



## TARGOVAX ASA

(A public limited company incorporated under the laws of Norway)

### Listing of the Company's Shares on Oslo Stock Exchange

---

The information in this prospectus (the "**Prospectus**") relates to the listing (the "**Listing**") of the existing shares (the "**Shares**") in Targovax ASA (the "**Company**"), a public limited company incorporated under the laws of Norway (together with its consolidated subsidiaries, "**Targovax**" or the "**Group**") on Oslo Stock Exchange ("**Oslo Stock Exchange**"), a stock exchange operated by Oslo Børs ASA.

The Company applied for the Shares to be admitted for trading and listing on Oslo Stock Exchange on 17 March 2017, and the board of directors of Oslo Stock Exchange approved the listing application of the Company on 22 March 2017. Trading in the Shares on Oslo Stock Exchange is expected to commence on or about 23 March 2017, under the ticker code "TRVX".

This Prospectus has been prepared to comply with the Norwegian Securities Trading Act of 29 June 2007 no. 75 (the "**Norwegian Securities Trading Act**") and related secondary legislation, including the Commission Regulation (EC) no. 809/2004 implementing Directive 2003/71/EC of the European Parliament and of the Council of 4 November 2003 regarding information contained in prospectuses, as amended, and as implemented in Norway (the "**EU Prospectus Directive**"). The Prospectus has been prepared in accordance with the proportionate disclosure requirements for small- and medium-sized enterprises. This Prospectus has been prepared solely in the English language. The Financial Supervisory Authority of Norway (*Nw.: Finanstilsynet*) (the "**Norwegian FSA**") has reviewed and, on 22 March 2017, approved this Prospectus in accordance with Sections 7-7 and 7-8 of the Norwegian Securities Trading Act. The Norwegian FSA has not controlled or approved the accuracy or completeness of the information included in this Prospectus. The approval by the Norwegian FSA only relates to the information included in accordance with pre-defined disclosure requirements. The Norwegian FSA has not made any form of control or approval relating to corporate matters described in or referred to in this Prospectus.

The Shares are registered in the Norwegian Central Securities Depository (the "**VPS**") in book-entry form. All Shares rank in parity with one another and carry one vote per Share.

**THIS PROSPECTUS SERVES AS A LISTING PROSPECTUS ONLY. THE PROSPECTUS DOES NOT CONSTITUTE AN OFFER, OR INVITATION TO PURCHASE, SUBSCRIBE OR SELL, ANY OF THE SECURITIES DESCRIBED HEREIN, AND NO SHARES OR OTHER SECURITIES ARE BEING OFFERED OR SOLD IN ANY JURISDICTION PURSUANT TO THIS PROSPECTUS.**

Investing in the Shares involves certain risks. See section 2 "Risk Factors" beginning on page 12.

The date of this Prospectus is 22 March 2017

## IMPORTANT INFORMATION

This Prospectus has been prepared in connection with the Listing of the Shares on Oslo Stock Exchange and in order to provide information about the Group and its business.

For definitions of certain other terms used throughout this Prospectus, see Section 16 "Definitions and Glossary".

The information contained herein is current as at the date hereof and subject to change, completion and amendment without notice. In accordance with Section 7-15 of the Norwegian Securities Trading Act, significant new factors, material mistakes or inaccuracies relating to the information included in this Prospectus, which are capable of affecting the assessment by investors between the time of approval of this Prospectus by the Norwegian FSA and the Listing on Oslo Stock Exchange, will be included in a supplement to this Prospectus. Neither the publication nor distribution of this Prospectus shall under any circumstances imply that there has been no change in the Group's affairs or that the information herein is correct as at any date subsequent to the date of this Prospectus.

No person is authorized to give information or to make any representation concerning the Group or in connection with the Listing or the Shares other than as contained in this Prospectus. If any such information is given or made, it must not be relied upon as having been authorized by the Company or by any of the affiliates, representatives, advisors of the foregoing.

**The distribution of this Prospectus in certain jurisdictions may be restricted by law. This Prospectus does not constitute an offer of, or an invitation to purchase, subscribe or sell, any of the securities described herein. No one has taken any action that would permit a public offering of the Shares. Accordingly, neither this Prospectus nor any advertisement may be distributed or published in any jurisdiction except under circumstances that will result in compliance with any applicable laws and regulations. The Company requires persons in possession of this Prospectus to inform themselves about, and to observe, any such restrictions. In addition, the Shares are subject to restrictions on transferability and resale and may not be transferred or resold except as permitted under applicable securities laws and regulations. Investors should be aware that they may be required to bear the financial risks of this investment for an indefinite period of time. Any failure to comply with these restrictions may constitute a violation of applicable securities laws.**

Any reproduction or distribution of this Prospectus, in whole or in part, and any disclosure of its content is prohibited.

### ENFORCEMENT OF CIVIL LIABILITIES

The Company is a public limited liability company incorporated under the laws of Norway. As a result, the rights of holders of the Company's Shares will be governed by Norwegian law and the Company's articles of association (the "**Articles of Association**"). The rights of shareholders under Norwegian law may differ from the rights of shareholders of companies incorporated in other jurisdictions. The members of the Company's board of directors (the "**Board Members**" and the "**Board of Directors**", respectively), and the members of the senior management of the Group (the "**Management**") are not residents of the United States, and virtually all of the Company's assets are located outside the United States. As a result, it may be difficult for investors in the United States to effect service of process on the Company or its Board Members and members of Management in the United States or to enforce in the United States judgment obtained in U.S. courts against the Company or those persons, including judgment based on the civil liability provisions of the securities laws of the United States or any State or territory within the United States. Uncertainty exists as to whether courts in Norway will enforce judgments obtained in other jurisdictions, including the United States, against the Company or its Board Members or members of the Management under the securities laws of those jurisdictions or entertain actions in Norway against the Company or its Board Members or members of Management under the securities laws of other jurisdictions. In addition, awards of punitive damages in actions brought in the United States or elsewhere may not be enforceable in Norway. The United States and Norway do not currently have a treaty providing for reciprocal recognition and enforcement of judgments (other than arbitral awards) in civil and commercial matters.

This Prospectus shall be governed by and construed in accordance with Norwegian law. The courts of Norway, with Oslo as legal venue, shall have exclusive jurisdiction to settle any dispute which may arise out of or in connection with the Listing or this Prospectus.

**No Shares or other securities are being offered or sold in any jurisdiction pursuant to this Prospectus.**

**In making an investment decision, prospective investors must rely on their own examination, and analysis of, and enquiry into the Group, including the merits and risks involved.** Neither the Company nor any of its representatives or advisers, are making any representation to any offeree or purchaser of the Shares regarding the legality of an investment in the Shares by such offeree or purchaser under the laws applicable to such offeree or purchaser. Each investor should consult with his or her own advisors as to the legal, tax, business, financial and related aspects of a purchase of the Shares.

All Sections of the Prospectus should be read in context with the information included in Section 4 "General Information".

Investing in the Shares involves certain risks. See section 2 "Risk Factors" beginning on page 12.

---

**TABLE OF CONTENTS**

1	SUMMARY .....	4
2	RISK FACTORS .....	12
	2.1 Risks related to the Group and the industry in which the Group operates .....	12
	2.2 Risks related to laws, regulations and litigation .....	20
	2.3 Risks related to financing and market risk .....	21
	2.4 Risks related to the Listing and the Shares .....	22
3	RESPONSIBILITY FOR THE PROSPECTUS .....	25
4	GENERAL INFORMATION .....	26
	4.1 Other important investor information .....	26
	4.2 Presentation of financial and other information .....	26
	4.3 Cautionary note regarding forward-looking statements .....	27
5	DIVIDENDS AND DIVIDEND POLICY .....	29
	5.1 Dividend policy .....	29
	5.2 Legal constraints on the distribution of dividends .....	29
	5.3 Manner of dividend payment .....	29
6	INDUSTRY AND MARKET OVERVIEW .....	30
	6.1 The pharmaceutical industry .....	30
	6.2 The cancer market .....	31
	6.3 Immunotherapy and the immunotherapy market .....	33
	6.4 Drug development .....	37
7	BUSINESS OF THE GROUP .....	40
	7.1 Overview .....	40
	7.2 Competitive strengths .....	41
	7.3 Strategy .....	42
	7.4 History and important events .....	43
	7.5 Overview of the Group's science .....	44
	7.6 ONCOS-102's and TG01's differentiating features .....	46
	7.7 Competition .....	53
	7.8 Research and development, patents and licenses .....	54
	7.9 Material contracts .....	62
	7.10 Dependency on contracts, patents and licenses etc .....	62
	7.11 Legal proceedings .....	62
	7.12 Information technology .....	62
	7.13 Office leases .....	62
8	CAPITALISATION AND INDEBTEDNESS .....	64
	8.1 Capitalization .....	64
	8.2 Net financial indebtedness .....	65
	8.3 Working capital statement .....	65
	8.4 Contingent and indirect indebtedness .....	65
9	SELECTED FINANCIAL AND OTHER INFORMATION .....	66
	9.1 Introduction and basis for preparation .....	66
	9.2 Summary of accounting policies and principles .....	66
	9.3 Statement of profit or loss .....	66
	9.4 Statement of other comprehensive income .....	66
	9.5 Statement of financial position .....	67
	9.6 Statement of cash flow .....	67
	9.7 Statement of changes in equity .....	68

9.8	Auditor.....	69
9.9	Financial review .....	69
9.10	Borrowings, contractual cash obligations and other commitments.....	70
9.11	Investments .....	70
9.12	Related party transactions.....	71
9.13	No off-balance sheet arrangements .....	71
9.14	Trend information.....	71
9.15	Significant changes.....	71
9.16	Recent developments.....	71
10	<b>BOARD OF DIRECTORS, MANAGEMENT, EMPLOYEES AND CORPORATE GOVERNANCE .....</b>	<b>72</b>
10.1	Introduction.....	72
10.2	The Board of Directors .....	72
10.3	Management.....	75
10.4	Remuneration and benefits.....	78
10.5	Share option programs.....	79
10.6	Restricted stock unit program .....	80
10.7	Benefits upon termination .....	81
10.8	Pensions and retirement benefits.....	81
10.9	Loans and guarantees.....	81
10.10	Employees.....	81
10.11	Nomination committee .....	81
10.12	Remuneration committee .....	82
10.13	Audit committee.....	82
10.14	Corporate governance committee.....	82
10.15	Conflicts of interests etc.....	82
10.16	Corporate governance.....	83
10.17	Lock-up.....	83
11	<b>CORPORATE INFORMATION AND DESCRIPTION OF SHARE CAPITAL.....</b>	<b>84</b>
11.1	Company corporate information .....	84
11.2	Legal structure.....	84
11.3	Share capital and share capital history.....	84
11.4	Admission to trading.....	85
11.5	Ownership structure .....	85
11.6	Authorization to increase the share capital and to issue Shares .....	86
11.7	Other financial instruments.....	86
11.8	Shareholder rights.....	86
11.9	The Articles of Association and certain aspects of Norwegian law.....	86
12	<b>SECURITIES TRADING IN NORWAY .....</b>	<b>90</b>
12.1	Introduction.....	90
12.2	Trading and settlement .....	90
12.3	Information, control and surveillance .....	90
12.4	The VPS and transfer of shares .....	91
12.5	Shareholder register – Norwegian law.....	91
12.6	Foreign investment in shares listed in Norway.....	91
12.7	Disclosure obligations .....	91
12.8	Insider trading .....	92
12.9	Mandatory offer requirement .....	92
12.10	Compulsory acquisition .....	92
12.11	Foreign exchange controls.....	93
13	<b>TAXATION .....</b>	<b>94</b>

13.1	Norwegian taxation.....	94
14	ADDITIONAL INFORMATION.....	97
14.1	Auditor and advisors.....	97
14.2	Documents on display.....	97
15	INCORPORATED BY REFERENCE.....	98
16	DEFINITIONS AND GLOSSARY.....	99

**APPENDICES**

APPENDIX A	ARTICLES OF ASSOCIATION.....	A1
------------	------------------------------	----

## 1 SUMMARY

Summaries are made up of disclosure requirements known as "Elements". These Elements are numbered in Sections A – E (A.1 – E.7) below. This summary contains all the Elements required to be included in a summary for this type of securities and the issuer. Because some Elements are not required to be addressed, there may be gaps in the numbering sequence of the Elements. Even though an Element may be required to be inserted in the summary because of the type of securities and issuer, it is possible that no relevant information can be given regarding the Element. In this case a short description of the Element is included in the summary with the mention of "not applicable".

### Section A – Introduction and Warnings

<b>A.1</b> <b>Warning</b>	<p>This summary should be read as an introduction to the Prospectus; any decision to invest in the securities should be based on consideration of the Prospectus as a whole by the investor;</p> <p>where a claim relating to the information contained in the Prospectus is brought before a court, the plaintiff investor might, under the national legislation of the Member States, have to bear the costs of translating the Prospectus before the legal proceedings are initiated; and</p> <p>civil liability attaches only to those persons who have tabled the summary including any translation thereof, but only if the summary is misleading, inaccurate or inconsistent when read together with the other parts of the Prospectus or it does not provide, when read together with the other parts of the Prospectus, key information in order to aid investors when considering whether to invest in such securities.</p>
<b>A.2</b> <b>Warning</b>	<p>Not applicable. No consent is granted by the Company for the use of the Prospectus for subsequent resale or final placement of the Shares.</p>

### Section B - Issuer

<b>B.1</b> <b>Legal and commercial name</b>	<p>Targovax ASA.</p>
<b>B.2</b> <b>Domicile and legal form, legislation and country of incorporation</b>	<p>The Company is a public limited company organized and existing under the laws of Norway pursuant to the Norwegian Public Limited Companies Act. The Company was incorporated in Norway on 8 October 2010, and the Company's registration number in the Norwegian Register of Business Enterprises is 996 162 095.</p>
<b>B.3</b> <b>Current operations, principal activities and markets</b>	<p>Targovax is a clinical stage immuno-oncology group developing targeted immunotherapy treatments for cancer patients. Targovax has a broad and diversified immune therapy portfolio and aims to become a leader in its area. The Group is currently developing two complementary and highly targeted approaches in immuno-oncology.</p> <p>The Group's vision is to "arm the patient's immune system to fight cancer" thus extending and transforming the lives of cancer patients with first-in-class specific therapeutic cancer vaccines. The Group's pipeline includes a number of product candidates aimed at different cancer types like melanoma, pancreas, mesothelioma, colorectal cancer and ovarian cancer.</p> <p>Each vaccine is designed to harness the patient's own immune system to fight the cancer while also delivering a favorable safety and tolerability profile.</p> <p>Targovax' head office is in Oslo and it has an R&amp;D subsidiary in Finland. On 2 July 2015, the Norwegian part of Targovax acquired all the shares in Oncos Therapeutics OY (renamed Targovax Oy following the acquisition), then a clinical-stage biotechnology company based in Helsinki, which also is focusing on the design and development of targeted cancer immunotherapy. Following the acquisition, Targovax Oy is a wholly-owned subsidiary of the Company.</p>

Targovax is targeting two complementary approaches to cancer immunotherapy:

- (i) a virus-based immunotherapy platform based on engineered oncolytic viruses armed with potent immune-stimulating transgenes targeting solid tumors, potentially reinstating the immune system's capacity to recognize and attack cancer cells; and
- (ii) a peptide-based immunotherapy platform targeting the difficult to treat RAS mutations found in more than 85% of patients with pancreatic cancers, 50% of colorectal cancer and 20 - 30% of all cancers.

The Group's technology is specific and works by educating the patient's own immune system to recognize and kill cancer cells.

The Group's lead compound, ONCOS-102, has successfully completed a Phase I clinical trial in all-comer solid tumors where it has shown systemic tumor-specific immune activation and indications of potential clinical anti-tumor efficacy. 11 out of 12 treated patients showed immune activation. This is remarkable considering the generally immune-depressed status of such late stage cancer patients who have exhausted all other treatment options. 40% of patients had stable disease after ONCOS-102 treatment. A patient with ovarian cancer who had stopped responding to therapy was immune-reactivated by ONCOS-102 (both at a sessional level and systemically) and started again to respond to chemotherapy. This late-stage patient then lived for 41 months with stable disease, without undergoing further ONCOS-102 treatment.

ONCOS-102 has entered a Phase I/II clinical trial in malignant pleural mesothelioma in June 2016. The trial is currently recruiting patients at three sites in Spain, and more clinical trial sites in other European countries will be added during 2017. Further, ONCOS-102 has entered (site recruitment ready) a clinical trial for the treatment of solid tumours in melanoma and will in the near future enter trials in ovarian cancer, and prostate cancer. The melanoma and ovarian cancer trials will be performed in the US (mainly at Memorial Sloan Kettering Cancer Center in New York), and the prostate cancer trial will be performed in the UK and in the Czech Republic.

RAS mutations are key drivers of cancer progression which are found in 20 - 30% of all cancers. There are few treatment options available for patients with RAS mutations, and the options available have limited efficacy, which highlights the significant medical need for these patients.

Studies to date have shown that the Group's other lead vaccine for RAS-mutated cancer, TG01, induces immune responses in cancer patients, which may translate clinically to a survival benefit, and has an acceptable safety and tolerability profile with few side effects. In an ongoing clinical trial, it has also been demonstrated that TG01 can effectively induce immune response when used in combination with gemcitabine chemotherapy. Data from the first patient cohort showed that 68% of evaluated patients (13/19) were still alive after two years if survival is assessed from time of resection which occurred on average two months prior to first treatment, or 12/19 if counted from time of first treatment. While the cohort is small and there is no control arm, this rate compares favourably with the available published historical two-year survival rates of resected cancer patients treated with gemcitabine alone of between 30% and 53% (J Neoptolemos 2010, J van Loethem 2010, H Oettle 2013, M Sinn 2015, K Uesaka 2016; In these reported studies, overall survival measured either from surgery or treatment randomization). Up to six months of combination therapy was generally well tolerated with few side effects. Three TG01-related anaphylactic reactions were seen, two anaphylaxes and one hypersensitivity. The allergic reactions only occurred after several cycles of gemcitabine and resolved within 1-2 hours. There

	<p>were no treatment related deaths. The Group has added a modified cohort to the trial with a reduced number of TG01-doses. The preliminary results from this cohort with a reduced number of TG01 administrations show that immune response is induced at the similar level as with the earlier vaccination schedule which had a higher number of administrations.</p> <p>TG02 has entered (site recruitment ready) a Phase I clinical trial in recurrent colorectal cancer in combination with pembrolizumab. This trial will be performed in Australia and New Zealand.</p> <p>Targovax has Orphan Drug Designation with the FDA and EMA for ONCOS-102 in malignant plural mesothelioma, ovarian cancer and soft tissue sarcoma and for TG01 in pancreatic cancer. Soft tissue sarcoma is an indication currently not being pursued by Targovax.</p> <p>While the research and development strategy is designed in-house, the Group collaborates with academic institutions to execute its development strategy. Similarly, the Group uses external contract manufacturing organizations ("CMOs") to produce its compounds. The Group has employed experienced personnel capable of directing work performed by the CMOs. This approach to product development allows the Group to easily change research directions and efforts when needed and to quickly bring in new technologies and expertise when necessary. The Group remains committed to the discovery, development and delivery to patients of its innovative therapeutic cancer treatments.</p> <p>Biotech companies at Targovax' stage of development normally do not have a developed strategy for commercialization. Targovax has an opportunistic attitude to out-licensing and partnering, while at the same time preparing a stand-alone alternative to commercialization. Geographically, Targovax and/or its future partners, will target large countries with mature reimbursement systems. This is the norm in the biotech and pharma industry and does not imply that Targovax will not aim to sell its products in smaller and less mature markets, but U.S. and top-5 Europe will be prioritized before rest of Europe, Japan, Canada and Australia. After these, other markets will follow.</p> <p>The Group's technology can be combined with other treatment approaches, including surgery, radiation, chemotherapy or other immune therapies.</p>																														
<p><b>B.4a Significant recent trends</b></p>	<p>The Group has not experienced any changes or trends that are significant to the Group between 31 December 2016 and the date of this Prospectus, nor is the Group aware of such changes or trends that may or are expected to be significant to the Group for the current financial year.</p>																														
<p><b>B.5 Description of the Group</b></p>	<p>The Company is the parent company in the Group. The Group's operations are carried out by the Company and its wholly-owned subsidiary Targovax Oy (previously named Oncos Oy). Targovax AG, a subsidiary of Targovax Oy, is under liquidation. Targovax Oy is incorporated in Finland and Targovax AG is incorporated in Switzerland.</p>																														
<p><b>B.6 Interests in the Company and voting rights</b></p>	<p>As of 10 March 2017, the Company had 3,286 shareholders. The Company's 20 largest shareholders as of the same date are shown in the table below.</p>																														
<table border="1"> <thead> <tr> <th data-bbox="140 1738 943 1771">Shareholders</th> <th data-bbox="943 1738 1222 1771">Number of Shares</th> <th data-bbox="1222 1738 1441 1771">Percent</th> </tr> </thead> <tbody> <tr> <td data-bbox="140 1771 943 1805">HANDELSBANKEN STOCKHOLM CLIENTS AC <sup>1</sup> .....</td> <td data-bbox="943 1771 1222 1805">11,155,584</td> <td data-bbox="1222 1771 1441 1805">26,44 %</td> </tr> <tr> <td data-bbox="140 1805 943 1839">RADIUMHOSPITALET FÖRSKNINGSSTIFTELSE .....</td> <td data-bbox="943 1805 1222 1839">4,077,255</td> <td data-bbox="1222 1805 1441 1839">9,66 %</td> </tr> <tr> <td data-bbox="140 1839 943 1872">NORDNET LIVSFÖRSIKRING AS .....</td> <td data-bbox="943 1839 1222 1872">1,356,741</td> <td data-bbox="1222 1839 1441 1872">3,22 %</td> </tr> <tr> <td data-bbox="140 1872 943 1906">VPF NORDEA AVKASTNING .....</td> <td data-bbox="943 1872 1222 1906">1,196,582</td> <td data-bbox="1222 1872 1441 1906">2,84 %</td> </tr> <tr> <td data-bbox="140 1906 943 1939">VPF NORDEA KAPITAL .....</td> <td data-bbox="943 1906 1222 1939">1,046,754</td> <td data-bbox="1222 1906 1441 1939">2,48 %</td> </tr> <tr> <td data-bbox="140 1939 943 1973">KLP AKSJENORGE .....</td> <td data-bbox="943 1939 1222 1973">988,513</td> <td data-bbox="1222 1939 1441 1973">2,34 %</td> </tr> <tr> <td data-bbox="140 1973 943 2007">DANSKE BANK A/S .....</td> <td data-bbox="943 1973 1222 2007">746,019</td> <td data-bbox="1222 1973 1441 2007">1,77 %</td> </tr> <tr> <td data-bbox="140 2007 943 2040">TIMMUNO AS .....</td> <td data-bbox="943 2007 1222 2040">724,650</td> <td data-bbox="1222 2007 1441 2040">1,72 %</td> </tr> <tr> <td data-bbox="140 2040 943 2074">PRIETA AS .....</td> <td data-bbox="943 2040 1222 2074">720,000</td> <td data-bbox="1222 2040 1441 2074">1,71 %</td> </tr> </tbody> </table>	Shareholders	Number of Shares	Percent	HANDELSBANKEN STOCKHOLM CLIENTS AC <sup>1</sup> .....	11,155,584	26,44 %	RADIUMHOSPITALET FÖRSKNINGSSTIFTELSE .....	4,077,255	9,66 %	NORDNET LIVSFÖRSIKRING AS .....	1,356,741	3,22 %	VPF NORDEA AVKASTNING .....	1,196,582	2,84 %	VPF NORDEA KAPITAL .....	1,046,754	2,48 %	KLP AKSJENORGE .....	988,513	2,34 %	DANSKE BANK A/S .....	746,019	1,77 %	TIMMUNO AS .....	724,650	1,72 %	PRIETA AS .....	720,000	1,71 %	
Shareholders	Number of Shares	Percent																													
HANDELSBANKEN STOCKHOLM CLIENTS AC <sup>1</sup> .....	11,155,584	26,44 %																													
RADIUMHOSPITALET FÖRSKNINGSSTIFTELSE .....	4,077,255	9,66 %																													
NORDNET LIVSFÖRSIKRING AS .....	1,356,741	3,22 %																													
VPF NORDEA AVKASTNING .....	1,196,582	2,84 %																													
VPF NORDEA KAPITAL .....	1,046,754	2,48 %																													
KLP AKSJENORGE .....	988,513	2,34 %																													
DANSKE BANK A/S .....	746,019	1,77 %																													
TIMMUNO AS .....	724,650	1,72 %																													
PRIETA AS .....	720,000	1,71 %																													



KOMMUNAL LANDSPENSJONSKASSE .....	691,845	1.64 %
STATOIL PENSJON .....	668,916	1.59 %
NORDNET BANK AB .....	616,928	1.46 %
CRESSIDA AS .....	420,000	1.00 %
PORTIA AS .....	400,000	0.95 %
VERDIPAPIRFONDET NORDEA NORGE PLUS .....	395,903	0.94 %
NORDEA 1 SICAV JPMLSA NORDEA LUX UC .....	390,761	0.93 %
SUNDT AS .....	300,000	0.71 %
VIOLA AS .....	300,000	0.71 %
THORENDAHL INVEST AS .....	260,000	0.62 %
Avanza Bank AB .....	249,565	0.59 %
<b>Others</b> .....	15,493,703	36.72 %
<b>Total</b> .....	42,199,719	100%

<sup>1</sup> Nominee account of Healthcap V LP / OFP V Advisor AB

	<p>There are no differences in voting rights between the shareholders.</p> <p>Shareholders owning 5% or more of the Shares have an interest in the Company's share capital which is notifiable pursuant to the Norwegian Securities Trading Act. See Section 12.7 "Disclosure obligations" for a description of the disclosure obligations under the Norwegian Securities Trading Act. As of 10 March 2017, no shareholder, other than HealthCap V L.P. (approximately 26%), owning its shares through its nominee account in Handelsbanken Stockholm Clients AC, and the Norwegian Radium Hospital Research Foundation (approximately 10%) holds more than 5% or more of the issued Shares.</p>
<p><b>B.7 Selected historical key financial information</b></p>	<p>The following selected financial information has been extracted from the Group's audited financial statements as of and for the year ended 31 December 2016, with comparable figures as of and for the year ended 31 December 2015 (the "<b>Financial Statements</b>").</p> <p>The selected financial information included herein should be read in connection with, and is qualified in its entirety by reference to the Financial Statements incorporated by reference to this Prospectus.</p>

<i>In TNOK</i>		Year ended 31 December	
		2016	2015
<b>Selected statement of profit or loss and other comprehensive income information</b>			
Total revenue.....		37	146
Total operating expenses.....		-119,548	-89,762
Operating profit/loss (-).....		-119,511	-89,616
Net financial items.....		-3,203	-269
Total comprehensive loss for the period.....		-122,714	-89,885
Loss for the period.....		-122,454	-91,816
		As of 31 December	
		2016	2015
<b>Selected statement of financial position information</b>			
Total non-current assets.....		339,512	359,659
Total current assets.....		185,833	185,455
Total assets.....		525,345	545,114
Total equity.....		401,168	422,873
Total non-current liabilities.....		94,992	96,821
Total current liabilities.....		29,185	25,420
Total equity and liabilities.....		525,345	545,114
		Year ended 31 December	
		2016	2015
<b>Selected statement of cash flow information</b>			
Cash flows from operating activities.....		-109,690	-80,890
Cash flows from investing activities.....		-37	1,155
Cash flows from financing activities.....		107,883	191,204
Total cash flow.....		-1,844	111,468
Cash and cash equivalents at end of period.....		171,629	173,898
<b>B.8</b>	<b>Selected key pro forma financial information</b>	Not applicable.	
<b>B.9</b>	<b>Profit forecast or estimate</b>	Not applicable. No profit forecast or estimate are made.	
<b>B.10</b>	<b>Audit report qualifications</b>	Not applicable. There are no qualifications in the audit reports.	
<b>B.11</b>	<b>Insufficient working capital</b>	Not applicable. The Group is of the opinion that the working capital available to the Group is sufficient for the Group's present requirements, for the period covering at least 12 months from the date of this Prospectus.	

#### Section C - Securities

<b>C.1</b>	<b>Type and class of securities admitted to trading and identification number</b>	The Company has one class of Shares in issue and all Shares in that class provide equal rights in the Company. Each of the Shares carries one vote. The Shares have been created under the Norwegian Public Limited Companies Act and are registered in book-entry form with the VPS under ISIN NO0010689326. The Shares are listed on Oslo Axess, a stock exchange operated by Oslo Børs ASA.
<b>C.2</b>	<b>Currency of issue</b>	The Shares are issued in NOK.
<b>C.3</b>	<b>Number of shares in issue</b>	As of the date of this Prospectus, the Company's share capital is NOK

	<b>and nominal value</b>	4,219,971.90 divided into 42,199,719 Shares, with each Share having a nominal value of NOK 0.10.
<b>C.4</b>	<b>Rights attaching to the securities</b>	The Company has one class of Shares in issue, and in accordance with the Norwegian Public Limited Companies Act, all Shares in that class provide equal rights in the Company. Each of the Shares carries one vote.
<b>C.5</b>	<b>Restrictions on transfer</b>	The Articles of Association do not provide for any restrictions on the transfer of Shares, or a right of first refusal for the Company's shareholders. Share transfers are not subject to approval by the Board of Directors.
<b>C.6</b>	<b>Admission to trading</b>	The Company applied for admission to trading of its Shares on Oslo Stock Exchange on 17 March 2017, and the board of directors of Oslo Stock Exchange approved the listing application of the Company on 22 March 2017.  The Company currently expects commencement of trading in the Shares on Oslo Stock Exchange, on 23 March 2017. The Company has not applied for admission to trading of the Shares on any other stock exchange or regulated market.
<b>C.7</b>	<b>Dividend policy</b>	The Company has not paid any dividends for the years ended 31 December 2016 and 2015 or previous years. The Group is focusing on the development of pharmaceutical products and does not anticipate paying any cash dividend until sustainable profitability is achieved.

#### Section D - Risks

<b>D.1</b>	<b>Key risks specific to the Company or its industry</b>	<p><i>Key risks related to the Group and the industry in which the Group operates</i></p> <ul style="list-style-type: none"> <li>• The Group has incurred significant operating losses since inception and the Group expects to incur substantial and increasing losses in the foreseeable future</li> <li>• Clinical development involves a lengthy and expensive process with uncertain outcomes, and results of earlier studies and trials may not be predictive of future clinical trial results. The Group has limited clinical data and its clinical trials may fail to demonstrate adequately the safety and efficacy of its product candidates, which would prevent or delay regulatory approval and commercialization</li> <li>• The Group's business is highly dependent on the success of its lead product candidates, ONCOS-102 and TG01, which together with the Group's other product candidates will require significant additional clinical testing before the Group can seek regulatory approval and potentially commercialize products</li> <li>• Any significant delay or failure in the conduct of present or future clinical studies may adversely impact the Group's ability to obtain regulatory approval for and commercialize its current and future product candidates</li> <li>• The carrying amount of the Group's patented technology constitutes a significant portion of the total assets in the Group's consolidated financial statements and any impairment loss recognized will have a material adverse effect on the Group's financial position</li> <li>• The Group's product candidates may cause undesirable side effects that could halt their clinical development, prevent their regulatory approval, limit their commercial potential, if approved, and result in other significant negative consequences</li> <li>• The Group has obtained orphan drug designations for ONCOS-102 in malignant plural mesothelioma and ovarian cancer and TG01 in</li> </ul>
------------	--	---

	<p>pancreatic cancer, but the Group may be unable to maintain the benefits associated with orphan drug designation</p> <ul style="list-style-type: none"> <li>• The success of the Group is dependent on its ability to obtain acceptable prices and reimbursements on its product candidates</li> <li>• The Group relies, and will continue to rely, upon third-parties for clinical trials, product development and manufacturing</li> <li>• The Group is subject to a number of manufacturing and supply chain risks which could be outside the Group's control, and any of which could substantially increase the Group's costs and limit and/or delay the supply of its product candidates</li> <li>• The Group may not be able to enter into partnership agreements</li> <li>• The Group faces an inherent business risk of liability claims in the event that the use or misuse of the compounds results in personal injury or death</li> <li>• The success, competitive position and future revenues will depend in part on the Group's ability to protect its intellectual property and know-how</li> <li>• Patent applications filed by others could limit the Group's freedom to operate</li> <li>• The Group may not be able to maintain sufficient insurance to cover all risks related to its operations</li> <li>• The Group faces significant competition from other biotechnology and pharmaceutical companies</li> <li>• The Group may lose market exclusivity and face competition from low-cost generic products</li> <li>• The Group may not be able to successfully implement its clinical, regulatory and commercial strategy</li> <li>• The Group is highly dependent on its key personnel, and if the Group is not successful in attracting and retaining highly qualified personnel, the Group will not be able to successfully implement its business plan</li> <li>• The Group's business involves use of hazardous materials, chemicals and biological compounds and is thus exposed to environmental risks</li> </ul> <p><i>Key risks related to laws, regulations and litigation</i></p> <ul style="list-style-type: none"> <li>• The Group may be subject to litigation and disputes that could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects</li> <li>• The Group is exposed to risks related to regulatory processes and changes in regulatory environment</li> <li>• Even if the Group obtains regulatory approval for a product candidate, the Group's products will remain subject to regulatory scrutiny</li> </ul> <p><i>Key risks related to the financing and market risk</i></p> <ul style="list-style-type: none"> <li>• The Group will require additional financing to achieve its goals, and a failure to obtain this necessary capital when needed could force the Group to delay, limit, reduce or terminate its product development or commercialization efforts</li> <li>• Present or future debt levels could limit the Group's flexibility to obtain additional financing and pursue other business opportunities</li> <li>• Interest rate fluctuations could in the future materially and adversely affect the Group's business, financial condition, results of operations, cash flows, time to market and prospects</li> <li>• Fluctuations in exchange rates could affect the Group's cash flow and financial condition</li> </ul>
--	--

<p><b>D.3 Key risks specific to the securities</b></p>	<p><i>Key risks related to the Listing and the Shares</i></p> <ul style="list-style-type: none"> <li>• The market value of the Shares may fluctuate significantly, which could cause investors to lose a significant part of their investment</li> <li>• The Company's ability to pay dividends is dependent on the availability of distributable reserves and the Company may be unwilling to pay any dividends in the future regardless of availability of distributable reserves</li> <li>• Future sales, or the possibility for future sales of substantial numbers of Shares may affect the Shares' market price</li> <li>• Future issuances of Shares or other securities may dilute the holdings of shareholders and could materially affect the price of the Shares</li> <li>• Pre-emptive rights to secure and pay for Shares in any additional issuance may be unavailable to U.S. or other shareholders</li> <li>• Investors may be unable to exercise their voting rights for Shares registered in a nominee account</li> <li>• Investors may be unable to recover losses in civil proceedings in jurisdictions other than Norway</li> <li>• Norwegian law may limit shareholders' ability to bring an action against the Company</li> <li>• The transfer of Shares is subject to restrictions under the securities laws of the United States and other jurisdictions</li> <li>• Exchange rate fluctuations could adversely affect the value of the Shares and any dividends paid on the Shares for an investor whose principal currency is not NOK</li> </ul>
--	--

**Section E - Offer**

<p><b>E.1 Net proceeds and estimated expenses</b></p>	<p>Not applicable. As there is no offer of shares there will be no net proceeds from or expenses in connection with any offer.</p>
<p><b>E.2a Reasons for the Offering and use of proceeds</b></p>	<p>Not applicable. The Company will not receive any proceeds as there will be no offering of shares.</p>
<p><b>E.3 Terms and conditions of the offering</b></p>	<p>Not applicable. As there is no offer of shares there are no terms or conditions of any offering.</p>
<p><b>E.4 Material and conflicting interests</b></p>	<p>To the Company's knowledge there are no material and/or confliction interest in connection with the Listing of the Company's shares.</p>
<p><b>E.5 Selling shareholders and lock-up agreements</b></p>	<p>There are no selling shareholders as there will be no offering of shares.</p> <p>The Company and the members of the Board of Directors and Management entered into customary lock-up undertakings with DNB Markets, a part of DNB Bank ASA, ABG Sundal Collier Norge ASA and Arctic Securities AS (the "<b>2016 Joint Bookrunners</b>") in connection with the completion of a private placement in July 2016 (the "<b>2016 Private Placement</b>"). The lock-up undertakings are effective for a period of 12 months following completion of the 2016 Private Placement, i.e. 7 July 2017.</p>
<p><b>E.6 Dilution resulting from the offering</b></p>	<p>Not applicable. There will be no dilution as there is no offer of shares.</p>
<p><b>E.7 Estimated expenses charged to investor</b></p>	<p>Not applicable. The expenses related to the Listing will be paid by the Company.</p>

## 2 RISK FACTORS

*An investment in the Shares involves inherent risk. Before making an investment decision with respect to the Shares, investors should carefully consider the risk factors and all information contained in this Prospectus, including the financial information and related notes. The risks and uncertainties described in this Section 2 are the principal known risks and uncertainties faced by the Group as of the date hereof that the Company believes are the material risks relevant to an investment in the Shares. An investment in the Shares is suitable only for investors who understand the risks associated with this type of investment and who can afford to lose all or part of their investment. The absence of negative past experience associated with a given risk factor does not mean that the risks and uncertainties described herein should not be considered prior to making an investment decision in respect of the Shares. If any of the following risks were to materialize, individually or together with other circumstances, they could have a material and adverse effect on the Group and/or its business, financial condition, results of operations, cash flows, time to market and/or prospects, which could cause a decline in the value and trading price of the Shares, resulting in the loss of all or part of an investment in the same.*

*The order in which the risks are presented does not reflect the likelihood of their occurrence or the magnitude of their potential impact on the Group's business, financial condition, results of operations, cash flows, time to market and/or prospects. The risks mentioned herein could materialize individually or cumulatively. The information in this Section 2 is as of the date of this Prospectus.*

### 2.1 Risks related to the Group and the industry in which the Group operates

**The Group has incurred significant operating losses since inception and the Group expects to incur substantial and increasing losses in the foreseeable future**

The Group is a clinical-stage biopharmaceutical group of companies with a limited operating history. Investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate effect or an acceptable safety profile, gain regulatory approval and become commercially viable.

The Group has financed its operations primarily through the sale of equity securities, convertible debt and grants and loans from the Finnish Funding Agency for Technology and Innovation ("TeKes") and grants from Innovation Norway and The Norwegian Research Council. Since its inception, most of the Group's resources have been dedicated to process development and production, and to the preclinical and clinical development of its product candidates. The size of the Group's future losses will depend, in part, on the Group's future expenses and its ability to generate revenue, if any. The Group has no products approved for commercial sale and has not generated any revenue from product sales to date, and it continues to incur significant research and development and other expenses related to its ongoing operations. As a result, the Group is not profitable and has incurred losses in each period since inception. Based on the audited financial statements for the year ended 31 December 2016, the Group had after financial items and tax a loss of NOK 122 million for the financial year 2016. The Group expects to continue to incur significant losses for the foreseeable future, and it expects these losses to increase as it continues its research and development of, and seek regulatory approvals for, its product candidates.

To become and remain profitable, the Group must succeed in developing and, eventually, commercializing products that generate revenues. This will require the Group to be successful in a range of challenging activities, including completing process developments, preclinical studies and clinical trials of the Group's products, discovering additional product candidates, obtaining regulatory approval for these product candidates and marketing and selling any products for which the Group may obtain regulatory approval. The Group may never succeed in these activities and, even if it does, may never generate revenue that is significant enough to achieve profitability. Should any of these risks materialize, it could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

**Clinical development involves a lengthy and expensive process with uncertain outcomes, and results of earlier studies and trials may not be predictive of future clinical trial results. The Group has limited clinical data and its clinical trials may fail to demonstrate adequately the safety and efficacy of its product candidates, which would prevent or delay regulatory approval and commercialization**

Before obtaining regulatory approvals for the commercial sale of the Group's product candidates, the Group must demonstrate through lengthy, complex and expensive preclinical testing and clinical trials that its product candidates are both safe and effective for use in each target indication. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Drug development involves moving drug candidates through research and extensive testing of activity and side effects in preclinical models before authorization is given for further

testing in humans in the clinical stage. The clinical stage is divided into three consecutive Phases (I, II and III) with the aim to reveal the safety and efficacy of a drug candidate before an application for marketing authorization can be filed with the relevant health authorities. The Group's lead product candidates, ONCOS-102 and TG01, are currently in Phase I and Phase II of the clinical stage, respectively. Failure can occur at any time during the development. Each individual development step is associated with the risk of failure. As a result, an early stage drug candidate carries a considerably higher risk of failure than a later stage candidate. Moreover, the commencement and completion of clinical trials may be delayed by several factors, including but not limited to, unforeseen safety issues, issues related to determination of dose, lack of effectiveness during clinical trials, slower than expected patient enrolment in clinical trials, unforeseen requirements from the regulatory agencies relating to clinical trials, inability or unwillingness of medical investigators to follow the proposed clinical protocols and termination of license agreements necessary to complete trials. On average, five out of 5,000 drugs make it through the preclinical phase, and historically only one out of these five is approved by the U.S. Food and Drug Administration (the "FDA") for marketing<sup>1</sup>. Moreover, only 2 of 10 marketed drugs return revenues that match or exceed R&D costs<sup>2</sup>. It takes on average 12 years to develop a drug<sup>2</sup>.

The Group has limited clinical data and the results of preclinical studies and early clinical trials of the Group's product candidates may not be predictive of the results of later-stage clinical trials. There is typically an extremely high rate of attrition from the failure of product candidates proceeding through clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy profile despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. The Group cannot be certain that it will not face similar setbacks. Most product candidates that commence clinical trials are never approved as commercial products. For a variety of reasons, most attempts by other companies to develop peptide based cancer vaccines in the past have not been successful and have not received marketing approval. Should the Group's clinical studies fail to demonstrate adequately the safety and efficacy of one or more of its product candidates it could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

**The Group's business is highly dependent on the success of its lead product candidates, ONCOS-102 and TG01, which together with the Group's other product candidates will require significant additional clinical testing before the Group can seek regulatory approval and potentially commercialize products**

The Group does not have any products that have gained regulatory approval. Its business and future success depend on its ability to obtain regulatory approval of, and then successfully commercialize, its lead product candidate, ONCOS-102 and TG01. These two, as well as the Group's other product candidates, are in the early stages of development. The Group's ability to develop, obtain regulatory approval for, and successfully commercialize ONCOS-102 and TG01 effectively will depend on several factors, including but not limited to the following:

- successful completion of the clinical trials;
- receipt of marketing approvals;
- establishing commercial manufacturing and supply arrangements;
- establishing a commercial infrastructure;
- acceptance of the product by patients, the medical community and third-party payers;
- establishing fair market share while competing with other therapies;
- successfully executing the Group's pricing and reimbursement strategy;
- a continued acceptable safety and adverse event profile of the product following regulatory approval; and
- qualifying for, identifying, registering, maintaining, enforcing and defending intellectual property rights and claims covering the product.

---

<sup>1</sup> <http://www.medicinenet.com/script/main/art.asp?articlekey=9877> (accessed 10 July 2015)

<sup>2</sup> Vernon JA, Golec JH, DiMasi JA. Drug development costs when financial risk is measured using the fama-french three-factor model. *Health Econ.* 2010;19(8):1002-1005

Drug development is associated with a high rate of late stage failures and oncology is not different in this respect. Immune oncology has seen some significant development successes primarily within the check point inhibitor area but targets and therapeutic approaches are still, to a large extent, in its infancy. Furthermore, some of the cancer indications where the Group is conducting clinical research are known to be difficult to improve on survival rates such as pancreatic and colorectal cancers and mesotheliomas. All of the Group's product candidates, including ONCOS-102 and TG01, will require additional clinical and nonclinical development, regulatory review and approval in multiple jurisdictions, substantial investment, access to sufficient commercial manufacturing capacity and significant marketing efforts before the Group can generate any revenue from product sales. The Group is not permitted to market or promote any of its product candidates before it receives regulatory approval from the FDA to market in the U.S. and from the European Medicines Agency (the "EMA") to market in Europe, as well as from equivalent regulatory authorities in other foreign jurisdictions. The Group may never receive such regulatory approval for any of its products candidates. If the Group is unable to develop or receive marketing approval for ONCOS-102 and/or TG01 in a timely manner or at all, the Group could experience significant delays or an inability to commercialize ONCOS-102 and/or TG01, which could materially and adversely affect the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

**Any significant delay or failure in the conduct of present or future clinical studies may adversely impact the Group's ability to obtain regulatory approval for and commercialize its current and future product candidates**

The Group depends on collaboration with partners, medical institutions and laboratories to conduct clinical testing in compliance requirements from appropriate regulatory authority in the country of use. The Group's ability to complete clinical studies in a timely fashion, or at all, depend on several factors, including but not limited to the following:

- delays in the planning of future clinical studies;
- delays in the CMC (chemistry, manufacturing, control) and QA (quality assurance) work related to drug substance and drug product in present or future clinical studies;
- delays in, or inability of, attracting and retaining highly qualified managerial, scientific and medical personnel to assist in the clinical studies;
- delays in obtaining, or failures to obtain, regulatory approval to commence clinical studies because of safety concerns of regulators relating to the Group's product candidate or failure to follow regulatory guidelines regarding general safety issues;
- actions by regulators to place a proposed trial on clinical hold or to temporarily or permanently stop a trial for a variety of reasons, principally for safety concerns;
- delays in recruiting patients to participate in a clinical trial, and the rate of patient enrolment, which is itself a function of many factors, including size of the patient population, the proximity of patients to the clinical trial sites, the eligibility criteria for the trial and the nature of the protocol;
- the inability to fully control experimental conditions;
- compliance of patients and investigators with the protocol and applicable regulations; failure of clinical studies and clinical investigators to be in compliance with relevant clinical protocol, or similar requirements in other countries;
- failure of third party clinical managers to satisfy their contractual duties, comply with regulations or meet expected deadlines;
- delays or failures in reaching agreement on acceptable terms with prospective trial sites;
- the Group's partners in clinical studies, the performance of which the Group cannot control;
- changes in the standard of care from initiation to completion of a clinical trial; and
- determination by regulators that the clinical design is not adequate.



Any significant delay or failure in the conduct of clinical studies may adversely impact the Group's ability to obtain regulatory approval for and commercialize its current and future product candidates, which again could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

**The carrying amount of the Group's patented technology constitutes a significant portion of the total assets in the Group's consolidated financial statements and any impairment loss recognized will have a material adverse effect on the Group's financial position**

The carrying amount of the patented technology (ONCOS-102) reflects the value of the consideration shares issued by the Company in its acquisition of Targovax Oy (previously named Oncos Therapeutics Oy) in 2015. The carrying amount of the patented technology constitutes a significant portion of the total assets in the Group's consolidated financial statements. A number of factors, including the prevailing market conditions, the competitive situation of the Group or any failures in the expected development of the product may result in an impairment loss for the patented technology. Any impairment loss recognized will have a material adverse effect on the Group's financial position.

**The Group's product candidates may cause undesirable side effects that could halt their clinical development, prevent their regulatory approval, limit their commercial potential, if approved, and result in other significant negative consequences**

Undesirable side effects caused by the Group's product candidates could cause the Group or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA, EMA or comparable foreign regulatory authorities. Results of the Group's clinical trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics.

If unacceptable side effects arise in the development of the Group's product candidates, the Group could suspend or terminate its clinical trials or the FDA, EMA or comparable foreign regulatory authorities could order the Group to cease clinical trials or deny approval of the Group's product candidates for any or all targeted indications. Treatment-related side effects could also affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. In addition, side effects may not be appropriately recognized or managed by the treating medical staff.

Additionally, if one or more of the Group's product candidates receives marketing approval, and the Group or others later identify undesirable side effects caused by such products, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw approvals of such product;
- regulatory authorities may require additional warnings on the label;
- the Group may be required to create a medication guide outlining the risks of such side effects for distribution to patients;
- health care professionals or patients may not accept the product and prefer competing alternatives;
- the Group could be sued and held liable for harm caused to patients;
- the regulators may require additional data from studies; and
- the Group's reputation may suffer.

Any of these events could prevent the Group from achieving or maintaining market acceptance of the particular product candidate, if approved, and could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

The Group has obtained orphan drug designations for ONCOS-102 in malignant plural mesothelioma and ovarian cancer and for TG01 in pancreatic cancer, but the Group may be unable to maintain the benefits associated with orphan drug designation.

Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug or biopharmaceutical intended to treat a rare disease or condition, which is defined as one occurring in a patient population of fewer than 200,000 in the

United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug or biologic will be recovered from sales in the United States. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. In addition, if a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications, including a full Biologics License Application, to market the same biologic for the same indication for 7 years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or where the manufacturer is unable to assure sufficient product quantity. In Europe, the EMA offer similar support and advantages to products which have an orphan drug designation. It is granted to rare diseases defined as occurring <math>5 < 10,000</math> and provide marketing exclusivity for 10 years.

Even though the Group has received orphan drug designation for ONCOS-102 in malignant plural mesothelioma and ovarian cancer and for TG01 in pancreatic cancer, the Group may not be the first to obtain marketing approval of either product candidate for the orphan-designated indication due to the uncertainties associated with developing pharmaceutical products.

**The success of the Group is dependent on its ability to obtain acceptable prices and reimbursements on its product candidates**

In most markets, drug prices and reimbursement levels are regulated or influenced by authorities, other healthcare providers, insurance companies or health maintenance organizations. Furthermore, the overall healthcare costs to society have increased considerably over the last decades and governments all over the world are striving to control them. There can be no guarantee that the Group's final products, if any, will obtain the selling prices or reimbursement levels foreseen by the Group. If actual prices and reimbursement levels granted to the Group's products prove lower than anticipated, it might have a negative impact on such products' profitability and/or marketability, which again could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

**The Group relies, and will continue to rely, upon third-parties for clinical trials, product development and manufacturing**

The Group cannot be certain that it will be able to enter into or maintain satisfactory agreements with third-party suppliers, like contract research organizations for the conduct of clinical studies or manufacturers. The Group's need to amend or change providers for the conduct of clinical studies might impact the timelines of the conduct of such studies. The Group's failure to enter into agreements with such suppliers or manufacturers on reasonable terms, or at all, could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

The Group may also not be able to rapidly alter production volumes to respond to changes in future commercial sale or demand of a product candidate. Poor manufacturing performance of third party manufacturers, a disruption in the supply or the Group's failure to accurately predict the demand for any future commercial sale of a product could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

**The Group is subject to a number of manufacturing and supply chain risks, any of which could substantially increase its costs and limit and/or delay the supply of its product candidates**

The process of manufacturing the Group's product candidates is complex, highly regulated and subject to several risks, including but not limited to:

- The manufacturing of drug products is subject to product loss due to contamination, equipment failure, improper installation or operation of equipment or vendor or operator fault. Minor deviations from normal manufacturing processes could result in reduced production yields, product defects and other supply disruptions. If contaminations are discovered in the Group's product candidates or in the manufacturing facilities in which the products are made, these manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination.
- The manufacturing facilities in which the Group's product candidates are made could be materially and adversely affected by equipment failures, labor shortages, natural disasters, power failures and several other factors.

- In order to supply investigational medicinal products to clinical trials, the Group and the Group's contract manufacturers need to comply with relevant EU and US good manufacturing practice ("GMP") guidelines. The Group and the contract manufacturers will be subject to inspections by relevant authorities in order to confirm compliance with relevant GMP guidelines and other applicable regulatory requirements. Any failure to follow GMP or other regulatory requirements or delay, interruption or other issues that arise in the manufacture of the Group's investigational medicinal products as a result of a failure in the facilities or operations to comply with regulatory requirements or pass any inspecting could significantly impair the Group's ability to develop and commercialize its candidates, including leading to delays in availability, imposition of sanctions, warning letters, failure to grant market approvals, delays, suspension or withdrawal of approvals, license revocation, recalls of products, operation restrictions and criminal prosecutions and damage of reputation and its business.
- Any failure in producing or supplying ONCOS-102 to appropriate quality standards set from time to time by regulatory authorities could significantly impair the Group's ability to develop and commercialize ONCOS-102.
- GM-CSF is a necessary component of TG01 and TG02 immunotherapy. Any failure in producing or supplying any TG01, TG02 and GM-CSF products to appropriate quality standards set from time to time by regulatory authorities could significantly impair the Group's ability to develop and commercialize its TG candidates.

Any adverse developments affecting manufacturing operations for the Group's product candidates and/or damage that occurs during shipping may result in delays, inventory shortages, lot failures, withdrawals or recalls or other interruptions in the supply of the Group's drug substance and drug product. The Group may also have to write off inventory, incur other charges and expenses for supply of drug product that fails to meet specifications, undertake costly remediation efforts, or seek costlier manufacturing alternatives. Inability to meet the demand for any of its product candidates, if approved, could damage the Group's reputation and the reputation of its products among physicians, healthcare payers, patients or the medical community, which could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

#### **The Group may not be able to enter into partnership agreements**

The Group's business strategy is to retain marketing rights and actively participate in the commercialization of its lead product candidates, while exploring potential partnering opportunities in selected geographies, partly through collaborative agreements with pharmaceutical or biotechnology companies. The Group cannot give any assurance that such agreements will be obtained on acceptable terms, nor that the Group will be able to enter into any such agreements at all. Furthermore, should such agreements be executed, there can be no assurance that the cooperation will work in practice and that agreements are adhered to or not terminated by the other party.

#### **The Group faces an inherent business risk of liability claims in the event that the use or misuse of the compounds results in personal injury or death**

The Group faces an inherent risk of product liability as a result of the clinical testing of its product candidates and will face an even greater risk if it commercializes any products. For example, the Group may be sued if its product candidates cause or are perceived to cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability or a breach of warranties. If the Group cannot successfully defend itself against product liability claims, it may incur substantial liabilities or be required to limit commercialization of its product candidates. Even successful defence would require significant financial and management resources.

The Group has not experienced any clinical trial liability claims to date, but it may experience such claims in the future. The Group currently maintains clinical trial liability insurance for each trial. The insurance policy may not be sufficient to cover claims that may be made against the Group. Clinical trial liability insurance may not be available in the future on acceptable terms, or at all. Any claims against the Group, regardless of their merit, could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

#### **The success, competitive position and future revenues will depend in part on the Group's ability to protect its intellectual property and know-how**

The Group's commercial success will depend in part on its ability to obtain and maintain intellectual property protection with respect to its proprietary technology and products. This will require the Group to obtain and maintain patent protection for its products, methods, processes and other technologies, to preserve trade secrets, to prevent third parties from infringing on proprietary rights and to operate without infringing the proprietary rights of third parties. To date, the Group holds certain exclusive patent rights and has filed several patent applications, see Section 7.8.6 "Patents and patent applications", however, the Group cannot predict the degree and range of protection any patents will afford against competitors and competing technologies, including whether third parties will find ways to invalidate or otherwise circumvent the patents, if and when additional patents will be issued, whether or not others will obtain patents claiming aspects similar to those covered by the Group's patents and patents applications, whether the Group will need to initiate litigation or administrative proceedings, or whether such litigation or proceedings are initiated by third parties against the Group which may be costly or whether third parties will claim that the Group's technology infringes upon their rights. The Group does not know whether any of the pending patent applications will result in the issuance of patents that effectively protect its technology or products. Should the Group not be able to protect its intellectual property and know-how, it could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

#### **Patent applications filed by others could limit the Group's freedom to operate**

Competitors may claim that one or more of the Group's product candidates infringe upon their patents or other intellectual property. Resolving a patent or other intellectual property infringement claim can be costly and time consuming and may require the Group to enter into royalty or license agreements. If this should be necessary, the Group cannot guarantee that it would be possible to obtain royalty or license agreements on commercially advantageous terms. A successful claim of patent or other intellectual property infringement could subject the Group to significant damages or an injunction preventing the manufacture, sale or use of the Group's affected products or otherwise limit the freedom to operate. Any of these events could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

#### **The Group may not be able to maintain sufficient insurance to cover all risks related to its operations**

The Group's business is subject to a number of risks and hazards, including, but not limited to industrial accidents, labor disputes and changes in the regulatory environment. Such occurrences could result in damage to properties, personal injury, monetary losses and possible legal liability. Although the Group seeks to maintain insurance or contractual coverage to protect against certain risks in such amounts as it considers reasonable, its insurance may not cover all the potential risks associated with the Group's operations, which could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

#### **The Group faces significant competition from other biotechnology and pharmaceutical companies**

The biopharmaceutical industry is characterized by intense competition and rapid innovation. The Group's competitors may be able to develop other compounds or drugs that are able to achieve similar or better results. Many major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies and universities and other research institutions continue to invest time and resources in developing novel approaches to immuno-oncology. Promising results have spurred significant competition from major pharmaceutical and biotechnology companies alike. The Group's competitors include, among others, Aduro Biotech, Inc., Bavarian Nordic, Inc. and Vaximm AG (cancer vaccines) and Amgen, Inc., Advantagene, Inc., Transgene SA, PsiOxus Therapeutics, Ltd., Cold Genesys, Inc., ORCA Therapeutics B.V., Oncolytics Biotech, Inc., SillaJen, Inc., Viralytics, Ltd. and DNatrix, Inc (oncolytic viruses). Many of the Group's competitors have substantially greater financial, technical and other resources than the Group does, such as larger research and development staff and experienced marketing and manufacturing organizations and well-established sales forces. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in the Group's competitors. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. The Group's competitors may succeed in developing, acquiring or licensing on an exclusive basis drug or biologic products that are more effective, safer, more easily commercialized or less costly than the Group's product candidates or may develop proprietary technologies or secure patent protection that the Group may need for the development of its technologies and products.

Even if the Group obtain regulatory approval of its product candidates, the availability and price of its competitors' products could limit the demand and the price the Group is able to charge for its product candidates. The Group may not be able to implement its business plan if the acceptance of its product candidates is inhibited by price competition

or the reluctance of physicians to switch from existing methods of treatment to the Group's product candidates, or if physicians switch to other new drug or biologic products or choose to reserve the Group's product candidates for use in limited circumstances. For additional information regarding the Group's competition, see Section 7.7 "Competition".

#### **The Group may lose market exclusivity and face competition from low-cost generic products**

The Group's product candidates and/or related technology are or are expected to be protected by patent rights that are expected to provide the Group with exclusive marketing rights in various countries. However, patent rights are of varying strengths and durations. Loss of market exclusivity and the introduction of a generic version of the same or a similar medicine typically results in a significant and sharp reduction in net sales for the relevant product, given that generic manufacturers typically offer their versions of the same medicine at lower prices. The Group's results may be affected by changes in public sentiment.

The pharmaceutical industry is under the close scrutiny of the public, governments and the media. In addition, there is significant pressure on the industry from certain nations to make the products available to their population at drastically lower costs. Any increase in such negative public sentiment or increase in public scrutiny or pressure from such nations could lead, among other things, to changes in legislation, to changes in the demand for the products, additional pricing pressures with respect to the products, or increased efforts to undercut intellectual property protections. Such changes could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

#### **The Group may not be able to successfully implement its clinical, regulatory and commercial strategy**

Achieving the Group's strategy as described in Section 7.3 "Strategy" involves inherent costs and uncertainties and there is no assurance that the Group will achieve its objectives or other anticipated benefits. Further, there is no assurance that the Group will be able to undertake its activities within their expected time frame, that the costs of any of the Group's objectives will be at expected levels or that the benefits of its objectives will be achieved within the expected timeframe or at all.

The Group's projections of both the number of people who have the cancers it is targeting, as well as the subset of people with these cancers who have received one or more prior treatments, and who have the potential to benefit from treatment with the Group's product candidates, are based on the Group's beliefs and estimates. These estimates have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations, or market research, and may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these cancers. The number of patients may turn out to be lower than expected. Additionally, the potentially addressable patient population for the Group's product candidates may be limited or may not be amenable to treatment with the Group's product candidates. Even if the Group obtains significant market share for its product candidates, because the potential target populations are small, the Group may never achieve profitability without obtaining regulatory approval for additional indications, including to be used as first or second line therapy.

The Group's ability to successfully implement its strategy could also be affected by factors beyond its control, such as the economic development in the markets in which it operates and the availability of acquisition and development opportunities in each market. Any failures, material delays or unexpected costs related to implementation of the Group's strategy could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

#### **The Group is highly dependent on its key personnel, and if the Group is not successful in attracting and retaining highly qualified personnel, the Group will not be able to successfully implement its business plan**

The Group's ability to compete in the highly competitive biotechnology and pharmaceutical industries and its ability to comply with complex EU and US guidelines related to its development work depend upon its ability to attract and retain highly qualified managerial, scientific and medical personnel. The loss of a key employee might impede the achievement of the scientific development and commercial objectives. Competition for key personnel with the experience that is required is intense and is expected to continue to increase. There is no assurance that the Group will be able to retain key personnel, nor can assurances be given that the Group will be able to recruit new key personnel in the future. Any failure to attract or retain such personnel could result in the Group not being able to successfully implement its business plan and could impact the compliance of the Group's quality system and thereby the compliance of the Group's development work, which again could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

**The Group's business involves use of hazardous materials, chemicals and biological compounds and is thus exposed to environmental risks**

The Group believes that its safety procedures for handling and disposing of such materials comply with applicable regulations, however, there will always be a risk of accidental contamination or injury. If liable for an accident, the Group could incur significant costs, damages or penalties that could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

**2.2 Risks related to laws, regulations and litigation**

**The Group may be subject to litigation and disputes that could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects**

The Group may in the future be involved from time to time in litigation and disputes. The operating hazards inherent in the Group's business may expose the Group to, amongst other things, litigation, including personal injury litigation, intellectual property litigation, contractual litigation, environmental litigation, tax or securities litigation, as well as other litigation that arises in the ordinary course of business.

The Group is currently not involved in any litigation. However, it may in the future be involved in litigation matters from time to time. The Group cannot predict with certainty the outcome or effect of any claim or other litigation matter. The ultimate outcome of any litigation matter and the potential costs associated with prosecuting or defending such lawsuits, including the diversion of the Management's attention to these matters, could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

**The Group is exposed to risks related to regulatory processes and changes in regulatory environment**

Cancer therapies are sometimes characterized as first line, second line or third line, and the FDA and EMA often approves new therapies initially only for third line use. When cancer is detected early enough, first-line therapy, usually chemotherapy, hormone therapy, surgery, radiotherapy or a combination of these, is sometimes adequate to cure the cancer or prolong life without a cure. Second- and third-line therapies are administered to patients when prior therapy is not effective. The Group expects to initially seek approval of its product candidates as a therapy for patients who have received one or more prior treatments. Subsequently, for those products that prove to be sufficiently beneficial, if any, the Group would expect to seek approval potentially as a first-line therapy, but there is no guarantee that the Group's product candidates, even if approved, would be approved for first-line therapy, and, prior to any such approvals, the Group may have to conduct additional clinical trials.

Further, the Group's operations could be affected by changes in intellectual property legal protections and remedies, trade regulations and procedures and actions affecting approval, production, pricing, reimbursement and marketing of products, as well as by unstable governments and legal systems and inter-governmental disputes. Any of these changes could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

**Even if the Group obtains regulatory approval for a product candidate, the Group's products will remain subject to regulatory scrutiny**

Any product candidate for whom the Group obtains marketing approval, along with the manufacturing processes, qualification testing, post-approval clinical data, labelling and promotional activities for such product, will be subject to continual and additional requirements of the different national and regional regulatory authorities. Even if marketing approval of a product candidate is granted, the approval may be subject to limitations on the indicated uses for which the product may be marketed or to conditions of approval, or contain requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the product. The different regulatory authorities closely regulate the post-approval marketing and promotion of pharmaceutical and biological products to ensure such products are marketed only for the approved indications and in accordance with the provisions of the approved labelling.

In addition, late discovery of previously unknown problems with the Group's products, manufacturing processes, or failure to comply with regulatory requirements, may lead to various adverse results, including, but not limited to, restrictions on such products, manufacturers or manufacturing processes, requirements to conduct post-marketing clinical trials, withdrawal of the products from the market, refusal to approve pending applications or supplements to approve applications that the Group submits and refusals to permit the import or export of the Group's products.

The regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of the Group's product candidates. If the Group is slow or unable to adapt

to changes in existing requirements or the adoption of new requirements or policies, or if the Group is not able to maintain regulatory compliance, it may lose any marketing approval that it may have obtained, which could have a material adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

### **2.3 Risks related to financing and market risk**

**The Group will require additional financing to achieve its goals, and a failure to obtain this necessary capital when needed could force the Group to delay, limit, reduce or terminate its product development or commercialization efforts**

The Group's operations have consumed substantial amounts of cash since inception. The Group expects to continue to spend substantial amounts to continue the clinical development of its product candidates. The exact amounts needed are unknown. If the Group is able to gain regulatory approval for any of its product candidates, it will require significant additional amounts of cash in order to launch and commercialize any such product candidates. In addition, other unanticipated costs may arise. Because the design and outcome of the Group's planned and anticipated clinical trials are highly uncertain, the Group cannot reasonably estimate the actual amounts necessary to successfully complete the development and commercialization of its product candidates.

The Group's future capital requirements depend on many factors, including but not limited to:

- the scope, progress, results and costs of researching and developing the Group's product candidates, and conducting preclinical studies and clinical trials;
- the size of the organization needed to take product candidates through clinical trials and potentially commercialization;
- the timing of, and the costs involved in, obtaining regulatory approvals for the Group's product candidates if clinical trials are successful;
- the cost of commercialization activities for the Group's product candidates, if any of its product candidates is approved for sale, including marketing, sales and distribution costs;
- the cost of manufacturing the Group's product candidates for clinical trials in preparation for regulatory approval and in preparation for commercialization;
- the Group's ability to establish and maintain strategic licensing or other arrangements and the financial terms of such agreements;
- the costs involved in preparing, filing, prosecuting, maintaining, expanding, defending and enforcing patent claims, including litigation costs and the outcome of such litigation;
- the timing, receipt and amount of sales of, or royalties on, the Group's future products, if any; and
- the emergence of competing cancer therapies and other adverse market developments.

Adequate sources of funding may not be available when needed or may not be available on favorable terms. The Group's ability to obtain such additional capital or financing will depend in part upon prevailing market conditions as well as conditions of its business and its operating results, and those factors may affect its efforts to arrange additional financing on satisfactory terms. If the Group raises additional funds by issuing additional shares or other equity or equity-linked securities, it will result in a dilution of the holdings of existing shareholders. If the Group raises additional capital through debt financing, the Group may be subject to covenants limiting or restricting its ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If the Group is unable to obtain adequate financing when needed, it may have to delay, reduce the scope of or suspend one or more of its clinical trials or research and development programs or its commercialization efforts, which could have a material adverse effect on the Group's business, financial condition and results of operations.

### **Present or future debt levels could limit the Group's flexibility to obtain additional financing and pursue other business opportunities**

The Group may incur additional indebtedness in the future. The current or future level of debt could have important consequences to the Group, including that:

- the Group's ability to obtain additional financing for working capital, capital expenditures, acquisitions or other purposes may be impaired or such financing may be unavailable on favorable terms;
- the Group's costs of borrowing could increase as it becomes more leveraged;
- the Group may need to use a substantial portion of its cash from operations to make principal and interest payments on its debt, reducing the funds that would otherwise be available for operations, future business opportunities and dividends to its shareholders;
- the Group's debt level could make it more vulnerable than its competitors with less debt to competitive pressures, a downturn in its business or the economy generally; and
- the Group's debt level may limit its flexibility in responding to changing business and economic conditions.

The Group's ability to service its current or future debt will depend upon, among other things, its future financial and operating performance, which will be affected by prevailing economic conditions as well as financial, business, regulatory and other factors, some of which are beyond its control. If the Group's operating income is not sufficient to service its current or future indebtedness, the Group will be forced to take action such as reducing or delaying its business activities, acquisitions, investments or capital expenditures, selling assets, restructuring or refinancing its debt or seeking additional equity capital. The Group may not be able to affect any of these remedies on satisfactory terms, or at all, which could have a material adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

### **Interest rate fluctuations could in the future materially and adversely affect the Group's business, financial condition, results of operations, cash flows, time to market and prospects**

Currently, the Group has no long-term debt other than its debt to Tekes. The debt to Tekes carry an annual interest equal to the European Central Bank's steering rate less 3 percentage points, but in no event less than 1%. The current interest is 1% per annum. The Group may in the future be exposed to interest rate risk primarily in relation to any future interest bearing debt issued at floating interest rates and to variations in interest rates of bank deposits. Consequently, movements in interest rates could have a material and adverse effect on the Group's business, financial condition, results of operations, cash flows, time to market and prospects.

### **Fluctuations in exchange rates could affect the Group's cash flow and financial condition**

The Group has currency exposure to both transaction risk and translation risk related to its operating expenses. Transaction risk arises when future commercial transactions or recognized assets or liabilities are denominated in a currency that is not the entity's functional currency. The Group undertakes various transactions in foreign currencies and is consequently exposed to fluctuations in exchange rates. The exposure arises largely from research expenses. The Group is mainly exposed to fluctuations in EUR, GBP, USD and CHF.

Translation risk arises due to the conversion of amounts denominated in foreign currencies to NOK, the Group's reporting and functional currency. One of the Group's subsidiaries has EUR as its reporting and functional currency, while another has CHF. Consequently, any change in exchange rates between its operating subsidiary's functional currency and NOK affect its consolidated statement of profit or loss and other comprehensive income and statement of financial position when the result of that operating subsidiary is translated into NOK for reporting purposes.

## **2.4 Risks related to the Listing and the Shares**

### **The market value of the Shares may fluctuate significantly, which could cause investors to lose a significant part of their investment**

An investment in the Shares may decrease in market value as well as increase. The market value of the Shares could fluctuate significantly in response to a number of factors beyond the Company's control, including quarterly variations in operating results, adverse business developments, changes in financial estimates and investment recommendations or ratings by securities analysts, announcements by the Company or its competitors of new product and service



offerings, significant contracts, acquisitions or strategic relationships, publicity about the Company, its products and services or its competitors, lawsuits against the Group, unforeseen liabilities, changes in management, changes to the regulatory environment in which it operates or general market conditions.

**The Company's ability to pay dividends is dependent on the availability of distributable reserves and the Company may be unwilling to pay any dividends in the future regardless of availability of distributable reserves**

Norwegian law provides that any declaration of dividends must be adopted by the shareholders at the Company's general meeting of shareholders (the "**General Meeting**") or by the Board of Directors pursuant to a power of attorney granted by the General Meeting. Dividends may only be declared to the extent that the Company has distributable funds and the Board of Directors finds such a declaration to be prudent in consideration of the size, nature, scope and risks associated with the Company's operations and the need to strengthen its liquidity and financial position. As the Company's ability to pay dividends is dependent on the availability of distributable reserves, it is, among other things, dependent upon receipt of dividends and other distributions of value from its subsidiaries and companies in which the Company may invest.

When the decision to declare dividend is made by the General Meeting, the General Meeting may as a general rule not declare higher dividends than the Board of Directors has proposed or approved. If, for any reason, the General Meeting does not declare dividends in accordance with the proposal by the Board of Directors, a shareholder will, as a general rule, have no claim in respect of such non-payment, and the Company will, as a general rule, have no obligation to pay any dividend in respect of the relevant period.

The Group is focusing on the development of pharmaceutical products and does not anticipate paying any cash dividend until sustainable profitability is achieved. In addition, the Company may choose not, or may be unable, to pay dividends in future years. The amount of dividends paid by the Company, if any, for a given financial period, will depend on, among other things, the Company's future operating results, cash flows, financial position, capital requirements, the sufficiency of its distributable reserves, the ability of the Company's subsidiaries to pay dividends to the Company, credit terms, general economic conditions, legal restrictions (as set out in Section 5.2 "Legal constraints on the distribution of dividends") and other factors that the Company may deem to be significant from time to time.

**Future sales, or the possibility for future sales of substantial numbers of Shares may affect the Shares' market price**

The market price of the Shares could decline as a result of sales of a large number of Shares in the market after the Listing or the perception that these sales could occur. These sales, or the possibility that these sales may occur, also might make it more difficult for the Company to sell equity securities in the future at a time and at a price that it deems appropriate.

The Company cannot predict what effect, if any, future sales of the Shares, or the availability of Shares for future sales, will have on their market price. Sales of substantial amounts of the Shares in the public market following the Listing, or the perception that such sales could occur, may adversely affect the market price of the Shares, making it more difficult for holders to sell their Shares or the Company to sell equity securities in the future at a time and price that they deem appropriate.

**Future issuances of Shares or other securities may dilute the holdings of shareholders and could materially affect the price of the Shares**

The Company may in the future decide to offer additional Shares or other securities in order to finance new capital-intensive projects, in connection with unanticipated liabilities or expenses or for any other purposes and to honor options or RSUs granted under the Group's share option and RSU programs. There is no assurance that the Company will not decide to conduct further offerings of securities in the future. Depending on the structure of any future offering, certain existing shareholders may not have the ability to purchase additional equity securities. If the Company raises additional funds by issuing additional equity securities, the holdings and voting interests of existing shareholders could be diluted.

**Pre-emptive rights to secure and pay for Shares in any additional issuance may be unavailable to U.S. or other shareholders**

Under Norwegian law, unless otherwise resolved at a General Meeting, existing shareholders have pre-emptive rights to participate on the basis of their existing ownership of Shares in the issuance of any new shares for cash consideration. Shareholders in the United States, however, may be unable to exercise any such rights to subscribe for

new shares unless a registration statement under the U.S. Securities Act is in effect in respect of such rights and shares or pursuant to an exemption from, or in transactions not subject to, the registration requirements of the U.S. Securities Act and other applicable securities laws. Shareholders in other jurisdictions outside Norway may be similarly affected if the rights and the new shares being offered have not been registered with, or approved by, the relevant authorities in such jurisdiction. The Company is under no obligation to file a registration statement under the U.S. Securities Act or seek similar approval under the laws of any other jurisdiction outside Norway, and doing so in the future may be impractical and costly. To the extent that the Company's shareholders are not able to exercise their rights to subscribe for new shares, their proportional interests in the Company will be reduced.

#### **Investors may be unable to exercise their voting rights for Shares registered in a nominee account**

Beneficial owners of the Shares that are registered in a nominee account (such as through brokers, dealers or other third parties) may not be able to vote for such Shares unless their ownership is re-registered in their names with the VPS prior to any General Meeting. There is no assurance that beneficial owners of the Shares will receive the notice of any General Meeting in time to instruct their nominees to either effect a re-registration of their Shares or otherwise vote for their Shares in the manner desired by such beneficial owners.

#### **Investors may be unable to recover losses in civil proceedings in jurisdictions other than Norway**

The Company is a public limited company organized under the laws of Norway. All of the Board Members and the members of the Management reside in Norway, except from Per Samuelsson (Board Member), who resides in Sweden, Johan Christenson (Board Member), who resides in Sweden, Robert Burns (Board Member), who resides in the UK, Eva-Lotta Coulter (Board Member), who resides in the UK, Diane Mellett (Board Member), who resides in France, Magnus Jaderberg (CMO), who resides in the UK, and Tiina Hakonen (site manager Helsinki), who resides in Finland. As a result, it may not be possible for investors to effect service of process in other jurisdictions upon such persons or the Company, to enforce against such persons or the Company judgments obtained in non-Norwegian courts, or to enforce judgments on such persons or the Company in other jurisdictions.

#### **Norwegian law may limit shareholders' ability to bring an action against the Company**

The rights of holders of the Shares are governed by Norwegian law and by the Articles of Association. These rights may differ from the rights of shareholders in other jurisdictions. In particular, Norwegian law limits the circumstances under which shareholders of Norwegian companies may bring derivative actions. For instance, under Norwegian law, any action brought by the Company in respect of wrongful acts committed against the Company will be prioritized over actions brought by shareholders claiming compensation in respect of such acts. In addition, it may be difficult to prevail in a claim against the Company under, or to enforce liabilities predicated upon, securities laws in other jurisdictions.

#### **The transfer of Shares is subject to restrictions under the securities laws of the United States and other jurisdictions**

The Shares have not been registered under the U.S. Securities Act or any U.S. state securities laws or any other jurisdiction outside of Norway and are not expected to be registered in the future. As such, the Shares may not be offered or sold except pursuant to an exemption from, or in transactions not subject to, the registration requirements of the U.S. Securities Act and other applicable securities laws. In addition, there is no assurance that shareholders residing or domiciled in the United States will be able to participate in future capital increases or rights offerings.

#### **Exchange rate fluctuations could adversely affect the value of the Shares and any dividends paid on the Shares for an investor whose principal currency is not NOK**

The Shares will be priced and traded in NOK on Oslo Stock Exchange, and any future payments of dividends on the Shares will be denominated in NOK. Investors registered in the VPS who have not supplied the VPS with details of their bank account, will not receive payment of dividends unless they register their bank account details with Nordea Bank Norge ASA ("**Nordea**"), being the Company's VPS registrar. The exchange rate(s) that is applied when denominating any future payments of dividends to the relevant investor's currency will be Nordea's exchange rate on the payment date. Exchange rate movements of NOK will therefore affect the value of these dividends and distributions for investors whose principal currency is not NOK. Further, the market value of the Shares as expressed in foreign currencies will fluctuate in part as a result of foreign exchange fluctuations. This could affect the value of the Shares and of any dividends paid on the Shares for an investor whose principal currency is not NOK.

### 3 RESPONSIBILITY FOR THE PROSPECTUS

This Prospectus has been prepared in connection with the Listing of the Shares on Oslo Stock Exchange.

The Board of Directors of Targovax ASA accepts responsibility for the information contained in this Prospectus. The members of the Board of Directors confirm that, having taken all reasonable care to ensure that such is the case, the information contained in the Prospectus is, to the best of their knowledge, in accordance with the facts and contains no omission likely to affect its import.

22 March 2017

#### The Board of Directors of Targovax ASA

Jonas Einarsson  
*Chairperson*

Bente-Lill Bjerkelund Romøren  
*Board member*

Lars Lund-Roland  
*Board member*

Per Samuelsson  
*Board member*

Robert Burns  
*Board member*

Johan Christenson  
*Board member*

Eva-Lotta Coulter  
*Board member*

Diane Mellett  
*Board member*

## **4 GENERAL INFORMATION**

### **4.1 Other important investor information**

The Company has furnished the information in this Prospectus. None of the Company or any of the affiliates, representatives or advisors of any of the Company or the Group, is making any representation to any offeree or purchaser of Shares regarding the legality of an investment in the Shares. Each investor should consult with his or her own advisors as to the legal, tax, business, financial and related aspects of a purchase of the Shares.

**Investing in the Shares involves a high degree of risk. See Section 2 "Risk Factors" beginning on page 12.**

### **4.2 Presentation of financial and other information**

#### *4.2.1 Financial information*

The Group's audited consolidated financial statements as of and for the years ended 31 December 2016 and 2015, have been prepared in accordance with International Financial Reporting Standards as adopted by the European Union ("**IFRS**") (the "**Financial Statements**"). The Financial Statements are included by reference to this Prospectus.

#### *4.2.2 Industry and market data*

This Prospectus contains statistics, data, statements and other information relating to markets, market sizes, market shares, market positions and other industry data pertaining to the Group's future business and the industries and markets in which it may operate in the future. Unless otherwise indicated, such information reflects the Company's estimates based on analysis of multiple sources, including data compiled by professional organizations, consultants and analysts and information otherwise obtained from other third party sources, such as annual financial statements and other presentations published by listed companies operating within the same industry as the Company may do in the future. Unless otherwise indicated in the Prospectus, the basis for any statements regarding the Company's competitive position in the future is based on the Company's own assessment and knowledge of the potential market in which it may operate.

The Company confirms that where information has been sourced from a third party, such information has been accurately reproduced and that as far as the Company is aware and is able to ascertain from information published by that third party, no facts have been omitted that would render the reproduced information inaccurate or misleading. Where information sourced from third parties has been presented, the source of such information has been identified. The Company does not intend, and does not assume any obligations to update industry or market data set forth in this Prospectus.

Industry publications or reports generally state that the information they contain has been obtained from sources believed to be reliable, but the accuracy and completeness of such information is not guaranteed. The Company has not independently verified and cannot give any assurances as to the accuracy of market data contained in this Prospectus that was extracted from these industry publications or reports and reproduced herein. Market data and statistics are inherently predictive and subject to uncertainty and not necessarily reflective of actual market conditions. Such statistics are based on market research, which itself is based on sampling and subjective judgments by both the researchers and the respondents, including judgments about what types of products and transactions should be included in the relevant market.

As a result, prospective investors should be aware that statistics, data, statements and other information relating to markets, market sizes, market shares, market positions and other industry data in this Prospectus (and projections, assumptions and estimates based on such information) may not be reliable indicators of the Company's future performance and the future performance of the industry in which it operates. Such indicators are necessarily subject to a high degree of uncertainty and risk due to the limitations described above and to a variety of other factors, including those described in Section 2 "Risk Factors" and elsewhere in this Prospectus.

#### *4.2.3 Other information*

In this Prospectus, all references to "**NOK**" are to the lawful currency of Norway, all references to "**EUR**" are to the lawful common currency of the EU member states who have adopted the Euro as their sole national currency, all references to "**USD**" or "**U.S. Dollar**" are to the lawful currency of the United States and all references to "**CHF**" are to the lawful currency of Switzerland. No representation is made that the NOK, EUR, USD or CHF amounts referred to herein could have been or could be converted into NOK, EUR, USD or CHF, as the case may be, at any particular rate, or at all. The Financial Statements are published in NOK.

#### 4.2.4 Rounding

Certain figures included in this Prospectus have been subject to rounding adjustments (by rounding to the nearest whole number or decimal or fraction, as the case may be). Accordingly, figures shown for the same category presented in different tables may vary slightly. As a result of rounding adjustments, the figures presented may not add up to the total amount presented.

#### 4.3 Cautionary note regarding forward-looking statements

This Prospectus includes forward-looking statements that reflect the Company's current views with respect to future events and financial and operational performance. These forward-looking statements may be identified by the use of forward-looking terminology, such as the terms "anticipates", "assumes", "believes", "can", "could", "estimates", "expects", "forecasts", "intends", "may", "might", "plans", "should", "projects", "will", "would" or, in each case, their negative, or other variations or comparable terminology. These forward-looking statements as a general matter are all statements other than statements as to historic facts or present facts and circumstances. They appear in the following Sections in this Prospectus, Section 6 "Industry and Market Overview", Section 7 "Business of the Group" and Section 9 "Selected Financial and Other Information", and include statements regarding the Company's intentions, beliefs or current expectations concerning, among other things, financial strength and position of the Group, operating results, liquidity, prospects, growth, the implementation of strategic initiatives, as well as other statements relating to the Group's future business development and financial performance, and the industry in which the Group operates.

Prospective investors in the Shares are cautioned that forward-looking statements are not guarantees of future performance and that the Group's actual financial position, operating results and liquidity, and the development of the industry and potential market in which the Group may operate in the future, may differ materially from those made in, or suggested by, the forward-looking statements contained in this Prospectus. The Company cannot guarantee that the intentions, beliefs or current expectations upon which its forward-looking statements are based will occur.

By their nature, forward-looking statements involve, and are subject to, known and unknown risks, uncertainties and assumptions as they relate to events and depend on circumstances that may or may not occur in the future. Because of these known and unknown risks, uncertainties and assumptions, the outcome may differ materially from those set out in the forward-looking statements. Important factors that could cause those differences include, but are not limited to:

- implementation of its strategy and its ability to further grow;
- the development and regulatory approval of the Group's products;
- the Group's ongoing clinical trials and expected trial results;
- technology changes, new products and services introduced into the Group's potential market;
- ability to develop additional products and enhance existing products;
- the competitive nature of the business the Group may operate in and the competitive pressure and changes to the competitive environment in general;
- earnings, cash flow and other expected financial results and conditions;
- fluctuations of exchange and interest rates;
- changes in general economic and industry conditions, including competition and pricing environments;
- political and governmental and social changes;
- changes in the legal and regulatory environment;
- environmental liabilities;
- access to funding; and
- legal proceedings.

The risks that are currently known to the Company and which could affect the Group's future results and could cause results to differ materially from those expressed in the forward-looking statements are discussed in Section 2 "Risk Factors".

The information contained in this Prospectus, including the information set out under Section 2 "Risk Factors", identifies additional factors that could affect the Company's financial position, operating results, liquidity and performance. Prospective investors in the Shares are urged to read all Sections of this Prospectus and, in particular, Section 2 "Risk Factors" for a more complete discussion of the factors that could affect the Group's future performance and the industry in which the Group operates when considering an investment in the Company.

These forward-looking statements speak only as at the date on which they are made. The Company undertakes no obligation to publicly update or publicly revise any forward-looking statement, whether as a result of new information, future events or otherwise. All subsequent written and oral forward-looking statements attributable to the Company or to persons acting on the Company's behalf are expressly qualified in their entirety by the cautionary statements referred to above and contained elsewhere in this Prospectus.

## **5 DIVIDENDS AND DIVIDEND POLICY**

### **5.1 Dividend policy**

The Company has not paid any dividends for the years ended 31 December 2016 and 2015 or previous years. The Group is focusing on the development of pharmaceutical products and does not anticipate paying any cash dividend until sustainable profitability is achieved.

### **5.2 Legal constraints on the distribution of dividends**

Dividends may be paid in cash, or in some instances, in kind. The Norwegian Public Limited Companies Act of 13 June 1997 no. 45 (the "**Norwegian Public Limited Companies Act**") provides the following constraints on the distribution of dividends applicable to the Company:

- Section 8-1 of the Norwegian Public Limited Companies Act provides that the Company may distribute dividends to the extent that the Company's net assets, following the distribution covers (i) the share capital, (ii) the reserve for valuation variances and (iii) the reserve for unrealized gains. The amount of any receivable held by the Company which is secured by a pledge over Shares in the Company, as well as the aggregate amount of credit and security which, pursuant to Section 8-7 to 8-10 of the Norwegian Public Limited Companies Act fall within the limits of distributable equity, shall be deducted from the distributable amount.

The calculation of the distributable equity shall be made on the basis of the balance sheet included in the approved annual accounts for the last financial year, provided, however, that the registered share capital as of the date of the resolution to distribute dividends shall be applied. Following the approval of the annual accounts for the last financial year, the General Meeting may also authorize the Board of Directors to declare dividends on the basis of the Company's audited annual accounts. Dividends may also be resolved by the General Meeting based on an interim balance sheet which has been prepared and audited in accordance with the provisions applying to the annual accounts and with a balance sheet date not further into the past than six months before the date of the General Meeting's resolution.

- Dividends can only be distributed to the extent that the Company's equity and liquidity following the distribution is considered sound by the Board of Directors, acting prudently.

In deciding whether to propose a dividend and in determining the dividend amount, the Board of Directors will take into account legal restrictions, as set out in the Norwegian Public Limited Companies Act, the Company's capital requirements, including capital expenditure requirements, its financial condition, general business conditions and any restrictions that its contractual arrangements in place at the time of the dividend may place on its ability to pay dividends and the maintaining of appropriate financial flexibility. Except in certain specific and limited circumstances set out in the Norwegian Public Limited Companies Act, the amount of dividends paid may not exceed the amount recommended by the Board of Directors.

The Norwegian Public Limited Companies Act does not provide for any time limit after which entitlement to dividends lapses. Subject to various exceptions, Norwegian law provides a limitation period of three years from the date on which an obligation is due. There are no dividend restrictions or specific procedures for non-Norwegian resident shareholders to claim dividends. For a description of withholding tax on dividends applicable to non-Norwegian residents, see Section 13 "Taxation".

### **5.3 Manner of dividend payment**

Any future payments of dividends on the Shares will be made in the currency of the bank account of the relevant shareholder, and will be paid to the shareholders through the VPS. Shareholders registered in the VPS who have not supplied the VPS with details of their bank account, will not receive payment of dividends unless they register their bank account details with the VPS registrar (Nordea). The exchange rate(s) that is applied when denominating any future payments of dividends to the relevant shareholder's currency will be Nordea's exchange rate on the payment date. Dividends will be credited automatically to the VPS registered shareholders' accounts, or in lieu of such registered account, at the time when the shareholder has provided Nordea with their bank account details, without the need for shareholders to present documentation proving their ownership of the Shares. Shareholders' right to payment of dividend will lapse three years following the resolved payment date for those shareholders who have not registered their bank account details with Nordea within such date. Following the expiry of such date, the remaining, not distributed dividend will be returned from Nordea to the Company.

## 6 INDUSTRY AND MARKET OVERVIEW

### 6.1 The pharmaceutical industry

#### 6.1.1 International trends

The global market for prescription drug sales has demonstrated a compound annual growth rate ("CAGR") of some 3.5% between 2005 and 2015, and is expected to grow by a robust 6.3% per year (CAGR) to reach USD 1,121 billion by 2022 (EvaluatePharma, 2016).

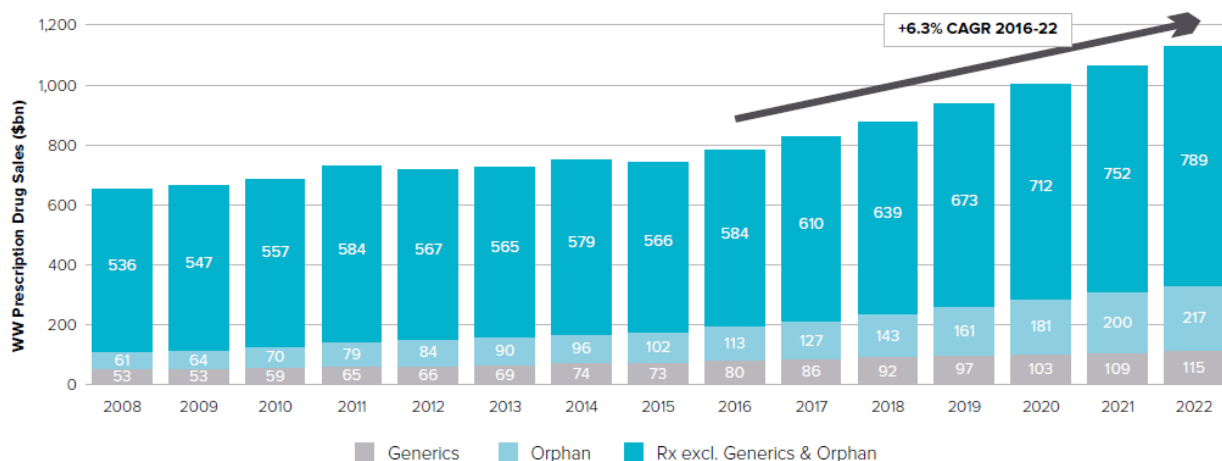


Figure 1 Worldwide total prescription<sup>3</sup>

The U.S. was the largest market for prescription drug sales in 2015, amounting to USD 250.0 billion or 33.7% of total worldwide prescription drug sales, followed by Europe with USD 110.7 billion or 14.9%. The combination of increasingly vocal politicians railing against US drug pricing, a weak global recovery, uncertainties regarding Brexit, and the outcome of the US presidential race have all coalesced to create uncertainty for investors. However, in the long run the outlook is more nuanced according to EvaluatePharma, forecasting an annual CAGR of 6.3%<sup>4</sup>.

The demographic shift towards a larger elderly population as well as a longer life expectancy increases the market for prescription drugs. The graph below summarizes the development in the population (i) older than 60 years, (ii) older than 65 years and (iii) older than 85 years, measured as a percentage of the total population. According to the U.S. Department of Health and Human Services; Administration for Community Living the percentage of the population older than 60 years is projected to be 26% in 2050, compared to 18% in 2010. As the world population grows, the number of patients with chronic diseases rises, and new and/or other diseases are becoming more abundant. Also, the middle class is growing fast in certain parts of the world, and the social focus on healthcare is increasing. These factors are assumed to increase the demand for healthcare in the future.

<sup>3</sup> EvaluatePharma, World Preview 2016, Outlook to 2022 <http://info.evaluategroup.com/rs/607-YGS-364/images/wp16.pdf> accessed 3 March 2017.

<sup>4</sup> EvaluatePharma, World Preview 2016, Outlook to 2022 <http://info.evaluategroup.com/rs/607-YGS-364/images/wp16.pdf> accessed 3 March 2017.



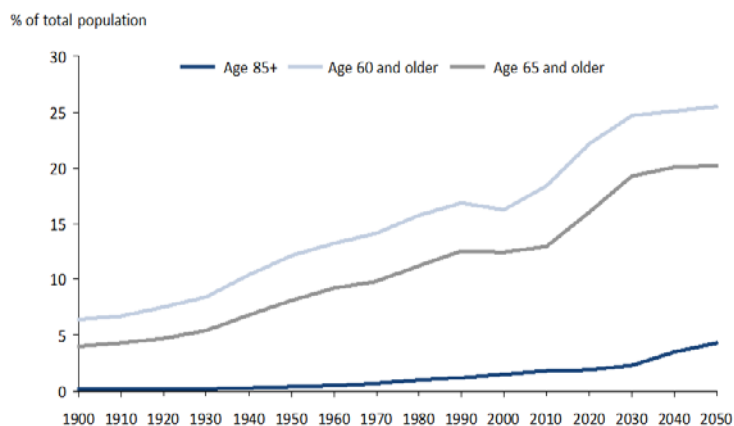


Figure 2 Development in population age<sup>5</sup>

Even if several key factors are indicating potential for high growth in the industry, there are also headwinds currently impacting the market. Among the most important ones are governmental interference with current market conditions. Governments and health authorities are increasingly discussing pricing power of pharmaceutical companies and fear of stricter pricing controls and regulations are looming. The holistic picture is however more complex, as a balance must be found between controlling healthcare costs on one hand while incentivizing pharmaceutical companies to develop new and innovative treatments for diseases with high unmet medical needs on the other.

Drug regulatory authorities are looking to maintain high standards for the drugs that receive market authorization, while accelerating approval and attempting to limit time to market for new and efficacious treatments. History provides a number of examples of drugs that have passed governmental criteria, but later were taken off the market due to severe side-effects. Well known examples are Bextra<sup>®</sup> and Vioxx<sup>®</sup> which were withdrawn from the marketplace after fatalities attributed to the products were reported.

## 6.2 The cancer market

### 6.2.1 General

World-wide spending on cancer drugs reached USD 107 billion in 2015 including therapeutic treatments and supportive care based on ex-manufacturer prices. The global CAGR from 2009 to 2014 was 6.5% on a constant exchange rate basis<sup>6</sup>. The same market grew with a CAGR of 14.2% from 2003 to 2008, which indicates a severe slowdown that can partly be explained by fewer major breakthroughs.<sup>7</sup> However, with many new drug candidates in the pipeline, there was increased activity in the equity capital market during 2014 and 2015, with numerous companies applying for listing in the US and Europe.

The market growth going forward is expected to be in the range of 7.5 to 10.5% through 2020, significantly higher than the pharmaceutical market in general. The growth is expected to be driven by innovation and utilization of new products partially offset by reduced use of some existing treatments with inferior clinical outcomes.<sup>8</sup>

### 6.2.2 Cancer epidemiology

The World Health Organization's Globocan report estimates that cancer accounted for 8.2 million deaths in 2012, which makes it the world's most deadly group of diseases. In 2012, 32.6 million individuals lived with a 5-year cancer diagnosis, while 14.1 million new cases of cancer were reported.<sup>9</sup> The overview below summarizes the estimated cancer incidence and mortality worldwide for men and women, respectively. Today, cancer accounts for about one in

<sup>5</sup> The U.S. Department of Health and Human Services; Administration for Community Living, [https://aoa.acl.gov/Aging\\_Statistics/future\\_growth/future\\_growth.aspx](https://aoa.acl.gov/Aging_Statistics/future_growth/future_growth.aspx) accessed 3 March 2017

<sup>6</sup> [http://www.imshealth.com/en/thought-leadership/quintilesims-institute/reports/ims-health-finds-global-cancer-drug-spending-crossed-\\$100-billion-threshold-in-2014-article](http://www.imshealth.com/en/thought-leadership/quintilesims-institute/reports/ims-health-finds-global-cancer-drug-spending-crossed-$100-billion-threshold-in-2014-article) (accessed 3 March 2017)

<sup>7</sup> Innovation in Cancer Care and Implications for Health Systems: Global Oncology Trend Report, IMS Institute for Healthcare Informatics, 2014 [http://obroncology.com/imshealth/content/IMSH\\_Oncology\\_Trend\\_Report\\_020514F4\\_screen.pdf](http://obroncology.com/imshealth/content/IMSH_Oncology_Trend_Report_020514F4_screen.pdf) (accessed 3 March 2017)

<sup>8</sup> <http://www.imshealth.com/en/about-us/news/ims-health-study-global-market-for-cancer-treatments-grows-to-107-billion-in-2015-fueled-by-record-level-of-innovation> (accessed 3 March 2017)

<sup>9</sup> World Health Organization Globocan 2012, <http://globocan.iarc.fr/Default.aspx> (accessed 3 March 2017)

every seven deaths worldwide. By 2030 the American Cancer Society expects the number of new incidents of cancer to be 21.7 million per year, and the number of deaths by cancer to increase to 13.0 million.<sup>10</sup>

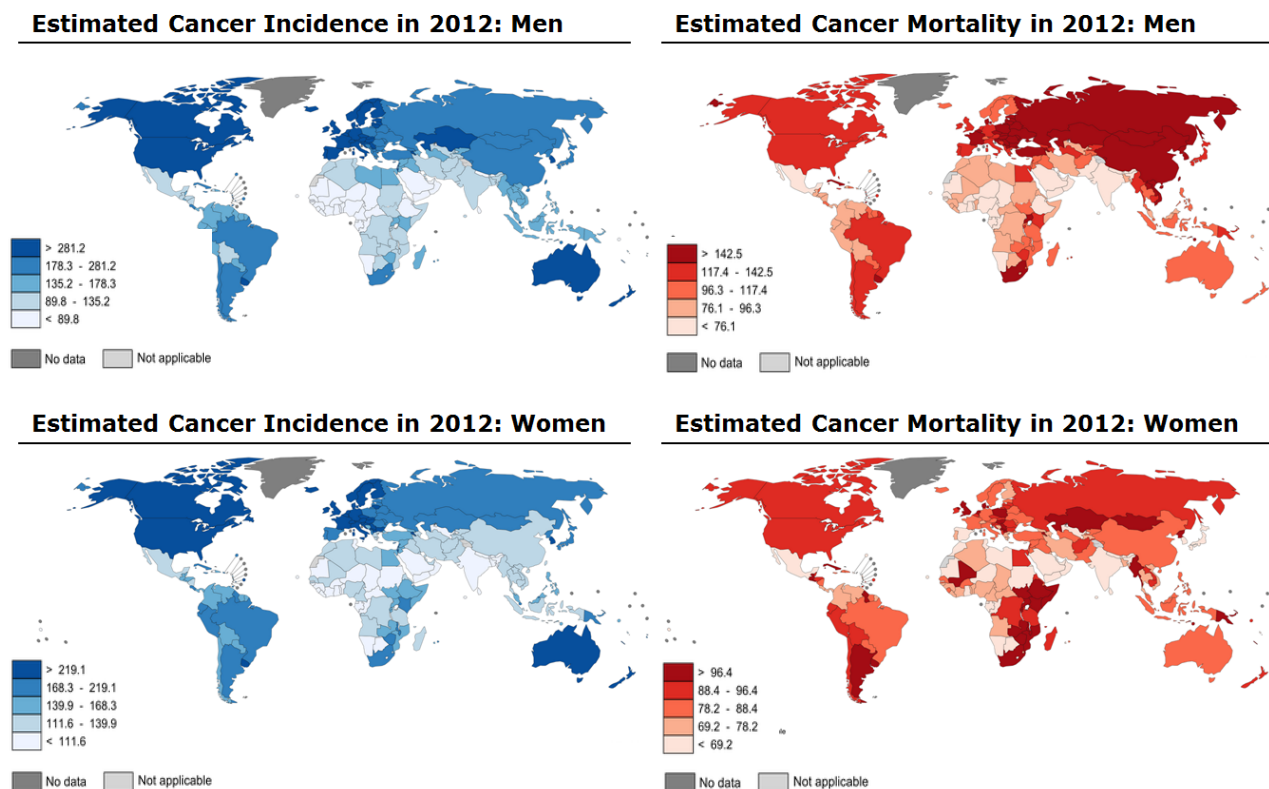


Figure 3 Cancer incidents and mortality (Source: World Health Organization Globocan 2012 <http://globocan.iarc.fr/Default.aspx> (accessed 3 March 2017))

### 6.2.3 Traditional cancer treatments

The cancer therapy (oncology) market is highly diversified, and the optimal cancer treatment should be individualized, depending on the type, stage and differentiation of the cancer, as well as the patient's overall physical condition and age. A patient's treatment plan may consist of one or many different treatment modalities, depending on the situation. For some cancer patients the treatment is of a curative intent, while for others, the intent is to relieve suffering and to increase quality of life (palliative care). Traditionally, surgery, chemotherapy, radiation therapy and hormone therapy are among the most common treatments. However, new and innovative approaches like targeted therapies and immunotherapy are increasingly being utilized for the treatment of cancer.

#### Surgery

Surgery is used both to diagnose and to treat cancer. During surgery it is possible to remove entire or parts of cancer tissue to test it to clarify the stage of cancer, and evaluate what measures can be taken in order to treat the patient. Surgery can in some cases cure the patient from cancer, given that the cancer has not spread to vital parts of the body prior to surgery being performed or that the cancer can be resected in its entirety.<sup>11</sup>

#### Chemotherapy

Chemotherapy is a cancer treatment that involves the use of cytotoxic drugs, and is often used as an adjuvant treatment given in addition to surgery or radiation therapy in order to kill any remaining cancer cells or control the tumor. This type of treatment may consist of one drug or a combination of drugs, administered either intravenously or orally. Patients may experience severe side-effects from some types of chemotherapy that significantly affect their quality of life and/or prevent the therapy to continue. The main reason why patients suffer from side-effects is that

<sup>10</sup> Cancer Facts & Figures 2014, American Cancer Society, 2014, <https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2014.html> (accessed 3 March 2017)

<sup>11</sup> <http://www.cancer.org/treatment/treatmentsandsideeffects/treatmenttypes/surgery/surgery-treatment-toc> (accessed 13 January 2015)

chemotherapy drugs indiscriminately target both normal, healthy cells as well as cancer cells.<sup>12</sup> Fortunately, targeted therapies that more specifically target oncogenic molecules and hence have milder side effects are more commonly used these days, while chemotherapy may be used to control the cancer by slowing down its growth in cases where it is not possible to eliminate the cancer or reduce the risk of recurrence.<sup>13</sup>

### **Radiation therapy**

Radiation therapy is a cancer treatment that involves the use of different types of high-energy external beam radiation to irradiate and destroy cancer cells. Radiation therapy can be used as part of a treatment plan with other treatments such as surgery or chemotherapy or as monotherapy. It is a treatment that aims to target only the tumor tissue.<sup>14</sup> However, side effects often occur because the radiation can also damage surrounding healthy cells and tissue. Major improvements in technology have led to more precise radiation treatment resulting in fewer side effects.<sup>15</sup>

### **Hormone therapy**

Hormone therapy is a form of systemic therapy that works to add, block or remove hormones to stop or slow down the growth of cancer cells affected by fluctuating hormone levels. Some types of cancers, i.e. breast cancer and prostate cancer, are hormone sensitive or hormone dependent, and will therefore be susceptible to hormone therapy<sup>16</sup>.

## **6.3 Immunotherapy and the immunotherapy market**

Over the last few decades the understanding of the immune system's role in cancer has increased, and with it, the focus on immunotherapy. In contrast to the traditional cancer treatments, immunotherapy utilizes the body's own immune system to fight cancer.

The immune system is a natural defense system that recognizes danger signals such as foreign bodies, bacteria and cancer cells. Almost all human cells showcase on their surface samples of the proteins which they contain (in the form of protein fragments called peptides), that can be recognized by cells of the adaptive immune system, including so called T-cells. Normal cells display a range of normal peptides on their surface complexes that in the absence of disease do not trigger a reaction by T-cells. Cancer cells however, carry mutations in certain genes and thus exhibit mutated peptides on their surface. Those can be recognized by T-cells. This triggers activation of the T-cells which then attack and kill the cancer cell. However, sometimes mutations do not change the shape of the peptides drastically enough to be recognized in this way or the cells learn how to evade the immune system. Cancers with RAS mutations represent one such example. T-cells do not easily recognize these slightly abnormal RAS peptides and without additional interventions such T-cells do not readily recognize and kill the cancer cells. See section 7.5.2 for more on the immune system.

Cancer immunotherapies have the goal of eliciting an immune response to eliminate or slow the growth of tumor cells<sup>17</sup>. Cancer immunotherapy involves stimulating the immune system to work harder or smarter to attack tumor cells, and has become an important additional treatment option within cancer therapy. The immune system can be utilized in several ways, but the most common is to increase or "boost" the immune system and to stimulate it to recognize the cancer cells as foreign bodies that are to be removed. Immunotherapies are being developed in multiple forms, including checkpoint inhibitors, therapeutic vaccines, bispecific antibody-based approaches, small molecules and cell based therapies<sup>18</sup>.

Even though immunotherapy has been studied in relation to oncology for decades, only in the past decade has cancer immunotherapy shown unprecedented responses in patients with advanced-stage cancers. In 2010, the first ever personalized therapeutic vaccine was approved, followed by the first approval of a checkpoint inhibitor in 2011. These landmark events marked a major turning point in immunotherapy, starting a new era of oncology drug development. Interest in immunotherapy was rekindled and in 2013 Science magazine described cancer immunotherapy as "Breakthrough of the year". Newer immunotherapies are being developed to activate specific immune cells leading to improved targeting of cancer cells, efficiency and safety.

---

<sup>12</sup> <http://www.macmillan.org.uk/Cancerinformation/Cancertreatment/Treatmenttypes/Chemotherapy/Chemotherapy.aspx> (accessed 10 July 2015)

<sup>13</sup> <http://www.cancer.net/navigating-cancer-care/how-cancer-treated/chemotherapy/what-chemotherapy> (accessed 3 March 2017)

<sup>14</sup> <http://www.macmillan.org.uk/Cancerinformation/Cancertreatment/Treatmenttypes/Radiotherapy/Radiotherapy.aspx> (accessed 10 July 2015)

<sup>15</sup> <http://www.cancer.net/navigating-cancer-care/how-cancer-treated/radiation-therapy> (accessed 10 July 2015)

<sup>16</sup> <http://www.cancercenter.com/treatments/hormone-therapy/> (accessed 21 August 2015)

<sup>17</sup> Decision Resource Special Report – Cancer Immunotherapies May 2015, purchased and not publicly available

<sup>18</sup> Citi Research 2013 (<https://www.citivelocity.com/citigps/OpArticleDetailPrint.action?recordId=209> accessed 3 March 2017)

Immunotherapy is now an important additional treatment modality in the fight against many types of cancer<sup>19</sup> and represents one of the fastest growing and most promising biotech segments today. The percentage of immuno-oncology addressable cancers is expected to increase to at least 60% by 2023 due to combination strategies.

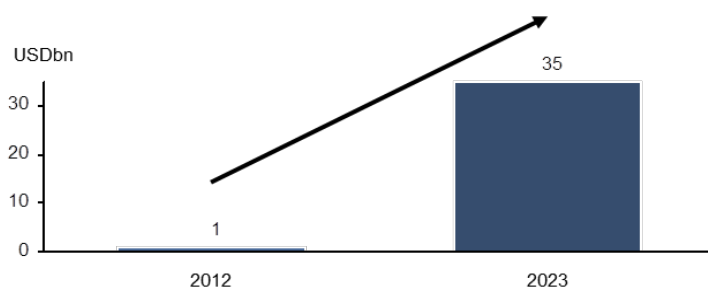


Figure 4 Global immuno-oncology market (Source: Citi Research, 2013  
<https://www.citivelocity.com/citigps/OpArticleDetailPrint.action?recordId=209> accessed 3 March 2017

According to a report by Citi Research, the immunotherapy market will experience considerable growth over the next years, increasing from USD 1.1 billion in 2012 to an estimated USD 35 billion in 2023, corresponding to 29% annual growth. According to a report by Decision Resources Group<sup>20</sup>, major-market share of cancer immunotherapies by geographical regions are expected to develop as shown in the figures below. Decision Resources Group believe the market will reach USD 13.3 billion in 2023. This is a lower number than Citi Research’s estimate, but altogether, significant growth is expected.

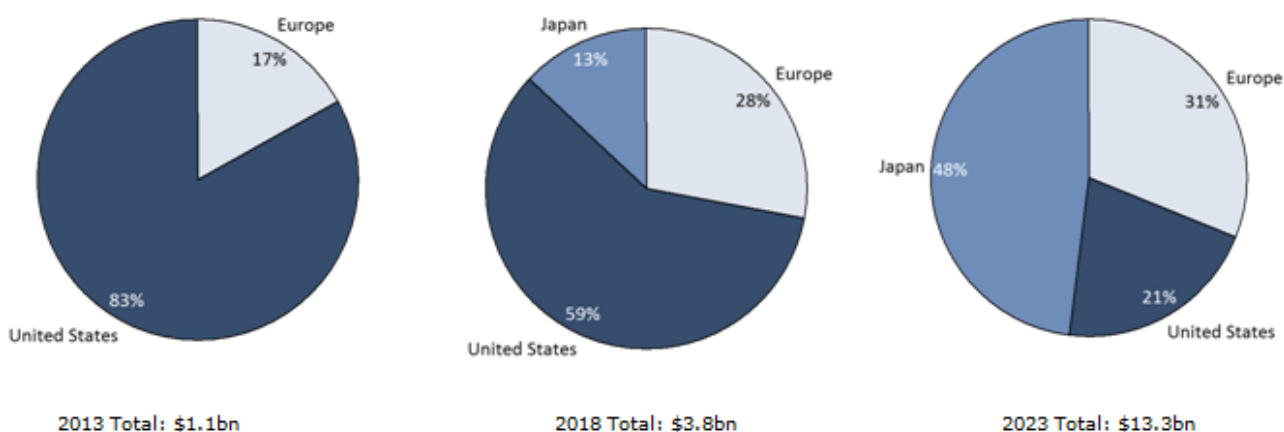


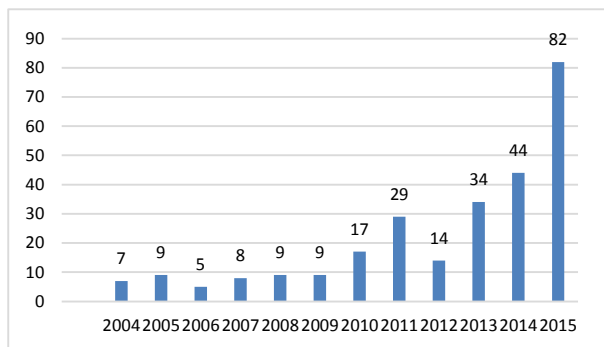
Figure 5 Development in major-market shares of cancer immunotherapies (Source: Decision Resources Special Report, 2015)

Also supporting the growing immunotherapy market is an increased number of immuno-oncology deals during the last decade. In 2004 there were 7 immuno-oncology deals compared to 82 deals in 2015. The figures below provide historical information on the development in number of deals as well as total deal value within the immuno-oncology sector.

<sup>19</sup> <http://www.cancer.org/treatment/treatmentsandsideeffects/treatmenttypes/immunotherapy/immunotherapy-what-is-immunotherapy> (Accessed: 9 February 2017)

<sup>20</sup> Decision Resource Special Report – Cancer Immunotherapies May 2015, projections based on seven major pharmaceutical markets; United States, France, Germany, Italy, Spain, United Kingdom, and Japan. Purchased and not publicly available

Number of immuno-oncology deals 2004 – 2015



Total deal value (USDm) 2004 – 2015

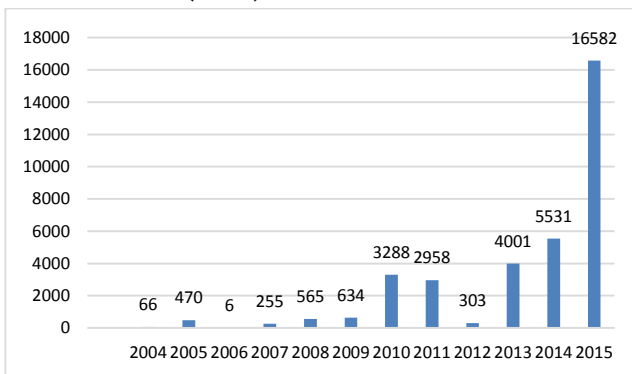
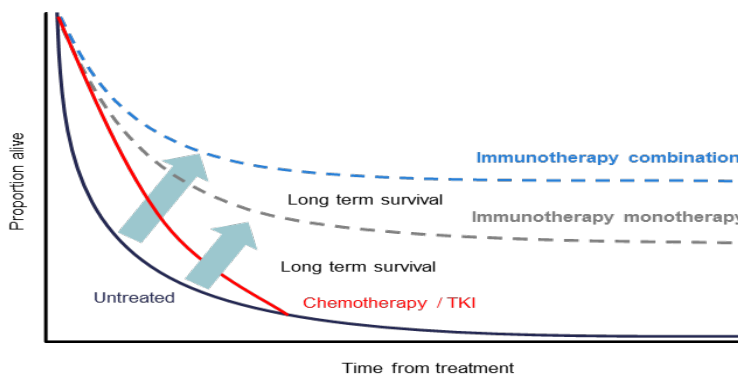


Figure 6 Historical development of deals within the immunotherapy sector (Source: GlobalData, 2015)

### 6.3.1 Immunotherapy – monotherapy

The approval of ipilimumab (Yervoy®), the first approved checkpoint inhibitor, created a revolution in immunotherapy and cancer treatment in general. As illustrated below, immuno-oncology therapies have the potential to shift the curve of long term survival of patients. Immunotherapy has the potential to increase long term survival, even more so if immunotherapeutic agents are used in combination.



Figures 7 Long term survival of cancer patients (Source: Citi Research 2013)

### Checkpoint inhibitors

The scientific turning point for immunotherapies came with the understanding that T-cell immune responses are controlled through on and off switches, so called immune checkpoints, which let the immune system attack foreign cells while preventing damage to healthy tissue. Immune checkpoint molecules are receptors on T-cells that need to be activated (or de-activated) to start an immune response. Some cancer cells can bind to these receptors on activated T-cells and turn them off. Immune checkpoint inhibitors ("CPIs") are drugs that can prevent cancer cells from turning off the T-cells by binding either to the receptors on the T-cells or on the tumor cells. This allows the T-cells to stay activated, continuing to attack tumor cells and infiltrate the tumor to stop it from growing.

There are several checkpoint molecules on T-cells and on cancer cells and hence a number of different CPIs in clinical use (e.g. Yervoy® (ipilimumab), an antibody to CTLA-4, and the more recently introduced Keytruda® (pembrolizumab) and Opdivo® (nivolumab) which are antibodies to PD-1, and Tecentriq® (atezolizumab) which is an antibody to PD-L1 and several others are in development.

However, not all patients do respond to CPIs and some cancer types are more likely to respond to checkpoint inhibitors than others. Several reports, including the Immunotherapies Report by Decision Resources highlight the future role of checkpoint inhibitors in combination with current cancer treatment regimens or other immunotherapies rather than as monotherapy.

### Therapeutic vaccines and oncolytic viruses

Therapeutic cancer vaccines are intended to treat existing cancer by strengthening the body's natural defense against cancer.<sup>21</sup> Therapeutic vaccines are meant to train the body's immune system to recognize and destroy cancer cells.

<sup>21</sup> Lollini PL, Cavallo F, Nanni P, Forni G. Vaccines for tumour prevention. Nature Reviews Cancer 2006; 6(3):204–216. Purchased and not publicly available

These vaccines are designed to be specific, meaning that they should target the tumor cells without affecting healthy cells. One such target is a family of proteins called RAS. RAS proteins are ubiquitously expressed in all cell lineages and play an important role in regulating cell growth and division. Mutation of RAS can cause sustained cell division and thus drive cancer development. According to a publication by Fernandez-Medarde et al (2011) RAS-mutations are early cancer markers present in up to 30% of all cancer types<sup>22</sup>.

Currently only one therapeutic cancer vaccine (Sipuleucel-T/Provenge; Sanpower Group) is approved for clinical use in the U.S.. There are many therapeutic cancer vaccines in development.

Within immunotherapy there are several different variations and approaches. Oncolytic viruses (OVs) are naturally or genetically modified viruses that selectively infect and kill cancer cells and spread within the tumor, while leaving normal tissue virtually unaffected. The virus can be injected directly into the tumor and subsequently kills the cancer cells through a process where the cell membrane is broken down (often referred to as "lysis"). When the cell membrane is broken down, unique tumor antigens are released and the immune system learns to recognize the unique cancer cells of each patient. As a result, the patient's immune cells (including T-cells) will start to find and kill other, similar cancer cells. In late October 2015, the oncolytic virus Imlygic (talimogene laherparepvec or T-vec) was the first ever oncolytic virus therapy approved by the FDA for use in the treatment of advanced melanoma, and the EMA followed closely by approving Imlygic for the same use in the EU. The market approval of Imlygic<sup>®</sup> is very important for Targovax's Oncos platform of oncolytic adenoviruses. As Imlygic<sup>®</sup> is the first oncolytic, genetically modified virus to be approved, this establishes regulatory and reimbursement pathways for oncolytic viruses, as well as demonstrates that an oncolytic virus can be a treatment modality accepted by the medical community. The approval of Amgen's Imlygic<sup>®</sup> has spurred great interest of other big pharmaceutical companies in oncolytic viruses as a product category.

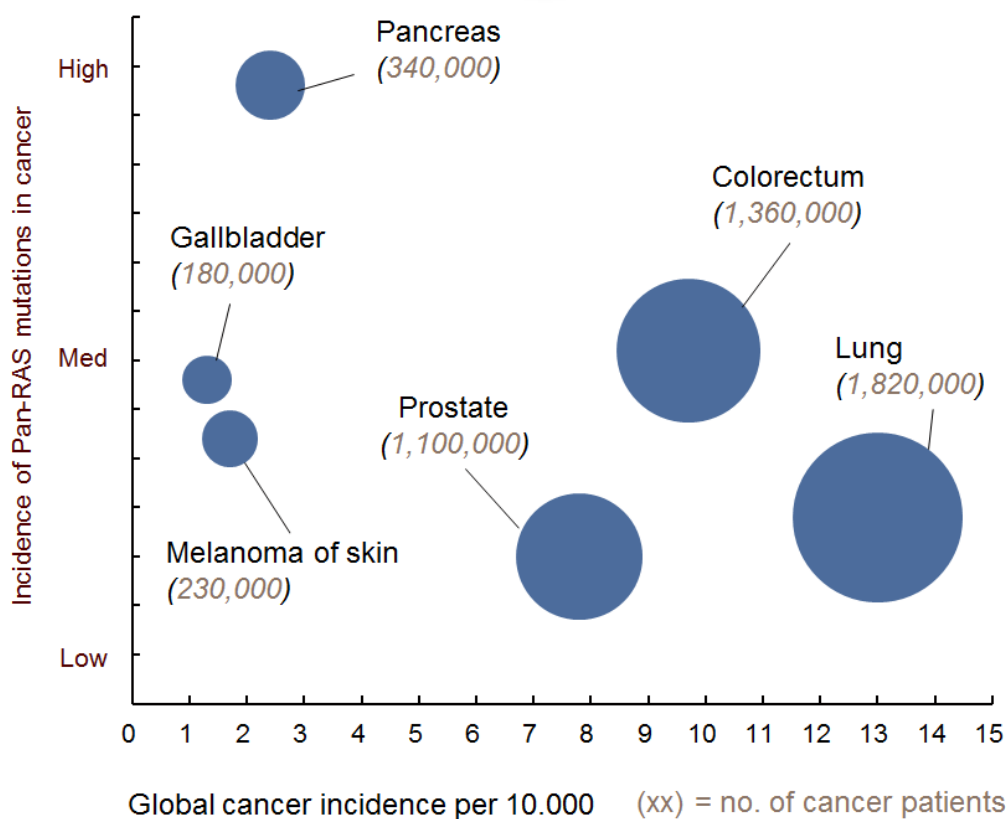


Figure 8 RAS mutations in cancer types<sup>23</sup>

One potential way to treat RAS positive cancers is considered to be the use of peptide-based cancer vaccine drug candidates that target RAS-mutations. These peptides are injected into the skin of the patient and subsequently the immune system learns to recognize the RAS-mutations and activates immune cells (including T-cells) to kill the cancer cells which display RAS-mutated peptides.

<sup>22</sup> «Ras in cancer and developmental diseases», Fernández-Medarde A. And Santos E. (2011); <http://www.ncbi.nlm.nih.gov/pubmed/21779504> (Accessed 9 February 2017)

<sup>23</sup> Source: Cancer Res, PS 2012, Nov 15, 2012

## 6.4 Drug development

### 6.4.1 Overview

The development of a pharmaceutical product is a risk-filled, time-consuming and expensive process, which, providing the drug is approved for marketing, has the potential for high returns on investment. On average, five out of 5,000 drugs make it through the preclinical phase, and historically only one out of these five is approved by the FDA for marketing. Moreover, only 2 of 10 marketed drugs return revenues that match or exceed R&D costs.<sup>24</sup> It takes on average 12 years to develop a drug.<sup>25</sup>

### 6.4.2 Phases

The process of developing a drug product candidate is divided into several phases, each used to describe the different aspects of the drug product candidate. The different phases are: the discovery phase, the preclinical development phase and the clinical phase. If a drug confirms to be effective throughout these phases and is approved by the regulatory authorities, it can be marketed and sold to the public.

The discovery phase is often a time-consuming and complicated process. It involves a lot of research time and effort as companies may often screen multiple therapeutic targets and several thousand potential drug candidates at this stage. Most of the potential drug candidates created in this phase do not make it into preclinical testing, but are discarded based on poor results. The drug candidates that do show promising results are tested more in depth in the next phase of the drug development. The first patent applications are normally also filed at this stage.<sup>26</sup>

In the preclinical development phase, drug candidates that have shown promising results in the discovery phase are tested further in living organisms. The focus during the preclinical phase is on documenting a drug candidate's safety, efficacy and toxicity in various cell lines (in-vitro) or animal models (in-vivo). Studying a drug's toxicity (side-effects) is a requirement and prerequisite that is imposed by the authorities in order to maximize patient safety during clinical trials. The preclinical phase also involves extensive testing of the dosing regimen and how the drug product candidate should be administered. If a drug satisfies the necessary requirements it can be tested in humans in what is referred to as the clinical phase.<sup>27</sup>

The clinical phase involves extensive testing of the drugs effect on humans, and is divided into three sub-phases.

#### Phase I

Phase I focuses on safety and pharmacology of a compound. During this stage, different doses of a compound are administered to a small group of healthy volunteers who are closely supervised. Phase I oncology studies are in the vast majority of cases conducted in actual cancer patients, and not healthy volunteers, and test the safety of the new drug/regimen. These studies usually start with low doses, which are gradually increased, while evaluating how the side-effects change. Data on how the drug is absorbed, distributed and metabolized are also collected. It is common to include approximately 20 to 100 individuals (normal subjects or patients) in this sub-phase of clinical development.<sup>28</sup> A Phase I/II trial is a trial having both Phase I objectives and early Phase II objectives.

#### Phase II

Phase II studies focus on more in-depth testing on how effective a drug product candidate is for a specific type of disease. Studies are based on a limited number of patients, but are large enough to provide sufficient statistical power to assess efficacy. Phase II oncology studies are conducted in patients who suffer from the condition the new drug is intended to treat and aim to test the efficacy of the new drug/regimen and to confirm the product safety profile. A wider population of as many as a couple of hundred volunteer patients participate in this part of the clinical development process.<sup>29</sup>

#### Phase III

If a drug product candidate successfully completes Phase II it can be evaluated in the Phase III setting which is usually one or several studies aimed at generating the data needed for licensing the medicine with regulatory agencies such

---

<sup>24</sup> Vernon JA, Golec JH, DiMasi JA. Drug development costs when financial risk is measured using the fama-french three-factor model. *Health Econ.* 2010;19(8):1002-1005. Purchased and not publicly available

<sup>25</sup> <http://www.medicinenet.com/script/main/art.asp?articlekey=9877> (accessed 9 February 2017)

<sup>26</sup> <http://www.fda.gov/ForPatients/Approvals/default.htm> (accessed 9 February 2017)

<sup>27</sup> <http://www.fda.gov/ForPatients/Approvals/Drugs/ucm405658.htm> (accessed 9 February 2017)

<sup>28</sup> <http://www.cancer.net/navigating-cancer-care/how-cancer-treated/clinical-trials/phases-clinical-trials> (accessed 9 February 2017)

<sup>29</sup> <http://www.cancer.net/navigating-cancer-care/how-cancer-treated/clinical-trials/phases-clinical-trials> (accessed 9 February 2017)

as FDA/EMA. In this phase the drug is often compared to a treatment approved for the same disease that is already on the market (standard of care). The focus is on confirming previous efficacy and safety findings in a larger population. These studies can last from one to eight years and involve anything from several hundred to several thousand patients. If a drug is successful in all three clinical phases, a new drug application/biologic licence application ("**NDA**" /"**BLA**") is submitted to the FDA or the equivalent governmental agency in other parts of the world. The NDA contains all information obtained during the testing phase. The regulatory agency then completes an independent review and makes its recommendations. The standard time of review is 12 months. However, sometimes NDAs which address areas of significant medical need may be granted faster approval processes. After the product is approved, it can be marketed.<sup>30</sup>

#### 6.4.3 *Development of cancer drugs*

The development of a cancer drug can often be shorter and less complicated than the development of drugs for other indications, because of the great medical need for new therapies, the life-threatening nature of the disease, as well as the low number of cancer patients that can be treated.

- Phase I can involve testing on cancer patients, which will give an early indication of the drugs' efficacy.
- It is possible to apply for fast-track review if a drug shows superior efficacy, or spares serious side effects compared to treatments that are currently available. A drug has a high probability of being awarded fast track if it shows exceptional results at an early stage and the market currently lacks valuable treatment alternatives.
- Health authorities in the U.S., the EU and in Japan can also grant certain drugs orphan designation, if the drug treats a disease that only affects a small number of people. This is a way of stimulating research and development of drugs for less common diseases. An orphan drug designation can result in a series of advantages, including premium pricing, lower registration fees and extended market exclusivity for up to ten years.<sup>31</sup>

In some cases, promising results from Phase II can be sufficient to receive a marketing approval for a specific drug product candidate. This is often referred to as accelerated approval ("**AA**"). AA is a summary term that includes several accelerated approval programs, like for example the much-coveted breakthrough therapy designation.<sup>32</sup> The FDA has developed the AA program to allow for earlier approval of drugs that treat serious conditions, and that fill an unmet medical need based on a surrogate endpoint. The criteria for being granted AA are the following<sup>33</sup>:

- The drug must be intended to treat a serious condition. A serious condition is defined by the FDA as a disease or condition associated with morbidity that has substantial impact on day-to-day functioning.
- The drug provides a meaningful therapeutic benefit over existing treatments.
- The drug demonstrates an effect on an endpoint that is reasonably likely to predict clinical benefit. A clinical endpoint is a characteristic or variable that directly measures a therapeutic effect of a drug, for example how a patient feels, functions or survives. A clinical benefit is a positive therapeutic effect that is clinically meaningful in the context of a given disease. There are two types of endpoints that can be used as a basis for AA which are (i) a surrogate endpoint that is considered reasonably likely to predict clinical benefit, and (ii) a clinical endpoint that can be measured earlier than irreversible morbidity or mortality ("**IMM**") that is reasonably likely to predict an effect on IMM or other clinical benefit. Determining whether an endpoint is reasonably likely to predict clinical benefit is a matter of judgment that will depend on the biological plausibility of the relationship between the disease, the endpoint and the desired effect and the empirical evidence to support that relationship.
- The drug must be produced by using fully developed processes and controls to Good Manufacturing Practice (GMP) standards. While AA represents a shortcut to the market by reducing the need for clinical testing, it does not reduce in any way the requirements to the quality of the drug and its manufacturing

---

<sup>30</sup> <http://www.cancer.net/navigating-cancer-care/how-cancer-treated/clinical-trials/phases-clinical-trials> (accessed 9 February 2017)

<sup>31</sup> <http://www.fda.gov/ForIndustry/DevelopingProductsforRareDiseasesConditions/default.htm> (accessed 9 February 2017)

<sup>32</sup> <http://www.fda.gov/Drugs/ResourcesForYou/HealthProfessionals/ucm313768.htm> (accessed 9 February 2017)

<sup>33</sup> <http://www.fda.gov/Drugs/ResourcesForYou/HealthProfessionals/ucm313768.htm> (accessed 9 February 2017)



Drugs granted AA must meet the same statutory standards for safety and effectiveness as those granted traditional approval. Under AA, the FDA can rely on a particular kind of evidence, such as a drug's effect on a surrogate endpoint, as a basis for approval. Companies that receive an AA for a drug product candidate are normally required to conduct the rest of the clinical development program post-approval.

#### *6.4.4 The orphan drug market*

An orphan drug is a therapeutic agent specifically developed for a rare ("orphan") disease. The orphan drug market, when compared with the overall drug pharmaceutical market, is exempted from several governmental regulations, which increases profitability and makes research and development less onerous. The market has shown promising signs of growth over the last couple of years, and in 2013 orphan drug sales increased by 6.8% versus previous year, to reach USD 90 billion. In comparison, overall prescription drug sales (excluding generics) grew by only 0.1% in the same period, and amounted to a total of USD 650 billion. The worldwide orphan drug market is estimated to grow to USD 176 billion by 2020. This area of development grows at a CAGR of 10.5%, almost double that of the overall prescription drug pharmaceutical market.<sup>34</sup>

---

<sup>34</sup> Orphan Drug Report 2014, EvaluatePharma, 2014 (accessed 9 February 2017)

## **7 BUSINESS OF THE GROUP**

### **7.1 Overview**

Targovax is a clinical stage immuno-oncology group developing targeted immunotherapy treatments for cancer patients. Targovax has a broad and diversified immune therapy portfolio and aim to become a leader in its area. The Group is currently developing two complementary and highly targeted approaches in immuno-oncology.

Targovax' vision is to "arm the patient's immune system to fight cancer" thus extending and transforming the lives of cancer patients with first-in-class specific therapeutic cancer vaccines. The Group's pipeline includes several product candidates aimed at different cancer types like melanoma, pancreas, mesothelioma, colorectal cancer and ovarian cancer.

Each vaccine is designed to harness the patient's own immune system to fight the cancer while also delivering a favourable safety and tolerability profile.

Targovax' head office is in Oslo and it has a R&D subsidiary in Finland. On 2 July 2015, the Norwegian part of Targovax acquired all the shares in Oncos Therapeutics Oy (renamed Targovax Oy following the acquisition), then a clinical-stage biotechnology company based in Helsinki, which also is focusing on the design and development of targeted cancer immunotherapy. Following the acquisition, Targovax Oy is a wholly-owned subsidiary of the Company.

Targovax is targeting two complementary approaches to cancer immunotherapy:

- (i) a virus-based immunotherapy platform based on engineered oncolytic viruses armed with potent immune-stimulating transgenes targeting solid tumors, potentially reinstating the immune system's capacity to recognize and attack cancer cells; and
- (ii) a peptide-based immunotherapy platform targeting the difficult to treat RAS mutations found in more than 85% of patients with pancreatic cancers<sup>35</sup>, 50% of colorectal cancer<sup>36</sup> and 20 - 30% of all cancers<sup>37</sup>.

The Group's technology is specific and works by educating the patient's own immune system to recognize and kill cancer cells.

The Group's lead compound, ONCOS-102, has successfully completed a Phase I clinical trial in all-comer solid tumors where it has shown systemic tumor-specific immune activation and indications of potential clinical anti-tumor efficacy. 11 out of 12 treated patients showed immune activation. This is remarkable considering the generally immune-depressed status of such late stage cancer patients who have exhausted all other treatment options. 40% of patients had stable disease after ONCOS-102 treatment. A patient with ovarian cancer who had stopped responding to therapy was immune-reactivated by ONCOS-102 (both at a sessional level and systemically) and started again to respond to chemotherapy. This late-stage patient then lived for 41 months with stable disease, without undergoing further ONCOS-102 treatment.

ONCOS-102 has entered a Phase I/II clinical trial in malignant pleural mesothelioma in June 2016. The trial is currently recruiting patients at three sites in Spain, and more clinical trial sites in other European countries will be added during 2017. Further, ONCOS-102 has entered (site recruitment ready) a clinical trial for the treatment of solid tumours in melanoma and will in the near future enter trials in ovarian cancer, and prostate cancer. The melanoma and ovarian cancer trials will be performed in the U.S. (mainly at Memorial Sloan Kettering Cancer Center in New York), and the prostate cancer trial will be performed in the UK and in the Czech Republic.

RAS mutations are key drivers of cancer progression which are found in 20 - 30% of all cancers<sup>38</sup>. There are few treatment options available for patients with RAS mutations, and the options available have limited efficacy, which highlights the significant medical need for these patients.

Studies to date have shown that the Group's other lead vaccine for RAS-mutated cancer, TG01, induces immune

---

<sup>35</sup> Miglio, U. et al; KRAS mutational analysis in ductal adenocarcinoma of the pancreas and its clinical significance; *Pathol Res Pract.* 2014; 210(5):307-11.

<sup>36</sup> Van Cutsem, E. et al; Fluorouracil, Leucovorin, and Irinotecan Plus Cetuximab Treatment and RAS Mutations in Colorectal Cancer; *J Clin Oncol.* 2015; 33(7):692-700

<sup>37</sup> Fernandez-Medarde, A. and Santos, E.; RAS in Cancer and Developmental Diseases; *Genes & Cancer.* 2011; 2(3):344-358

<sup>38</sup> Fernandez-Medarde, A. and Santos, E.; RAS in Cancer and Developmental Diseases; *Genes & Cancer.* 2011; 2(3):344-358

responses in cancer patients, which may translate clinically to a survival benefit, and has an acceptable safety and tolerability profile with few side effects. In an ongoing clinical trial, it has also been demonstrated that TG01 can effectively induce immune response when used in combination with gemcitabine chemotherapy. Data from the first patient cohort showed that 68% of evaluated patients (13/19) were still alive after two years if survival is assessed from time of resection which occurred on average two months prior to first treatment, or 12/19 if counted from time of first treatment. While the cohort is small and there is no control arm, this rate compares favourably with the available published historical two-year survival rates of resected cancer patients treated with gemcitabine alone of between 30% and 53% (J Neoptolemos 2010, J van Loethem 2010, H Oettle 2013, M Sinn 2015, K Uesaka 2016; In these reported studies, overall survival measured either from surgery or treatment randomization). Up to six months of combination therapy was generally well tolerated with few side effects. Three TG01-related anaphylactic reactions were seen, two anaphylaxes and one hypersensitivity. The allergic reactions only occurred after several cycles of gemcitabine and resolved within 1-2 hours. There were no treatment related deaths. The Group has added a modified cohort to the trial with a reduced number of TG01-doses. The preliminary results from this cohort with a reduced number of TG01 administrations show that immune response is induced at the similar level as with the earlier vaccination schedule which had a higher number of administrations.

TG02 has entered (site recruitment ready) a Phase I clinical trial in recurrent colorectal cancer in combination with pembrolizumab. This trial will be performed in Australia and New Zealand.

Targovax has Orphan Drug Designation with the FDA and EMA for ONCOS-102 in malignant plural mesothelioma, ovarian cancer and soft tissue sarcoma and for TG01 in pancreatic cancer. Soft tissue sarcoma is an indication currently not being pursued by Targovax.

While the research and development strategy is designed in-house, the Group collaborates with academic institutions to execute its development strategy. Similarly, the Group uses external contract manufacturing organizations ("CMOs") to produce its compounds. The Group has employed experienced personnel capable of directing work performed by the CMOs. This approach to product development allows the Group to easily change research directions and efforts when needed and to quickly bring in new technologies and expertise when necessary. The Group remains committed to the discovery, development and delivery to patients of its innovative therapeutic cancer treatments.

Biotech companies at Targovax' stage of development normally do not have a developed strategy for commercialization. Targovax has an opportunistic attitude to out-licensing and partnering, while at the same time preparing a stand-alone alternative to commercialization. Geographically, Targovax and/or its future partners, will target large countries with mature reimbursement systems. This is the norm in the biotech and pharma industry and does not imply that Targovax will not aim to sell its products in smaller and less mature markets, but U.S. and top-5 Europe will be prioritized before rest of Europe, Japan, Canada and Australia. After these, other markets will follow.

The Group's technology can be combined with other treatment approaches, including surgery, radiation, chemotherapy or other immune therapies.

## 7.2 Competitive strengths

Targovax believes that it has several competitive strengths that will enable it to successfully commercialize its therapeutic cancer vaccines in the market place. These strengths include that:

- **Targovax has unique technologies with promising data:** The Group's clinical experience to date confirms that both ONCOS-102 and TG01 can be used safely and observed immune responses are consistent with the assumed mechanism of action of the Group's technology platforms. The Group has a solid immuno-oncology pipeline with both technology platforms suitable for combination therapies with both chemotherapy and other immunotherapies, for example check point inhibitors (CPIs). ONCOS-102 has shown 40% stable disease (SD) across patients with late stage progressive solid tumours in phase I and TG01 has shown what seems to be a signal of efficacy through two-year overall survival data in resected pancreatic cancer.
- **Targovax has multiple shots on goal:** Targovax has a strong focus on novel immunotherapies with two technologies and three clinical stage product candidates in development. Between these three candidates, Targovax has four ongoing combination trials and will initiate two new combination trials during the 1st half of 2017, these two in collaboration with external sponsors. Altogether a total of six trials in six different indications. Four clinical readouts are expected in 2017 and five in 2018.
- **Targovax has Orphan Drug Designation in four indications:** The Group has Orphan Drug Designation

for ONCOS-102 in malignant plural mesothelioma, ovarian cancer and soft tissue sarcoma (there is currently no clinical development plan related to soft tissue sarcoma) and for TG01 in pancreatic cancer. An Orphan Drug Designation can result in several advantages for the Group, including premium pricing, lower registration fees and extended market exclusivity for seven (US) and ten (Europe) years.

- **Targovax is positioned as a leading immuno-oncology specialist:** The immuno-oncology market is poised for strong growth and is expected, by some analysts, to reach USD 35 billion by 2023<sup>39</sup>. The combination of the Group's viral therapeutic cancer vaccines together with its peptide therapeutic cancer vaccines for RAS mutations has created an attractive development platform for immunotherapies.
- **Targovax has an experienced Management team and Board of Directors:** The Group has a strong executive Management team and Board of Directors with relevant biotech pharmaceutical drug development and commercial and international experience. The highly experienced and competent organization enables the Group with accelerated development and efficient execution.
- **Targovax has ongoing clinical collaborations:** The Group has ongoing clinical collaborations with Ludwig Cancer Research and Cancer Research Institute of the U.S., as well as Sotio a.s. of the Czech Republic, both in order to generate combination data between ONCOS-102 and other innovative cancer immunotherapies.
- **Targovax is backed by leading life science focused investors:** The Company has a strong shareholder base, including specialist investor HealthCap. The Group is further backed by highly recognized Norwegian early stage investors and reputable institutions.
- **Targovax has a strong intellectual property position:** The Group has a strong intellectual property position with patent applications either filed, pending or granted that expire from year 2029<sup>40</sup>.
- **Targovax uses well established state of the art production technologies:** The Group uses well established state of the art production technologies securing low cost of goods at commercial scale. The Group works with contract manufacturers where the production process is currently being tailored and optimized to ensure high quality products for all stages of clinical trials as well as commercial product.
- **Targovax has stable and easy to handle products compared to cell based products:** Targovax has stable products that are easy to handle securing uncomplicated logistics compared to cell based products.

### 7.3 Strategy

Targovax, an innovation driven immuno-oncology specialist, is committed to develop, manufacture and deliver to patients innovative targeted first-in-class therapeutic cancer vaccines to extend and transform the lives of cancer patients with solid tumors. The Group is aiming to become a leading immuno-oncology development company with a broad and diversified portfolio of therapeutic cancer vaccine candidates in multiple cancer forms. The Group's targeted therapeutic cancer vaccines are ideally positioned to be combined with Standard-of-Care chemotherapies as well as other types of immunotherapies, for example check point inhibitors (CPIs).

#### **Push ahead with the clinical development programs for ONCOS-102, TG01 and TG02**

The Group has two phase I trials ongoing; one in melanoma (site recruitment ready) and one in recurrent colorectal cancer (sites recruitment ready). In addition, two Phase I/II trials are ongoing; one in resected pancreatic cancer (recruitment of patients completed), and one in mesothelioma (recruitment started). Furthermore, two additional Phase I or II trials in ovarian and colorectal cancer and prostate cancer will start in 2017. These two trials will be sponsored and managed by the Targovax collaborating organisations Ludwig Cancer Research (LICR) and Sotio a.s.

#### **Evaluate the combination of ONCOS-102 and check point inhibitors (CPIs) in non-responding CPI patients**

Evaluate the combination of ONCOS-102 and check point inhibitors (CPIs) in patients who show a poor or no response to CPI based therapy to improve outcomes in current target indications for CPIs. This would potentially expand immunotherapy treatment into larger populations of patients. The majority of patients who receive a CPI do not respond to such therapy and may benefit from the additional immune priming and activation of T-cells that ONCOS-102 induces.

---

<sup>39</sup> Citi Research: "Immunotherapy - The Beginning of the End for Cancer", A Baum, 22 May 2013

<sup>40</sup> Two patents expire prior to 2029: One expired in 2016 and one will expire in 2019, see Section 7.8.6 "Patents and patent applications".

## **Optimize the Group's manufacturing capabilities to ensure later stage clinical trials and commercial supply**

The Group plans to optimize the manufacture, supply and quality systems for its therapeutic candidates to ensure its manufacturing capability is sufficient for later stage clinical trials and commercial supply.

## **Expand its intellectual property profile**

The Group intends to continue building its technology platforms, comprised of intellectual property and know how in the field of targeted therapeutic cancer vaccines. These assets form the foundation for its ability to successfully strengthen, defend and expand its position.

## **Selectively pursue partnerships and clinical trial collaborations**

The Group intends to build on its existing strong relationship with well-known research centers in Europe and the U.S. to identify new opportunities and position the Group in the field of targeted therapeutic cancer vaccines. The Group will pursue partnerships with leading pharmaceutical companies in the immuno-oncology field to maximize commercial opportunities. Targovax is not actively pursuing out-licensing opportunities prior to Proof-of-Concept, but is ready to react opportunistically to prospects with good terms to maximize shareholder value. In the near term, the primary focus of Targovax' business development efforts will be to secure clinical trial collaborations with pharmaceutical companies in order to conduct joint clinical trials and thus create more clinical data. The Company believes that clinical trial collaborations have the potential to drive significant value through combined capabilities.

## **Progress further targeted therapeutic cancer vaccine candidates to the product development stage**

The Group currently has research programs on potential therapeutic cancer vaccine candidates. The Group intends to advance these research programs into preclinical and clinical development as a soon as practicable.

## **Explore further product development opportunities and new research fields and candidate products**

The Group will explore opportunities for further development of its platform products, both as monotherapy and in potential combinations. In addition, the Group will explore new research directions for identifying new candidate products. Initially the focus will be on new technologies for potential intravenous administration of ONCOS-102 and novel viruses incorporating new virus transgenes for a second generation of oncolytic viruses. Additionally, RAS mutation specific T-cell receptors will be generated for use in cell based cancer therapy - a rapidly growing area of immuno-oncology. The Group will continue to explore research collaborations with Oslo University Hospital, The University of Helsinki and other academic research institutions.

### **7.4 History and important events**

The table below provides an overview of key events in the history of the Group:

<b>Year</b>	<b>Event</b>
1993 .....	First patient (ever) treated with RAS peptide. As a result of the research collaboration between Oslo University Hospital ( <i>Nw. Rikshospitalet</i> ) and Norsk Hydro, the first clinical trial with RAS peptide vaccination was initiated. The trial was sponsored by Oslo University Hospital and the founders of the Company were central in conducting the trial.
1998 .....	First patient treated with TG01. After the first clinical trial in 1993, Norsk Hydro initiated commercial development of RAS peptide vaccines and TG01. Norsk Hydro was sponsor for several exploratory clinical trials with RAS peptide vaccines and the first trial with TG01. The founders of the Company were central in conducting the research and the clinical programs.
2008 .....	First administration of ONCOS-102 in hospital exemption use setting by Akseli Hemminki and his university group.
2009 .....	Oncos (now Targovax Oy) was established by Akseli Hemminki (scientific founder), Pekka Simula, Antti Vuolanto, Mikko Salo and Mark Roth.
2010 .....	The Company was established by inventors of the RAS-targeted technology and the Norwegian Radium Hospital Research Foundation.
2011 .....	Orphan Drug status granted in EU and US for TG01. GMP production established for TG01 and ONCOS-102.
2012 .....	Securing immune stimulator GM-CSF for Phase I/II clinical development of TG01. EMA advice supporting the clinical development plan for TG01. Regulatory approval for Phase I/II clinical trial with TG01 in combination with gemcitabine in resected pancreatic cancer. Phase I clinical trial initiated for ONCOS-102, an adenovirus 5/3 with a GM-CSF transgene.
2013 .....	First patient treated for TG01 in combination with gemcitabine. Completed recruitment of 12 patients in Phase I clinical trial for ONCOS-102.

Orphan Drug Designation granted in EU and the US for ONCOS-102 in soft tissue sarcoma.

2014 ..... The Company is registered on the N-OTC.

Phase I part of Phase I/II clinical trial successfully completed for TG01 in combination with gemcitabine with RAS specific immune response in 6/6 patients.

Phase II clinical trial initiated for TG01 in combination with gemcitabine.

Phase I clinical trial for ONCOS-102 completed with demonstration of systemic anti-tumor immune response in two patients, immune activation at lesional level in 11/12 patients and 40% stable disease (SD).

Orphan Drug Designation granted in EU and the US for ONCOS-102 in ovarian cancer and malignant plural mesothelioma.

Appointment of Gunnar Gårdemyr as Chief Executive Officer of the Company and Magnus Jäderberg as Chief Medical Officer of Oncos (now Targovax Oy).

2015 ..... Completed recruitment of 18 patients in the Phase I/II clinical trial investigating TG01 in combination with gemcitabine in resected pancreatic cancer.

Pre-clinical toxicology studies completed for TG02.

Manufactured trial medication for TG02 Phase I/II trial due in 2016.

Cloned ONCOS-402, an adenovirus 5/3 with a CD40L transgene, ready for pre-clinical testing due in 2016.

Phase I clinical trial for ONCOS-102 published in (Journal of ImmunoTherapy for Cancer).

Appointment of Øystein Soug as new Chief Financial Officer and Peter Skorpil as Head of Business Development.

The Company presented interim data from the ongoing Phase I/II clinical trial at ASCO 2015 and Oncos presented Phase I immunoactivation data.

The Company successfully completes the acquisition of Oncos Therapeutics Oy.

Successful completion of a NOK 200 million private placement.

Signed collaboration with Cancer Research Institute (CRI) and Ludwig Institute for Cancer Research (LICR).

Signed collaboration agreement with Sotio a.s.

Submitted two clinical trials to competent authorities.

2016 ..... Announced interim survival analysis of a first cohort of the ongoing open label, Phase I/II of TG01 and standard of care chemotherapy in patients with resected pancreatic cancer.

Announced interim DTH immunological data of a second cohort of the same trial.

Targovax has received approval in Australia to conduct a Phase I clinical trial of TG02 and pembrolizumab in patients with locally recurrent, RAS mutated rectal cancer.

Targovax has received approval in Spain to conduct a Phase I/II clinical trial of ONCOS-102 and standard of care chemotherapy in advanced refractory malignant pleural mesothelioma.

Successful completion of a NOK 110 million private placement and a NOK 4 million subsequent offering.

Listing of the Shares on Oslo Axess.

Appointment of Øystein Soug as new chief executive officer.

2017 ..... Appointment of Erik Digman Wiklund as chief financial officer of Targovax, who will take up this role as of April 2017.

Announced encouraging top line two-year survival data from TG01 clinical trial in resected pancreatic cancer patients.

## 7.5 Overview of the Group's science

### 7.5.1 Background to immuno-oncology

Cancer has historically been treated with surgery, radiation, chemotherapy, or hormone therapy. Over the last few decades, the understanding of the immune system's role in cancer has increased and has led to immunotherapy becoming an important additional treatment option. Initially, new immunotherapies for cancer were nonspecific in their activation of the immune system which meant limited efficacy and/or significant toxicity while newer immunotherapies are able to activate specific immune cells leading to improved targeting of cancer cells, efficacy and safety. There are various categories of immune therapies including cytokines, antibodies, adoptive cell therapies and peptide as well as virus based vaccines.

#### Cytokines

Interferon-alfa, a cytokine, was the first to be approved for cancer patients in the 1980s. A recent example of cytokines in oncology is Interleukin-2 (IL-2). Cytokines are proteins produced by a number of different cells including T-cell and B-cells. They play an important role in cell signaling, and, in the immune system, cytokines modulate the balance between humoral and cell-based immune responses.

#### Antibodies

The 1990s saw several antibodies introduced such as Rituxan<sup>®</sup>, later followed by Herceptin and Avastin<sup>®</sup> in the 2000s.

In the 2000s, we saw antibodies that target T-cell check point inhibitors (CPIs) being developed with Yervoy<sup>®</sup>, being the first check point inhibitor (CPI), launched in 2011 for the treatment of advanced melanoma. Yervoy<sup>®</sup> was followed by Keytruda<sup>®</sup> and Opdivo<sup>®</sup> in 2014, now approved for both advanced melanoma and lung cancer. However, despite the advances of check point inhibitors (CPIs), there remains a significant unmet medical need in that the majority of patients with cancer, including advanced melanoma, do not respond to check point inhibitors (CPIs). Major tumor types such as pancreas, prostate, colon and ovarian as well as patient groups within responsive tumors often do not respond to current immunotherapy approaches. One theory to explain this non-responsiveness is that certain tumors require direct immune stimulation and recent studies have shown how the absence of the right type of cytotoxic T-cells at the tumor is correlated with poor prognosis. Thus, immune therapies that target immune activation at the site of the tumor (lesional level), are suitably placed to be combined with check point inhibitors (CPIs) as well as other anti-cancer therapies such as chemotherapy. This has led to the development of a number of targeted immune therapies.

### **Adoptive cell therapies**

Examples include adoptive T-cell therapies where T-cells are extracted from patients, then activated in a laboratory after which they are given back to the patient.

### **Peptide and oncolytic virus vaccines**

Other approaches to activate tumor lesions include administration of peptide vaccines or oncolytic viruses – both being part of the Targovax offering. By having two different immune platforms that target local immune activation, the Group believes it to be well positioned to develop combination therapies that can contribute towards revolutionizing oncology.

#### *7.5.2 Background to the immune system and T-cells*






The immune system is constantly monitoring any external threats to the body. It recognizes danger signals such as foreign bodies, bacteria and cancer cells. It can be described as having two lines of defense: (i) a first line non-specific defense named the innate immune system and (ii) a second line defense named the adaptive immune system. The adaptive immune system is composed of highly specific, targeted cells which provide long-term recognition and protection from infectious agents or abnormal processes such as cancer. The adaptive immune system is further subdivided into humoral or anti-body based immune response and into cellular immune response which includes T-cell based immune responses.

T-cells are the most important immune cells as they are both involved in sensing and killing abnormal cells as well as coordinating the activation of other cells in an immune response. They are grouped into two major types, CD4+ T-cells and CD8+ T-cells. The CD4+ T-cells are primarily helper T-cells involved in immune cell co-ordination while CD8+ T-cells are cytotoxic and can directly attack and kill cancer cells. Initial activation of T-cells takes place in the lymph nodes and is assisted by antigen presenting cells ("**APC**"). Small disease (cancer) related protein fragments named peptides are presented to the T-cells in complex with human leukocyte antigen ("**HLA**") molecules on the surface of the APCs followed by production of sub-populations of T-cells that recognize and destroy cancer cells displaying the same peptides. This way T-cells learn to distinguish between "normal self" and "foreign" peptides and are thus able to mobilize an attack when appropriate.

Although the immune system is designed to identify "foreign" or "abnormal", this process is often defective in cancer patients. The cancer "takes over" by, for example, hiding from the immune system or down regulating the immune system which results in an immune suppressive tumor environment – an environment where immune cells have limited or no opportunity to be effective. Consequently, drugs that can change the micro tumor environment from immune suppressive to immune susceptible are likely to offer clinical benefits.

Cancer immunotherapies are combined to maximize efficacy.

Targovax technologies are positioned to be combined with other oncology treatments further expanding therapeutic usage.

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 engine	Switch on GPS-targeting	Press the gas pedal	Release brakes
 TG 01 - Peptide vaccines/GM-CSF	✓	✓	✓	
 ONCOS-102 - Viral vaccines	✓	✓	✓	
 Peptide loaded viral vaccine T-Cell therapy	✓	✓	✓	
 Check point inhibitors (CPIs)				✓

Source: Company websites, press releases and filings, FactSet.

## 7.6 ONCOS-102's and TG01's differentiating features

### 7.6.1 Introduction

Targovax is developing two different types of immune activating vaccines. ONCOS-102 is based on the common cold virus Adenovirus 5. This virus is known to be immunogenic, meaning that it is effective in creating an immune response. To increase its use in treating cancers, it has been modified in three ways. Firstly, an Adenovirus 3 knob has been added to enhance viral adhesion to cancer cells and thus capacity to infect cancer cells. Secondly, to ensure selective replication in cancer cells, it has an E1A 24bp deletion which means that it can only replicate in cancer cells leaving normal cells unaffected. Thirdly, it is engineered with a transgene in another part of the Adenovirus 5 backbone called the E3 region where granulocyte macrophage colony stimulating factor ("**GM-CSF**"), a powerful immune stimulator, is inserted. As ONCOS-102 is administered into the tumor, (i) a local danger signal is created upon administration of the virus; (ii) which starts replicating, expressing and releasing GM-CSF to attract innate immune cells; (iii) viral replication results in cancer cells lysis with release of cancer antigens, the unique signal of cancer cells, that strengthens the danger signal and (iv) APCs (antigen presenting cells) such as dendritic cells ("**DC**"), pick up tumor antigens. DC's transport tumor antigens to the lymph nodes where the DC's present the tumor antigens to immature T-cells. Matured CD8+ T-cells that specifically recognize the antigens in question, will then be produced, find and kill tumor cells expressing the specific antigens. As part of this process, "educated" CD8+ (killer) T-cells will scan the entire body for the cancer cells. ONCOS-102 is also a Toll Like Receptor ("**TLR**") 9 agonist – TLRs are small proteins expressed by innate immune cells such as macrophages and DCs and stimulation of these cells represents another mechanism for immune activation.

Targovax' viral vaccines (including ONCOS-102) are either directly injected into the tumor or are administered by intraperitoneal infusion, but not by systemic administration via intravenous infusion. The mode of administration accordingly limits the range of cancer types / tumors that can potentially be treated with Targovax' viral vaccines. Targovax is evaluating possibilities for other modes of administration and for technologies that could enable administration via intravenous infusion.

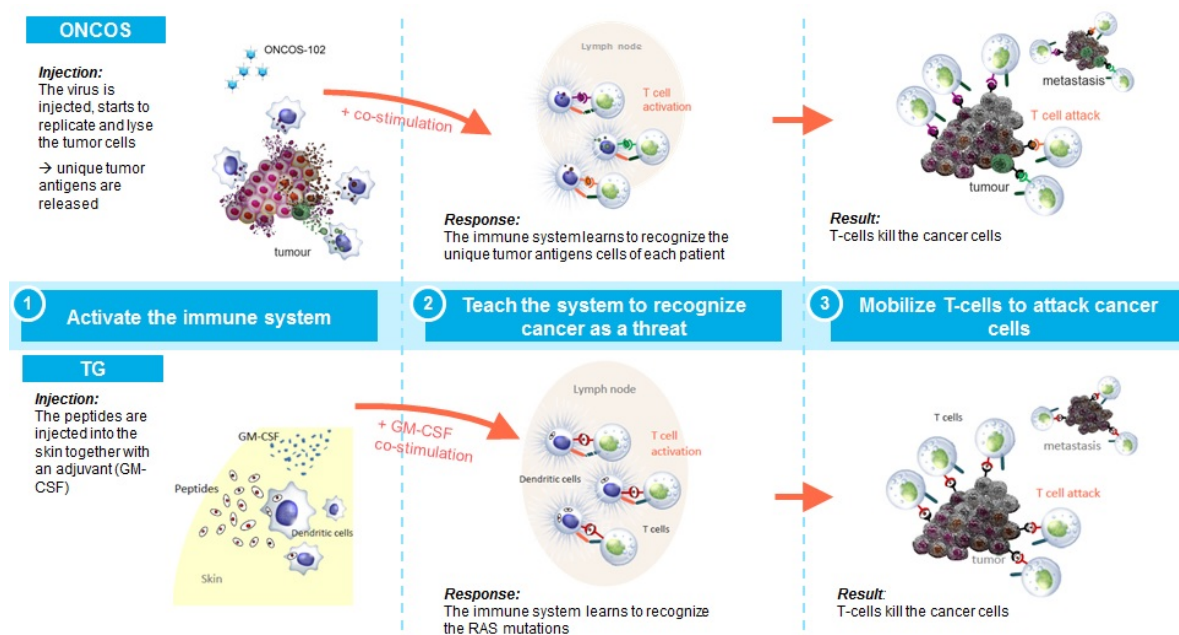
The TG01 vaccine has a slightly different mechanism of action. It consists of seven peptides that mimic cancer specific antigens arising from oncogenic mutations in exon 2 of the RAS gene. The RAS mutations are only present in cancer cells and TG01 can be used to educate T-cells to specifically recognize and target cancer cells harboring such mutations. TG01 is administered into the skin by intra-dermal injection together with a second product, the immune stimulator GM-CSF that is needed since peptides are not immunogenic by themselves. After administration into the skin GM-CSF attracts and activates local DCs to become mature antigen presenting cells. The TG peptides are taken up by the activated DCs and transported to the lymph nodes. There, T-cells learn to recognize and target cancer cells harboring the RAS mutations. Subsequently, "educated" T-cells will scan the entire body for cancer cells with the specific RAS mutation and kill them. This anti-cancer effect is caused by both direct killing by the T-cells produced in response to the TG vaccination but also by activation of T-cells recognizing other cancer antigens presented as a result



of killed tumor cells thus providing a broader anti-cancer activity (in situ bystander activity). Both TG01 and GM-CSF are necessary components of the peptide vaccine platform and will be produced and developed as an investigational product by Targovax.

Below is a schematic representation of the two unique and complementary technologies:

### Illustration of the Group's technology



Source: Ranki et al OncoImmunology 2014; Vassilev et al OncoImmunology 2015.

#### 7.6.2 ONCOS-102

Below is an overview of the distinctive features of ONCOS-102 in comparison to its known competitors included in Section 7.7 "Competition" below.

- **ONCOS-102 is an oncolytic virus that can both prime and boost immune responses<sup>41</sup>:** ONCOS-102 is an adenovirus that activates CD8+ T-cells via TLR 9. In contrast, oncolytic viruses based on herpes simplex virus ("HSV") have less optimal immune activation being agonists of TLR 2 and 4<sup>42</sup>. Furthermore, HSV can hide from the immune system<sup>43</sup> and has a specific mechanism to inhibit T-cell responses<sup>44</sup>. Vaccinia virus based cancer vaccines are less effective in priming T-cell responses<sup>45</sup>.
- **The benefits association with intra-tumoral administration:** Intra-tumoral administration provides immune activation at the site of the tumor without being deactivated by systemic neutralizing anti-bodies nor is there a need to expose patients to high intravenous viral concentrations/doses that in some cases have been associated with toxicity after intravenous administration.
- **ONCOS-102 is the oncolytic virus with one of the most comprehensively mapped mechanism of action:**

In a Phase I trial of 12 treatment refractory cancer patients with different solid tumors, ONCOS-102 was given intra tumorally nine times for six months. The main objectives were safety, dose finding and preliminary signals of efficacy. Three cohorts were studied in a 3+3 design and patients were monitored for adverse events, disease progression by CT/PET and immune activation in lesions and blood by analyses of biopsies and PBMC at baseline, 1 month and 2 months.

<sup>41</sup> Draper and Heeney, 2010, Mat Rev Microbiol

<sup>42</sup> Villalba et al, 2012, Med Microbiol Immunol

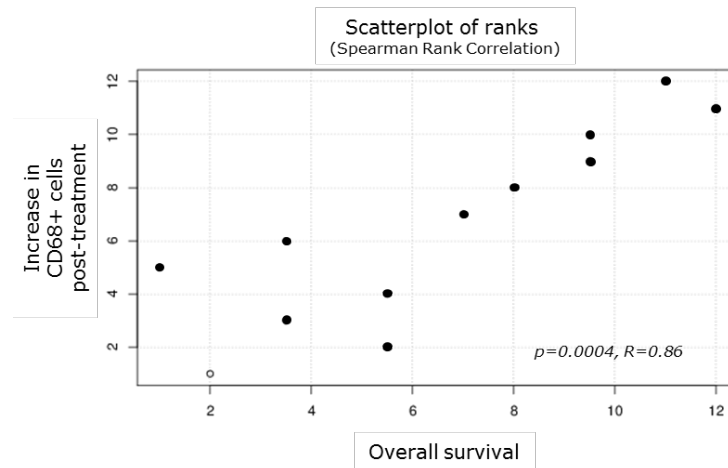
<sup>43</sup> Raftery et al, 1999, J Exp Med

<sup>44</sup> Barcy et al, 2001, J Immunol

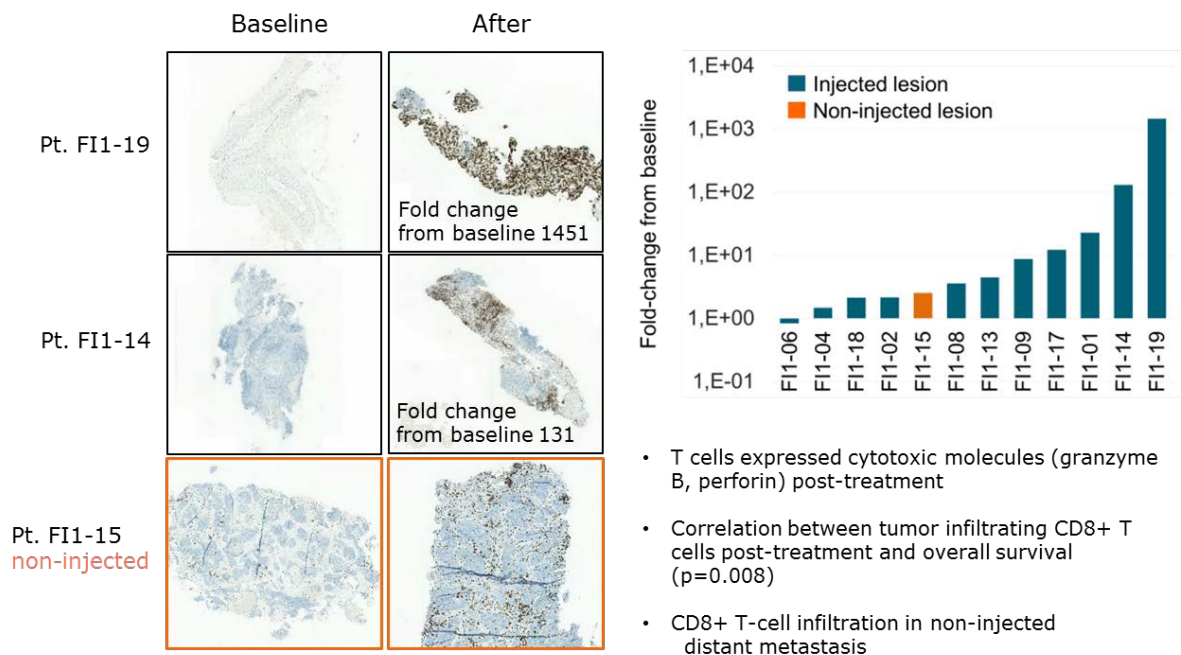
<sup>45</sup> Bart et al, 2014, J Clin Invest

**Safety:** There were no dose limiting toxicities ("DLT"). Most adverse events were grade 1 – 2 (fever, chills, fatigue, injection site pain, decreased appetite, gastro intestinal symptoms, weight loss and anemia) and six patients had grade 3 adverse events (gastro intestinal symptoms, fever, fatigue, peripheral oedema and increased ALP/ASAT) of which one (peripheral oedema) was possibly related to trial drug. ALP and ASAT are laboratory biomarkers of liver function where increases over a certain level indicates reduced liver function. Such can be due to drugs but also common in patients with cancer. There were no grade 4 or 5 adverse events. As can be seen, the most common adverse events were symptoms of viral infection (e.g. fever, chills, fatigue and decreased appetite) and are characteristic of patients with late stage carcinoma (e.g. fatigue, decreased appetite and weight loss). The safety profile was similar to that seen in the advanced therapy access program (ATAP) described below.

**Immunology:** Uniquely, the Group has gathered baseline biopsies of tumor lesions that allow for assessment of vaccine induced immune cell increases (delta) by comparing to post treatment biopsies. Such immune cell increases are believed to be an important predictor of a positive clinical outcome. Indeed, in this Phase I trial, ONCOS-102 was able to activate the innate immune system in 11/12 patients with a positive correlation to overall survival:



In the same trial, 11/12 patients had infiltration of cytotoxic CD8+ T-cells at lesional level as can be seen in the graph below where patients had significant and in some cases several fold log increases meaning up to 131 (patient 14) and 1,451 (patient 19) times increases to baseline. The adaptive immune system activation was also positively correlated with overall survival:

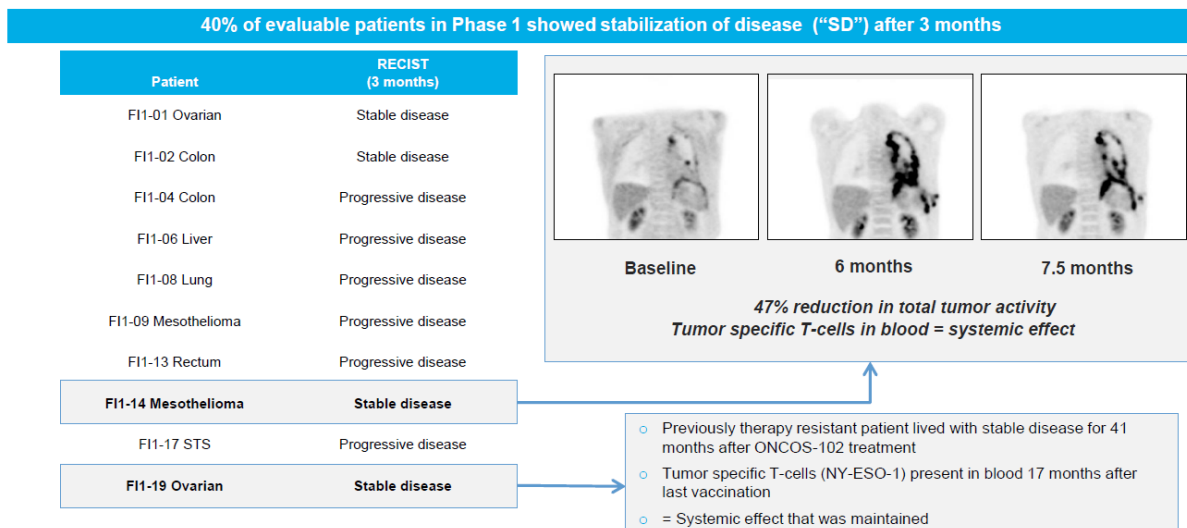


Anti-tumor cellular immune response was seen systemically in two patients and the Company believes it to be the only oncolytic virus research group to have shown such. In a patient with malignant pleural mesothelioma, induction of CD8+ T-cells specific to the tumor antigen MAGE-A3 after treatment was seen. Similarly, ONCOS-102 induced CD8+ T-cells specific to the tumor antigens NY-ESO-1, MAGE-A1, MAGE-A3 and mesothelin in the blood of a patient with ovarian cancer. These findings, coupled with the increase of CD8+ T-cells in a non-injected lesion (see patient 15 in the orange boxes and bar in the above graph), shows how ONCOS-102 is able to induce a systemic and tumor specific immune activation in treatment refractory patients with solid tumors.

- **Orphan drug status in a number of indications:** ONCOS-102 has orphan drug status in mesothelioma, ovarian cancer and soft tissue sarcoma.
- **Promising clinical Phase I data:** ONCOS-102 has promising clinical Phase I data showing stable disease in 40% of patients who all had treatment refractory progressive cancers and examples of patients with late partial response as well as prolonged survival. As can be seen below, a patient with treatment refractory malignant pleural mesothelioma (patient 14) had a close to 50% reduction of its tumor mass on PET scan 6 weeks after the last ONCOS-102 vaccination. Malignant pleural mesothelioma is a type of lung cancer associated with exposure to asbestosis. It is highly malignant, and, with only one product, pemetrexed, licensed to date, it represents an area of huge medical need. Patient 19 below with progressive ovarian cancer, had undergone seven different types of chemotherapy, surgery and radiation, entered the trial, received all nine vaccinations and developed stable disease ("SD"). After finishing the trial, the patient responded to chemotherapy which had not been the case before the trial, her disease remained stable and she lived for another 2.5 years. Similarly remarkable was the detection of specific T-cells to the tumor antigen NY-ESO-1 in the patient's blood. Put together, this information suggests that ONCOS-102 vaccinations were able to provide stabilization of disease, possibly sensitizing the patient to subsequent chemotherapy while ensuring immunological memory a long time after the last vaccination:



## Immunological findings were linked to clinical benefit



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, Stable disease= neither disappeared or progressed, Progressive disease= >20% increase  
Source: Internal data on file

- **Reassuring safety data from large scale advanced therapy access program (ATAP):** This was an individualized treatment program conducted in Finland within the European Directive described as ATAP regulations. It was not a trial with a protocol of predetermined treatments and monitoring. 290 patients were treated with different types and combinations of adenoviruses given intra-tumorally, intravenously or intra-peritoneally with or without immune stimulatory transgenes. All patients had advanced solid tumor disease and were refractory to standard of care chemotherapy. 115 patients received ONCOS-102. Positive clinical responses in individual patients and lack of any detectable serious side effects formed the basis for

continued development of ONCOS-102 and the Phase I trial described above. Most adverse events were grade 1 – 2 (fever, fatigue and nausea in less than 50% of patients, 29% with grade 3 and 5% with grade 4 – 5 (none drug related) adverse events. Adverse events in studies are grade 1 – 5: 1 (mild), 2 (moderate), 3 (severe), 4 (life threatening or disabling) and 5 (death).

### 7.6.3 TG01

Below is an overview of the distinctive features of TG01 in comparison to its known competitors included in Section 7.7 "Competition".

- **Cancer specific peptide vaccine:** Oncogenic mutations in the RAS genes are uniquely found in cancer cells and consequently mutated RAS proteins are also unique for cancer cells. The mutations in the RAS proteins are immunological markers that can serve as targets for immunological attack by T-cells. Synthetic peptides (small proteins) mimicking protein fragments encompassing the RAS mutations can be used as vaccines to activate RAS mutation specific T-cells. TG01 consists of seven synthetic peptides that mimic seven of the most common RAS exon 2 mutations found in many types of cancers. It has been demonstrated that TG01 activates RAS mutation specific T-cells, both when used as mono-therapy and in combination with chemotherapy. Cancer specific immune response reduces greatly the risk of cross-reactivity and unacceptable damage of healthy tissues. The peptides are designed to prevent induction of non-mutation (non-cancer specific) immune response. In contrast, vaccines based on allogenic cancer cell lines engineered to produce immune stimulating molecules (e.g. alpha (1,3) galactosyltransferase ( $\alpha$ -GT), GM-CSF) induce immune responses against cancer associated antigens also shared by healthy cells and tissues<sup>46,47</sup>.
- **Therapeutic cancer vaccine targeting "undruggable" RAS mutations:** Oncogenic RAS mutations are drivers for development of cancer and have for a long time been considered as an "undruggable" target for therapy<sup>48</sup>. However, the Targovax developed TG peptides vaccine has been shown to activate long lasting RAS mutation specific T-cell responses in cancer patients<sup>49</sup>. Compositions of heat-inactivated *S. cerevisiae* yeast expressing combinations of RAS mutations are less effective than peptides in priming T-cells<sup>50</sup>.
- **Peptide vaccine, but no need for tissue typing of patients:** Peptides must be able to bind to HLA class II molecules for activation of CD4+ T-cells and to HLA class I molecules for activation of CD8+ cells. The HLA repertoire (i.e. tissue type) defines an individual's tissue type and it varies between individuals. General population coverage is secured for TG01 by the design of the peptides. The peptides are designed to bind all three major sub-groups of HLA class II molecules DR, DP and DQ, either directly or after antigen processing by APCs. In addition, the seventeen amino acids long TG peptides allow processing of natural HLA class I epitopes nested around the RAS mutation (HLA class I epitopes are normally nine amino acids). The immunological efficacy of TG01 has been confirmed by clinical testing.
- **Cocktail of peptides covering seven common RAS mutations:** TG01 covers 99% of the most common RAS mutations found in pancreas cancer. Oncogenic mutations in the RAS genes occur as single base alterations resulting in only one amino acid substitution in the expressed protein. In total 12 different amino acid substitutions are found for RAS exon 2 mutations and usually only one mutation is present in a tumor. Traditionally, development of vaccines targeting the different mutations individually require knowledge of (thus screening of) the patients' specific mutation and the need for several products to be developed simultaneously. This, taken together with the fact that the mutation pattern vary greatly between cancer indications making recruitment of patients to clinical studies and clinical practice very complicated, and therefore not considered commercially viable. The one product TG01 covers more than 99% of the common RAS mutations found in pancreas cancer.
- **GM-CSF is a very powerful immune stimulator for peptide vaccines:** Peptides are not immunogenic by themselves and there is a need for an immune stimulator. Recombinant human GM-CSF expressed in *E. coli* (molgramostim) has proven to be a very efficient immune stimulator for TG01. Using GM-CSF also avoids problems like T-cell sequestering caused by traditional adjuvants creating an antigen depot (primed

---

<sup>46</sup> Rossie G.R. et al 2013

<sup>47</sup> Le D.T et al 2013, J Immunother. 2013 September; 36(7),382-389

<sup>48</sup> Adrienne D. Cox et al. 2014, Nature Reviews Drug Discovery 13,828–851(2014)

<sup>49</sup> Wedén S et al 2011, Int J Cancer. 2011 Mar 1; 128(5):1120-8

<sup>50</sup> D.Richards et al 2012, Annals of Oncology 23 (Supplement4): iv5-iv18, 2012

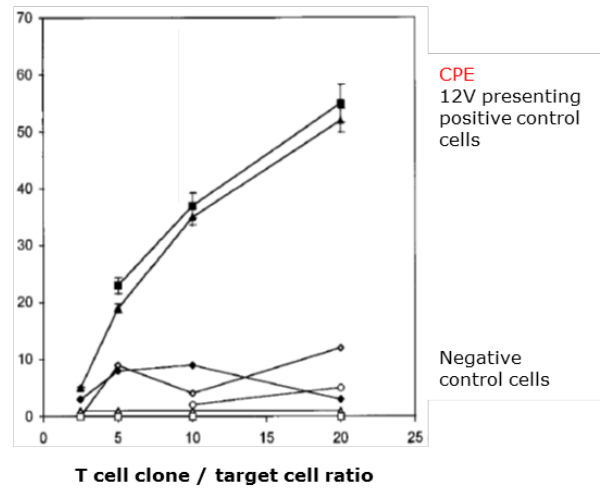
T-cells return to the depot at the vaccination site instead of tumor). Different micro-organisms used for production result in different GM-CSF molecules, with large variation in potency. Targovax has selected the non-glycosylated molecule produced in E-coli for development together with TG01. The potency of this molecule is about the double of that of a glycosylated molecule produced in yeast. All results obtained for TG01 in patients are from using non-glycosylated as immune stimulator.

- **TG peptides induce both cancer specific CD4+ and CD8+ T-cells capable of specific killing of cancer cells:** TG peptides combined with GM-CSF activates both CD4+ and CD8+ T-cells that can specifically recognize and kill autologous cancer cells and cell lines harboring corresponding RAS mutations (examples below).

**Tumour specific CD4+ T-cells kill cancer cells from one vaccinated patient**

CD4+ T-cell clone from a RAS peptide vaccinated patient that recognize the same mutation (12V) as found in the patient's tumor, can lyse and kill cancer cells (CPE) from the same patient (in vitro)<sup>51</sup>.

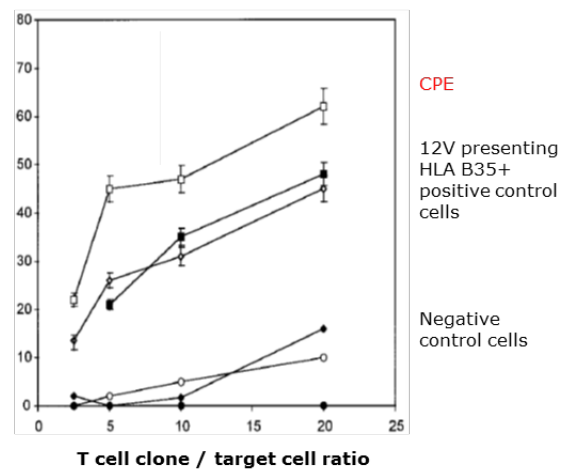
**% Specific lysis (killing) of cells by CD4+ T cell clone**



**Tumour specific CD8+ T-cells kill cancer cells from one vaccinated patient**

HLA B35 (tissue type) restricted CD8+ T-cell clone from a RAS peptide vaccinated patient that recognize the same mutation (12V) as found in the patient's tumor, can lyse and kill cancer cells (CPE) from the same patient (in vitro)<sup>52</sup>.

**% Specific lysis (killing) of cells by CD8+ T cell clone**

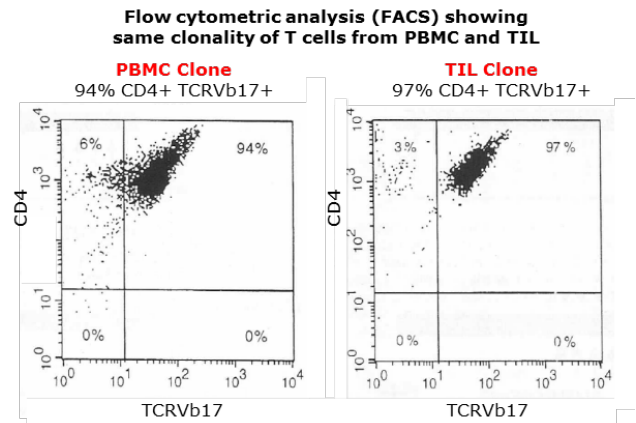


- **Tumour specific T-cell infiltration:** After vaccination with four different TG RAS peptides only T-cells reactive against the RAS mutation present in the tumor were enriched in the tumor.

<sup>51</sup> Gjertsen et al 1997, Int.J.Cancer: 72,784-790(1997)

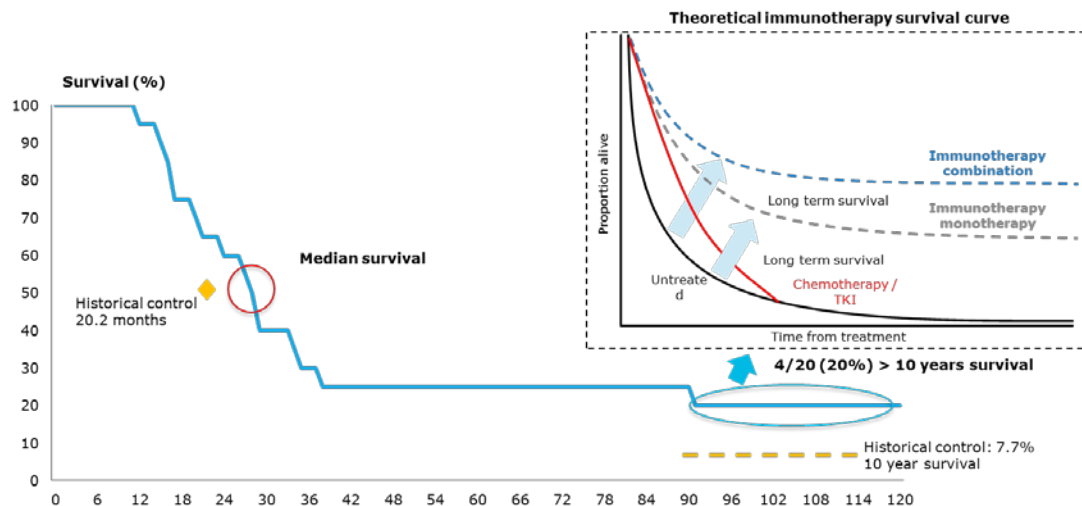
<sup>52</sup> Gjertsen et al 1997, Int.J.Cancer: 72,784-790(1997)

CD4+ T-cells with same T-cell receptor clonality (TCR Vb17), and recognizing the same mutation (12R) as found in the patient's tumor, were found in both blood (PBMC) and tumor biopsy (TIL) from vaccinated patient. T-cells specific for other RAS mutations than 12R were found in PBMC from patient but not in tumor<sup>53</sup>.



- Encouraging long-term survival for patients with resected pancreatic cancer after treatment with TG01 or TG peptides:** Long-term follow up after end of study of two clinical trials with TG01 or TG peptide mono-therapy, conducted by Norsk Hydro in the period 1994 – 2000, showed 28 months median survival and 20% ten years survival for the combined study populations of totally 20 patients<sup>54</sup>. Reported median survival for historical controls is 20.2 months and 7.7% ten year survival<sup>55,56</sup>. Patients were treated with either a single TG peptides (9 patients) or TG01 (11 patients).

**Retrospective survival analysis of two clinical trials with TG01 or single TG peptide vaccination**



- Encouraging two years survival data in the ongoing TG01 clinical trial showing:** Overall Survival (OS) rate at 1 and 2 years for the main cohort (n=19 patients) were 89.5% and 68.4%, respectively. These survival data compare favourably with historical data on survival in five large studies previously published. The regimen was generally well tolerated. In April 2016 Targovax reviewed interim data for immune activation (DTH responses) in the modified vaccination cohort, assessing early immune activation. 4 of the 5 first recruited patients (of a total of up to 13 patients) showed an 8-week immune response. These results were in line with an analysis of the first cohort (in March 2015) where 18 out of 19 patients were eligible for immune response assessment and 15 patients had established a detectable early immune response.
- Immunological response to TG01 signalling increased survival in both resected and advanced pancreatic cancer:** Below are results from clinical trial CTN RAS 98010<sup>57</sup>:

<sup>53</sup> Gjertsen et al 2001, Int. J. Cancer:92,441-450(2001)

<sup>54</sup> Wedén S et al 2011, Int J Cancer. 2011 Mar 1;128(5):1120-8

<sup>55</sup> Oettle H et al. JAMA 2007, vol 297 no 3

<sup>56</sup> Oettle H et al. JAMA 2013 vol 310, no 14

<sup>57</sup> Clinical study report CTN RAS 98010 on file

Resected pancreatic cancer TG01/GM-CSF (mono-therapy)	Evaluable patients	Median survival (from resection)	5 year survival (from resection)
<b>Detected immune response</b>	11/11 (100%)	26.5 months (Historical controls 20.2 months <sup>58</sup> )	2/11 (18%) <sup>59</sup> (Historical controls 10.4% <sup>60</sup> )
<b>Not detected immune response</b>	0	N/A	N/A

Advanced pancreatic cancer TG01/GM-CSF (mono-therapy)	Number of patients	Median survival (from 1 <sup>st</sup> vaccination)	1 year survival (from 1 <sup>st</sup> vaccination)
<b>Detected immune response</b>	14/25 (56%)	156 days	3/25 (21%)
<b>Not detected immune response</b>	11/25 (44%)	109 days	1/11 (9%)

- Preliminary immunological results from ongoing clinical trial CT TG01-01 in resectable pancreatic cancer show so far that a TG01 specific immune response (DTH) was seen in 14 of 17 patients after combining TG01 with gemcitabine chemotherapy (ASCO 2015). The TG01/GM-CSF regimen was generally well tolerated with related events being those expected (local reactions and flu like symptoms). There were four related allergic reactions to vaccination, three of which occurred only after gemcitabine treatment and of which two were severe.
- **TG01 can be used to both prime and boost anti-cancer T-cell responses:** TG01 can be administered repeatedly without being deactivated by systemic neutralizing anti-bodies.
- **Low cost of goods – simple to produce, stable and uncomplicated logistics:** TG peptides are produced by state of the art chemical synthesis and GM-CSF by recombinant expression in *E.coli* bacteria. TG01 is a stable lyophilized product presented in glass vials.

## 7.7 Competition

The standard of care treatment of cancers is constantly being improved by the use of new biomarkers, new medical technologies, and new chemotherapies. Immuno-oncology in general and the cancer vaccine field in particular are rapidly evolving as the biotechnological and pharmaceutical industries are dedicating tremendous efforts and resources to the advancement of novel, proprietary therapies. Targovax competes not only with other immuno-oncology treatments, but also with the existing standard of care therapies in the Group's target indications. The Group's main competitors include (indication and development phase of most advanced drug candidate in brackets):

- **Oncolytic viruses:** Amgen, Inc. (melanoma, first registered in the US October 2015), Advantagene, Inc. (prostate cancer, Phase III), Transgene SA (hepatocellular carcinoma, Phase III), PsiOxus Therapeutics, Ltd. (colorectal cancer, Phase II), Cold Genesys, Inc. (bladder cancer, Phase III), SillaJen, Inc. (liver cancer, Phase III), Viralytics, Ltd. (melanoma, Phase II) and DNATrix, Inc (ovarian cancer, glioma, Phase II).<sup>61</sup>
- **Cancer vaccines:** DanDrit Biotech A/S (metastatic colorectal cancer, Phase III), Bavarian Nordic, A/S (prostate cancer, Phase III), Aduro Biotech, Inc. (ovarian cancer, Phase I/II), Immodulon Therapeutics, Ltd. (metastatic cancer, Phase I/II), and Vaximm AG (glioblastoma, Phase II).<sup>62</sup>

The Group's competitive landscape is rapidly changing, with several different compounds currently being trialed for the Group's target indications. Looking solely at ongoing Phase I and Phase II studies, there are approximately 200 different compounds within pancreas, approximately 40 different compounds within mesothelioma, approximately 80 different compounds within melanoma and approximately 200 compounds within colorectal. It is worth noting that only a minority of these compounds are immune-oncology treatments. As a result of these ongoing studies, as well as new combinations with CPIs, the standard of care landscape may look different upon and in the event of a market entry of any of the Group's compounds.<sup>63</sup>

<sup>58</sup> Oettle H et al. JAMA 2007, vol 297 no 3

<sup>59</sup> Wedén S et al 2011, Int J Cancer. 2011 Mar 1;128(5):1120-8

<sup>60</sup> Oettle H et al. JAMA 2013 vol 310, no 14

<sup>61</sup> GlobalData, 2015, and the respective websites of the competitors.

<sup>62</sup> GlobalData, 2015, and the respective websites of the competitors.

<sup>63</sup> GlobalData, 2015.

Additionally, with recent clinical successes in both the cancer vaccine and oncolytic virus fields, the Company expects several early stage companies to emerge with the potential to become significant competitors.

The side effect profiles of peptide or virus based immunotherapies vary, but are of relatively mild nature. Generally speaking, peptide or virus based immunotherapies tend to have considerably less severe side effect profiles than classical chemotherapies. It is unlikely that competing peptide or virus based immunotherapies can distinguish themselves favorably from the Group's immunotherapies only based on a superior side effect profile.

The Company believes that its oncolytic viruses have a good chance at succeeding in the clinic. With the approval of Imlygic, there is now a precedent which clearly shows that an oncolytic virus can succeed in the clinic and get registered. The immunologic mechanism of action of ONCOS-102 has been demonstrated in the Group's Phase I clinical trial. The Group's oncolytic viruses appear to kill cancer cells selectively, manufacturing and logistics will be simple at commercial scale, and administration is safe and targeted by intra-tumoral injection.

The Group also believes that its RAS-mutated therapeutic cancer vaccines have a higher likelihood to succeed than the competitors' approaches because it has avoided the pitfalls that plagued many previous attempts at therapeutic cancer vaccination: (i) selection of antigens that are not cancer-specific, (ii) failure to induce CD4+ T helper cells along with CD8+ cytotoxic T-cells, (iii) complex logistics, (iv) inefficient adjuvant and (v) sub-optimal patient selection.

Many of the Group's current or potential future competitors have substantially greater financial, technical and human resources than the Group presently does. The field of immuno-oncology is an area of very intense investment by both biotechnological and pharmaceutical companies, and it has seen a tremendous, and constantly increasing, deal-making activity over the past couple of years. New M&A or licensing deals may create significant new competitors in the future. These current or potential new competitors also compete with the Group for patient recruitment into clinical trials, for establishing clinical trial sites, for acquiring complementary technologies to its own programs and for recruiting and retaining top R&D and management personnel.

## **7.8 Research and development, patents and licenses**

### *7.8.1 Research and development*

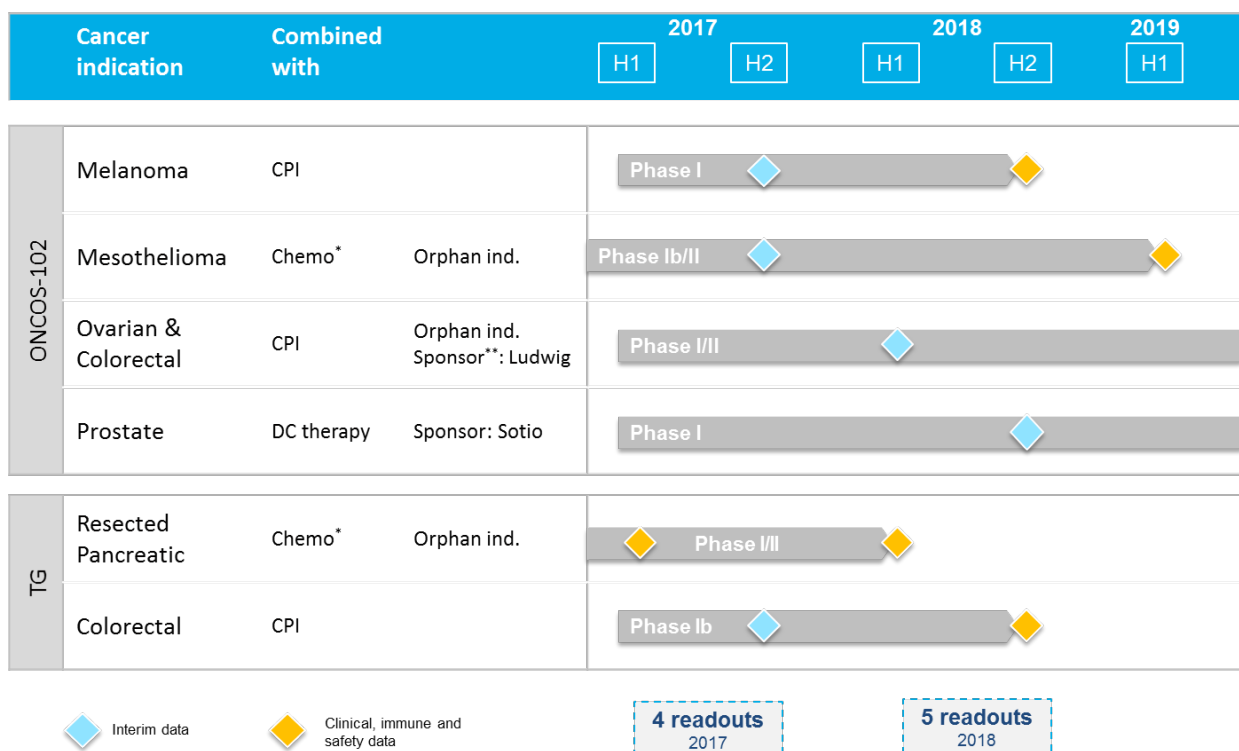
The research and development goals of Targovax are to:

- (i) demonstrate the efficacy of ONCOS-102 in check point inhibitor (CPI) refractory patients with advanced melanoma;
- (ii) demonstrate the efficacy of ONCOS-102 in combination with first line standard of care chemotherapy in patients with malignant pleural mesothelioma;
- (iii) explore intra-peritoneal administration of ONCOS-102 in combination with the check point inhibitor (CPI) durvalumab of MedImmune in ovarian and colorectal cancer in collaboration with Ludwig Cancer Research Institute;
- (iv) explore ONCOS-102 in combination with autologous dendritic cell therapy in advanced prostate cancer in collaboration with Sotio a.s.;
- (v) demonstrate the efficacy of TG01 in combination with GM-CSF as an adjuvant treatment in resected pancreas cancer;
- (vi) demonstrate the efficacy of TG02 in combination with GM-CSF, as a treatment for patients with unresectable advanced colorectal cancer in combination with standard of care chemotherapy or checkpoint inhibitor;
- (vii) secure product supply for ongoing clinical trials;
- (viii) complete process development and manufacturing of ONCOS-102, TG01, TG02 and GM-CSF ready for pivotal phase of clinical studies; and
- (ix) continue collaboration with University of Oslo, University of Helsinki and commercial partners to identify and secure research plans for the next generation of RAS mutation specific immunotherapies including T-cell receptors for use in cell based therapy and oncolytic viruses including incorporation of new transgenes into the Group's virus back bone.

The development goals are supported by the following clinical trial program for the period 2017 – 2019.



## Clinical trial program 2017 – 2019



\* In combination with Standard of Care Chemotherapy. Pemetrexed/cisplatin for Mesothelioma and Gemcitabine for Resected Pancreatic

\*\* A sponsor is the company or institution that submits the application for a clinical trial to the regulatory authorities and that is responsible for conducting and reporting the trial in compliance with the regional regulatory legislations and guidelines.

The below tables include details regarding the Group's studies:

### 7.8.1.1 Study 1 – TG01 in resected pancreatic cancer

Description	Study design
<ul style="list-style-type: none"> <li>Phase I/II trial of TG01 and Gemcitabine as adjuvant therapy for treating patients with resected adenocarcinoma of the pancreas.</li> <li>19 patients (main group) and up to 13 patients (modified group).</li> <li>5 sites in Norway, UK and Spain.</li> </ul>	<ul style="list-style-type: none"> <li>Single arm open label study.</li> <li>Stage I or II disease with confirmed R0 and R1 resection.</li> <li>CT scan at baseline (if possible) and then every 6 month or when clinically indicated and at end of study visits.</li> <li>Main group; Start TG01/GM-CSF vaccination prior to/same time as start of chemotherapy, TG01/GM-CSF treatment during the course of chemotherapy, continue TG01/GM-CSF post chemo.</li> <li>DTH immune reaction at baseline and weeks 1, 2, 3, 4, 6, 8, 10, 52.</li> <li>PBMC for TG01 specific T-cell response at baseline, week 11, week 52 and end of study.</li> <li>Modified group; Start TG01/GM-CSF vaccination prior to chemotherapy, stop TG01/GM-CSF after 6 weeks and reinitiate post-chemo.</li> <li>DTH immune reaction at weeks 6, 8 and week 8 post chemo.</li> <li>PBMC for TG01 specific T-cell response at baseline, week 8, week 4 post chemo, week 52 and end of study</li> </ul>
Objectives and endpoints	Timeline
<p><b>Primary objectives</b></p> <ul style="list-style-type: none"> <li>Safety of TG01/GM-CSF treatment and adjuvant chemotherapy.</li> <li>Immune response to TG01/GM-CSF and effect of adjuvant chemotherapy combined with TG01/GM-CSF after tumor resection.</li> </ul> <p><b>Secondary objectives</b></p> <ul style="list-style-type: none"> <li>Clinical efficacy at 2 years.</li> </ul> <p><b>Explorative objectives</b></p> <ul style="list-style-type: none"> <li>Relationship of KRAS status to recurrence.</li> <li>Monitor CA 19-9 levels.</li> </ul>	<ul style="list-style-type: none"> <li>First patient first visit (main group) Q1 2013.</li> <li>Last patient first visit (main group) Q1 2015.</li> <li>First patient first visit (modified group) Q3 2015.</li> <li>Last patient first visit (modified group) Q2 2016.</li> </ul> <p>Expected news flow:</p> <ul style="list-style-type: none"> <li>2 year overall survival data main group was presented in 1Q 2017.</li> <li>2 year data modified group 1H 2018.</li> </ul>

<p><b>Efficacy endpoints</b></p> <p><u>Safety</u>: Adverse events and laboratory assessment.</p> <p><u>Immune responses</u>: DTH and proliferative T-cell response.</p> <p><u>Efficacy at 2 years</u>: Disease free survival, overall survival.</p> <p><u>Exploratory</u>: Relationship of KRAS status to recurrence, monitor CA 19-9 levels.</p>
---

### 7.8.1.2 Study 2 – ONCOS-102 in pleural mesothelioma

Description	Study design
<ul style="list-style-type: none"> <li>A randomized Phase II open label study with a Phase I safety lead in cohort of ONCOS-102 and pemetrexed/cisplatin in patients with unresectable malignant pleural mesothelioma.</li> <li>30 patients (6 patients (safety cohort) + 24 patients. (Randomised Phase II).</li> <li>Up to 10 sites in Spain, Italy and others (TBD).</li> </ul>	<ul style="list-style-type: none"> <li>Open labelled study with a safety lead in cohort followed by randomised Phase II.</li> <li>The safety group (six patients) and the experimental arm (14 patients) in Phase 2: ONCOS-102 and pemetrexed /cisplatin. ONCOS-102 given at days 1, 4, 8, 36, 78 and 120 – clophosphamide i.v. bolus is given prior day 1 and 78. Chemo will be given in 21-day cycles (starting at day 22) for 6 cycles.</li> <li>Control group (10 patients); pemetrexed / cisplatin given at 21 day cycles for 6 cycles.</li> <li>CT/PET at baseline day 64 (control arm: day 43) and day 148 (control arm: day 127).</li> <li>Biopsies at baseline and day 36.</li> <li>PBMC at screening and days 1, 43, 85, 127 plus 9 and 12 months.</li> </ul>
Objectives and endpoints	Timeline
<p><b>Primary objectives</b></p> <ul style="list-style-type: none"> <li>Safety and tolerability of ONCOS-102 in combination with chemotherapy.</li> </ul> <p><b>Secondary objectives</b></p> <ul style="list-style-type: none"> <li>Tumour-specific immune activation in peripheral blood (PBMC) and tumour tissue.</li> <li>Overall response rate and progression-free survival.</li> <li>Overall survival.</li> </ul> <p><b>Efficacy endpoints</b></p> <ul style="list-style-type: none"> <li>Safety and tolerability</li> <li>Biological correlates of cellular and humoral immune responses in blood and tumour tissue.</li> <li>Overall response rate and progression-free survival</li> <li>Overall survival.</li> </ul>	<ul style="list-style-type: none"> <li>First patient first visit was entered H1 2016.</li> <li>Last patient first visit H2 2018.</li> <li>Last patient last visit H1 2019.</li> </ul> <p>Expected news flow:</p> <ul style="list-style-type: none"> <li>Interim data (safety lead in cohort) H2 2017.</li> <li>Clinical, immune and safety data H1 2019.</li> </ul>

### 7.8.1.3 Study 3 – ONCOS-102 in melanoma

Description	Study design
<ul style="list-style-type: none"> <li>A pilot study of sequential ONCOS-102 and a checkpoint inhibitor (CPI) in patients with advanced and unresectable melanoma progressing after PD1 blockade.</li> <li>12 patients.</li> <li>1 site in the US.</li> </ul>	<ul style="list-style-type: none"> <li>Open-label single-arm.</li> <li>ONCOS-102 given i.t. at days 1, 4 and 8.</li> <li>Pembrolizumab is given according to the established schedule from day 22 and thereafter every 3 weeks to week 24.</li> <li>CT/PET at baseline, weeks 9, 18 and end of study.</li> <li>Biopsies at baseline, day 22 and day 64.</li> <li>PBMC at pre-screening and days 1, 22, 64 and 127.</li> </ul>
Objectives and endpoints	Timeline
<p><b>Primary objectives</b></p> <ul style="list-style-type: none"> <li>Safety of sequential treatment with ONCOS-102 and CPI.</li> </ul> <p><b>Main secondary objectives</b></p> <ul style="list-style-type: none"> <li>Objective response rate (ORR).</li> <li>Change in immune cell subsets in peripheral blood and tumour tissue.</li> </ul> <p><b>Explorative objectives</b></p> <ul style="list-style-type: none"> <li>Investigate mutational rate and neoepitope burden in tumours.</li> <li>Investigate changes in T-cell receptor clonality in infiltrating and circulating T-cells.</li> <li>Investigate gene expression changes in the tumour microenvironment and peripheral blood.</li> </ul> <p><b>Efficacy endpoints</b></p> <ul style="list-style-type: none"> <li>Safety.</li> <li>Objective response rate and Progression Free survival.</li> <li>Correlation of TILs and objective response rate.</li> </ul>	<ul style="list-style-type: none"> <li>First patient first visit H1 2017.</li> <li>Last patient first visit H1 2018.</li> <li>Last patient last visit H2 2018.</li> </ul> <p>Expected news flow:</p> <ul style="list-style-type: none"> <li>Interim immune activation date in H2 2017.</li> <li>Immune activation and clinical data in H2 2018.</li> </ul>

- Clinical benefit rate at 6 months.
  - Density of infiltration of various immune cell subsets in tumour tissue and peripheral blood over time.

#### 7.8.1.4 Study 4 – TG02 in locally recurrent rectal cancer

Description	Study design
<ul style="list-style-type: none"> <li>• A non-randomised open-label Phase 1b exploratory study of TG02-treatment as monotherapy or in combination with a CPI to assess safety and immune activation in patients with locally recurrent rectal cancer.</li> <li>• 20 patients (two parts).</li> <li>• 5 sites in AUS and NZ.</li> </ul>	<ul style="list-style-type: none"> <li>• Open label Phase I exploratory study <i>Two parts:</i> <u>Part I (n=10 patients).</u> <ul style="list-style-type: none"> <li>• TG02/GMCSF as monotherapy on weeks 1,2,3,4 and 6</li> </ul> <u>Part II (n=10 patients).</u> <ul style="list-style-type: none"> <li>• TG02/GMCSF on weeks 1,2,3,4 and 6 in combination with pembrolizumab on weeks 1, 3 and 6.</li> </ul> </li> <li>• CT/PET at baseline and 8 weeks.</li> <li>• Biopsies at baseline and by surgery (8-14 weeks).</li> <li>• PBMC at baseline, 4 and 8 weeks and if surgery delayed, as close as possible to surgery.</li> </ul>
Objectives and endpoints	Timeline
<p><b>Primary objectives</b></p> <ul style="list-style-type: none"> <li>• Safety.</li> <li>• Systemic TG02 specific immune responses in blood and tumour tissue.</li> </ul> <p><b>Secondary objectives</b></p> <ul style="list-style-type: none"> <li>• Changes in immunological and pathological markers in tumour tissue.</li> <li>• Changes in FDG PETCT images.</li> <li>• Changes in CEA.</li> </ul> <p><b>Efficacy endpoints</b></p> <ul style="list-style-type: none"> <li>• Safety (Adverse events, laboratory assessment, vital signs).</li> <li>• Presence of TG02 specific T-cells in peripheral blood.</li> <li>• TG02-specific DTH-reaction.</li> <li>• Changes in intra-tumoural lymphocytes.</li> </ul>	<ul style="list-style-type: none"> <li>• First patient first visit H1 2017.</li> <li>• Last patient first visit H2 2017.</li> <li>• Timelines for Part II to be decided.</li> </ul> <p>News flow:</p> <ul style="list-style-type: none"> <li>• Interim immune activation data H2 17 (part 1).</li> <li>• Immune activation and clinical data in H2 2018 (part 1 and 2) planned for H2 2018.</li> </ul>

#### 7.8.1.5 Study 5 – ONCOS-102 in ovarian and colorectal cancer

The study is a combination study with the Cancer Research Institute of the U.S., Ludwig Cancer Research Institute who are the sponsors/manage the study and MedImmune (AstraZeneca).

Description	Study design
<ul style="list-style-type: none"> <li>• A phase I/II dose escalation study with expansion to investigate the safety, biologic and anti-tumour activity of ONCOS-102 with durvalumab in subjects with advanced ovarian and colorectal cancer.</li> <li>• Up to 78 patients.</li> <li>• 6-8 sites in US.</li> </ul>	<ul style="list-style-type: none"> <li>• Open label Phase I /II study.</li> <li>• ONCOS-102 administered intra-peritoneally for 6 weeks, durvalumab given 12 times in 4 weekly cycles starting week 3 following a 3+3 dose escalation phase where ONCOS-102 and durvalumab are given sequentially.</li> <li>• CT/PET at baseline and during study.</li> <li>• Biopsies at baseline and during study.</li> <li>• PBMC at baseline and during study.</li> </ul>
Objectives and endpoints	Timeline
<p><b>Primary objectives</b></p> <ul style="list-style-type: none"> <li>• Safety and tolerability.</li> <li>• Clinical efficacy clinical benefit (at week 24); durable clinical benefit (at week 24), objective response rate (at week 24), PFS and OS.</li> </ul> <p><b>Explorative objectives</b></p> <ul style="list-style-type: none"> <li>• Biologic activity (effect on immune markers).</li> </ul>	<ul style="list-style-type: none"> <li>• First patient in H1 2017.</li> </ul> <p>News flow:</p> <ul style="list-style-type: none"> <li>• Interim data H1 (dose escalating part) 2018</li> </ul>

#### 7.8.1.6 Study 6 – ONCOS-102 in prostate cancer, a partner study where Sotio a.s. is the sponsor and responsible for the management of the study.

Description	Study design
<ul style="list-style-type: none"> <li>• A Phase I single arm clinical trial to evaluate safety and immune activation of the combination of DCVAC/pca (dendritic cells activated ex-vivo by allogenic prostate</li> </ul>	<ul style="list-style-type: none"> <li>• Details are not public.</li> </ul>

cancer cells) and ONCOS-102 in advanced metastatic castration-resistant prostate cancer.	
<b>Objectives and endpoints</b>	<b>Timeline</b>
<b>Primary objectives</b> <ul style="list-style-type: none"> <li>Safety and tolerability.</li> </ul>	<ul style="list-style-type: none"> <li>First patient first visit H1 2017.</li> <li>Last patient first visit in H1 2018.</li> </ul>
<b>Secondary objectives</b> <ul style="list-style-type: none"> <li>Details are not public.</li> </ul>	News flow:
<b>Explorative objectives</b> <ul style="list-style-type: none"> <li>Details are not public.</li> </ul>	<ul style="list-style-type: none"> <li>Interim data in H2 2018.</li> </ul>
<b>Efficacy endpoints</b> <ul style="list-style-type: none"> <li>Details are not public.</li> </ul>	

### 7.8.2 Regulatory strategy

The Group has two phase I trials ongoing; one in melanoma (site recruitment ready) and one in recurrent rectal cancer (sites recruitment ready). In addition, two Phase I/II trials are ongoing; one in resected pancreatic cancer (recruitment of patients completed), and one in mesothelioma (recruitment started). Furthermore, two additional Phase I or II trials in Ovarian and colorectal cancer and Prostate cancer will start in 2017. These two trials will be sponsored and managed by the Targovax collaborating organisations Ludwig Cancer Research (LICR) and Sotio a.s. All trials should be regarded as proof of concept trials and will as such determine subsequent regulatory pathways when immune activation, clinical efficacy and safety data have been analysed. The Group will continuously consider opportunities for accelerated approvals with EMA and the FDA.

Potential clinical trials:

- A next clinical trial of ONCOS-102 in 2nd line checkpoint-refractory melanoma, potentially a phase II or phase II/III trial.
- A next clinical trial of TG01 in resected pancreatic cancer, potentially a phase II or phase II/III trial.

Other potential clinical trials, dependant on the strength of data from ongoing clinical trials, could be:

- ONCOS-102 in mesothelioma:** Conduct a pivotal clinical trial of ONCOS-102 plus pemetrexed/cisplatin versus pemetrexed/cisplatin with PFS and OS as endpoints while target PFS as first data set for filing and registration.
- TG02 in unresectable advanced colorectal cancer:** Conduct Phase I/II clinical trial of TG02 in combination with standard of care chemotherapy or checkpoint inhibitor versus standard of care chemotherapy or checkpoint inhibitor; followed by a pivotal trial.
- Depending on the outcome of the collaboration trials of ONCOS-102 in prostate cancer and of ONCOS-102 in ovarian and colorectal cancer, the Group may conduct following trials either on their own or in collaboration with the partnering companies Sotio a.s. and Ludwig Cancer Research Institute.

### 7.8.3 Collaborative research and development agreements

#### 7.8.3.1 Agreement with Cancer Research Institute of the U.S. and Ludwig Cancer Research

On 18 November 2015, Targovax entered into an agreement with Ludwig Cancer Research (LICR) and the Cancer Research Institute (CRI) in New York to evaluate ONCOS-102 in early phase clinical trials, testing the virotherapy in combination with other, potentially synergistic immunotherapies such as checkpoint inhibitors.

Through this collaboration, Targovax will gain access to the well-known expertise and network of Cancer Research Institute (CRI) and Ludwig Cancer Research (LICR), which provides new opportunities for combinatorial research. The focus will be on mechanistic synergies with clinical impact combining ONCOS-102 with other immune therapies. A combination clinical trial of ONCOS-102 and MedImmune's durvalumab will be initiated in the first half of 2017. The trial is listed on [www.clinicaltrials.gov](http://www.clinicaltrials.gov) under the reference NCT02963831. Patients with ovarian cancers and/or with colorectal cancers will be enrolled.

Cost sharing is an aspect of the collaboration. The Group has some optionality with respect to the timing of costs, which may affect the share capital requirement of the Group. The cash flow effect of conducting the collaboration trial is expected to be small for Targovax.

### 7.8.3.2 Agreement with Sotio a.s.

In November 2015, Targovax entered into an agreement with the biotech company Sotio a.s. to design and run a collaboration trial combining ONCOS-102 and Sotio a.s.' dendritic cell therapy DCVAC/PCa to evaluate the safety and tolerability of the combination therapy in the treatment of advanced prostate cancer. The plan is to recruit the first patient in first half 2017.

The design of the planned trial with Sotio a.s. is subject to regulatory approvals in the Czech Republic and the UK. Cost sharing is an aspect of the collaboration. The cash flow effect of conducting the collaboration trial is expected to be small for Targovax.

### 7.8.3.3 Other collaborative research and development agreements

Entering into collaborative research and development agreements with partners is a part of the Group's strategy. The Group is consequently involved in discussions with other potential partners on an ongoing basis. If any such discussions were to materialize into firm agreements, this may affect the share capital requirement of the Group.

### 7.8.4 Research and development expenses

Below is an overview of the research and development ("R&D") expenses of the Group for the year ended 31 December 2016, the year ended 31 December 2015 and the year ended 31 December 2014.

<i>In TNOK</i>	Year ended	Year ended	Year ended
	31 December	31 December	31 December
	2016	2015	2014
	(audited)	(audited)	(audited)
External R&D expenses .....	45,001	25,231	7,766
Payroll and related expense .....	24,449	13,497	4,752
Other operating expense .....	970	384	2,276
<b>Total .....</b>	<b>70,420</b>	<b>39,111</b>	<b>14,794</b>

All expenditure on research activities is recognized as an expense in the period in which it is incurred.

### 7.8.5 Grants

The Group has received the following grants as of 31 December 2016:

- (i) NOK 800,000 from Innovation Norway to establish Targovax for the years 2011 to 2012. Up until the date of this Prospectus, all requirements and milestones related to the grant have been met.
- (ii) NOK 9,000,000 from Innovation Norway to develop TG01, the therapeutic cancer vaccine targeting RAS positive cancer cells, for the years 2011 to 2014. Up until the date of this Prospectus, all requirements and milestones related to the grant have been met.
- (iii) NOK 11,675,000 from the Research Council of Norway to develop GM-CSF as immunomodulator for cancer vaccine TG01 and novel RAS peptide formulations for the years 2013 to 2016. Up until the date of this Prospectus, all requirements and milestones related to the grant have been met.
- (iv) NOK 12,715,000 from SkatteFunn tax reduction scheme related to development of cancer vaccines TG01 and TG02 consisting of three approved projects. One of the projects was completed in 2013 and the two other projects were completed in 2016. Up until the date of this Prospectus, all requirements and milestones related to the grant have been met.
- (v) EUR 1,041,796 for preparations of clinical trials and for business development of a young innovative company and EUR 34,353 in R&D grant, both from Tekes for the years 2009 to 2012. As of the date of the Prospectus, no obligations remain related to these grants.
- (vi) EUR 15,000 from ELY-keskus (Finland's Centre for Economic Development, Transport and the Environment) for initiating company activities for the year 2009. As of the date of the Prospectus, no obligations remain related to these grants.

- (vii) EUR 223,363 from EU to hire one scientist into EU project "ADVance". The EU project was terminated in November 2015. Up until the date of the Prospectus, all requirements and milestones related to the grant have been met. The last payment tranche from EU of EUR 39,417 is expected to be received in 2017.

In addition, Targovax Oy has received three R&D loans from Tekes under loan agreements dated September 2010, January 2012 and December 2013, respectively, in the total outstanding amount of EUR 5,989,293 as of 31 December 2016. Pursuant to IFRS, these loans have a grant element due to the low interest rate they carry. The loan periods of the R&D loans are 10 years, of which the first 5 years are free of repayment.<sup>64</sup> The loans are repaid in equal annual instalments during the latter 5 years. Annual interest is paid yearly throughout the entire loan period. The applicable interest rate under the R&D loans is the European Central Bank's steering rate less 3 percentage points per annum, although not less than 1%. The Company has issued an on-demand guarantee in favour of Tekes for the repayment obligation of Targovax Oy under the R&D loans.

During March 2017 the Group received an additional loan approval of EUR 327,307 under one of the existing Tekes loans.

Pursuant to the terms and conditions of the R&D loans from Tekes, there is a change of control provision which accelerate the repayment obligation under the R&D loans in the event of a change of control in Targovax Oy.

#### 7.8.6 Patents and patent applications

Below is an overview of the Group's patents and patent applications.

Patent / patent application	Priority date	Status	Area covered	Geographic area	Expiry date
EP15172418.4	16 June 2015	Pending	New peptides targeting RAS exon 4 mutations and mixtures of defined RAS-mutated peptides can be used as a vaccine against, or treatment for RAS mutated cancers. In addition, mixtures of T-cells specific for RAS-mutations in individual patients can be administered to those patients, with or without RAS-mutated peptides, and RAS mutation specific T-cell receptors can be used to engineer chimeric antigen receptor T-cells (CART) that can be administered as treatment to patients with RAS mutated cancer.	Currently EPO <sup>1</sup> , but will proceed to international	16 June 2035
WO2015/169804	6 May 2014	Pending	The administration of a mixture of RAS-mutated peptides together with an anti-metabolite chemotherapeutic agent such as gemcitabine leads to a stronger immune response than the administration of the peptide mixture alone.  If granted, this patent application would cover TG01 in combination with gemcitabine.	International	6 May 2034
WO2015/086590 (A2)	9 December 2013	Pending	A mixture of at least two defined RAS-mutated peptides can be used as a vaccine against, or treatment for, over 99% of all RAS mutated cancers. In addition, mixtures of T-cells specific for RAS-mutations in individual patients can be administered to those patients, with or without RAS-mutated peptides.  <b>If granted, this patent application would cover TG02 and TG03.</b>	International	9 December 2033
NO 309798	30 April 1999	Granted	Method of vaccinating humans with a mixture of RAS-mutated peptides to elicit a RAS-specific T-cell immune response (therapeutic and prophylactic use).	Norway	30 April 2019

<sup>64</sup> The repayment free period of the loan from September 2010 has been extended with three years.

Patent / patent application	Priority date	Status	Area covered	Geographic area	Expiry date
<b>This patent covers TG01.</b>					
EP16188301.2	12 September 2016	Pending	ONCOS-102 in combination with a checkpoint inhibitor as treatment for human cancer.	Pending in EPO	12 September 2036
FI20165026	15 January 2016	Pending	ONCOS-102 viral construct in combination with chemotherapeutic agents (Pemetrexed and Cisplatin or Pemetrexed and Carboplatin) as treatment for human malignant mesothelioma.	Pending in Finland	15 January 2036
WO2013076374 (A1) FI 123955 US 9,410,129 B2	25 November 2011	Granted / pending	Composition of matter and method of use of oncolytic adenoviruses with E2F promotor having several different transgenes including GM-CSF.	Granted in Finland and USA. Pending in EPO.	25 November 2031
EP 15186798.3 US 14/866,582	25 November 2011	Pending	ONCOS-402 composition of matter and method of treating patients (divisional application of WO2013076374 (A1))	Pending in EPO / USA	25 November 2031
<b>This patent covers ONCOS-402</b>					
WO 2012038607(A1) FI 124926 B ZA 2013/01862 AU 2011306846 CN ZL201180053316.1 SG 188550	24 September 2010	Granted / pending	Composition of matter and method of use of viral constructs in which the viral replication is under hTERT gene activated by telomerase activity found in cancer cells. Viral construct includes the use of CD40L transgene. <b>This patent covers several viral constructs containing the CD40L transgene, but not ONCOS-402.</b>	Granted in Finland, South Africa, Australia, China and Singapore. Pending in Canada, EPO and, South Korea.	24 September 2031
WO 2010072900 (A1) US 9,345,787 B2 EP 2379586 FI 121508 B RU 2520823 SG 173432 AU 2009332883 ZA 2011/04224 CN 200980151762.9	22 December 2008	Granted / pending	ONCOS-102 viral construct and its uses. Composition of matter for Ad5/3-D24-GMCSF. Using the virus in a method of treating patients suffering from various cancer indications. <b>This patent covers ONCOS-102.</b>	Granted in USA, EPO <sup>1</sup> , Australia, Finland, China, Russia, Singapore and South Africa. Pending in, Brazil, Canada, China, Hong Kong, India, Japan and South Korea.	For most territories; 22 December 2029. For Finland: 28 April 2029; For Russia: 22, December 2034

<sup>1</sup> Member states of the European Patent Organisation.

The ownerships of the above mentioned patents and patent applications are held by the Group. Except from the above, the Group does not hold or license any patents that are business-critical.

The Group's success will depend significantly on its ability to obtain and maintain patent and other proprietary protection for commercially important technology, inventions and know-how related to its business, defend and enforce its patents, preserve the confidentiality of the Group's trade secrets and operate without infringing the valid and enforceable patents and other proprietary rights of third parties. The Group also relies on know-how and continuing technological innovation to develop, strengthen, and maintain its proprietary position in the field of cancer treatment. See Section 2.1 "Risks related to the Group and the industry in which the Group operates" for more information on the risks associated with the Group's patents.

The costs of the patents are usually comprised of a one-time application fee and costs for prosecution and issuance of the patent in each selected country or region, and an up to twenty years of maintenance fee for each granted patent.

The patent positions of biopharmaceutical companies are generally uncertain and involve complex legal, scientific and factual questions. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance. Consequently, the Company does not know whether its product candidate and future candidates will be protectable or remain protected by enforceable patents in

all relevant countries. The Company cannot predict whether the pending patent applications the Group is currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient proprietary protection from competitors. Any patents that the Group holds may be challenged, circumvented or invalidated by third parties. See Section 2.1 "Risks related to the Group and the industry in which the Group operates" for more information on the risks associated with third parties limiting the Group's freedom to operate.

One of the Group's patents, USP 5961978 (USA), expired in October 2016. The expired patent related to peptides and methods of vaccinating humans with RAS position 12 and position 13 mutated peptides to elicit a RAS mutation-specific T-cell immune response. Indirectly, the patent was also believed to provide protection for TG01 and TG02. However, TG01 is protected in the U.S. by its orphan drug designation and by WO2015/169804 with priority date 6 May 2014. TG02 is specifically protected by WO2015/086590 with priority date 9 December 2013. Consequently, the Company does not believe that the expiry of USP 596178 will be of importance to Targovax with respect to commercial development of the two vaccines comprising position 12 and position 13 mutated RAS peptides. The expiry of the U.S. patent will not have any consequences outside the U.S. Patent no. NO 309798 (Norway), which expires in 2019, relates to TG01. TG01 has obtained orphan drug designation in both Europe and the U.S. Consequently, the expiry of the Norwegian granted patent is not considered to have any negative effect on Targovax.

The Group also relies on trade secret protection for its confidential and proprietary information.

#### *7.8.7 License agreements*

The Group's virus platform uses a cell line licensed from the US National Institute of Health in the GMP manufacturing of ONCOS-102 and ONCOS-402. The license covers the use of the cell line for commercial purposes. The license fee is in total USD 20,000 over the 10 year term of the agreement. The license agreement terminates in 2024.

### **7.9 Material contracts**

No company in the Group has entered into any material contract outside the ordinary course of business for the two years prior to the date of this Prospectus. Further, no company in the Group has entered into any other contract outside the ordinary course of business which contains any provision under which any member of the Group has any obligation or entitlement.

### **7.10 Dependency on contracts, patents and licenses etc.**

It is the Company's opinion that the Group's existing business or profitability is not dependent upon any contracts. It is further the opinion of the Company that the Group's existing business or profitability is not dependent on any patents or licenses other than the patent and patent application as further described in Section 7.8.6 "Patents and patent applications".

### **7.11 Legal proceedings**

From time to time, the Company may become involved in litigation, disputes and other legal proceedings arising in the normal course of business, principally personal injury, property casualty and cargo claims. The Company expects that these claims would be covered by insurance, subject to customary deductibles. Such claims, even if lacking merit, could result in the expenditure of significant financial and managerial resources.

The Group is not, nor has been during the course of the preceding 12 months, involved in any legal, governmental or arbitration proceedings which may have, or has had in the recent past, significant effects on the Group's and/or the Group's financial position or profitability, and the Group is not aware of any such proceedings which are pending or threatened.

### **7.12 Information technology**

The Group has outsourced the IT functions, including network, servers, set up and support of printers and PCs. The services are based on a centralized operations/support model.

### **7.13 Office leases**

The Group rents premises in Oslo, Norway for office purposes. The annual rent is approximately NOK 1,359,000 (excl VAT). The Company is in addition to this amount charged for a proportionate share of common variable costs related to building management.

The Group also rents premises in Helsinki, Finland for office and laboratory purposes. The rent is approximately EUR 230,000 per annum (excl VAT). As part of the lease, the landlord agreed to finance the construction works and



machinery and equipment purchases made by Targovax Oy in 2010 – 2012 pertaining to the premises (approximately EUR 1.4 million excl VAT). The Group is now repaying such investment as part of the rent. The rental agreement may be terminated by the Group in August 2020 and by the landlord in August 2025. Should the lease be terminated by the Group prematurely (i.e. before August 2020), the Group would be liable to pay liquidated damages to the landlord (amounting to 1/150 of the landlord's total investment per month of premature termination).

There are no environmental issues that may affect the Group's utilization of the tangible fixed assets.

The Group does not own any assets which are necessary for production.

## 8 CAPITALISATION AND INDEBTEDNESS

The information presented below should be read in conjunction with the information included elsewhere in this Prospectus, including Section 9 "Selected Financial and Other Information".

This Section provides information about the Group's unaudited capitalization and net financial indebtedness on an actual basis as at 31 December 2016 and, in the "As adjusted" column, the Group's unaudited capitalization and net financial indebtedness as at 31 December 2016, on an adjusted basis to give effect to that the Group's cash balance has been reduced with approximately NOK 23 million in the period from 31 December 2016 to the contemplated date of Listing on 23 March 2017. Other than this, there has been no material change to the Group's capitalization and net financial indebtedness since 31 December 2016.

### 8.1 Capitalization

<i>In TNOK</i>	<b>As of 31 December 2016</b>	<b>Adjustment for reduced cash balance</b>	<b>As adjusted</b>
	<i>(unaudited)</i>	<i>(unaudited)</i>	<i>(unaudited)</i>
<b>Indebtedness</b>			
<i>Total current debt:</i>			
Guaranteed.....	-	-	-
Secured.....	-	-	-
Unguaranteed/unsecured.....	29,185	-	29,185
<i>Total non-current debt:</i>			
Guaranteed <sup>1</sup> .....	39,714	-	39,714
Secured.....	-	-	-
Unguaranteed/unsecured.....	55,278	-	55,278
<b>Total indebtedness</b> .....	<b>124,177</b>	<b>-</b>	<b>124,177</b>
<b>Shareholders' equity</b>			
Share capital.....	4,219	-	4,219
Legal reserves.....	627,796	-	627,796
Other reserves <sup>2</sup> .....	-230,847	-23,000	-253,847
<b>Total shareholders' equity</b> .....	<b>401,168</b>	<b>-23,000</b>	<b>378,168</b>
<b>Total capitalization</b> .....	<b>525,345</b>	<b>-23,000</b>	<b>502,345</b>

1 The Company has issued an on-demand guarantee in favor of Tekes for the repayment obligation of Targovax Oy related to this non-current debt.

2 Contains other reserves (NOK 17,055), retained earnings (NOK -253,521) and translation differences (NOK 5,618).

## 8.2 Net financial indebtedness

<i>In TNOK</i>	As of 31 December 2016 <i>(unaudited)</i>	Adjustment for reduced cash balance <i>(unaudited)</i>	As adjusted <i>(unaudited)</i>
Net indebtedness			
(A) Cash .....	171,629	-23,000	148,629
(B) Cash equivalents .....	-	-	-
(C) Interest bearing receivables .....	-	-	-
<b>(D) Liquidity (A) + (B) + (C) .....</b>	<b>171,629</b>	<b>-23,000</b>	<b>148,629</b>
<b>(E) Current financial receivables .....</b>	<b>14,203</b>	<b>-</b>	<b>14,203</b>
(F) Current bank debt .....	-	-	-
(G) Current portion of non-current debt .....	-	-	-
(H) Other current financial debt .....	29,185	-	-
<b>(I) Current financial debt (F) + (G) + (H) ...</b>	<b>29,185</b>	<b>-</b>	<b>29,185</b>
<b>(J) Net current financial indebtedness (I) - (E) - (D) .....</b>	<b>-156,648</b>	<b>23,000</b>	<b>-133,648</b>
(K) Non-current bank loans .....	-	-	-
(L) Bonds issued .....	-	-	-
(M) Other non-current loans .....	39,714	-	-
<b>(N) Non-current financial indebtedness (K) + (L) + (M) .....</b>	<b>39,714</b>	<b>-</b>	<b>39,714</b>
<b>(O) Net financial indebtedness (J) + (N) ...</b>	<b>-116,934</b>	<b>23,000</b>	<b>-93,934</b>

## 8.3 Working capital statement

The Group is of the opinion that the working capital available is sufficient for the Group's present requirements for the period covering at least 12 months from the date of this Prospectus.

## 8.4 Contingent and indirect indebtedness

As at 31 December 2016 and as at the date of the Prospectus, the Group did not have any contingent or indirect indebtedness.

## 9 SELECTED FINANCIAL AND OTHER INFORMATION

### 9.1 Introduction and basis for preparation

The following selected financial information has been extracted from the Group's audited financial statements as of and for the year ended 31 December 2016, with comparable figures as of and for the year ended 31 December 2015 (the "Financial Statements"). The Financial Statements have been prepared in accordance with IFRS.

The selected financial information included herein should be read in connection with, and is qualified in its entirety by reference to the Financial Statements incorporated by reference to this Prospectus.

### 9.2 Summary of accounting policies and principles

For information regarding accounting policies and the use of estimates and judgments, please refer to note 2 of the Financial Statements incorporated by reference to this Prospectus.

### 9.3 Statement of profit or loss

The table below sets out selected data from the Group's audited statement of profit or loss for the years ended 31 December 2016 and 2015.

*In TNOK*

	Year ended 31 December	
	2016	2015
Other revenue .....	37	146
<b>Total revenue</b> .....	<b>37</b>	<b>146</b>
External R&D expenses .....	-45,001	-25,231
Payroll and related expenses .....	-49,235	-35,431
Other operating expenses .....	-25,311	-29,100
<b>Total operating expenses</b> .....	<b>-119,548</b>	<b>-89,762</b>
<b>Operation profit/loss (-)</b> .....	<b>-119,511</b>	<b>-89,616</b>
Financial income .....	1,241	2,339
Financial expenses .....	-4,444	-2,608
<b>Net financial items</b> .....	<b>-3,203</b>	<b>-269</b>
<b>Loss before income tax</b> .....	<b>-122,714</b>	<b>-89,885</b>
Income tax .....	260	-1,930
<b>Loss for the period</b> .....	<b>-122,454</b>	<b>-91,816</b>
<b>Earnings/loss (-) per share</b>		
Basic and dilutive earnings/loss (-) per share (in NOK) .....	-3.55	-5.06

### 9.4 Statement of other comprehensive income

The table below sets out selected data from the Group's audited statement of other comprehensive income for the years ended 31 December 2016 and 2015.

*In TNOK*

	Year ended 31 December	
	2016	2015
Income/loss(-) for the period	-122,454	-91,816
Exchange differences arising from the translation of foreign operations .....	-16,174	21,793
<b>Total comprehensive income/loss (-) for the period</b> .....	<b>-138,628</b>	<b>-70,023</b>
Income/loss (-) for the period attributable to owners .....	-138,628	-70,023

## 9.5 Statement of financial position

The table below sets out selected data from the Group's audited statement of financial position as of 31 December 2016 and 2015.

	As of 31 December	
	2016	2015
<i>In TNOK</i>		
<b>Assets</b>		
Intangible assets .....	338,213	358,070
Office furniture .....	1,299	1,590
<b>Total non-current assets</b> .....	<b>339,512</b>	<b>359,659</b>
Receivables .....	14,203	11,557
Cash and cash equivalents .....	171,629	173,898
<b>Total current assets</b> .....	<b>185,833</b>	<b>185,455</b>
<b>Total assets</b> .....	<b>525,345</b>	<b>545,114</b>
<b>Equity and liabilities</b>		
<b>Equity</b>		
Share capital .....	4,219	2,688
Share premium reserve .....	627,796	522,502
Other reserves .....	17,055	6,957
Retained earnings .....	-253,521	-131,067
Translation differences .....	5,618	21,793
<b>Total equity</b> .....	<b>401,168</b>	<b>422,873</b>
<b>Non-current liabilities</b>		
Interest-bearing liabilities .....	39,714	38,112
Deferred tax .....	55,278	58,709
<b>Total long term liabilities</b> .....	<b>94,992</b>	<b>96,821</b>
<b>Current liabilities</b>		
Accounts payable and other current liabilities .....	4,681	6,307
Accrued public charges .....	3,348	1,826
Other short-term liabilities .....	21,155	17,287
<b>Total current liabilities</b> .....	<b>29,185</b>	<b>25,420</b>
<b>Total equity and liabilities</b> .....	<b>525,345</b>	<b>545,114</b>

## 9.6 Statement of cash flow

The table below sets out selected data from the Group's audited statements of cash flows for the years ended 31 December 2016 and 2015.

	Year ended 31 December	
	2016	2015
<i>In TNOK</i>		
<b>Cash flows from operating activities</b>		
Loss before income tax .....	-122,714	-89,885
Adjustments for:		
Interest income .....	-1,241	-2,339
Interest and other finance expense .....	4,444	2,608
Share option expense .....	10,098	5,717
Depreciation .....	284	148
Change in receivables .....	-2,646	-3,026
Change in other current liabilities .....	2,085	5,887
<b>Net cash flow from operating activities</b> .....	<b>-109,690</b>	<b>-80,890</b>
<b>Cash flows from investing activities</b>		
Investment in office furniture .....	-37	-158

In TNOK

Year ended  
31 December

	2016	2015
Purchase of intangible assets .....	-	1,313
<b>Net cash flow from investing activities</b>	<b>-37</b>	<b>1,155</b>
<b>Cash flows from financing activities</b>		
Interest received .....	533	1,009
Interest paid .....	-548	-526
Other finance expense.....	-286	-
Loan from TEKES.....	1,360	-
Share issue expense - Acquisition of Oncos OY.....	-	-260
Share issue expense – Private placement and repair offering .....	-7,753	-9,207
Proceeds from issuance of shares – Private Placement.....	114,593	200,000
Proceeds from exercise of options.....	-16	188
<b>Net cash flow from financing activities</b> .....	<b>107,883</b>	<b>191,204</b>
<b>Net increase/(decrease) in cash and cash equivalents</b> .....	<b>-1,844</b>	<b>111,468</b>
Net exchange gain/loss on cash and cash equivalents .....	-424	-123
Cash and cash equivalents at beginning of period .....	<b>173,898</b>	62,552
<b>Cash and cash equivalents at end of period</b> .....	<b>171,629</b>	<b>173,898</b>

## 9.7 Statement of changes in equity

The table below sets out selected data from the Group's audited statement of changes in equity for the years ended 31 December 2016 and 2015.

In TNOK	Share capital	Share premium	Other reserves	Translation differences	Retained earnings (accumulated losses)	Total equity
<b>Balance at 1 January 2015</b>	<b>943</b>	<b>97,792</b>	<b>780</b>	<b>-</b>	<b>-38,841</b>	<b>60,673</b>
Loss for the period .....	-	-	-	-	-91,816	-91,816
Exchange differences arising from the translation of foreign operations .....	-	-	-	21,793	-	21,793
Other comprehensive income/loss, net of tax.....	-	-	-	-	-	-
Total comprehensive income for the period .....	-	-	-	21,793	-91,816	-70,023
Issue of ordinary shares – Acquiring Oncos Therapeutics OY	943	234,792	-	-	-	235,735
Transaction costs – Oncos Therapeutics OY	-	-260	-	-	-	-260
Issuance of ordinary shares – Capital increase – Private Placement	800	199,200	-	-	-	200,000
Transaction costs – Private Placement	-	-9,207	-	-	-	-9,207
Share issuance, employee share options	3	185	-	-	-	188
Reclassification of share-based payment Oncos Therapeutics OY	-	-	410	-	-410	-
Recognition of share-based payments .....	-	-	5,768	-	-	5,768
<b>Balance at 31 December 2015</b> .....	<b>2,688</b>	<b>522,502</b>	<b>6,957</b>	<b>21,793</b>	<b>-131,067</b>	<b>422,873</b>
Loss for the period.....	-	-	-	-	-122,454	-122,454
Exchange differences arising from the translation of foreign operations .....	-	-	-	-16,174	-	-16,174
Other comprehensive income/loss, net of tax.....	-	-	-	-	-	-
Total comprehensive income for the period .....	-	-	-	-16,174	-122,454	-138,628
Issue of ordinary shares – Capital Increase – Private Placement and repair	1,529	113,065	-	-	-	114,593

<i>In TNOK</i>	Share capital	Share premium	Other reserves	Translation differences	Retained earnings (accumulated losses)	Total equity
Transaction costs – Private Placement and repair offering	-	-7,753	-	-	-	-7,753
Share issuance, employee share options	2	-18	-	-	-	-16
Recognition of share-based payments & RSUs.....	-	-	10,098	-	-	10,098
<b>Balance at 31 December 2016 .....</b>	<b>4,219</b>	<b>627,796</b>	<b>17,055</b>	<b>5,618</b>	<b>-253,521</b>	<b>401,168</b>

## 9.8 Auditor

The Company's auditor is Ernst & Young AS ("EY"), Dronning Eufemias gate 6, P.O. Box 20, Oslo Atrium, N-0051 Oslo, Norway. EY's partners are members of The Norwegian Institute of Public Accountants (*Nw.: Den Norske Revisorforening*). EY has been the Company's auditor since 30 October 2014. The Financial Statements for the years ended 31 December 2016 and 2015 have been audited by EY, and the auditor's reports are together with the Financial Statements for the years ended 31 December 2016 and 2015 incorporated by reference to this Prospectus.

EY has not audited, reviewed or produced any report on any other information provided in this Prospectus.

The Company's Board of Directors resolved in 2015 that the Management should carry out a tender process of the Company's audit services during 2016. The Management has completed such tender process and as a result, the Board of Directors has proposed to the Company's annual general meeting summoned to be held 5 April 2017, that PricewaterhouseCoopers AS shall be elected as the new auditor of the Company.

## 9.9 Financial review

### 9.9.1 Liquidity and capital resources

#### 9.9.1.1 Sources of liquidity

The Group's principal sources of liquidity are cash flows from equity issues and governmental grants. The Group primarily uses cash for development of immuno-oncology drug candidates and necessary working capital. As of 31 December 2016, cash and cash equivalents amounted to NOK 172 million.

The Group believes that the same general combination of funds provided by governmental grants and equity issues will be sufficient to meet the Group's working capital and capital expenditure requirements for the foreseeable future. Based on the Group's current estimates, it believes that the cash balance will be sufficient to cover the Group's activities for the period covering at least 12 months from the date of this Prospectus.

#### 9.9.1.2 Restrictions on use of capital

There are currently no restrictions on the use of the Group's capital resources that have materially affected or could materially affect, directly or indirectly, the Group's operations. The Group does not have any debt covenants, and is therefore not in breach and does not expect to be in breach of such covenants. The Group does not believe that there are significant obstacles or barriers to transfers of funds to it from its subsidiaries. There are certain requirements and milestones related to the grants the Group has received, see Section 7.8.5 "Grants".

#### 9.9.1.3 Summarized cash flow information

The following table summarizes the Group's historical cash flows, and is extracted from the audited cash flow statement as of and for the year ended 31 December 2016 and 2015:

<i>In TNOK</i>	Year ended 31 December	
	2016	2015 <sup>1</sup>
Cash flow from operating activities .....	-109,690	-80,890
Cash flow from investing activities .....	-37	1,155
Cash flow from financing activities .....	107,883	191,204
Net change in cash and cash equivalents .....	-1,844	111,468
Cash and cash equivalents at end of period.....	171,629	173,898

#### 9.9.1.4 Cash flows from operating activities

##### **Year ended 31 December 2016 compared to year ended 31 December 2015**

Net cash outflow from operating activities for the year ended 31 December 2016 was NOK 110 million compared to NOK 81 million for the year ended 31 December 2015, an increase of NOK 29 million primarily due to increased development activities in the Group.

#### 9.9.1.5 Cash flows from investing activities

##### **Year ended 31 December 2016 compared to year ended 31 December 2015**

Net cash outflow from investing activities for the year ended 31 December 2016 was NOK 0 million compared to a net inflow of NOK 1 million for the year ended 31 December 2015. The cash inflow of NOK 1 million in 2015 is cash acquired related to the acquisition of Targovax Oy.

#### 9.9.1.6 Cash flows from financing activities

##### **Year ended 31 December 2016 compared to year ended 31 December 2015**

Net cash inflow from financing activities for the year ended 31 December 2016 was NOK 108 million compared to NOK 191 million for the year ended 31 December 2015, a decrease of NOK 83 million. The decrease was primarily attributable to net proceeds from equity issue. Net proceed from equity issue was NOK 107 million in 2016 compared to NOK 191 million in 2015.

#### 9.9.2 Results of operations

##### **Year ended 31 December 2016 compared to the year ended 31 December 2015**

Revenues were NOK 0 million in the year ended 31 December 2016, compared to NOK 0 million in the year ended 31 December 2015. The Group has no core business revenue, only minor sale of services and rental income. Operating expenses amounted to NOK 120 million in the year ended 31 December 2016, compared to NOK 90 million in the year ended 31 December 2015. The increase in 2016 compared to 2015 reflects increased development activities. After financial items and tax, the loss for the year amounted to NOK 122 million in 2016 compared to NOK 92 million in 2015.

#### 9.9.3 Financial position

##### **As of 31 December 2016 compared to as of 31 December 2015**

As of 31 December 2016, cash and cash equivalents amounted to NOK 172 million, compared to NOK 174 million as of 31 December 2015. Total equity amounted to NOK 401 million as of 31 December 2016 compared to NOK 423 million as of 31 December 2015. Other receivables amounted to NOK 14 million as of 31 December 2016 compared to NOK 12 million as of 31 December 2015.

#### **9.10 Borrowings, contractual cash obligations and other commitments**

The Group does not have any material contractual cash obligations or other commitments as of the date of this Prospectus. However, Targovax Oy has received funding from Tekes in the forms of R&D loans in the principal outstanding amount of EUR 5,989,293 as of 31 December 2016.

During March 2017 the Group received an additional loan approval of EUR 327,307 under one of the existing Tekes loans.

See Section 7.8.5 "Grants" for further description of the grants and R&D loans.

#### **9.11 Investments**

##### *9.11.1 Principal investment in progress and planned principal investments*

There are no significant capital expenditure investments in progress. Costs associated with the development of the Group's product candidates are ordinary R&D expenses, expensed as they are incurred. See Section 7.8.4 "Research and development expenses".

The Group does not have any other investment plans, firm commitments or obligations to make significant future investments in tangible or intangible assets, or financial assets. However, the Group may modify its plans in the future to address, among others, changes in market conditions for its products and changes in the competitive conditions.

##### *9.11.2 Principal historical investments*



Historical investments relate to R&D expenses in connection with the development of the product candidates. Costs of obtaining and maintaining patents are also included in the R&D expenses. For further details regarding the R&D expenses, see Section 7.8.4 "Research and development expenses".

The table below shows the principal historical capital expenditures and investments of the Group for the years ended 31 December 2016 and 2015, derived from the Group's Financial Statements.

<i>In TNOK</i>	Year ended 31 December	
	2016	2015
Office equipment etc. ....	37	158
<b>Total</b> .....	<b>37</b>	<b>158</b>

All research and development costs were for the years ended 31 December 2016 and 2015 expensed and amounted to NOK 70.4 million and NOK 39.1 million, respectively.

There have been no principal investments since 31 December 2016.

#### **9.12 Related party transactions**

The Company has no related party transactions.

#### **9.13 No off-balance sheet arrangements**

The Company has not entered into and is not a party of any off-balance sheet arrangements.

#### **9.14 Trend information**

The Group has not experienced any changes or trends that are significant to the Group between 31 December 2016 and the date of this Prospectus, nor is the Group aware of such changes or trends that may or are expected to be significant to the Group for the current financial year.

#### **9.15 Significant changes**

There have been no significant changes in the financial or trading position of the Group since 31 December 2016

#### **9.16 Recent developments**

The recent developments in the period from 31 December 2016 to the date of this Prospectus are in accordance with plan.

Targovax announced on 5 January 2017 that Erik Digman Wiklund has been appointed as the Group's new chief financial officer, and will take up this role from April 2017 as the previous chief financial officer, Oystein Soug, was appointed as Targovax' chief executive officer on 2 November 2016.

On 2 February 2017, Targovax announced overall survival data from an analysis of the first cohort of patients in its ongoing, phase I/II clinical trial evaluating TG01 (co-administered with GM-CSF) in resected pancreatic cancer. For more information, see section 7.6.3. All of Targovax' sponsored trials, ONCOS-102 in melanoma, ONCOS-102 in mesothelioma and TG02 in colorectal cancer are open for recruitment of patients. Furthermore, Targovax, together with its clinical trial collaborators Cancer Research Institute (CRI), Ludwig Cancer Research (LICR) and Sotio a.s., are planning to get the two other planned studies, ONCOS-102 in ovarian and colorectal cancer and ONCOS-102 in prostate cancer, ready for recruitment.

The Group's cash balance has been reduced with approximately NOK 23 million in the period from 31 December 2016 to the contemplated date of Listing on 23 March 2017, mainly relating to research and development activities.

The Group has, during March 2017, received an additional loan approval of EUR 327,307 under one of the existing Tekes loans.

Except from the above mentioned matters, there have been no significant changes in the financial or trading position of the Group since date of the Financial Statements, which have been included by reference in this Prospectus.

## 10 BOARD OF DIRECTORS, MANAGEMENT, EMPLOYEES AND CORPORATE GOVERNANCE

### 10.1 Introduction

The General Meeting is the highest authority of the Company. All shareholders in the Company are entitled to attend and vote at General Meetings of the Company and to table draft resolutions for items to be included on the agenda for a General Meeting.

The overall management of the Company is vested in the Company's Board of Directors and the Company's Management. In accordance with Norwegian law, the Board of Directors is responsible for, among other things, supervising the general and day-to-day management of the Company's business ensuring proper organization, preparing plans and budgets for its activities ensuring that the Company's activities, accounts and assets management are subject to adequate controls and undertaking investigations necessary to perform its duties.

The Board of Directors has three sub-committees: an audit committee, a remuneration committee and a corporate governance committee. In addition, the Company's Articles of Association provides for a nomination committee.

The Management is responsible for the day-to-day management of the Company's operations in accordance with Norwegian law and instructions set out by the Board of Directors. Among other responsibilities, the Company's chief executive officer (the "**CEO**"), is responsible for keeping the Company's accounts in accordance with existing Norwegian legislation and regulations and for managing the Company's assets in a responsible manner. In addition, the CEO must according to Norwegian law, brief the Board of Directors about the Company's activities, financial position and operating results at a minimum of one time per month.

### 10.2 The Board of Directors

#### 10.2.1 Overview of the Board of Directors

The Company's Articles of Association provide that the Board of Directors shall consist of up to eight Board Members. The current Board of Directors consist of eight Board Members, as listed in the table below.

Pursuant to the Norwegian Code of Practice for Corporate Governance dated 30 October 2014 (the "**Norwegian Corporate Governance Code**"), (i) the majority of the shareholder-elected members of the Board of Directors should be independent of the Company's executive management and material business contacts, (ii) at least two of the shareholder-elected members of the Board of Directors should be independent of the Company's main shareholders (shareholders holding more than 10% of the Shares in the Company), and (iii) no members of the Company's executive management should be on the Board of Directors.

All Board Members are independent of the Company's executive management and material business contacts and no members of the Company's executive management serves on the Board of Directors. Except from Per Samuelsson and Johan Christenson who are not considered independent of HealthCap V L.P. and Jónas Einarsson and Bente-Lill Bjerkelund Romøren who are not considered independent of the Norwegian Radium Hospital Research Foundation, all Board Members are independent of the Company's main shareholders (shareholders holding more than 10% of the Shares in the Company).

The Company's registered office address at Lilleakerveien 2 C, 0283 Oslo, Norway serves as c/o addresses for the Board Members in relation to their directorships of the Company.

As at the date of this Prospectus the members of the Board of Directors hold RSUs giving rights to acquire Shares. See Section 10.6 "Restricted stock unit program".

As at the date of this Prospectus, none of the members of the Board of Directors hold any options or other rights to acquire Shares, other than Robert Burns who holds 21,235 share options in the Company. See Section 10.5 "Share option program" for further information about the Group's share option program.

#### 10.2.2 The Board of Directors

The names and positions of the Board Members are set out in the table below.

<u>Name</u>	<u>Position</u>	<u>Served since</u>	<u>Term expires</u>	<u>Shares</u>
Jónas Einarsson.....	Chairperson	October 2010	AGM 2017	-
Bente-Lill Bjerkelund Romøren ...	Board member	May 2012	AGM 2017	-
Johan Christenson .....	Board member	July 2015	AGM 2017	-

Name	Position	Served since	Term expires	Shares
Lars Lund-Roland.....	Board member	July 2015	AGM 2017	4,417
Per Samuelsson.....	Board member	July 2015	AGM 2017	-
Robert Burns.....	Board member	July 2015	AGM 2017	34,063
Eva-Lotta Coulter.....	Board member	September 2015	AGM 2017	-
Diane Mellett.....	Board member	September 2015	AGM 2017	-

### 10.2.3 Brief biographies of the Board Members

Set out below are brief biographies of the Board Members, including their relevant management expertise and experience, an indication of any significant principal activities performed by them outside the Company and names of companies and partnerships of which a Board Member is or has been a member of the administrative, management or supervisory bodies or partner the previous five years.

#### Jónas Einarsson, Chairperson

Jónas Einarsson is the CEO of the Norwegian Radium Hospital Research Foundation. The Norwegian Radium Hospital Research Foundation is an experienced pre-seed investor and project developer focused on cancer. Mr Einarsson sits on the board of directors of several Norwegian biotech companies and was one of the initiators behind Oslo Cancer Cluster and the Oslo Cancer Cluster Innovation Park. Mr Einarsson is a Norwegian citizen, and resides in Norway.

*Current directorships and senior management positions ... The Norwegian Radium Hospital Research Foundation (CEO), Oncinvent (board member), Ultimovacs AS (board member), Biomolex AS (board member) and OCC Innovation Park (board member).*

*Previous directorships and senior management positions*

*last five years ..... Nordic Nanovector ASA (board member), Oslo Cancer Cluster (OCC) (CEO and chairman) and The Norwegian School of Veterinary Science (board member).*

#### Bente-Lill Bjerkelund Romøren, Board member

Bente-Lill Bjerkelund Romøren is a consultant with 40 years of experience gained from national and international management positions in the pharmaceutical industry. She was formerly CEO of Novo Nordisk Scandinavia. Her experience spans senior management, marketing, sales, business development, licensing, market access, public affairs, clinical trials and lifecycle management. Ms Bjerkelund Romøren has good knowledge of the healthcare system as well as regulations and framework for the pharmaceutical market. She has board member experience from private and public sector (healthcare). She holds a MSc degree in chemistry from the Norwegian Institute of Technology in Trondheim. Ms Bjerkelund Romøren is a Norwegian citizen, and resides in Norway.

*Current directorships and senior management positions ... The Norwegian Radium Research Foundation (board member), Farmastat (chairman), Photocure ASA (chairman) and the Norwegian Ski Federation (chairman of the ski jumping committee, board member of Skistyret) and Vikersund Ski-Jumping Center Foundation (board member).*

*Previous directorships and senior management positions*

*last five years ..... Novo Nordisk Scandinavia AS (general manager Norway) and Nordic Nanovector ASA (board member).*

#### Johan Christenson, Board member

Dr. Johan Christenson has been a Partner at HealthCap since 2001. He has been in the life science sector covering science, medicine, drug development and venture investments since 1981. Prior to joining HealthCap, Dr Christenson was with SEB Företagsinvest (the venture capital arm of SEB) to supervise the health care portfolio. He was Global Product Director and member of the global therapy area management team of Pain and Inflammation at AstraZeneca. He has a MD degree and a PhD in basic neuroscience from Karolinska Institute. He held a position as Assistant Dean at the Karolinska Institute Graduate School for two years. Dr. Christenson has four years of clinical specialist training in paediatrics and paediatric neurology. Dr Christenson is a Swedish citizen, and resides in Sweden.

*Current directorships and senior management positions ... Trimb Healthcare AB (board member), Oncopeptides AB (board member), Glinova AB (board member), Nexstim Oy (board member), Ibiid AB (board member), Ancilla AB (board member), HealthCap 1999 GP AB (board member), HealthCap Annex Fund I-II GP AB (board member), HealthCap IV GP AB (board member), HealthCap III Sidefund GP AB (board member), HealthCap GbR ORX Holding AB (board member), HealthCap 1999 ORX Holding AB (board member), HealthCap Sidefund ORX Holding AB (board member), HealthCap Holdings GB AB (board member), HealthCap Annex Fund I-II Bis GP AB (board member), HealthCap Aero Holdings GP AB*

(board member) and HealthCap Orx Holdings GP AB (board member).

*Previous directorships and senior management positions last five years* .....

*Oncos Therapeutics OY (board member), Cerenis Therapeutics SA (board member), Newron Sweden AB (chairman) Wilson Therapeutics (board member), BeneChill, Inc. (board member) and Enebybergs Tennishall AB (board member).*

### **Lars-Lund Roland, Board member**

Lars Lund-Roland is a management consultant and associate partner at Narum Gruppen and has for the last three and a half years been CEO of Bringwell AB (publ), a Nordic health and welfare company listed in Stockholm, that commercialises OTC pharmaceuticals, nutrition and food supplements. Prior to this, he has been Managing Director of MSD Norway (Merck & Co Inc. subsidiary) for 10 years and has gained more than twenty-five years of big-pharma experience from various executive positions within marketing and sales at Merck & Co., Inc. He currently holds board positions at Vaccibody AS and Idia AS and has served as board member of Infodoc AS and Health Tech AS, two Norwegian health technology companies, as well as on the board of the Norwegian Association of Pharmaceutical Manufacturers. He is a Business Economist Graduate from Norwegian Business School BI, has a BSc in Healthcare from Buskerud University College and leadership education from the Sr. Executive program at Columbia Business School and Harvard. Mr. Lund-Roland is a Norwegian citizen, and resides in Norway.

*Current directorships and senior management positions* ... Associate Partner Narum Group, VacciBody AS (board member), Idia AS (board member).

*Previous directorships and senior management positions last five years* .....

*AS Anjo (board member), Bringwell AB (CEO and board member), MSD Norge AS (managing director), Health Tech AS (board member,) Infodoc AS (board member) and Papirbredden Innovation AS (chairman).*

### **Per Samuelsson, Board member**

Per Samuelsson is a partner at Odlander Fredrikson/HealthCap, the life sciences venture capital firm, which he joined in 2000. Prior to this, he gained more than 15 years of investment banking experience, mainly with Aros Securities in Sweden. In his final position with Aros Securities, as a Director in the firm's corporate finance department, he specialized in the areas of merger transactions, initial public offerings, and equity incentive programs. Prior to this, Mr Samuelsson was Head of Research, also at Aros Securities. He currently holds several Board positions at Nordic Nanovector ASA, NVC Holding AB, Oncopeptides AB, RSPR Pharma AB and SwedenBIO. He received his MSc in Engineering from the Institute of Technology in Linköping, Sweden. Mr Samuelsson is a Swedish citizen, and resides in Sweden.

*Current directorships and senior management positions* ... Nordic Nanovector ASA (board member), Ancilla AB (board member), Cantando AB (board member), RSPR Incentive AB (chairman), HealthCap AB (board member), Kip Jansson Film 1 AB (board member), Oncopeptides AB (board member), NVC Holding AB (board member), RSPR Pharma AB (board member), Skipjack AB (board member), SwedenBio Service AB (board member), HealthCap Holdings GP AB (board member), HealthCap Annex Fund I-II Bis GP AB (board member), HealthCap 1999 GP AB (board member), HealthCap Annex Fund I-II GP AB (board member), HealthCap IV GP AB (board member), HealthCap III Sidfund GP AB (board member), HealthCap Aero Holdings GP AB (board member) and HealthCap Orx Holdings GP AB (board member).

*Previous directorships and senior management positions last five years* .....

*BioStratum Inc (board member), Nordic Vision Clinics AS (board member and chairman), Algeta ASA (board member), Eksse AB (board member), Rocaer AB (board member), Oncos Therapeutics Oy (board member), Onxeo SA (board member), Topotarget A/S (board member), Optivy Sweden AB (chairman and board member), Nordic Vision Clinics AS (board member), RSPR Pharma AB (chairman), HealthCap GbR ORX Holding AB (board member), HealthCap Sidfund ORX Holding AB (board member), HealthCap 1999 ORX Holding AB (board member) and NVC Holding AB (chairman).*

### **Robert Burns, Board member**

Robert Burns is a consultant and advisor to companies developing immune based therapies in cancer. He has experience over more than 30 years in building biotechnology companies focused on immuno-oncology and was a member of the board of directors of Oncos Therapeutics OY prior to the Company's acquisition of Targovax Oy. He was previously Chairman of Haemostatix Limited before it was acquired by Ergomed plc. He was also previously CEO at 4-

Antibody AG, Affitech A/S (NASDAQ/OMX) and Celldex Therapeutics Inc (NASDAQ), each an immuno-oncology vaccine and antibody discovery company. Prior to Celldex Therapeutics, Dr Burns was Director of Technology Licensing at the Ludwig Institute for Cancer Research, an international independently financed not-for-profit research group focused on cancer vaccines and antibody based cancer immunotherapies. He holds a PhD in Chemistry and is a UK citizen, residing in Oxford, United Kingdom.

*Current directorships and senior management positions ... Alvos Oncology Ltd (managing director).*

*Previous directorships and senior management positions*

*last five years ..... Haemostatix Limited (chairman) and 4-Antibody AG (CEO).*

#### **Eva-Lotta Coulter (known as Eva-Lotta Allan), Board member**

Eva-Lotta Allan is an experienced biotechnology deal-maker with over 25 years of business development experience from the biotechnology and life science industry in both private and public companies. She has significant operational and investor relations expertise. She is Chief Business Officer at Immunocore, an immune-oncology company specializing in the development of soluble T-cell receptor based drugs. Immunocore secured Europe's largest private life sciences financing in July 2015. Ms Allan was previously at Ablynx NV, where she served as Chief Business Officer for close to seven years and brought in multiple strategic partnerships. She is on the board of the Bioindustry Association (BIA) in the UK and has served as a Non-Executive Director of Isconova AB. Prior to Ablynx, Ms Allan served as Senior Director of Business Development and Site Operations (Europe) at Vertex Pharmaceuticals where she was also a Director of the Board of Vertex Europe. She received her degree in microbiology from the University of Stockholm. Ms Allan is a Swedish citizen, and resides in United Kingdom.

*Current directorships and senior management positions ... Bioindustry Association (Board member), Immunocore Ltd (Chief Business Officer).*

*Previous directorships and senior management positions*

*last five years ..... Oxford Asymmetry (now Evotec) and Oxford GlycoSciences (now UCB), Immunocore Ltd (board member), Ablynx plc (Chief Business Officer) and Isconova AB (board member).*

#### **Diane Mellett, Board member**

Diane Mellett is a consultant to a number of biotech and medical device companies. She has qualified in both US and UK law and advises biotechnology companies in commercial contract and intellectual property matters. She was formerly General Counsel for Cambridge Antibody Technology (CAT) (LSE: NASDAQ) and led the secondary NASDAQ listing of that company as well as serving on the board of directors. During her time at CAT, she led a successful defense of a contractual dispute with Abbott Pharmaceuticals (now Abbvie) covering the company's major collaboration partnership covering Humira®, the most successful revenue generating antibody therapy in the pharmaceutical industry to date. Ms Mellett is a UK citizen, and resides in France.

*Current directorships and senior management positions ... Chevrelles Consulting Ltd (sole director) and Bioexpress S A (board member).*

*Previous directorships and senior management positions*

*last five years ..... Medical Research Council Technology (member of the Board of Governors).*

### **10.3 Management**

#### *10.3.1 Overview*

The Company's management team consists of 8 individuals as of the date of this Prospectus. The names of the members of Management as of the date of this Prospectus, and their respective positions, including close associates, are presented in the table below:

<b>Name</b>	<b>Current position within the Company</b>	<b>Employed with the Company since</b>	<b>Shares</b>
Øystein Soug .....	Chief Executive Officer and Chief Financial Officer <sup>1</sup>	May 2015	100,000 <sup>2</sup>
Jon Amund Eriksen .....	Chief Technology Innovation Officer	February 2011	728,601 <sup>3</sup>
Magnus Jäderberg.....	Chief Medical Officer	July 2015	20,000
Berit Iversen.....	Vice President, CMC	December 2011	7,587
Tina Madsen.....	Vice President, Quality Assurance	January 2015	6,300
Anne-Kirsti Aksnes .....	Vice President, Clinical Development	January 2015	12,000
Peter Skorpil .....	Vice President, Business Development	April 2015	10,000
Tiina Hakonen.....	Site manager Helsinki	May 2012	0

<sup>1</sup> Erik Digman Wiklund is employed as the Company's new Chief Financial Officer starting April 2017

<sup>2</sup> The shares are held through Abakus Invest AS.

Name	Current position within the Company	Employed with the Company since	Shares
------	-------------------------------------	---------------------------------	--------

3 The shares are held through Timmuno AS and Jon Amund Eriksen.

The Company's registered office address at Lilleakerveien 2 C, 0283 Oslo, Norway, serves as c/o address for the members of Management in relation to their employment with the Company.

### 10.3.2 Brief biographies of the members of Management

Set out below are brief biographies of the members of Management, including their relevant management expertise and experience, an indication of any significant principal activities performed by them outside the Company and names of companies and partnerships of which a member of Management is or has been a member of the administrative, management or supervisory bodies or partner the previous five years.

#### Øystein Soug – Chief Executive Officer

Øystein Soug has experience from 20 years in international banking industry and biotech. The last six years before joining the Company he was CFO of Algeta ASA, where he built up the functions of Finance, IR, Compliance, IT and HR. During Mr Soug's period in Algeta, the company started and completed a 900 patient Phase III trial, licenced its lead drug Xofigo with Bayer, built a US sales organization, launched Xofigo in the US, raised some USD 200 million in the capital markets and was sold for USD 2.9 billion to Bayer. Before his current CEO role, he was CFO of Targovax from May 2015 to October 2016. Prior to biotech, he held several positions with the Orkla Group and the European Bank for Reconstruction and Development (EBRD). He has a MSc in Economics and Finance from the University of St. Gallen (lic.oec.HSG). Mr Soug is a Norwegian citizen, and resides in Norway.

*Current directorships and senior management positions ... Abakus Invest AS (chairman) and Pharmasum Therapeutics AS (board member).*

*Previous directorships and senior management positions last five years ..... Bionor Pharma ASA (deputy chairman) and Algeta ASA (CFO).*

#### Erik Digman Wiklund – Chief Financial Officer

Erik Digman Wiklund joins from the nutraceutical company Aker Biomarine Antarctic AS, where he held the position as Director of Product Innovation. Prior to joining Aker Biomarine Antarctic AS, Erik worked for the Norwegian cancer biotechnology company Algeta ASA, and also has management consulting experience from the Pharma & Health Care practice of McKinsey & Company. Erik holds a PhD in Molecular Biology from Aarhus University, Denmark, and the Garvan Institute of Medical Research in Sydney, Australia. Mr Wiklund is a Swedish citizen, residing in Norway.

*Current directorships and senior management positions ... Kokkeløren AS/ Kokkeløren Holding AS (chairman), Digman AS (Chairman), Digman Photography ENK (owner).*

*Previous directorships and senior management positions last five years ..... Aker Biomarine Antarctic AS (Director of Product Innovation).*

#### Jon Amund Eriksen – Chief Technology Innovation Officer

Jon Amund Eriksen is co-founder and co-inventor of the Targovax technology. Mr Eriksen has more than 30 years of experience in the pharmaceutical and biotech industry (Nycomed, Norsk Hydro, GemVax, Pharmexa and Lytix Biopharma). He has previously held several senior positions as scientist, project leader and manager within development of cancer immunotherapy from discovery and early preclinical to Phase III clinical development. He is co-inventor of several patents for peptide cancer vaccines. Mr Eriksen holds a MSc in Chemistry from the University of Oslo. Mr Eriksen is a Norwegian citizen, and resides in Norway.

*Current directorships and senior management positions ... Timmuno AS (chairman and CEO).*

*Previous directorships and senior management positions last five years ..... Lytix Biopharma AS (director development oncology).*

#### Magnus Jäderberg – Chief Medical Officer

Magnus Jäderberg is a pharmaceutical physician with more than 30 years in various R&D functions including clinical research, medical affairs, pharmacovigilance, strategic product development and general management. He is experienced in all phases of clinical research, including clinical pharmacology, dose finding, registration, post-launch product differentiation and pharmacovigilance. Dr Jäderberg's therapeutic area expertise includes infectious diseases and immune oncology with late stage development, registration and launch of Rapamune® (sirolimus) and Yervoy® (ipilimumab). Prior to joining Targovax, he held roles at national, European and global level at GSK, Pharmacia, Wyeth

and most recently as Chief Medical Officer, Bristol Myers Squibb (Europe). Dr Jaderberg qualified in medicine at Karolinska Institute, Stockholm, Sweden, and is a fellow of the Faculty of Pharmaceutical Medicine of the Royal Colleges of Physicians of the United Kingdom. He is a Swedish citizen, and resides in the United Kingdom.

*Current directorships and senior management positions ... None.*

*Previous directorships and senior management positions*

*last five years ..... Bristol Myers Squibb (Europe) (CMO).*

#### **Berit Iversen – Vice President, CMC**

Berit Iversen has more than 25 years of experience within Research & Development and Operation in the pharmaceutical and biotech industry, including analytical sciences, quality control, validation and quality assurance from preclinical product development through to regulatory approval of products.

She has held different managing positions within CMC, Analytical development and Quality Control, in Nycomed/GE-Healthcare and in Invitrogen Dynal, now Thermo Fischer Scientific. Before joining Targovax, she was responsible for CMC and QA in Lytix Biopharma. She holds a MSc degree in chemistry from the University of Oslo. Ms Iversen is a Norwegian citizen, and resides in Norway.

*Current directorships and senior management positions ... None.*

*Previous directorships and senior management positions*

*last five years ..... Norsk Biotekforum (Norsk Industri).*

#### **Tina Madsen – Vice President, Quality Assurance**

Tina Madsen has 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. She has held managing positions within formulation and process development in Alpharma and QA in GE Healthcare. Before joining Targovax, she was Director of Product Quality Assurance in Algeta ASA (now Bayer AS). Ms Madsen holds a MSc in Pharmacy. Ms Madsen is a Danish citizen, and resides in Norway.

*Current directorships and senior management positions ... None.*

*Previous directorships and senior management positions*

*last five years ..... Algeta ASA (Director Product Quality Assurance).*

#### **Anne-Kirsti Aksnes – Vice President, Clinical Development**

Anne-Kirsti Aksnes has more than 20 years of experience within clinical research and development in the pharmaceutical and biotech industry and 10 years of experience working in clinical physiology. Previously, she was VP Clinical Research in Algeta ASA (now Bayer AS), where she had a key role in the strategic, scientific and clinical development as well as in medical communications. She holds a medical doctorate degree (PhD) at Karolinska Institute, Sweden. Mrs Aksnes is a Norwegian citizen, and resides in Norway.

*Current directorships and senior management positions ... None.*

*Previous directorships and senior management positions*

*last five years ..... Algeta ASA (vice president clinical development)*

#### **Tiina Hakonen - Site Manager Helsinki**

Tiina Hakonen has more than 20 years of experience within clinical research and development in the pharmaceutical and biotech industry. She is experienced in all phases of clinical research. Ms Hakonen has held management positions in Global Pharma and CRO organizations in Biostatistics and Data Management. She has a Master of Science (Statistics) degree from the University of Oulu, Finland. Ms Hakonen is a Finnish citizen, and resides in Finland.

*Current directorships and senior management positions ... None.*

*Previous directorships and senior management positions*

*last five years ..... None.*

#### **Peter Skorpil – Vice President, Business Development**

Peter Skorpil has extensive experience in licensing, commercial assessments, business intelligence and partnering. Previously, he was Commercial Director in Pronova BioPharma and Business Development Manager for Clavis Pharma where he was responsible for, among other things, out-licensing and managing Clavis partners. Mr Skorpil has also worked as a venture capital analyst at NeoMed Management. He holds an MBA from Brandeis University,

Massachusetts, U.S. and a PhD in molecular biology from University of Geneva, Switzerland. Mr Skorpil is a Swiss citizen, and resides in Norway.

*Current directorships and senior management positions ... None.*

*Previous directorships and senior management positions*

*last five years ..... None.*

## 10.4 Remuneration and benefits

### 10.4.1 Remuneration of the Board of Directors

In 2016, the annual general meeting of the Company resolved that all current board members shall receive NOK 200,000 for the period from the annual general meeting in 2015 and until the annual general meeting in 2016. If the current board members have served for a shorter period than since the annual general meeting in 2015, the remuneration shall be pro rata adjusted down (based on the number of days served compared to the full period). The annual general meeting further resolved that Robert Forbes Burns, Eva-Lotta Allan and Diane Mary Mellett in addition shall receive an extraordinary remuneration in the amount of NOK 100,000 in subject to mandatory settlement in restricted stock units ("RSUs"). See section 10.6 "Restricted stock unit program" for more information regarding the RSUs. Three of the board members Jónas Einarsson (chairman), Johan Christenson and Per Samuelsson have decided to waive any remuneration until the Company has sufficient financing in place. In accordance with their wishes, the annual general meeting resolved that no remuneration shall be granted to these board members for the period from the annual general meeting in 2015 to the annual general meeting in 2016.

At the same annual general meeting, it was resolved that for the period from the annual general meeting in 2016 to annual general meeting in 2017, the chairman of the board shall receive NOK 350,000 and all other board members shall receive NOK 200,000 for the period.

The remuneration shall be payable immediately after the annual general meeting in 2017. The board of directors may choose to receive their remuneration, or parts thereof, in the form of restricted stock units (RSUs). If a board member has not served for the entire period, the remuneration shall be pro rata adjusted down (based on the number of days served compared to the full period). With respect to Jónas Einarsson (chairman), Johan Christenson and Per Samuelsson, the payment of the remuneration is subject to the Company having sufficient financing in place prior to the annual general meeting in 2017.

The following remuneration was granted to the members of the Board of Directors for the period from the annual general meeting in 2015 to the annual general meeting in 2016 and for the period from the annual general meeting in 2016 to the annual general meeting in 2017, respectively:

<b>Board member</b>	<b>Prop rata adjustment for the period from AGM 2015 to AGM 2016</b>	<b>Remuneration for the period from AGM 2015 to AGM 2016</b>	<b>Remuneration for the period from AGM 2016 to AGM 2017</b>
Jónas Einarsson (chairman)	-	NOK 0	NOK 350,000*
Bente-Lill Bjerkelund Romøren	100%	NOK 200,000	NOK 200,000
Johan Christenson	-	NOK 0	NOK 200,000*
Lars Lund-Roland	81% <sup>65</sup>	NOK 161,667	NOK 200,000
Per Samuelsson	-	NOK 0	NOK 200,000*
Robert Burns	100%	NOK 300,000 (of which minimum NOK 100,000 as RSUs)	NOK 200,000
Eva-Lotta Coulter	58%	NOK 216,000 (of which minimum NOK 100,000 as RSUs)	NOK 200,000
Diane Mellett	58%	NOK 216,000 (of which minimum NOK 100,000 as RSUs)	NOK 200,000

\* Conditional upon the Company having sufficient financing in place prior to the annual general meeting in 2017.

### 10.4.2 Remuneration of Management

The total remuneration to the members of the Management in 2016 was NOK 18 million. The table below sets out the remuneration of the Management in 2016.

<sup>65</sup> Calculated with effect from 22 June 2015 where the General Meeting electing the Board Member took place.



Name	Salary	Bonus	Pension expense	Share-based payments (excl social security tax)	Other expensed benefits	Total
Jon Amund Eriksen (CTO) .....	1,509	-	64	-	206	1,779
Gunnar Gårdemyr (CEO) <sup>1</sup> .....	2,694	254	64	-	178	3,189
Øystein Soug (CFO/CEO) <sup>2</sup> .....	1,597	181	64	-	9	1,851
Magnus Jäderberg (CMO) .....	2,218	705	-	-	578	3,501
Anne-Kirsti Aksnes (VP Clinical development) .....	1,114	77	61	-	7	1,260
Antti Vuolanto (Executive VP) <sup>3</sup> .....	1,356	502	414	110	2	2,384
Tina Madsen (VP, Quality Assurance) .....	1,032	75	58	-	8	1,173
Peter Skorpil (VP, Business Development) ...	935	70	52	-	9	1,067
Berit Iversen (VP, CMC) <sup>4</sup> .....	1,032	72	58	-	7	1,170
Tiina Hakonen (Site Manager Helsinki) <sup>5</sup> .....	759	48	170	-	2	980
<b>Total</b> .....	<b>14,246</b>	<b>1,985</b>	<b>1,006</b>	<b>110</b>	<b>1,008</b>	<b>18,354</b>

1 Gunnar Gårdemyr resigned from his position in the Group on 1 November 2016.

2 Øystein Soug was appointed CEO of the Group on 1 November 2016 and was before that CFO of the Group.

3 Antti Vuolanto resigned from his position in the Group on 18 August 2016.

4 Berit Iversen joined the Group in September 2016.

5 Tiina Hakonen joined the Group in September 2016.

## 10.5 Share option programs

The Company has granted share options under its long-term incentive program (the "LTI Option Program") and in the past as payment for inventions (the "IPR Option Program").

As of 31 December 2016, there are in total 2,513,170 outstanding options for all option programs, 2,409,256 options under the LTI Option Program and 103,914 options under the IPR Option Program.

Under the current plan, share options have been granted to all employees upon joining the Company. Additional grants have been made to employees on a discretionary basis. Certain former investors, employees and former and current board members have also been granted options under the LTI Option Program as replacement for historical option holdings.

All employees, including new employees, will be eligible for an option award on a discretionary basis in 2017. The Board of Directors will exercise discretion as to who will receive an equity award in any given year, based on recommendations made by the nomination committee.

Share options generally vest over a four-year period as follows: 25 percent of the options vest on the first anniversary of the grant date; and the remaining 75 percent of the options vest in equal monthly tranches over the next 36 months. Options expire seven years after the grant date.

As of 31 December 2016, the range of exercise price and weighted average remaining contractual life of the options were as follows:

Exercise price	Outstanding options			Vested options			
	Outstanding options per 31 December 2016	Weighted average remaining contractual life	Weighted average remaining years until vesting	Weighted average exercise price	Vested options per 31 December 2016	Weighted average exercise price	Weighted average remaining life vested
0.00 - 0.51	73,876	5.50	3.73	0.51	23,837	0.51	1.78
0.51 - 7.50	25,000	0.85	0.00	7.50	25,000	7.50	0.85
7.50 - 15.04	595,000	6.87	2.02	11.62	5,000	15.04	0.05
15.04 - 21.50	337,250	3.26	0.37	21.13	219,261	21.50	1.43
21.50 - 25.00	1,381,030	3.92	0.56	25.00	733,116	25.00	1.60
25.00 - 37.60	101,014	5.25	0.01	37.60	97,689	37.60	5.12
<b>Grand Total:</b>	<b>2,513,170</b>	<b>4.60</b>	<b>0.95</b>	<b>20.93</b>	<b>1,103,903</b>	<b>24.45</b>	<b>1.35</b>

The following members of the Management participate in the LTI Option Program:

Option holder	Number of options	Expiry date	Exercise price (NOK)
Øystein Soug (CEO/CFO <sup>1</sup> )	540,000	11 November 2020: 300,000 options	NOK 25
		2 July 2022: 90,000 options	NOK 25
		1 November 2023: 150,000	NOK 9,3
Jon Amund Eriksen (CTIO)	160,000	2 July 2022	NOK 25
Magnus Jäderberg (CMO)	510,000	15 February 2021: 133,265 options	NOK 25
		2 July 2022: 256,735 options	NOK 25
		9 December 2023: 120,000	NOK 12,39
Anne-Kirsti Aksnes (VP CD)	153,000	1 January 2022: 53,000 options	NOK 21.5
		9 December 2023: 100,000 options	NOK 12.39
Berit Iversen (VP CMC)	90 000	5 November 2017: 25,000 options	NOK 7.5
		2 July 2022: 45,000 options	NOK 25
		9 December 2023: 20,000 options	NOK 12.39
Tiina Hakonen	45 000	1 January 2021: 3,837	NOK 25
		2 July 2022: 21,163	NOK 25
		9 December 2023: 20,000	NOK 12,39
Tina Madsen (VP QA)	53,000	1 January 2022	NOK 21.5
Peter Skorpil (VP BC)	45,000	8 April 2022	NOK 25

1 Øystein Soug was appointed CEO of the Group on 1 November 2016 and was before that CFO of the Group.

## 10.6 Restricted stock unit program

At the annual general meeting of the Company in 2016, the general meeting resolved to establish a program for the members of the board of directors pursuant to which the members of the board of directors may choose to receive their remuneration, or parts thereof, in the form of restricted stock units (RSUs). The RSUs will be non-transferrable and each RSU will give the right and obligation to acquire shares in Targovax ASA (at nominal value) subject to satisfaction of the applicable vesting conditions.

Each member of the board of directors has three alternatives when the remuneration to the board members is resolved by the general meeting:

- a) Receive 100% of the board remuneration in the form of RSUs;
- b) Receive 1/3 of the board remuneration in cash and 2/3 in the form of RSUs; or
- c) Receive 2/3 of the board remuneration in cash and 1/3 in the form of RSUs;

The number of RSUs to be granted is calculated as the NOK amount of the RSU selected portion of total remuneration to the Board Member, divided by the market price for the Targovax share. The market price shall be calculated as the volume weighted average share price for the 10 trading days prior to the grant date (i.e. the date of the general meeting which the corresponding board remuneration was resolved). The RSU program will apply to the remuneration proposed by the Board of Directors in Section 10.4.1 "Remuneration of the Board of Directors", and for future periods unless otherwise resolved by the General Meeting (including remuneration for the period from the annual General Meeting in 2016 to the annual general meeting in 2017 which was resolved by the annual General Meeting in 2016).

As a main rule, the vesting of the RSUs will be subject to (i) the grantee being a member of the Board of Directors at the vesting date, and (ii) the grantee not having notified the Company prior to the vesting date of the grantee's intention to step down from the Board of Directors. If any of the above events occur prior to vesting, then the number of RSUs that vest shall be equal to the total number of RSUs granted multiplied by a fraction in which the numerator is equal to the number of calendar days in the period from grant and until the date on which the event occurs, and the denominator is equal to 365. The remaining RSUs shall will lapse without compensation.

The RSUs will vest on the first anniversary of the grant date (i.e. the date of the general meeting which the corresponding board remuneration was resolved), unless otherwise determined by the nomination committee. With respect to the RSU's granted for the period from the annual General Meeting in 2015 to the annual General Meeting in 2016, the RSU shall be fully vested at the time of grant (i.e. as of 13 April 2016). When the RSUs have vested, the participant must in the following three-year period select when to take delivery of the Shares. The participants will on a quarterly basis have the opportunity to:

- a) Receive all Shares; or
- b) Receive all Shares and sell a proportion of the Shares immediately (Shares may be sold to cover tax).

The RSUs will be honored by the issue of new Targovax ASA Shares or by the delivery of treasury Shares. The Board Member must for each share pay the nominal value of a Targovax ASA Share of NOK 0.10.

Based on the election made by each member of the Board of Directors (i.e. the allocation between RSUs and cash remuneration as described above), and the volume weighted average share price for the 10 business days prior to the date of grant (13 April 2016) which was NOK 12.20 per share, the members of the Board of Directors currently hold the following number of RSUs:

RSU holder	Grant date	Number of RSUs for the period AGM		Number of RSUs for the period AGM 2016		Vesting date	Total RSUs
		2015 – AGM 2016	Vesting date	– AGM 2017	Vesting date		
Jónas Einarsson	-	-	-	-	-	-	-
Bente-Lill Bjerkelund	-	-	-	-	-	-	-
Romøren	13 April 2016	5,464	13 April 2016	5,465	13 April 2017	10,929	
Johan Christenson	-	-	-	-	-	-	
Lars Lund-Roland	13 April 2016	-	13 April 2016	16,394	13 April 2017	16,394	
Per Samuelsson	-	-	-	-	-	-	
Robert Burns	13 April 2016	24,590	13 April 2016	16,394	13 April 2017	40,984	
Eva-Lotta Coulter	13 April 2016	17,704	13 April 2016	5,465	13 April 2017	23,169	
Diane Mellett	13 April 2016	17,704	13 April 2016	16,394	13 April 2017	34,098	
<b>Total</b>						<b>129,991</b>	

### 10.7 Benefits upon termination

Oystein Soug (CEO) is entitled to severance pay equal to the more beneficial of (i) 12 months' base salary as per the date of the termination or (ii) payment of base salary until 31 December 2018, and Magnus Jäderberg (CMO) is entitled to severance pay equal to 12 months' salary in the event of termination of his employment. Apart from this, no employee, including any member of Management, has entered into employment agreements which provide for any special benefits upon termination. None of the Board Members or members of the nomination committee have service contracts and none will be entitled to any benefits upon termination of office.

### 10.8 Pensions and retirement benefits

For the year ended 31 December 2016, the costs of pensions for members of Management were NOK 419,649.00. The Company has no pension or retirement benefits for its Board Members.

### 10.9 Loans and guarantees

The Company has not granted any loans, guarantees or other commitments to any of its Board Members or to any member of Management.

### 10.10 Employees

As of 31 December 2016, the Group had 27 employees. The table below shows the development in the numbers of employees over the last two years (including both the employees of the Company, Targovax Oy and its subsidiary Targovax AG which currently is under liquidation).

	Year ended 31 December	
	2016	2015
<b>Total Group</b> .....	<b>27</b>	<b>27</b>
By legal entity:		
- Targovax ASA (Norway) .....	20	16
- Targovax Oy (Finland).....	7	10
- Targovax AG (Switzerland) .....	0	1
By main category of activity:		
- Management.....	8	7
- Functional Heads.....	3	4
- Functional employees.....	10	12
- Administrative.....	6	4

### 10.11 Nomination committee

The Company's Articles of Association provide for a nomination committee composed of three members. The current

members of the nomination committee are Ludvik Sandnes (chairperson), Anders Tuv and Johan Christenson. The nomination committee shall give recommendations for the shareholder-elected Board Members and the members of the nomination committee and make recommendations for remuneration to the Board Members and the members of the nomination committee.

#### **10.12 Remuneration committee**

The Board of Directors has established a remuneration committee composed of Board Members. The current members of the remuneration committee are Per Samuelsson, Lars Lund-Roland and Robert Burns. The primary purpose of the remuneration committee is to assist and facilitate the decision making of the Board of Directors in matters relating to the remuneration of the executive management of the Group, reviewing recruitment policies, career planning and management development plans, and prepare matters relating to other material employment issues in respect of the executive management.

The remuneration committee reports and makes recommendations to the Board of Directors, but the Board of Directors retains responsibility for implementing such recommendations.

#### **10.13 Audit committee**

The Board of Directors has established an audit committee composed of Board Members. The current members of the audit committee are Jónas Einarsson, Per Samuelsson and Lars Lund-Roland. The primary purposes of the audit committee are to:

- assist the Board of Directors in discharging its duties relating to the safeguarding of assets, the operation of adequate system and internal controls, the control processes and the preparation of accurate financial reporting and statements in compliance with applicable legal requirements, corporate governance and accounting standards; and
- provide support to the Board of Directors on the risk profile and risk management of the Group.

The audit committee reports and makes recommendations to the Board of Directors, but the Board of Directors retains responsibility for implementing such recommendations.

#### **10.14 Corporate governance committee**

The Board of Directors has established a corporate governance committee composed of Board Members. The current members of the corporate governance committee are Johan Christenson, Bente-Lill Bjerkelund Romøren, Diane Mellett and Eva-Lotta Coulter. The primary purposes of the corporate governance committee are to monitor the Company's compliance with the Norwegian Corporate Governance Code. The corporate governance committee reports and makes recommendations to the Board of Directors, but the Board of Directors retains responsibility for implementing such recommendations.

#### **10.15 Conflicts of interests etc.**

Per Samuelsson was a member of the board of directors of Eksse AB and Rocaer AB (two fund administration companies for liquidated HealthCap funds). These companies were liquidated in the ordinary course of business in 2012. Other than this, no Board Member or member of the Management has, or had, as applicable, during the last five years preceding the date of the Prospectus:

- any convictions in relation to fraudulent offences;
- received any official public incrimination and/or sanctions by any statutory or regulatory authorities (including designated professional bodies) or was disqualified by a court from acting as a member of the administrative, management or supervisory bodies of a company or from acting in the management or conduct of the affairs of any company; or
- been declared bankrupt or been associated with any bankruptcy, receivership or liquidation in his or her capacity as a founder, member of the administrative body or supervisory body, director or senior manager of a company; or
- been selected as a member of the administrative, management or supervisory bodies or member of senior management of the Company's major shareholders, customers, suppliers or others.

There are currently no other actual or potential conflicts of interest between the Company and the private interests or other duties of any of the Board Members and the members of the Management, including any family relationships between such persons.

#### **10.16 Corporate governance**

The Company has adopted and implemented a corporate governance policy based on the Norwegian Corporate Governance Code. The Company's corporate governance policy deviates from the Norwegian Corporate Governance Code on the following points:

- Deviation from Section 6 "General meetings": The Company does not have an arrangement in place to ensure independent chairing of the General Meeting. However, the Board of Directors will on an ad hoc basis evaluate independent chairing when necessary. Historically, it has not been deemed necessary to have independent chair.

Although Targovax encourages the Board Members and the members of the nomination committee to be present at the annual General Meeting, their attendance is not always possible as the majority of the members live abroad and have competing work and travel commitments.

- Deviation from Section 7 "Nomination committee": Johan Christenson is currently member of both the Board of Directors and the nomination committee and offered himself for re-election, and was re-elected, as a Board Member and a member of the nomination committee at the annual General Meeting in 2016.

#### **10.17 Lock-up**

##### *10.17.1 The Company*

Pursuant to a lock-up undertaking entered into in connection with the completion of the 2016 Private Placement, the Company has undertaken that it will not and will procure that none of its respective subsidiaries nor any other party acting on its behalf (other than the 2016 Joint Bookrunners) will, without the prior written consent of the 2016 Joint Bookrunners: (1) directly or indirectly, issue, offer, pledge, sell, or contract to issue or sell any Shares, or (2) (i) directly or indirectly, issue, offer, pledge, sell or contract to issue or sell any securities convertible into or exercisable or exchangeable for Shares or (ii) enter into any swap or any other agreement or any transaction that has an equivalent effect to paragraph (i) above, whether any such swap or transaction described in paragraph (i) or (ii) above is to be settled by delivery of such securities, in cash or otherwise.

The lock up undertaking will remain in force for a period of 12 months following the 2016 Private Placement, i.e. 7 July 2017. The lock-up undertaking does not apply to any issuance of options, shares or other similar instruments as part of the existing duly approved option scheme and RSU scheme.

##### *10.17.2 Members of the Board of Directors and the Management*

Pursuant to a lock-up undertaking entered into in connection with the completion of the 2016 Private Placement, all members of the Board of Directors and the Management have undertaken to: (1) not offer, sell, pledge, lend or otherwise dispose of any Shares or resolve to do any of the foregoing without the prior written consent of the 2016 Joint Bookrunners. The obligation applies correspondingly to any sale of or other disposition of options, warrants, convertible bonds or other securities convertible or exchangeable into Shares. The members of the Board of Directors and the Management have also undertaken not to enter into any swap or other agreement or transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of Shares, whether any such swap or transaction is to be settled by delivery of Shares or other securities, in cash or otherwise or resolve to do any of the foregoing, without the prior written consent of the 2016 Joint Bookrunners.

The undertaking does not apply to (i) acceptance (including pre-acceptance) of any bona fide offer for all the Shares, (ii) any direct or indirect transfer of Shares to a company controlled by the shareholder or entity controlling the shareholder provided that such company or entity prior to the transfer has signed a lock-up undertaking in the same form as this lock-up undertaking, (iii) the sale of Shares subscribed under the Company's share option program, (iv) the sale of Shares to finance the strike price for share options exercised and any tax triggered by such sale or the exercise of share options, or (v) Shares acquired following the completion of the 2016 Private Placement.

The lock-up undertaking shall remain in force for 12 months after the 2016 Private Placement, i.e. 7 July 2017.

## 11 CORPORATE INFORMATION AND DESCRIPTION OF SHARE CAPITAL

The following is a summary of certain corporate information and material information relating to the Shares and share capital of the Company and certain other shareholder matters, including summaries of certain provisions of the Company's Articles of Association and applicable Norwegian law in effect as of the date of this Prospectus. The summary does not purport to be complete and is qualified in its entirety by the Company's Articles of Association and applicable law.

### 11.1 Company corporate information

The Company's legal and commercial name is Targovax ASA. The Company is a publicly limited company organized and existing under the laws of Norway pursuant to the Norwegian Public Limited Companies Act. The Company's registered office and domicile is in the municipality of Oslo, Norway. The Company was incorporated in Norway on 8 October 2010 and converted into a public limited company on 29 September 2015. The Company's organization number in the Norwegian Register of Business Enterprises is 996 162 095, and the Shares are registered in book-entry form with the VPS under ISIN NO0010689326. The Company's register of shareholders in VPS is administrated by Nordea Bank Norge ASA, Securities Services – Issuer Services, Middelthuns gate 17, P.O. Box 1166 Sentrum, N-0107 Oslo, Norway. The Company's registered office is located at Lilleakerveien 2 C, 0283 Oslo, Norway and the Company's main telephone number at that address is +47 21 39 88 10. The Company's website can be found at [www.targovax.com](http://www.targovax.com). The content of [www.targovax.com](http://www.targovax.com) is not incorporated by reference into and does not otherwise form part of this Prospectus.

### 11.2 Legal structure

The Company is a public limited company incorporated and domiciled in Norway. The Company is the parent company in the Group. The Group's operations are carried out by the Company and its wholly-owned subsidiary Targovax Oy. Targovax AG, a wholly-owned subsidiary of Targovax Oy, earlier being the employing entity of one of the employees of the Group, is under liquidation. Targovax Oy is incorporated in Finland and Targovax AG is incorporated in Switzerland. The Company does not have any other subsidiaries. The Company is the holder of the TG technology while Targovax Oy is the holder of the ONCOS-102 technology.

As at the date of this Prospectus, the Company is of the opinion that its holding in Targovax Oy is likely to have a significant effect on the assessment of its own assets and liabilities, financial condition or profit and losses.

### 11.3 Share capital and share capital history

As of the date of this Prospectus, the Company's share capital is NOK 4,219,971.90 divided into 42,199,719 Shares, with each Share having a nominal value of NOK 0.10. All the Shares have been created under the Norwegian Public Limited Companies Act, and are validly issued and fully paid.

The Company has one class of shares. Other than the share options and RSUs described in Section 10.5 "Share option program" and Section 10.6 "Restricted stock unit program", there are no share options or other rights to subscribe for or acquire Shares from the Company. Neither the Company nor any of its subsidiaries directly or indirectly owns Shares in the Company.

The table below shows the development in the Company's share capital for the period from 8 October 2010 to the date hereof:

Date of registration	Type of change	Change in share capital (NOK)	Nominal value (NOK)	New number of Shares	New share capital (NOK)
8 October 2010	Incorporation	100,000.00	1,000	100	100,000.00
6 April 2011	Share capital increase	66,000.00	1,000	166	166,000.00
13 September 2011	Share capital increase	34,000.00	1,000	200	200,000.00
23 February 2012	Share capital increase	170,300.00	0.10	1,703,000	370,300.00
19 April 2013	Share capital increase	100,000.00	0.10	4,703,000	470,300.00
21 January 2014	Share capital increase	147,059.00	0.10	6,173,590	617,359.00
13 June 2014	Share capital increase	325,581.40	0.10	9,429,404	942,940.40
2 July 2015	Share capital increase	942,940.40	0.10	18,858,808	1,885,880.80
9 July 2015	Share capital increase	800,000.00	0.10	26,858,808	2,685,880.80
17 December 2015	Share capital increase (exercise of options)	2,500	0.10	26,883,808	2,688,380.80
9 May 2016	Share capital increase (exercise of options)	2,155.90	0.10	26,905,367	2,690,536.70
7 July 2016	Share capital increase	1,468,500.00	0.10	14,685,000	4,159,036.70

Date of registration	Type of change	Change in share capital (NOK)	Nominal value (NOK)	New number of Shares	New share capital (NOK)
17 August 2016	(private placement) Share capital increase (repair offer)	54,363.40	0.10	42,134,001	4,213,400.10
21 November 2016	Share capital increase (exercise of options)	5,679.90	0.10	42,190,800	4,219,080.00
24 February 2017	Share capital increase (exercise of options)	891.90	0.10	42,199,719	4,219,971.90

\*) The nominal value of the shares was changed from NOK 1,000 to NOK 0,1 between the September 2011 and February 2012 share issue. For comparable figures nominal value of 0,1 NOK are assumed for all years.

Except for the issuance of 9,429,404 consideration shares, each with a nominal value of NOK 0.10, in connection with the acquisition of Targovax Oy completed on 2 July 2015, no share capital has been paid for with assets other than cash in the period from the incorporation of the Company to the date of this Prospectus.

#### 11.4 Admission to trading

The Company has applied for admission to trading of its Shares on Oslo Stock Exchange and the board of directors of Oslo Stock Exchange approved the listing application of the Company on 22 March 2017.

The Company currently expects commencement of trading in the Shares on Oslo Stock Exchange on or about 23 March 2017. The Company has not applied for admission to trading of the Shares on any other stock exchange or regulated market.

#### 11.5 Ownership structure

As of 10 March 2017, the Company had 3,286 shareholders. The Company's 20 largest shareholders as of the same date are shown in the table below.

#	Shareholders	Number of Shares	Percent
1	HANDELSBANKEN STOCKHOLM CLIENTS AC <sup>1</sup>	11,155,584	26.44 %
2	RADIUMHOSPITALET FORSKNINGSSTIFTELSE	4,077,255	9.66 %
3	NORDNET LIVSFORSIKRING AS	1,356,741	3.22 %
4	VPF NORDEA AVKASTNING	1,196,582	2.84 %
5	VPF NORDEA KAPITAL	1,046,754	2.48 %
6	KLP AKSJENORGE	988,513	2.34 %
7	DANSKE BANK A/S	746,019	1.77 %
8	TIMMUNO AS	724,650	1.72 %
9	PRIETA AS	720,000	1.71 %
10	KOMMUNAL LANDSPENSJONSKASSE	691,845	1.64 %
11	STATOIL PENSJON	668,916	1.59 %
12	NORDNET BANK AB	616,928	1.46 %
13	CRESSIDA AS	420,000	1.00 %
14	PORTIA AS	400,000	0.95 %
15	VERDIPAPIRFONDET NORDEA NORGE PLUS	395,903	0.94 %
16	NORDEA 1 SICAV JPMLSA NORDEA LUX UC	390,761	0.93 %
17	SUNDT AS	300,000	0.71 %
18	VIOLA AS	300,000	0.71 %
19	THORENDAHL INVEST AS	260,000	0.62 %
20	Avanza Bank AB	249,565	0.59 %
	<b>Others</b>	15,493,703	36.72 %
	<b>Total</b>	42,199,719	100%

<sup>1</sup> Nominee account of Healthcap V LP / OFP V Advisor AB

There are no differences in voting rights between the shareholders.

Shareholders owning 5% or more of the Shares have an interest in the Company's share capital which is notifiable pursuant to the Norwegian Securities Trading Act. See Section 12.7 "Disclosure obligations" for a description of the disclosure obligations under the Norwegian Securities Trading Act. As of 10 March 2017, no shareholder, other than HealthCap V L.P., owning its shares through its nominee account in Handelsbanken Stockholm Clients AC, (approximately 26%), and the Norwegian Radium Hospital Research Foundation (approximately 10%) holds more than 5% or more of the issued Shares.

To the extent known to the Company, there are no persons or entities that, directly or indirectly, jointly or severally, exercise or could exercise control over the Company. The Company is not aware of any arrangements the operation of

which may at a subsequent date result in a change of control of the Company.

The Company's Articles of Association do not contain any provisions that would have the effect of delaying, deferring or preventing a change of control of the Company. The Shares have not been subject to any public takeover bids during the current or last financial year.

#### **11.6 Authorization to increase the share capital and to issue Shares**

The Board of Directors has been granted an authorization to increase the share capital by up to NOK 268,838.08, to be used in connection with the share based incentive programs for the Group's employees. The authorization is valid until the annual general meeting in 2017. The Board of Directors has proposed to the annual General Meeting summoned to be held 5 April 2017 that the authorization to be used in connection with the share based incentive programs for the Group's employees is replaced by an authorization equalling 10% of the Company's outstanding shares, options and RSUs (i.e. on a fully diluted basis). In order to take into account future share issuances, the Board of Directors has proposed that the authorization shall be up to the lower of (a) NOK 800,000 and (b) 10% of the Company's outstanding shares, options and RSUs. See Section 10.5 "Share option program" for more information regarding the share option programs.

The Board of Directors has been granted an authorization to increase the share capital by up to NOK 30,000, to be used in connection with the RSU Program for the Board of Directors. The authorization is valid until the annual General Meeting in 2017 and the Board of Directors has proposed that the authorization is renewed until the annual General Meeting in 2018 at the annual General Meeting summoned to be held 5 April 2017. See Section 10.6 "Restricted stock unit program" for more information regarding the share option programs.

In addition, the Board of Directors has in the notice to the annual General Meeting summoned to be held 5 April 2017, proposed to the annual General Meeting that an authorization to increase the share capital of the Company with 10% of its share capital, i.e. NOK 421,997.19, is given to the Board of Directors in order to give the Board of Directors financial flexibility in connection with any acquisitions or similar transactions, or to strengthen the Company's equity in general.

The preferential rights of the existing shareholders to subscribe for the new shares pursuant to Section 10-4 of the Norwegian Public Limited Companies Act may be deviated from with respect to the mentioned existing and proposed authorizations. The existing and proposed authorizations do not permit share capital increases in connection with mergers, but permits share capital increases against contribution in kind.

#### **11.7 Other financial instruments**

Except for the share options described in Section 10.5 "Share option programs" and the RSUs described under Section 10.6 "Restricted stock unit program", neither the Company nor any of its subsidiaries have issued any options, warrants, convertible loans or other instruments that would entitle a holder of any such instrument to subscribe for any shares in the Company or its subsidiaries. Furthermore, neither the Company nor any of its subsidiaries has issued subordinated debt or transferable securities other than the Shares and the shares in its subsidiaries which will be held, directly or indirectly, by the Company.

#### **11.8 Shareholder rights**

The Company has one class of Shares in issue, and in accordance with the Norwegian Public Limited Companies Act, all Shares in that class provide equal rights in the Company, including the right to any dividends. Each of the Shares carries one vote. The rights attaching to the Shares are described in Section 11.9 "The Articles of Association and certain aspects of Norwegian law".

#### **11.9 The Articles of Association and certain aspects of Norwegian law**

##### *11.9.1 The Articles of Association*

The Company's Articles of Association are set out in Appendix A to this Prospectus. Below is a summary of provisions of the Articles of Association.

##### *Objective of the Company*

The objective of the Company comprises sale and development of biomedical products and services. See Section 3 in the Company's Articles of Association.

##### *Registered office*

The Company's registered office is in the municipality of Oslo, Norway. See Section 2 in the Company's Articles of



Association.

#### *Share capital and nominal value*

The Company's share capital is NOK 4,219,971.90 divided into NOK 42,199,719 Shares, each Share with a nominal value of NOK 0.10. The Shares are registered with the VPS. See Section 4 in the Company's Articles of Association.

#### *Board of Directors*

The Company's Board of Directors shall consist of up to 8 Board Members. See Section 5 in the Company's Articles of Association.

#### *Restrictions on transfer of Shares*

The Articles of Association do not provide for any restrictions on the transfer of Shares, or a right of first refusal for the Company. Share transfers are not subject to approval by the Board of Directors.

#### *General meetings*

Documents relating to matters to be dealt with by the General Meeting, including documents which by law shall be included in or attached to the notice of the General Meeting, do not need to be sent to the shareholders if such documents have been made available on the Company's website. A shareholder may nevertheless request that documents which relate to matters to be dealt with at the General Meeting are sent to him/her. See Section 8 in the Company's Articles of Association. The shareholders may cast their votes in writing, including through electronic communication, in a period prior to the General Meeting. The Board of Directors can establish specific guidelines for such advance voting. The established guidelines must be stated in the notice of the General Meeting. The Board of Directors may decide that shareholders who want to participate in the General Meeting must notify the Company thereof within a specific deadline that cannot expire earlier than three days prior to the General Meeting.

#### *Nomination committee*

The Company shall have a nomination committee. See Section 10.11 "Nomination committee" and Section 6 in the Company's Articles of Association.

#### *11.9.2 Certain aspects of Norwegian corporate law*

##### *General meetings*

Through the general meeting, shareholders exercise supreme authority in a Norwegian company. In accordance with Norwegian law, the annual general meeting of shareholders is required to be held each year on or prior to 30 June. Norwegian law requires that written notice of annual general meetings setting forth the time of, the venue for and the agenda of the meeting be sent to all shareholders with a known address no later than 21 days before the annual general meeting of a Norwegian public limited company listed on a stock exchange or a regulated market shall be held, unless the articles of association stipulate a longer deadline, which is not currently the case for the Company.

A shareholder may vote at the general meeting either in person or by proxy appointed at their own discretion. Although Norwegian law does not require the Company to send proxy forms to its shareholders for General Meetings, the Company plans to include a proxy form with notices of General Meetings. All of the Company's shareholders who are registered in the register of shareholders maintained with the VPS as of the date of the General Meeting, or who have otherwise reported and documented ownership to Shares, are entitled to participate at General Meetings.

Apart from the annual general meeting, extraordinary general meetings of shareholders may be held if the Board of Directors considers it necessary. An extraordinary general meeting of shareholders must also be convened if, in order to discuss a specified matter, the auditor or shareholders representing at least 5% of the share capital demands this in writing. The requirements for notice and admission to the annual general meeting also apply to extraordinary general meetings. However, the annual general meeting of a Norwegian public limited company may with a majority of at least two-thirds of the aggregate number of votes cast as well as at least two-thirds of the share capital represented at a general meeting resolve that extraordinary general meetings may be convened with a 14 day notice period until the next annual general meeting provided the Company has procedures in place allowing shareholders to vote electronically.

##### *Voting rights – amendments to the Articles of Association*

Each of the Shares carries one vote. In general, decisions that shareholders are entitled to make under Norwegian law or the Articles of Association may be made by a simple majority of the votes cast. In the case of elections or appointments, the person(s) who receive(s) the greatest number of votes cast are elected. However, as required

under Norwegian law, certain decisions, including resolutions to waive preferential rights to subscribe in connection with any share issue in the Company, to approve a merger or demerger of the Company, to amend the Articles of Association, to authorize an increase or reduction in the share capital, to authorize an issuance of convertible loans or warrants by the Company or to authorize the Board of Directors to purchase Shares and hold them as treasury shares or to dissolve the Company, must receive the approval of at least two-thirds of the aggregate number of votes cast as well as at least two-thirds of the share capital represented at a general meeting. Norwegian law further requires that certain decisions, which have the effect of substantially altering the rights and preferences of any shares or class of shares, receive the approval by the holders of such shares or class of shares as well as the majority required for amending the Articles of Association.

Decisions that (i) would reduce the rights of some or all of the Company's shareholders in respect of dividend payments or other rights to assets or (ii) restrict the transferability of the Shares, require that at least 90% of the share capital represented at the general meeting in question vote in favor of the resolution, as well as the majority required for amending the Articles of Association.

In general, only a shareholder registered in the VPS is entitled to vote for such Shares. Beneficial owners of the Shares that are registered in the name of a nominee are generally not entitled to vote under Norwegian law, nor is any person who is designated in the VPS register as the holder of such Shares as nominees. Investors should note that there are varying opinions as to the interpretation of the right to vote on nominee registered shares. In the Company's view, a nominee may not meet or vote for Shares registered on a nominee account. A shareholder must, in order to be eligible to register, meet and vote for such Shares at the General Meeting, transfer the Shares from such nominee account to an account in the shareholder's name.

There are no quorum requirements that apply to the general meetings.

#### *Additional issuances and preferential rights*

If the Company issues any new Shares, including bonus share issues, the Articles of Association must be amended, which requires the same vote as other amendments to the Articles of Association. In addition, under Norwegian law, the Company's shareholders have a preferential right to subscribe for new Shares issued by the Company. Preferential rights may be derogated from by resolution in a General Meeting passed by the same vote required to amend the Articles of Association. A derogation of the shareholders' preferential rights in respect of bonus issues requires the approval of all outstanding Shares.

The General Meeting may, by the same vote as is required for amending the Articles of Association, authorize the Board of Directors to issue new Shares, and to derogate from the preferential rights of shareholders in connection with such issuances. Such authorization may be effective for a maximum of two years, and the nominal value of the Shares to be issued may not exceed 50% of the registered par share capital when the authorization is registered with the Norwegian Register of Business Enterprises.

Under Norwegian law, the Company may increase its share capital by a bonus share issue, subject to approval by the Company's shareholders, by transfer from the Company's distributable equity or from the Company's share premium reserve and thus the share capital increase does not require any payment of a subscription price by the shareholders. Any bonus issues may be affected either by issuing new shares to the Company's existing shareholders or by increasing the nominal value of the Company's outstanding Shares.

Issuance of new Shares to shareholders who are citizens or residents of the United States upon the exercise of preferential rights may require the Company to file a registration statement in the United States under United States securities laws. Should the Company in such a situation decide not to file a registration statement, the Company's U.S. shareholders may not be able to exercise their preferential rights. If a U.S. shareholder is ineligible to participate in a rights offering, such shareholder would not receive the rights at all and the rights would be sold on the shareholder's behalf by the Company.

#### *Minority rights*

Norwegian law sets forth a number of protections for minority shareholders of the Company, including, but not limited to, those described in this paragraph and the description of General Meetings as set out above. Any of the Company's shareholders may petition Norwegian courts to have a decision of the Board of Directors or the Company's shareholders made at the General Meeting declared invalid on the grounds that it unreasonably favors certain shareholders or third parties to the detriment of other shareholders or the Company itself. The Company's shareholders may also petition the courts to dissolve the Company as a result of such decisions to the extent particularly strong reasons are considered by the court to make necessary dissolution of the Company.

Minority shareholders holding 5% or more of the Company's share capital have a right to demand in writing that the Company's Board of Directors convene an extraordinary general meeting to discuss or resolve specific matters. In addition, any of the Company's shareholders may in writing demand that the Company place an item on the agenda for any General Meeting as long as the Company is notified in time for such item to be included in the notice of the meeting. If the notice has been issued when such a written demand is presented, a renewed notice must be issued if the deadline for issuing notice of the General Meeting has not expired.

#### *Rights of redemption and repurchase of Shares*

The share capital of the Company may be reduced by reducing the nominal value of the Shares or by cancelling Shares. Such a decision requires the approval of at least two-thirds of the aggregate number of votes cast and at least two-thirds of the share capital represented at a General Meeting. Redemption of individual Shares requires the consent of the holders of the Shares to be redeemed.

The Company may purchase its own Shares provided that the Board of Directors has been granted an authorization to do so by a General Meeting with the approval of at least two-thirds of the aggregate number of votes cast and at least two-thirds of the share capital represented at the meeting. The aggregate nominal value of treasury shares so acquired, and held by the Company must not exceed 10% of the Company's share capital, and treasury shares may only be acquired if the Company's distributable equity, according to the latest adopted balance sheet, exceeds the consideration to be paid for the shares. The authorization by the General Meeting of the Company's shareholders cannot be granted for a period exceeding 24 months.

#### *Shareholder vote on certain reorganizations*

A decision of the Company's shareholders to merge with another company or to demerge requires a resolution by the General Meeting passed by at least two-thirds of the aggregate votes cast and at least two-thirds of the share capital represented at the General Meeting. A merger plan, or demerger plan signed by the Board of Directors along with certain other required documentation, would have to be sent to all the Company's shareholders, or if the Articles of Association stipulate that, made available to the shareholders on the Company's website, at least one month prior to the General Meeting to pass upon the matter.

#### *Liability of members of the Board of Directors*

Board Members owe a fiduciary duty to the Company and its shareholders. Such fiduciary duty requires that the Board Members act in the best interests of the Company when exercising their functions and exercise a general duty of loyalty and care towards the Company. Their principal task is to safeguard the interests of the Company.

Board Members may each be held liable for any damage they negligently or wilfully cause the Company. Norwegian law permits the General Meeting to discharge any such person from liability, but such discharge is not binding on the Company if substantially correct and complete information was not provided at the General Meeting passing upon the matter. If a resolution to discharge the Company's Board Members from liability or not to pursue claims against such a person has been passed by a General Meeting with a smaller majority than that required to amend the Articles of Association, shareholders representing more than 10% of the share capital or, if there are more than 100 shareholders, more than 10% of the shareholders may pursue the claim on the Company's behalf and in its name. The cost of any such action is not the Company's responsibility but can be recovered from any proceeds the Company receives as a result of the action. If the decision to discharge any of the Company's Board Members from liability or not to pursue claims against the Company's Board Members is made by such a majority as is necessary to amend the Articles of Association, the minority shareholders of the Company cannot pursue such claim in the Company's name.

#### *Indemnification of Directors*

Neither Norwegian law nor the Articles of Association contains any provision concerning indemnification by the Company of the Board of Directors. The Company is permitted to purchase insurance for the Board Members against certain liabilities that they may incur in their capacity as such.

#### *Distribution of assets on liquidation*

Under Norwegian law, the Company may be wound-up by a resolution of the Company's shareholders at the General Meeting passed by at least two-thirds of the aggregate votes cast and at least two-thirds of the share capital represented at the meeting. In the event of liquidation, the Shares rank equally in the event of a return on capital.

#### *11.9.3 Shareholders' agreements*

To the knowledge of the Company, there are no shareholders' agreements related to the Shares.

## **12 SECURITIES TRADING IN NORWAY**

*Set out below is a summary of certain aspects of securities trading in Norway. The summary is based on the rules and regulations in force in Norway as at the date of this Prospectus, which may be subject to changes occurring after such date. The summary does not purport to be a comprehensive description of securities trading in Norway. Shareholders who wish to clarify the aspects of securities trading in Norway should consult with and rely upon their own advisors.*

### **12.1 Introduction**

The Oslo Stock Exchange was established in 1819 and is the principal market in which shares, bonds and other financial instruments are traded in Norway. As of 31 December 2016, the total capitalization of companies listed on the Oslo Stock Exchange amounted to approximately NOK 2,121 billion. Shareholdings of non-Norwegian investors as a percentage of total market capitalization as at 31 December 2016 amounted to approximately 36.6%.

The Oslo Stock Exchange has entered into a strategic cooperation with the London Stock Exchange group with regards to, *inter alia*, trading systems for equities, fixed income and derivatives.

### **12.2 Trading and settlement**

Trading of equities on the Oslo Stock Exchange is carried out in the electronic trading system Millennium Exchange. This trading system is in use by all markets operated by the London Stock Exchange, including the Borsa Italiana, as well as by the Johannesburg Stock Exchange.

Official trading on the Oslo Stock Exchange takes place between 09:00 hours (CET) and 16:20 hours (CET) each trading day, with pre-trade period between 08:15 hours (CET) and 09:00 hours (CET), closing auction from 16:20 hours (CET) to 16:25 hours (CET) and a post-trade period from 16:25 hours (CET) to 17:30 hours (CET). Reporting of after exchange trades can be done until 17:30 hours (CET).

The settlement period for trading on the Oslo Stock Exchange is two trading days (T+2). This means that securities will be settled on the investor's account in the VPS two days after the transaction, and that the seller will receive payment after two days.

Oslo Clearing ASA, a wholly-owned subsidiary of SIX x-clear AG, a company in the SIX group, has a license from the Norwegian FSA to act as a central clearing service, and has from 18 June 2010 offered clearing and counterparty services for equity trading on the Oslo Stock Exchange.

Investment services in Norway may only be provided by Norwegian investment firms holding a license under the Norwegian Securities Trading Act, branches of investment firms from an EEA member state or investment firms from outside the EEA that have been licensed to operate in Norway. Investment firms in an EEA member state may also provide cross-border investment services into Norway.

It is possible for investment firms to undertake market-making activities in shares listed in Norway if they have a license to this effect under the Norwegian Securities Trading Act, or in the case of investment firms in an EEA member state, a license to carry out market-making activities in their home jurisdiction. Such market-making activities will be governed by the regulations of the Norwegian Securities Trading Act relating to brokers' trading for their own account. However, such market-making activities do not as such require notification to the Norwegian FSA or the Oslo Stock Exchange except for the general obligation of investment firms that are members of the Oslo Stock Exchange to report all trades in stock exchange listed securities.

### **12.3 Information, control and surveillance**

Under Norwegian law, the Oslo Stock Exchange is required to perform a number of surveillance and control functions. The Surveillance and Corporate Control unit of the Oslo Stock Exchange monitors all market activity on a continuous basis. Market surveillance systems are largely automated, promptly warning department personnel of abnormal market developments.

The Norwegian FSA controls the issuance of securities in both the equity and bond markets in Norway and evaluates whether the issuance documentation contains the required information and whether it would otherwise be unlawful to carry out the issuance.

Under Norwegian law, a company that is listed on a Norwegian regulated market, or has applied for listing on such market, must promptly release any inside information directly concerning the company. Inside information means

precise information about financial instruments, the issuer thereof or other matters which are likely to have a significant effect on the price of the relevant financial instruments or related financial instruments, and which are not publicly available or commonly known in the market. A company may, however, delay the release of such information in order not to prejudice its legitimate interests, provided that it is able to ensure the confidentiality of the information and that the delayed release would not be likely to mislead the public. The Oslo Stock Exchange may levy fines on companies violating these requirements.

#### **12.4 The VPS and transfer of shares**

The Company's principal share register is operated through the VPS. The VPS is the Norwegian paperless centralized securities register. It is a computerized book-keeping system in which the ownership of, and all transactions relating to, Norwegian listed shares must be recorded. The VPS and the Oslo Stock Exchange are both wholly-owned by Oslo Børs VPS Holding ASA.

All transactions relating to securities registered with the VPS are made through computerized book entries. No physical share certificates are, or may be, issued. The VPS confirms each entry by sending a transcript to the registered shareholder irrespective of any beneficial ownership. To give effect to such entries, the individual shareholder must establish a share account with a Norwegian account agent. Norwegian banks, Norges Bank (being, Norway's central bank), authorized securities brokers in Norway and Norwegian branches of credit institutions established within the EEA are allowed to act as account agents.

As a matter of Norwegian law, the entry of a transaction in the VPS is *prima facie* evidence in determining the legal rights of parties as against the issuing company or any third party claiming an interest in the given security. A transferee or assignee of shares may not exercise the rights of a shareholder with respect to such shares unless such transferee or assignee has registered such shareholding or has reported and shown evidence of such share acquisition, and the acquisition is not prevented by law, the relevant company's articles of association or otherwise.

The VPS is liable for any loss suffered as a result of faulty registration or an amendment to, or deletion of, rights in respect of registered securities unless the error is caused by matters outside the VPS' control which the VPS could not reasonably be expected to avoid or overcome the consequences of. Damages payable by the VPS may, however, be reduced in the event of contributory negligence by the aggrieved party.

The VPS must provide information to the Norwegian FSA on an ongoing basis, as well as any information that the Norwegian FSA requests. Further, Norwegian tax authorities may require certain information from the VPS regarding any individual's holdings of securities, including information about dividends and interest payments.

#### **12.5 Shareholder register – Norwegian law**

Under Norwegian law, shares are registered in the name of the beneficial owner of the shares. As a general rule, there are no arrangements for nominee registration and Norwegian shareholders are not allowed to register their shares in the VPS through a nominee. However, foreign shareholders may register their shares in the VPS in the name of a nominee (bank or other nominee) approved by the Norwegian FSA. An approved and registered nominee has a duty to provide information on demand about beneficial shareholders to the company and to the Norwegian authorities. In case of registration by nominees, the registration in the VPS must show that the registered owner is a nominee. A registered nominee has the right to receive dividends and other distributions, but cannot vote in general meetings on behalf of the beneficial owners.

#### **12.6 Foreign investment in shares listed in Norway**

Foreign investors may trade shares listed on the Oslo Stock Exchange through any broker that is a member of the Oslo Stock Exchange, whether Norwegian or foreign.

#### **12.7 Disclosure obligations**

If a person's, entity's or consolidated group's proportion of the total issued shares and/or rights to shares in a company listed on a regulated market in Norway (with Norway as its home state, which will be the case for the Company) reaches, exceeds or falls below the respective thresholds of 5%, 10%, 15%, 20%, 25%, 1/3, 50%, 2/3 or 90% of the share capital or the voting rights of that company, the person, entity or group in question has an obligation under the Norwegian Securities Trading Act to notify the Oslo Stock Exchange and the issuer immediately. The same applies if the disclosure thresholds are passed due to other circumstances, such as a change in the company's share capital.

## **12.8 Insider trading**

According to Norwegian law, subscription for, purchase, sale or exchange of financial instruments that are listed, or subject to the application for listing, on a Norwegian regulated market, or incitement to such dispositions, must not be undertaken by anyone who has inside information, as defined in Section 3-2 of the Norwegian Securities Trading Act. The same applies to the entry into, purchase, sale or exchange of options or futures/forward contracts or equivalent rights whose value is connected to such financial instruments or incitement to such dispositions.

## **12.9 Mandatory offer requirement**

The Norwegian Securities Trading Act requires any person, entity or consolidated group that becomes the owner of shares representing more than one-third of the voting rights of a company listed on a Norwegian regulated market (with the exception of certain foreign companies not including the Company) to, within four weeks, make an unconditional general offer for the purchase of the remaining shares in that company. A mandatory offer obligation may also be triggered where a party acquires the right to become the owner of shares that, together with the party's own shareholding, represent more than one-third of the voting rights in the company and the Oslo Stock Exchange decides that this is regarded as an effective acquisition of the shares in question.

The mandatory offer obligation ceases to apply if the person, entity or consolidated group sells the portion of the shares that exceeds the relevant threshold within four weeks of the date on which the mandatory offer obligation was triggered.

When a mandatory offer obligation is triggered, the person subject to the obligation is required to immediately notify the Oslo Stock Exchange and the company in question accordingly. The notification is required to state whether an offer will be made to acquire the remaining shares in the company or whether a sale will take place. As a rule, a notification to the effect that an offer will be made cannot be retracted. The offer and the offer document required are subject to approval by the Oslo Stock Exchange before the offer is submitted to the shareholders or made public.

The offer price per share must be at least as high as the highest price paid or agreed by the offeror for the shares in the six-month period prior to the date the threshold was exceeded. If the acquirer acquires or agrees to acquire additional shares at a higher price prior to the expiration of the mandatory offer period, the acquirer is obliged to restate its offer at such higher price. A mandatory offer must be in cash or contain a cash alternative at least equivalent to any other consideration offered.

In case of failure to make a mandatory offer or to sell the portion of the shares that exceeds the relevant threshold within four weeks, the Oslo Stock Exchange may force the acquirer to sell the shares exceeding the threshold by public auction. Moreover, a shareholder who fails to make an offer may not, as long as the mandatory offer obligation remains in force, exercise rights in the company, such as voting in a general meeting, without the consent of a majority of the remaining shareholders. The shareholder may, however, exercise his/her/its rights to dividends and pre-emption rights in the event of a share capital increase. If the shareholder neglects his/her/its duty to make a mandatory offer, the Oslo Stock Exchange may impose a cumulative daily fine that runs until the circumstance has been rectified.

Any person, entity or consolidated group that owns shares representing more than one-third of the votes in a company listed on a Norwegian regulated market (with the exception of certain foreign companies not including the Company) is obliged to make an offer to purchase the remaining shares of the company (repeated offer obligation) if the person, entity or consolidated group through acquisition becomes the owner of shares representing 40%, or more of the votes in the company. The same applies correspondingly if the person, entity or consolidated group through acquisition becomes the owner of shares representing 50% or more of the votes in the company. The mandatory offer obligation ceases to apply if the person, entity or consolidated group sells the portion of the shares which exceeds the relevant threshold within four weeks of the date on which the mandatory offer obligation was triggered.

Any person, entity or consolidated group that has passed any of the above mentioned thresholds in such a way as not to trigger the mandatory bid obligation, and has therefore not previously made an offer for the remaining shares in the company in accordance with the mandatory offer rules is, as a main rule, obliged to make a mandatory offer in the event of a subsequent acquisition of shares in the company.

## **12.10 Compulsory acquisition**

Pursuant to the Norwegian Public Limited Companies Act and the Norwegian Securities Trading Act, a shareholder who, directly or through subsidiaries, acquires shares representing 90% or more of the total number of issued shares in a Norwegian public limited liability company, as well as 90% or more of the total voting rights, has a right, and each

remaining minority shareholder of the company has a right to require such majority shareholder, to effect a compulsory acquisition for cash of the shares not already owned by such majority shareholder. Through such compulsory acquisition the majority shareholder becomes the owner of the remaining shares with immediate effect.

If a shareholder acquires shares representing more than 90% of the total number of issued shares, as well as more than 90% of the total voting rights, through a voluntary offer in accordance with the Securities Trading Act, a compulsory acquisition can, subject to the following conditions, be carried out without such shareholder being obliged to make a mandatory offer: (i) the compulsory acquisition is commenced no later than four weeks after the acquisition of shares through the voluntary offer, (ii) the price offered per share is equal to or higher than what the offer price would have been in a mandatory offer, and (iii) the settlement is guaranteed by a financial institution authorized to provide such guarantees in Norway.

A majority shareholder who effects a compulsory acquisition is required to offer the minority shareholders a specific price per share, the determination of which is at the discretion of the majority shareholder. However, where the offeror, after making a mandatory or voluntary offer, has acquired more than 90% of the voting shares of a company and a corresponding proportion of the votes that can be cast at the general meeting, and the offeror pursuant to Section 4-25 of the Norwegian Public Limited Companies Act completes a compulsory acquisition of the remaining shares within three months after the expiry of the offer period, it follows from the Norwegian Securities Trading Act that the redemption price shall be determined on the basis of the offer price for the mandatory/voluntary offer unless specific reasons indicate another price.

Should any minority shareholder not accept the offered price, such minority shareholder may, within a specified deadline of not less than two months, request that the price be set by a Norwegian court. The cost of such court procedure will, as a general rule, be the responsibility of the majority shareholder, and the relevant court will have full discretion in determining the consideration to be paid to the minority shareholder as a result of the compulsory acquisition.

Absent a request for a Norwegian court to set the price or any other objection to the price being offered, the minority shareholders would be deemed to have accepted the offered price after the expiry of the specified deadline.

#### **12.11 Foreign exchange controls**

There are currently no foreign exchange control restrictions in Norway that would potentially restrict the payment of dividends to a shareholder outside Norway, and there are currently no restrictions that would affect the right of shareholders of a company that has its shares registered with the VPS who are not residents in Norway to dispose of their shares and receive the proceeds from a disposal outside Norway. There is no maximum transferable amount either to or from Norway, although transferring banks are required to submit reports on foreign currency exchange transactions into and out of Norway into a central data register maintained by the Norwegian customs and excise authorities. The Norwegian police, tax authorities, customs and excise authorities, the National Insurance Administration and the Norwegian FSA have electronic access to the data in this register.

## 13 TAXATION

Set out below is a summary of certain Norwegian tax matters related to an investment in the Company. The summary regarding Norwegian taxation is based on the laws in force in Norway as at the date of this Prospectus, which may be subject to any changes in law occurring after such date. Such changes could possibly be made on a retrospective basis.

The following summary does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to purchase, own or dispose of the shares in the Company. Shareholders who wish to clarify their own tax situation should consult with and rely upon their own tax advisors. Shareholders resident in jurisdictions other than Norway and shareholders who cease to be resident in Norway for tax purposes (due to domestic tax law or tax treaty) should specifically consult with and rely upon their own tax advisors with respect to the tax position in their country of residence and the tax consequences related to ceasing to be resident in Norway for tax purposes.

Please note that for the purpose of the summary below, a reference to a Norwegian or non-Norwegian shareholder refers to the tax residency rather than the nationality of the shareholder.

### 13.1 Norwegian taxation

#### 13.1.1 Taxation of dividends

##### Norwegian Personal Shareholders

Dividends received by shareholders who are individuals resident in Norway for tax purposes ("**Norwegian Personal Shareholders**") are taxable as ordinary income in Norway for such shareholders at an effective rate of 29.76% to the extent the dividend exceeds a tax-free allowance; i.e. dividends received, less the tax free allowance, shall be multiplied by 1.24 which are then included as ordinary income taxable at a flat rate of 24%, increasing the effective tax rate on dividends received by Norwegian Personal Shareholders to 29.76%.

The allowance is calculated on a share-by-share basis. The allowance for each share is equal to the cost price of the share multiplied by a risk free interest rate based on the effective rate after tax of interest on treasury bills (*Nw.: statskasseveksler*) with three months maturity. The allowance is calculated for each calendar year, and is allocated solely to Norwegian Personal Shareholders holding shares at the expiration of the relevant calendar year.

Norwegian Personal Shareholders who transfer shares will thus not be entitled to deduct any calculated allowance related to the year of transfer. Any part of the calculated allowance one year exceeding the dividend distributed on the share ("excess allowance") may be carried forward and set off against future dividends received on, or gains upon realization, of the same share. Any excess allowance will also be included in the basis for calculating the allowance on the same share in the following years.

##### Norwegian Corporate Shareholders

Dividends distributed from the Company to shareholders who are limited liability companies (and certain similar entities) resident in Norway for tax purposes ("**Norwegian Corporate Shareholders**"), are effectively taxed at rate of 0.72% (3% of dividend income from such shares is included in the calculation of ordinary income for Norwegian Corporate Shareholders and ordinary income is subject to tax at a flat rate of 24%).

##### Non-Norwegian Personal Shareholders

Dividends distributed to shareholders who are individuals not resident in Norway for tax purposes ("**Non-Norwegian Personal Shareholders**"), are as a general rule subject to withholding tax at a rate of 25%. The withholding tax rate of 25% is normally reduced through tax treaties between Norway and the country in which the shareholder is resident. The withholding obligation lies with the company distributing the dividends and the Company assumes this obligation.

Non-Norwegian Personal Shareholders resident within the EEA for tax purposes may apply individually to Norwegian tax authorities for a refund of an amount corresponding to the calculated tax-free allowance on each individual share (please see "Taxation of dividends – Norwegian Personal Shareholders" above). However, the deduction for the tax-free allowance does not apply in the event that the withholding tax rate, pursuant to an applicable tax treaty, leads to a lower taxation on the dividends than the withholding tax rate of 25% less the tax-free allowance.

If a Non-Norwegian Personal Shareholder is carrying on business activities in Norway and the shares are effectively connected with such activities, the shareholder will be subject to the same taxation of dividends as a Norwegian Personal Shareholder, as described above.



Non-Norwegian Personal Shareholders who have suffered a higher withholding tax than set out in an applicable tax treaty may apply to the Norwegian tax authorities for a refund of the excess withholding tax deducted.

### **Non-Norwegian Corporate Shareholders**

Dividends distributed to shareholders who are limited liability companies (and certain other entities) not resident in Norway for tax purposes ("**Non-Norwegian Corporate Shareholders**"), are as a general rule subject to withholding tax at a rate of 25%. The withholding tax rate of 25% is normally reduced through tax treaties between Norway and the country in which the shareholder is resident.

Dividends distributed to Non-Norwegian Corporate Shareholders resident within the EEA for tax purposes are exempt from Norwegian withholding tax provided that the shareholder is the beneficial owner of the shares and that the shareholder is genuinely established and performs genuine economic business activities within the relevant EEA jurisdiction.

If a Non-Norwegian Corporate Shareholder is carrying on business activities in Norway and the shares are effectively connected with such activities, the shareholder will be subject to the same taxation of dividends as a Norwegian Corporate Shareholder, as described above.

Non-Norwegian Corporate Shareholders who have suffered a higher withholding tax than set out in an applicable tax treaty may apply to the Norwegian tax authorities for a refund of the excess withholding tax deducted.

Nominee registered shares will be subject to withholding tax at a rate of 25% unless the nominee has obtained approval from the Norwegian Tax Directorate for the dividend to be subject to a lower withholding tax rate. To obtain such approval the nominee is required to file a summary to the tax authorities including all beneficial owners that are subject to withholding tax at a reduced rate.

The withholding obligation in respect of dividends distributed to Non-Norwegian Corporate Shareholders and on nominee registered shares lies with the company distributing the dividends and the Company assumes this obligation.

#### *13.1.2 Taxation of capital gains on realization of shares*

### **Norwegian Personal Shareholders**

Sale, redemption or other disposal of shares is considered a realization for Norwegian tax purposes. A capital gain or loss generated by a Norwegian Personal Shareholder through a disposal of shares is taxable or tax deductible in Norway. Such capital gain or loss is included in or deducted from the Norwegian Personal Shareholder's ordinary income in the year of disposal. The effective tax rate on gain or loss related to shares realised by Norwegian Personal Shareholders is currently 29.76%; i.e. capital gains (less the tax free allowance) and losses shall be multiplied by 1.24 which are then included in or deducted from the Norwegian Personal Shareholder's ordinary income in the year of disposal. Ordinary income is taxable at a flat rate of 24%, increasing the effective tax rate on gains/losses realised by Norwegian Personal Shareholders to 29.76%.

The gain is subject to tax and the loss is tax deductible irrespective of the duration of the ownership and the number of shares disposed of.

The taxable gain/deductible loss is calculated per share as the difference between the consideration for the share and the Norwegian Personal Shareholder's cost price of the share, including costs incurred in relation to the acquisition or realization of the share. From this capital gain, Norwegian Personal Shareholders are entitled to deduct a calculated allowance provided that such allowance has not already been used to reduce taxable dividend income. Please refer to Section 13.1.1 "Taxation of dividends – Norwegian Personal Shareholders" above for a description of the calculation of the allowance. The allowance may only be deducted in order to reduce a taxable gain, and cannot increase or produce a deductible loss, i.e. any unused allowance exceeding the capital gain upon the realization of a share will be annulled.

If the Norwegian Personal Shareholder owns shares acquired at different points in time, the shares that were acquired first will be regarded as the first to be disposed of, on a first-in first-out basis.

### **Norwegian Corporate Shareholders**

Norwegian Corporate Shareholders are exempt from tax on capital gains derived from the realization of shares qualifying for the Norwegian participation exemption, including shares in the Company. Losses upon the realization and costs incurred in connection with the purchase and realization of such shares are not deductible for tax purposes.

### **Non-Norwegian Personal Shareholders**

Gains from the sale or other disposal of shares by a Non-Norwegian Personal Shareholder will not be subject to taxation in Norway unless the Non-Norwegian Personal Shareholder holds the shares in connection with business activities carried out or managed from Norway.

### **Non-Norwegian Corporate Shareholders**

Capital gains derived by the sale or other realization of shares by Non-Norwegian Corporate Shareholders are not subject to taxation in Norway.

#### *13.1.3 Net wealth tax*

The value of shares is included in the basis for the computation of net wealth tax imposed on Norwegian Personal Shareholders. Currently, the marginal net wealth tax rate is 0.85% of the value assessed. The value for assessment purposes for listed shares is equal to 90% of the listed value as of 1 January in the year of assessment (i.e. the year following the relevant fiscal year). The value of debt allocated to the listed shares for Norwegian wealth tax purposes is reduced correspondingly (i.e. to 90%).

Norwegian Corporate Shareholders are not subject to net wealth tax.

Shareholders not resident in Norway for tax purposes are not subject to Norwegian net wealth tax. Non-Norwegian Personal Shareholders can, however, be taxable if the shareholding is effectively connected to the conduct of trade or business in Norway.

#### *13.1.4 VAT and transfer taxes*

No VAT, stamp or similar duties are currently imposed in Norway on the transfer or issuance of shares.

#### *13.1.5 Inheritance tax*

A transfer of shares through inheritance or as a gift does not give rise to inheritance or gift tax in Norway.

## **14 ADDITIONAL INFORMATION**

### **14.1 Auditor and advisors**

The Company's independent auditor is EY with registration number 976 389 387, and business address Dronning Eufemias gate 6, N-0191 Oslo, Norway. The partners of EY are members of Den Norske Revisorforening (The Norwegian Institute of Public Accountants). The Company's financial statements as of and for the years ended 31 December 2016 and 2015 as included by reference to this Prospectus have been audited by EY.

The Company's Board of Directors resolved in 2015 that the Management should carry out a tender process of the Company's audit services during 2016. The Management has completed such tender process and as a result, the Board of Directors has proposed to the Company's annual General Meeting summoned to be held 5 April 2017, that PricewaterhouseCoopers AS shall be elected as the new auditor of the Company.

Advokatfirmaet Thommessen AS (Haakon VII's gate 10, N-0161 Oslo, Norway) is acting as legal counsel to the Company.

### **14.2 Documents on display**

Copies of the following documents will be available for inspection at the Company's offices at Lilleakerveien 2 C, 0283 Oslo, Norway, during normal business hours from Monday to Friday each week (except public holidays) for a period of twelve months from the date of this Prospectus:

- The Company's certificate of incorporation and Articles of Association;
- All reports, letters, and other documents, historical financial information, valuations and statements prepared by any expert at the Company's request any part of which is included or referred to in this Prospectus;
- The historical financial information of the Company and its subsidiary undertakings for each of the two financial years preceding the publication of this Prospectus; and
- This Prospectus.

## 15 INCORPORATED BY REFERENCE

The Norwegian Securities Trading Act and the Norwegian Securities Trading Regulations, implementing Commission Regulation (EC) no. 809/2004 implementing Directive 2003/71/EC of the European Parliament and of the Council of 4 November 2003 regarding information contained in prospectuses as well as the format, incorporation by reference and publication of such prospectuses and dissemination of advertisements, allow the Company to incorporate by reference information into this Prospectus that has been previously filed with Oslo Stock Exchange or the Norwegian Financial Supervisory Authority in other documents. The Company's consolidated financial statements as of and for the years ended 31 December 2016 and 2015 and the audit reports in respect of these financial statements, are by this reference incorporated as a part of this Prospectus. Accordingly, this Prospectus is to be read in conjunction with these documents.

### Cross Reference Table

The information incorporated by reference in this Prospectus should be read in connection with the following cross-reference table. References in the table to "Annex" and "Items" are references to the disclosure requirements as set forth in the Norwegian Securities Trading Act cf. the Norwegian Securities Trading Regulations by reference to such Annex (and Item therein) of Commission Regulation (EC) no. 809/2004.

Section in the prospectus	Disclosure requirement	Reference document and link	Page of reference document
Section 9.1 to 9.7	Audited historical financial information (Annex XXV, item 3.1)	Annual Report 2015: <a href="http://hugin.info/171039/R/2016358/758010.pdf">http://hugin.info/171039/R/2016358/758010.pdf</a> Annual Report 2016: <a href="http://hugin.info/171039/R/2088142/788174.pdf">http://hugin.info/171039/R/2088142/788174.pdf</a>	Page 56 – 140 (Accounts and notes) Page 47 – 128 (Accounts and notes)
Section 9.8	Auditing of historical annual financial information (Annex XXV, item 20.1)	Audit Report 2015: <a href="http://hugin.info/171039/R/2016358/758010.pdf">http://hugin.info/171039/R/2016358/758010.pdf</a> Audit Report 2016: <a href="http://hugin.info/171039/R/2088142/788174.pdf">http://hugin.info/171039/R/2088142/788174.pdf</a>	Page 141 - 142 Page 129 - 132

## 16 DEFINITIONS AND GLOSSARY

In the Prospectus, the following defined terms have the following meanings:

2010 PD Amending Directive .....	Directive 2010/73/EU amending the EU Prospectus Directive.
2016 Joint Bookrunners.....	DNB Markets, a part of DNB Bank ASA, ABG Sundal Collier Norge ASA and Arctic Securities AS, collectively.
2016 Private Placement .....	The private placement completed on 7 July 2016 with gross proceeds of approximately NOK 110 million, in which 14,685,000 new Shares, each with a nominal value of NOK 0.10, were issued by the Company.
AA .....	Accelerated approval.
ALP .....	Alkaline phosphatase
antibody .....	Immune defense molecule recognizing antigens on cell surfaces.
Antigen .....	A substance that the immune system recognizes as foreign to the body and that the immune system can mount an immune response against
APC.....	Antigen presenting cells.
ASAT.....	Aspartate amino transferase
Articles of Association.....	The Company's articles of association.
BLA.....	Biologic license application.
Board Members .....	The members of the Board of Directors.
Board of Directors.....	The board of directors of the Company.
CAGR .....	Compound annual growth rate
CA 19-9.....	Blood levels of Cancer Antigen 19-9 are used to differentiate pancreatic cancer from other cancers and serve to monitor treatment response as well as recurrence.
CD4+ T helper cells .....	CD4 positive T helper lymphocytes.
CD8+ cytotoxic T-cells .....	CD8 positive cytotoxic T lymphocytes.
CEO .....	The Company's chief executive officer.
CET.....	Central European Time.
CHF .....	Swiss franc, the lawful currency of Switzerland.
CMO.....	Contract manufacturing organization.
Company .....	Targovax ASA.
CPIs.....	Immune checkpoint inhibitors.
CT .....	Computed tomography.
DC .....	Dendritic cell.
DLT.....	Dose limiting toxicities.
DTH .....	Delayed-type hypersensitivity. A test performed on the skin to measure T-cell mediated immunity against specific antigens.
EEA.....	The European Economic Area.
Epitope.....	An epitope is the specific part of an antigen that is recognized by the immune system. T-cells and antibodies recognize and attack specific epitopes. An antigen can have several different epitopes.
EMA .....	The European Medicines Agency.
EU .....	The European Union.
EU Prospectus Directive.....	Directive 2003/71/EC of the European Parliament and of the Council of 4 November 2003, and amendments thereto, including the 2010 PD Amending Directive to the extent implemented in the Relevant Member State.
EUR .....	The lawful common currency of the EU member states who have adopted the Euro as their sole national currency.
exon .....	Gene fragment being expressed to protein.
EY.....	Ernst & Young AS, the Company's auditor.
FDA .....	The U.S. Food and Drug Administration.
Financial Statements.....	The audited financial statements for the Company as of and for the years ended 31 December 2016 and 2015.
Gemcitabine.....	A generic chemotherapy drug used to treat cancer since 1995, which has become standard of care in various cancer indications. Gemcitabine is a nucleoside analog that becomes incorporated into the DNA of replicating cells, thereby killing the cells.
General Meeting .....	The general meeting of the shareholders in the Company.

GM-CSF .....	Granulocyte macrophage colony stimulating factor (non-glycosylated human GM-CSF expressed in E.coli).
GMP .....	Good manufacturing practice.
Group.....	The Company and its consolidated subsidiaries.
HLA.....	Human leukocyte antigen.
HSV .....	Herpes simplex virus.
IFRS .....	International Financial Reporting Standards as adopted by the EU.
IMM .....	Irreversible morbidity or mortality.
Intralesional Infiltration .....	The penetration of T-cells called Tumor-Infiltrating Lymphocytes (TILs) into a tumor
IPR Option Program .....	A former option program in the Company where share options were given as payment for inventions.
KRAS .....	A form of the RAS gene that is highly expressed in the gut, lung, and thymus.
Listing .....	The listing of the Shares on Oslo Stock Exchange.
LTI Option Program.....	The Group's long-term (share) incentive program.
Management .....	The senior management team of the Company.
Member States .....	The participating member states of the European Union.
NDA .....	New drug application.
NOK.....	Norwegian Kroner, the lawful currency of Norway.
Non-Norwegian Corporate Shareholders.....	Shareholders who are limited liability companies (and certain other entities) not resident in Norway for tax purposes.
Neoepitope .....	An epitope that is created through a genetic mutation in cancer cells. Neoepitopes are much stronger stimulators of the immune system than epitopes that are merely over-expressed in cancer cells compared to normal cells, but which are not structurally altered themselves.
Non-Norwegian Personal Shareholder .....	Shareholders who are individuals not resident in Norway for tax purposes.
Non-randomized Clinical Trial .....	All enrolled patients receive the same treatment regimen in the clinical trial. The outcome of the trial is compared to historical data.
Non-randomized Phase of a Clinical Trial .....	In the first part of the clinical trial, the non-randomized phase, all enrolled patients receive the same treatment. In the second part of the clinical trial, the randomized phase, all enrolled patients are randomly assigned to one of the treatment regimens that are compared in the clinical trial. A clinical trial can be non-randomized or randomized, or it can contain a non-randomized and a randomized phase.
Nordea .....	Nordea Bank Norge ASA.
Norwegian Corporate Governance Code .....	The Norwegian Code of Practice for Corporate Governance dated 30 October 2014.
Norwegian Corporate Shareholders .....	Shareholders who are limited liability companies and certain similar corporate entities resident in Norway for tax purposes.
Norwegian FSA.....	The Financial Supervisory Authority of Norway ( <i>Nw.: Finanstilsynet</i> ).
Norwegian Personal Shareholder.....	Shareholders who are individuals resident in Norway for tax purposes.
Norwegian Public Limited Companies Act .....	The Norwegian Public Limited Companies Act of 13 June 1997 no. 45 ( <i>Nw.: allmennaksjeloven</i> ).
Norwegian Securities Trading Act....	The Norwegian Securities Trading Act of 29 June 2007 no. 75 ( <i>Nw.: verdipapirhandelloven</i> ).
N-OTC.....	Norwegian OTC is an information system for unlisted shares (it is not a regulated stock exchange).
NRAS .....	A form of the RAS gene that is highly expressed in the testis and thymus.
Open Label Study .....	Both the patients and the physicians know what kind of treatment a patient gets in such a clinical trial. This is opposed to a placebo-controlled clinical trial in which neither the patients nor the physicians know if a patient gets the active treatment or the placebo
Oslo Axess.....	A Norwegian regulated stock exchange operated by Oslo Børs ASA.
Oslo Stock Exchange.....	Oslo Børs ASA, or, as the context may require, Oslo Børs, a Norwegian regulated stock exchange operated by Oslo Børs ASA.
PBMC .....	Peripheral blood mononuclear cells.
PET .....	Positron emission tomography.
Pivotal Study.....	A clinical trial that is intended to directly lead to the market approval of a drug.
Prospectus .....	This Prospectus dated 22 March 2017.

Randomized and Non-randomized Phase of a Clinical Trial.....	In the first part of the clinical trial, the non-randomized phase, all enrolled patients receive the same treatment. In the second part of the clinical trial, the randomized phase, all enrolled patients are randomly assigned to one of the treatment regimens that are compared in the clinical trial. A clinical trial can be non-randomized or randomized, or it can contain a non-randomized and a randomized phase.
Randomized Clinical Trial .....	Enrolled patients are randomly assigned to one of the treatment regimens that are compared in the clinical trial.
RAS .....	RAS genes and expressed RAS protein.
RAS mutation.....	Defined change in exon 2 codon 12 or 13 in RAS genes and the corresponding expressed RAS protein with amino acid substitutions in sequence position 12 and 13.
Relevant Member State .....	Each Member State of the European Economic Area which has implemented the EU Prospectus Directive.
R Resections .....	A system of classification of pancreatic cancer surgery to define the extent of the resection.
R0 Resection .....	The pancreatic tumor has been completely resected and there are no signs of tumor cells around the edges of the resected tumor mass. There may or may not be lymph node metastases.
R1 Resection .....	The pancreatic tumor has been completely resected but there are signs of tumor cells around the edges of the resected tumor mass. This indicates that probably not all tumor cells were resected
R2 Resection .....	The pancreatic tumor could not be completely resected and visible tumor mass was left behind
Randomized Clinical Trial .....	Enrolled patients are randomly assigned to one of the treatment regimens that are compared in the clinical trial
RSUs.....	Restricted stock units.
SD .....	Stabile disease.
Share(s) .....	Means the shares of the Company, each with a nominal value of NOK 0.10, or any one of them.
SIX .....	The Swiss Exchange.
Targovax .....	The Company and its consolidated subsidiaries, (the "Group").
Targovax Oy .....	Targovax Oy, a wholly owned subsidiary of the Company (previously named Oncos Therapeutics Oy).
Targovax AG .....	Targovax AG, a wholly owned subsidiary of Targovax Oy (currently under liquidation).
T-cell .....	T-lymphocyte.
Tekes .....	Finnish Funding Agency for Technology and Innovation.
TG .....	TG includes GM-CSF unless explicitly stated.
TLR.....	Toll Like Receptor, small proteins expressed by innate immune cells such as macrophages and dendritic cells and stimulation of these cells represents another mechanism for immune activation.
transgene .....	Virus with extra gene(s) inserted.
UK .....	United Kingdom.
U.S. or United States .....	The United States of America.
U.S. Securities Act .....	The U.S. Securities Act of 1933, as amended.
USD or U.S. Dollar .....	United States Dollars, the lawful currency of the United States.
VPS.....	The Norwegian Central Securities Depository ( <i>Nw.: Verdipapirsentralen</i> ).

**APPENDIX A:**  
**ARTICLES OF ASSOCIATION**



(OFFICE TRANSLATION)

## VEDTEKTER

for

### TARGOVAX ASA

Sist endret 9. februar 2017

- § 1 Foretaksnavn**  
Selskapets navn er Targovax ASA.  
Selskapet er et allmennaksjeselskap.
- § 2 Forretningskontor**  
Selskapets forretningskontor er i Oslo kommune.
- § 3 Virksomhet**  
Selskapets virksomhet skal omfatte salg og utvikling av biomedisinske produkter og tjenester. Formålet kan fremmes ved deltakelse i eller samarbeid med andre foretak i inn- og utland.
- § 4 Aksjekapital**  
Selskapets aksjekapital er kr 4 219 971,90 fordelt på 42 199 719 aksjer hver pålydende kr 0,10.  
Selskapets aksjer skal være registrert i VPS.
- § 5 Styre**  
Selskapets styre består av inntil 8 styremedlemmer etter generalforsamlingens nærmere beslutning.
- § 6 Valgkomité**  
Selskapet skal ha en valgkomité. Komiteen skal bestå tre medlemmer. Flertallet av medlemmene skal være uavhengig av styret og den daglige ledelse. Valgkomiteens medlemmer, herunder valgkomiteens leder, velges av generalforsamlingen for ett år av gangen.

## ARTICLES OF ASSOCIATION

for

### TARGOVAX ASA

Last amended 9 February 2017

- § 1 The name of the company**  
The company's name is Targovax ASA.  
The company is a public limited liability company.
- § 2 Registered office**  
The company's registered office is in Oslo municipality.
- § 3 Object**  
The business of the company shall comprise the sale and development of biomedical products and services. This object can be pursued through participation in or collaboration with other enterprises in Norway and abroad.
- § 4 Share capital**  
The company's share capital is NOK 4,219,971.90 divided between 42,199,719 shares, each with a nominal value of NOK 0.10. The company's shares shall be registered in the Norwegian Central Securities Depository (VPS).
- § 5 Board of directors**  
The company's board of directors shall consist of up to 8 members as decided by the general meeting.
- § 6 Nomination committee**  
The company shall have a nomination committee. The nomination committee shall consist of three members. A majority of the members shall be independent of the board of directors and the management. The members of the nomination committee, including the chairperson, will be elected by the general meeting for a

Valgkomiteen avgir innstilling til generalforsamlingen til valg av aksjonærvalgte medlemmer til styret og medlemmer til valgkomiteen, samt godtgjørelse til styrets medlemmer og valgkomiteens medlemmer. Godtgjørelse til medlemmene av valgkomiteen fastsettes av generalforsamlingen. Generalforsamlingen kan fastsette instruks for valgkomiteen.

#### **§ 7 Signatur**

Selskapets firma tegnes av styrets leder og et styremedlem i fellesskap. Styret kan meddele prokura.

#### **§ 8 Generalforsamling**

Dokumenter som gjelder saker som skal behandles i selskapets generalforsamling, herunder dokumenter som etter lov skal inntas i eller vedlegges innkallingen til generalforsamlingen, trenger ikke sendes til aksjonærene dersom dokumentene er tilgjengelige på selskapets hjemmeside. En aksjonær kan likevel kreve å få tilsendt dokumenter som gjelder saker som skal behandles på generalforsamlingen.

På den ordinære generalforsamlingen skal følgende spørsmål behandles og avgjøres:

1. Godkjennelse av årsregnskapet og årsberetningen, herunder utdeling av utbytte.
2. Andre saker som etter loven eller vedtektene hører under generalforsamlingen.

term of one year.

The nomination committee shall give recommendations for the election of shareholder elected members of the board of directors and the members of the nomination committee, and remuneration to the members of the board of directors and the members of the nomination committee. The remuneration to the members of the nomination committee is determined by the general meeting. The general meeting may adopt instructions for the nomination committee.

#### **§ 7 Signature**

The chair of the board and one member of the board are jointly authorised to sign on behalf of the company. The board may grant powers of procuration.

#### **§ 8 General meeting**

Documents relating to matters to be dealt with by the company's general meeting, including documents which by law shall be included in or attached to the notice of the general meeting, do not need to be sent to the shareholders if such documents have been made available on the company's website. A shareholder may nevertheless request that documents which relates to matters to be dealt with at the general meeting, are sent to him/her.

The annual general meeting shall address and resolve the following matters:

1. Approval of the annual report and accounts, including distribution of dividend
2. Any other matters which are referred to the general meeting by law or the articles of association.

Aksjonærer kan avgi sin stemme skriftlig, herunder ved bruk av elektronisk kommunikasjon, i en periode før generalforsamlingen. Styret kan fastsette nærmere retningslinjer for slik forhåndsstemming. Det skal fremgå av generalforsamlingsinnkallingen hvilke retningslinjer som er fastsatt.

Styret kan beslutte at aksjonærer som vil delta på generalforsamlingen må meddele dette til selskapet innen en bestemt frist som ikke kan utløpe tidligere enn tre dager før generalforsamlingen.

The shareholders may cast their votes in writing, including through electronic communication, in a period prior to the general meeting. The board of directors can establish specific guidelines for such advance voting. The established guidelines must be stated in the notice of the general meeting.

The board of directors may decided that shareholders who want to participate in the general meeting must notify the company thereof within a specific deadline that cannot expire earlier than three days prior to the general meeting.

## **Registered office and advisors**

### **Targovax ASA**

Lilleakerveien 2 C  
0283 Oslo  
Norway

### **Legal Adviser to the Company**

Advokatfirmaet Thommessen AS  
Haakon VIIIs gate 10  
N-0161 Oslo  
Norway