide immunotherapy, targeted at all RAS-mutated cancers

OSLO CANCER CLUSTER

2 Unique portfolio with promising data

- ✓ TG01 is the only RAS-specific cancer vaccine in development
- ✓ ONCOS-102 is the only oncolytic virus which has shown tumor-specific T-cell activation

ONCOS
TG

3 Multiple value inflection points

- ✓ Multiple shots on goal through programs in 6 indications
- ✓ 9 clinical read-outs over next 2 years

4 Experienced management team

- ✓ A highly experienced international management team
- ✓ Strong and recently strengthened board

5 Backed by leading life science investors

- ✓ HealthCap is the largest owner with 31.6 %
- ✓ IPO planned for 2016

HealthCap

A transformational year for Targovax

- ✓ **Completed merger with Oncos Therapeutics, Finland**
- ✓ **Successful NOKm 200 private placement**
- ✓ **TG01 Pancreatic cancer Phase II study and ONCOS-102 Mesothelioma Phase II study are progressing as planned**
- ✓ **Signed agreement with Ludwig Cancer Research (LICR) and the Cancer Research Institute (CRI) to evaluate ONCOS-102 in combination with other immunotherapies**
- ✓ **Entered into collaboration with Czech biotech company Sotio to study the combination of ONCOS-102 and Sotio's dendritic cell therapy**

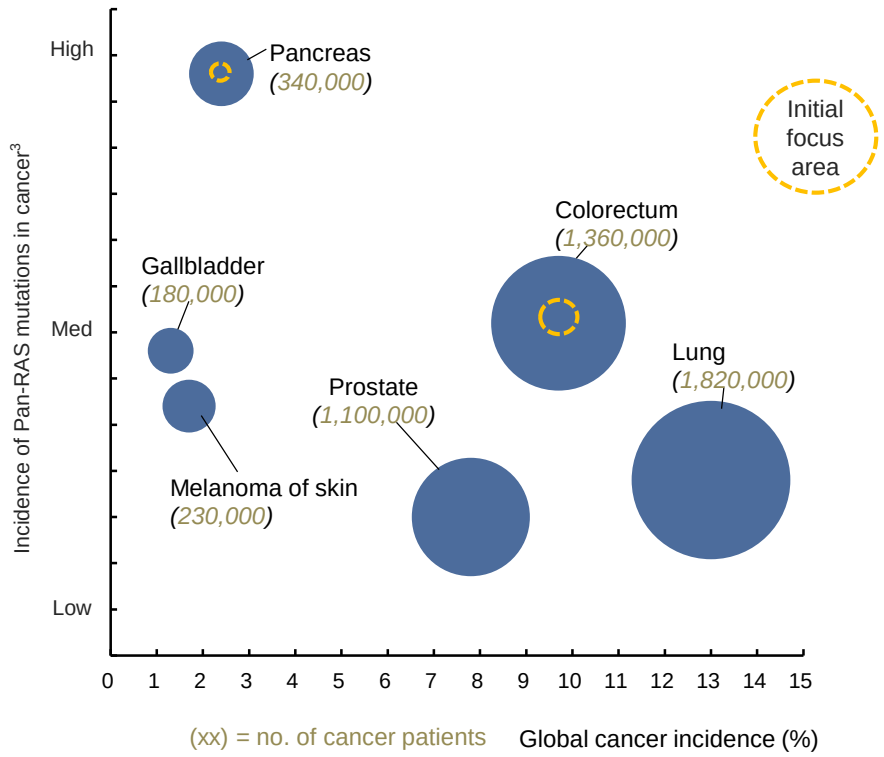
Targovax focus

Solid tumors

Tumor type	Response to CPIs
Melanoma	~50% / 50%
Triple Negative Breast	~70-80% / ~30-20%
Renal Cell Carcinoma	~70% / 30%
Lung Carcinoma (NSCLC)	~80% / 20%
Head and Neck	~80%[1] / 20%
Bladder	~84%[2] / 16%

Non-responders Responders

RAS mutations



[1] Patients were preselected by Merck PD-L1 IHC assay
[2] 11% in PD-L1 (Roche) negative: 43% in PD-L1 + population
[3] Cancer Res, PS 2012, Nov 15, 2012

Combining cancer immunotherapies to maximize efficacy

Immuno-oncology mechanisms	Wake up the immune system	Teach the T-cells at the lymph nodes	Attack the cancer with T-cells systemically	Disarm cancer's defence
 *Car analogy*	*Ignite the engine*	*Switch on the GPS–targeting*	*Press on the gas pedal*	*Release the brakes*
targovax TG 01 - Peptide vaccine/GM-CSF	✓	✓	✓	
targovax Oncos-102 - Viral vaccine	✓	✓	✓	
Kite Pharma / BAVARIAN NORDIC Peptide loaded viral vaccine T-Cell therapy	✓	✓	✓	
MERCK, AstraZeneca, Genentech, Bristol-Myers Squibb, EMD Serono, Pfizer Check point inhibitors ("CPI"s)				✓

Source: Company websites, press releases and filings, FactSet

An emerging immuno-oncology specialist

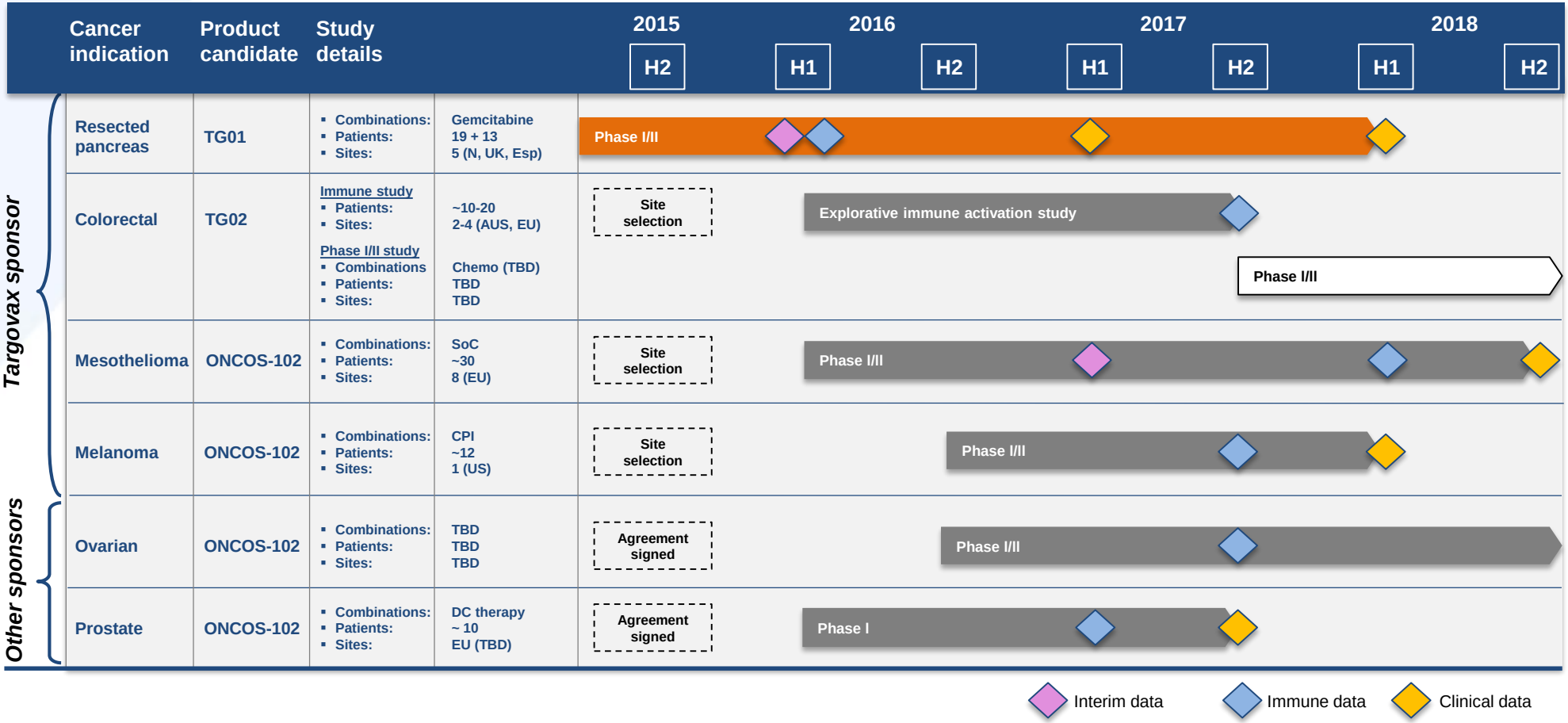
	ONCOS	TG
1 Nature of therapy	✓ Adenovirus vaccines creating immunity against patient's own antigens	✓ RAS-targeting peptide cocktails
2 Mode of Action	✓ The virus makes the tumors release tumor antigens	✓ The RAS peptides are picked up by dendritic cells
3 Efficacy	✓ 40% of evaluable patients showed stable disease	✓ 93%-100% patients with immune response in resected pancreatic cancer
4 Practicality	✓ Intratumoral injections ✓ Low cost of goods	✓ Intradermal injections ✓ Low cost of goods
5 Opportunities	✓ A perfect match with CPIs	✓ RAS mutations represent a unique target

Diversified pipeline with orphan indications*

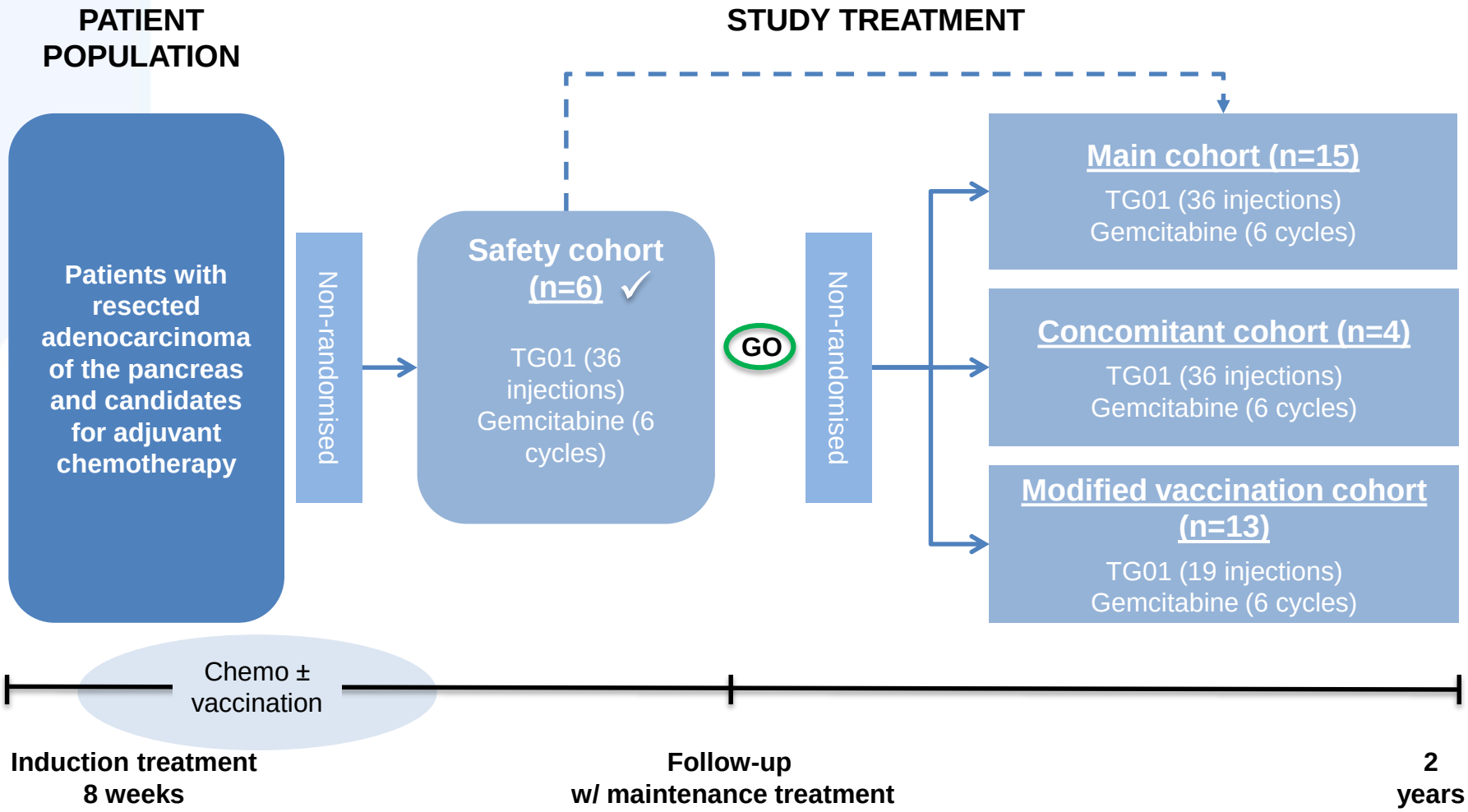
	Indication(s)	Program	Discovery	Pre-clinical	Phase I	Phase II	Phase III
Development	Pancreas cancer*	TG01					
	Mesothelioma*	ONCOS-102					
	Melanoma	ONCOS-102					
	Colorectal cancer	TG02					
Exploratory	Ovarian cancer*	ONCOS-102					
	Prostate cancer	ONCOS-102					
Discovery	*Discovery*	TG03					
		ONCOS-402					
		ONCOS-802					
		ONCOS-902					

- Targovax has a broad and diversified pipeline with several promising compounds targeting multiple indications
- There is a low price tag of advancing the compounds to a go/no-go decision for the specific indications

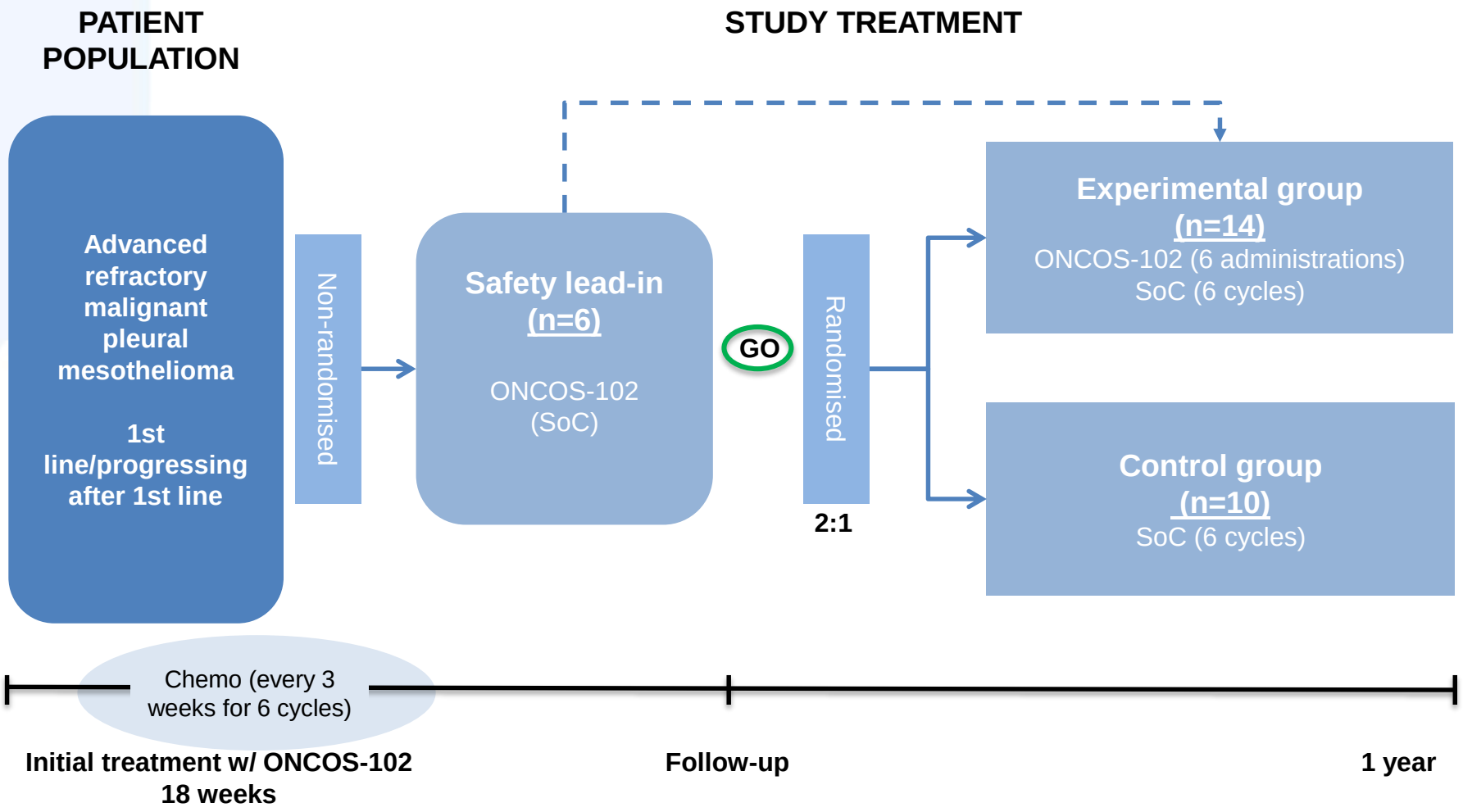
Late stage planning of 5 Phase I/II combination studies



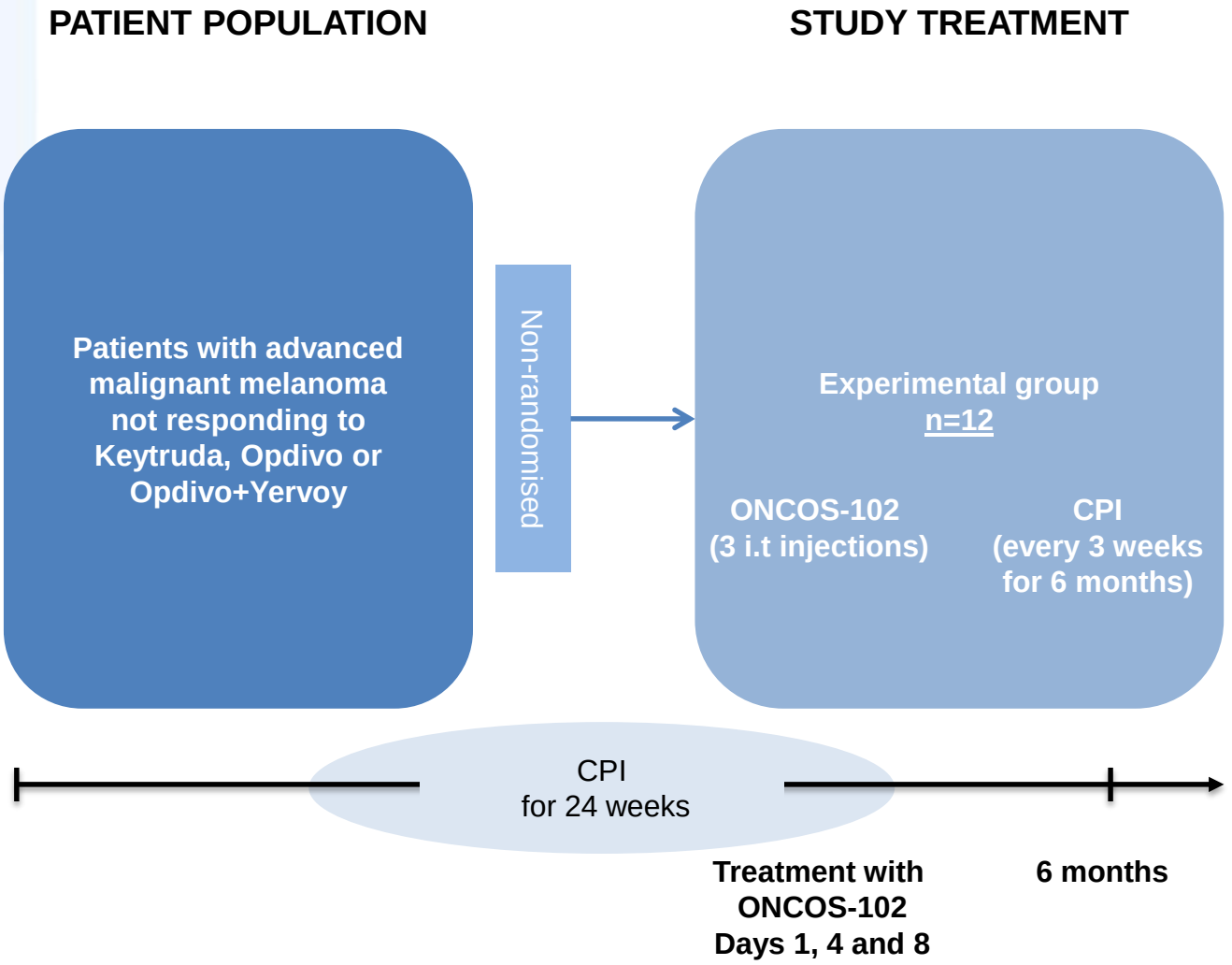
TG01 in Pancreatic Cancer – Study design



ONCOS-102 in Mesothelioma – Study design

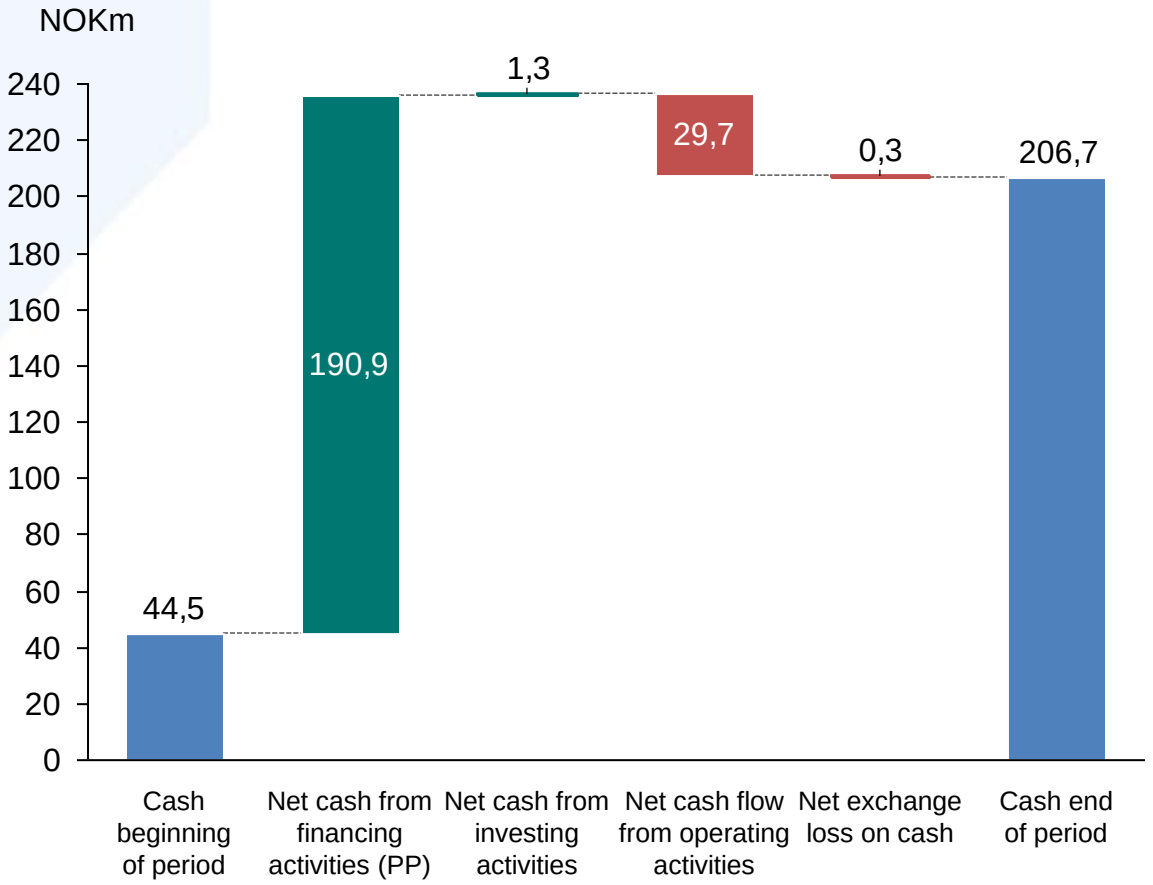


ONCOS-102 in Malignant Melanoma – Study design



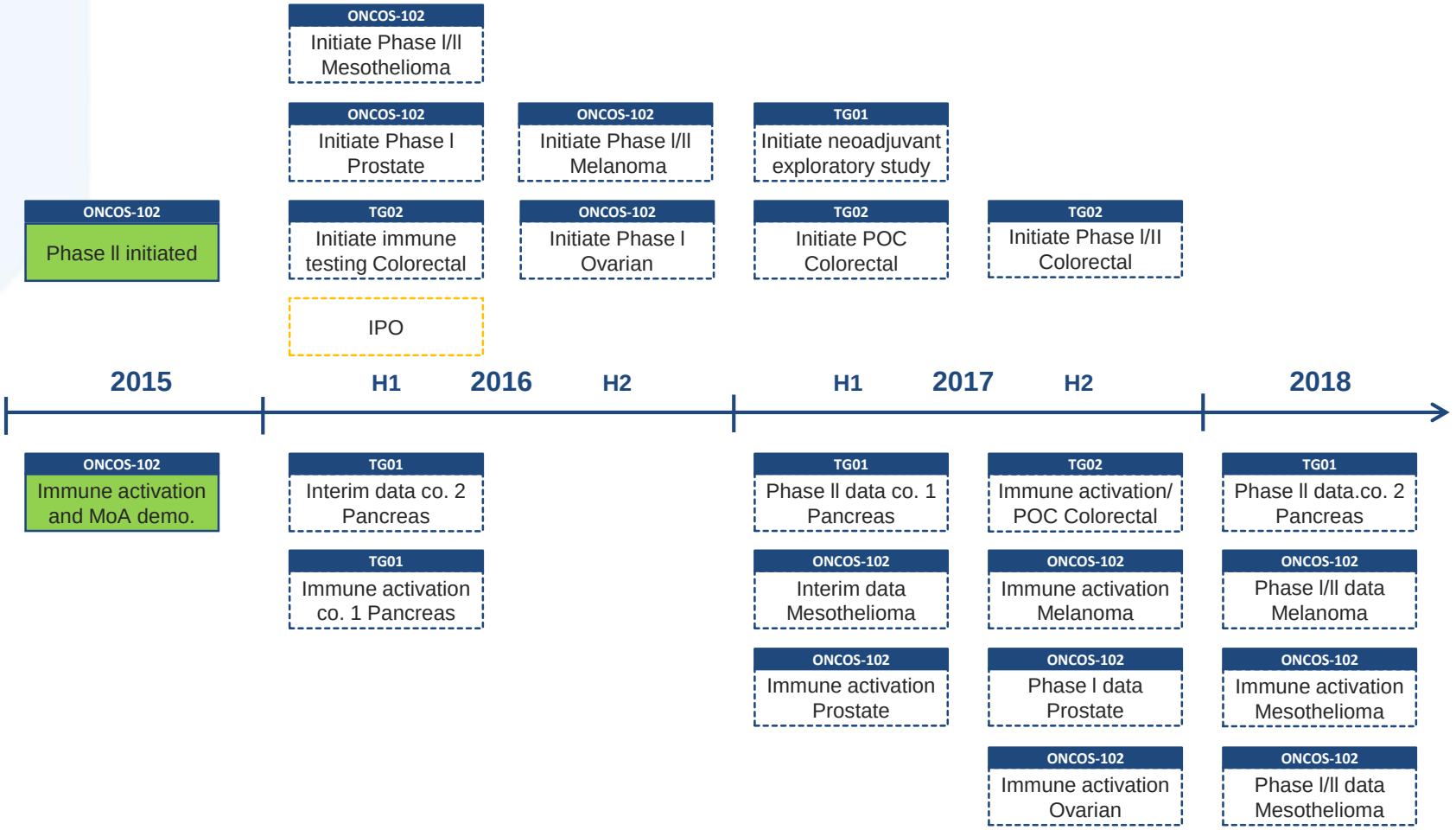
Strengthened capital position

Cash and cash equivalents Q3, 2015 (NOKm)



- Gross proceeds from the private placement in June were NOKm 200
- IPO planned for 2016
- Current cash lasts until 2H16
- Flexibility to extend runway

Multiple value inflection points



Targovax is well positioned in the immuno-oncology market

	June 2015	Today
Technology	*One technology*	***Two promising technologies***
Studies	*2 small Phase I studies*	***Late stage planning of 5 Phase I/II combination studies***
Investor base	*Limited*	***3x investor base***
Organization	*Small*	***Highly experienced international organization***
Visibility	*Unknown*	***Increased visibility and international press coverage***
Collaborations	*None*	***2 scientific collaborations signed***

Thank you for your attention!

Appendix

Internationally experienced senior management team

Gunnar Gårdemyr, CEO

- More than 30 years of international experience from the pharmaceutical and biotech industry including business development, mergers & acquisitions, global marketing and commercial strategy

Dr. Magnus Jaderberg, CMO

- More than 25 years in various R&D functions and previously CMO at Bristol Meyers Squibb (Europe)

Antti Vuolanto, Executive VP

- More than 10 years of experience in biotechnology business development, product development and commercialization. Co-founder of Oncos Therapeutics.

Nikolaj Knudtzon, Head of HR

- More than 15 years of experience within development and implementation of strategic HR in close cooperation with business and executives

Øystein Soug, CFO

- Previously CFO at Algeta, where he built up the functions of Finance, IR, Compliance, IT and HR, and oversaw its ultimate sale to Bayer for USDbn 2.9

Jon Amund Eriksen, COO

- 35 years of R&D experience from pharmaceutical and biotech industry, 25 years within immuno-oncology. Co-founder of Targovax

Tina Madsen, VP, Quality Assurance

- More than 20 years of experience within Research & Development and commercial manufacturing in the pharmaceutical and biotech industry, including quality assurance, process development and formulation

Peter Skorpil, VP, Business Development

- Extensive experience in licensing, commercial assessments, business intelligence and partnering and previously Commercial Director at Pronova BioPharma

Experienced Board of Directors

Jónas Einarsson, MD

- CEO of Radiumhospitalets Forskningsstiftelse
- On the board of several Norwegian Biotech companies, and was one of the initiators behind Oslo Cancer Cluster and the Oslo Cancer Cluster Innovation

Johan Christenson, MD, PhD

- Partner of HealthCap
- Previously supervised the healthcare portfolio of SEB Företagsinvest
- Senior management experience from Astra Pain Control and AstraZeneca
- PhD in basic neuroscience
- Author of 17 scientific articles

Per Samuelsson

- Partner of HealthCap
- Prior to joining HealthCap in 2000, he gained over 15 years of investment banking experience, mainly with Aros Securities in Sweden
- Prior to this Mr. Samuelsson was head of Research, also at Aros Securities

Eva-Lotta Allan

- Currently Chief Business Officer at Immunocore
- More than 25 years of experience from the biotechnology and life science industry in both private and public companies
- Has held senior positions at e.g. Ablynx, Vertex Pharmaceuticals and Oxford Asymmetry (Evotec)

Lars Lund-Roland

- CEO of Bringwell AB
- Previously MD of MSD Norway (Merck & Co Inc. subsidiary) and has more than twenty-five years' experience from various executive positions within marketing and sales
- Chairman of the Board of PI Innovation and has served as board member of Infodoc and Health Tech

Bente-Lill Romøren

- Board member of Radiumhospitalets Forskningsstiftelse, Nordic Nanovector, and chairman of Farmastat and Photocure
- Was previously employed by Novo Nordisk Scandinavia AS from 1976 to 2012 in various positions, including as CEO of the Norwegian unit (2008-2012)

Robert Burns, PhD

- Consultant and advisor to companies developing immune based therapies in cancer
- Chairman at Haemostatix
- Extensive experience in building biotechnology companies, previously CEO of Affitech and Celldex Therapeutics
- Previously Director at the Ludwig Institute for Cancer Research

Diane Mellett

- Consultant to biotech and medical device companies
- Qualified in both UK and US law
- Formerly General Counsel for Cambridge Antibody Technology (CAT)
- Led successful defence for CAT concerning a contractual dispute on Humira ®

Strong shareholder base

Shareholder structure

Shareholder	No. of shares	Ownership
HealthCap	8,488,918	31.6%
Radiumhospitalets Forskningsstiftelse	3,410,589	12.7%
Datum Invest AS	2,462,000	9.2%
Arctic Funds Plc	907,000	3.4%
Timmuno AS	724,650	2.7%
Prieta AS	720,000	2.7%
Portia AS	631,945	2.4%
Danske Bank A/S (Nominee)	587,971	2.2%
Nordnet Bank AB (Nominee)	570,022	2.1%
KLP Aksje Norge	460,000	1.7%
Eltek Holding AS	442,000	1.6%
Statoil Pensjon	433,716	1.6%
Storebrand Vekst	425,000	1.6%
Pactum AS	400,000	1.5%
Birk Venture AS	378,980	1.4%
OP-Europe	357,869	1.3%
Trygve Schiørbecks	286,449	1.1%
Viola AS	280,000	1.0%
Kommunal Landspensjonskasse	270,000	1.0%
DNB Grønt Norden	250,919	0.9%
Other shareholders (~160)	4,370,780	16.3%
Total	**26,858,808**	**100.0%**

- 26,858,808 ordinary shares
- Fully diluted number of shares is 29,513,3021
- Approx. ~180 shareholders
- Average strike price on options NOK 23.5
- Total dilutive effect of options is <9.0%

[1] Includes all options; both granted and soon-to-be granted. Assumes all new options are issued with NOK 25.0 strike price.

TG01 has shown promising results in the ongoing Phase I/II resected pancreas cancer clinical trial

Immunological results

Main Group (starting TG01 3 weeks prior to gemcitabine)	DTH[1] response (n=14)	T cell response (n=8)
14	13 (93%)	6 (75%)

- TG01 elicits RAS-specific immune responses in most patients even when administered in combination with gemcitabine

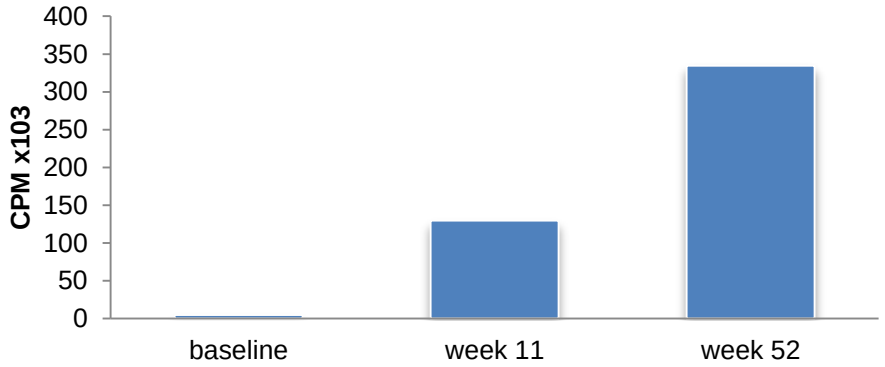
Safety results

- TG01 is generally well tolerated
- There were 4 related allergic reactions to vaccination in the first dose cohorts, three of which occurred after gemcitabine treatment; two of which were severe requiring supportive care. Both were classified as Dose Limiting Toxicities (DLT) with the dose in the subsequent and ongoing patient cohort being reduced

Boosters result in maintained TG01 T cell response

TG01 specific T cell proliferation – blood samples from patient 01-002

Radiolabelled thymidine incorporation measured as count per minute (CPM)



- No detectable TG01 specific T cell response at baseline
- Strong TG01 specific T cell response at study week 11; TG01 given from week 1 and gemcitabine from week 4
- The TG01 specific immune response was maintained and strengthened at week 52 after completion of 5-6 months of chemotherapy and continuing with monthly TG01 boosters

[1] Delayed Type Hypersensitivity

Source: Internal data on file

ONCOS-102 Phase 1 study: Immunological findings were linked to signals of clinical benefit

Both lesional immune activation and clinical signals

Setting

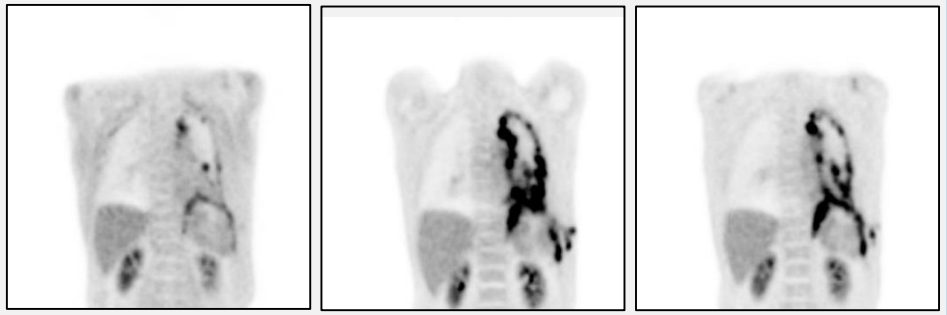
- 12 late stage patients with 9 different types of solid tumors
- All patients were chemotherapy refractory, 65% had had radiotherapy and 50% surgery
- No longer responding to any treatments – participation in a clinical study only option

Results

- 11/12 patients' tumor lesions were immune activated (biopsies before and after treatment)
- 40% had stable disease at 3 months – their tumors stopped growing
- A lung cancer patient had 47% reduction of his tumor (Example 1)
- An ovarian cancer patient still living 2 years later and with stable disease (Example 2)
- No dose limiting toxicities or severe adverse reactions

Patient success stories

Example 1: Stable disease in Mesothelioma



47% reduction in total tumor burden
Tumor specific T-cells in blood = systemic effect

Example 2: Stable disease in Ovarian

Previously therapy resistant patient is still alive with stable disease 24 months after treatment

Tumor specific T-cells (NY-ESO-1) present in blood 17 months after last vaccination
= systemic effect that was maintained

[1] Response Evaluation Criteria In Solid Tumors (RECIST) is a set of internationally agreed rules that define when tumors in cancer patients improve/respond, stay the same/stabilize or worsen/progress during treatment. Complete response= all tumor disappeared, Partial response= >30% disappeared, Stabile disease= neither disappeared or progressed, Progressive disease= >20% increase

Source: Internal data on file