

# **ALLIGATOR BIOSCIENCE AB (PUBL)**

*30 January 2018*  
*Per Norlén, CEO*

# Disclaimer

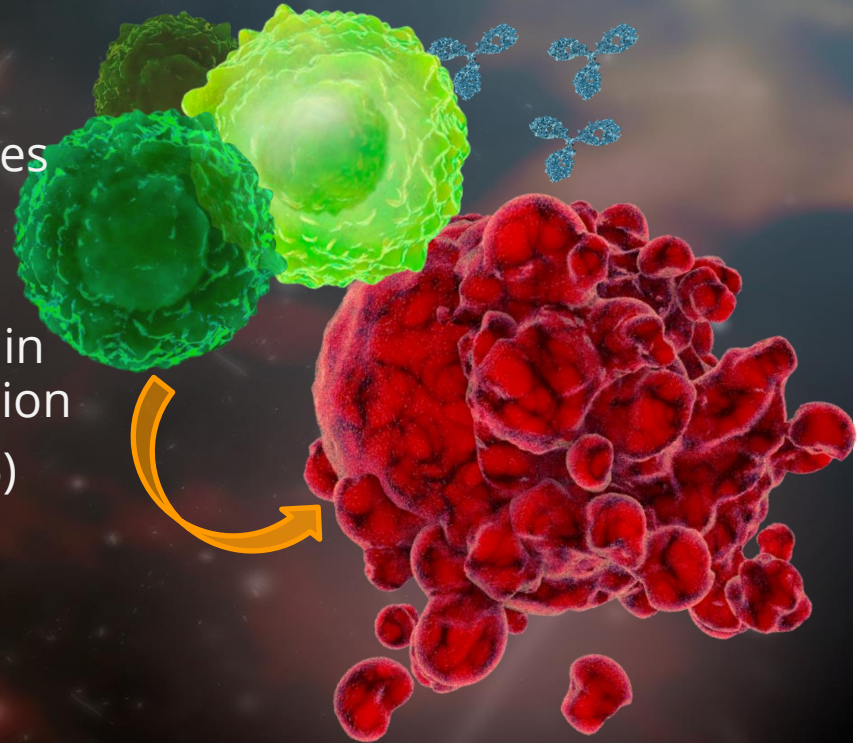
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## FORWARD LOOKING STATEMENTS

This presentation contains forward-looking statements that provide Alligator's expectations or forecasts of future events such as new product developments, regulatory approvals and financial performance. Such forward looking statements are subject to risks, uncertainties and may be impacted by inaccurate assumptions. This may cause actual results to differ materially from expectations and it may cause any or all of Alligator's forward-looking statements here or in other publications to be wrong. Factors that may affect future results include currency exchange rate fluctuations, delay or failure of development projects, loss or expiry of patents, production problems, breaches or terminations of contracts, government-mandated or market driven price decreases, introduction of competing products, exposure to product liability claims and other lawsuits, changes in reimbursement rules, changes of laws regulations or interpretation thereof, and unexpected cost increases. Alligator undertakes no obligation to update forward looking statements.

# Alligator Bioscience in brief

- Swedish clinical-stage biotech company with approx. 50 employees
- Pioneers in tumor-directed immunotherapy of cancer
- Strategic partnership with Janssen in 2015, total deal value USD 695 million
- Listed on Nasdaq Stockholm (2016) mid cap segment (ATORX)
- Market cap approx. SEK 1.9 billion (71 388 615 shares)



## Positive Phase I data ADC-1013

Generally well tolerated at clinically relevant doses

## Preclinical development ATOR-1017

Initiation of cell-line development

## Aptevo Therapeutics

Co-development agreement for ALG.APV-527

## Clinical development of ADC-1013

Initiation of phase I and out-licensing to Janssen

## Bispecific antibodies

Focus expanded to include bispecifics

## Immuno-oncology

Focus on immuno-oncology

2017

2015

2012

2008

2001

2018

2016

2013

## Milestone payment from Janssen

USD 6 million milestone received in January

## Organization strengthened

New management team members appointed

## Preclinical development ATOR-1015

Preparation for production of clinical material

## Nasdaq Stockholm (ATORX)

IPO on Nasdaq Stockholm

## ALLIGATOR GOLD®

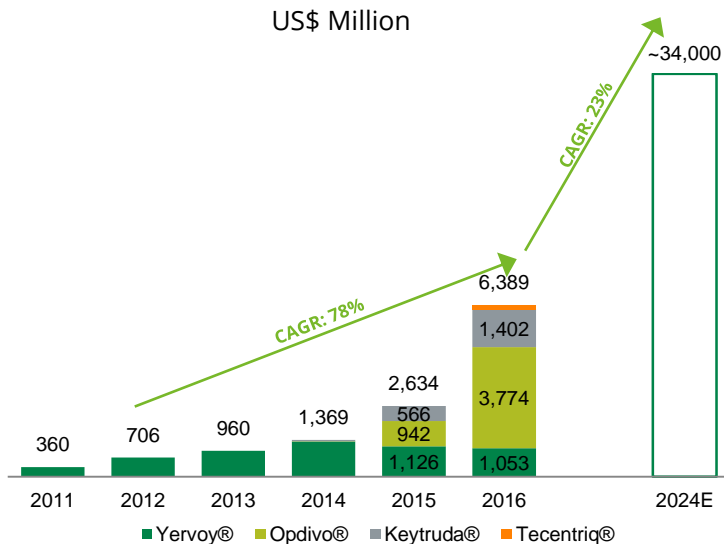
Antibody library established

## FIND®

Alligator Bioscience is founded

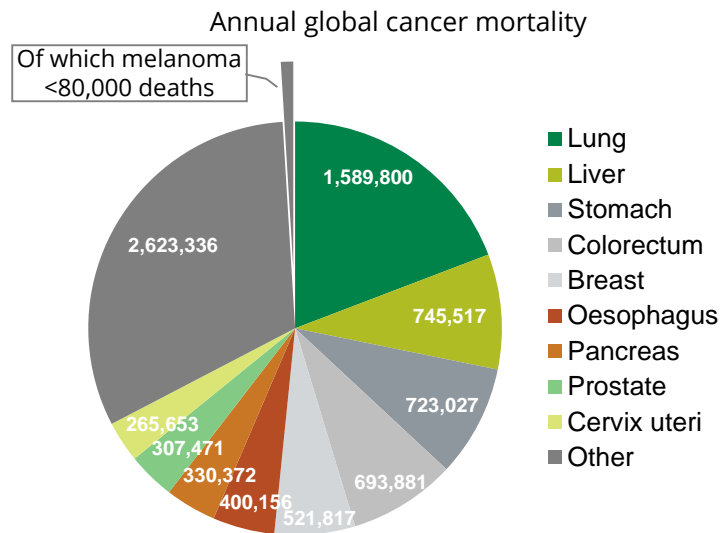
# Rapid uptake of immuno-oncology

## Sales of existing immuno-oncology treatments



Existing drugs show strong uptake

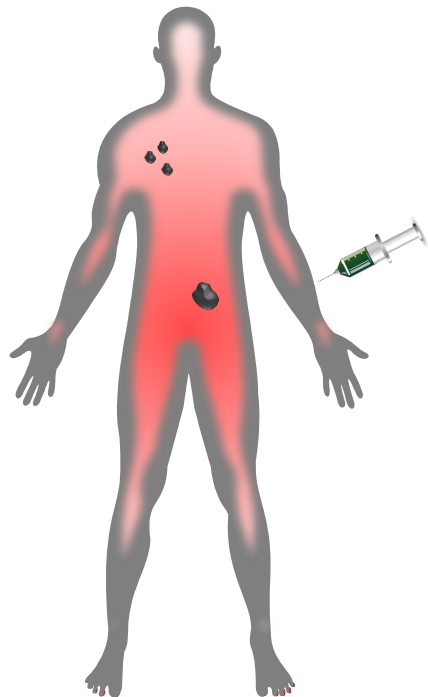
## Market potential for immuno-oncology



8,201,030 global cancer deaths annually

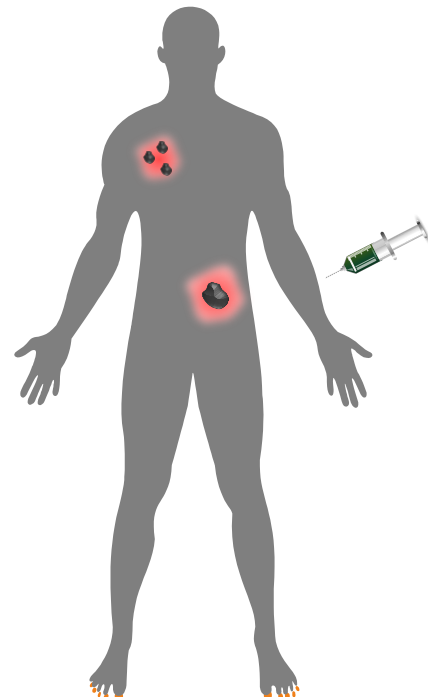
I-O market holds the largest upside potential within the global pharmaceutical market

# Tumor-directed immuno-oncology



## GENERAL IMMUNE-ACTIVATION

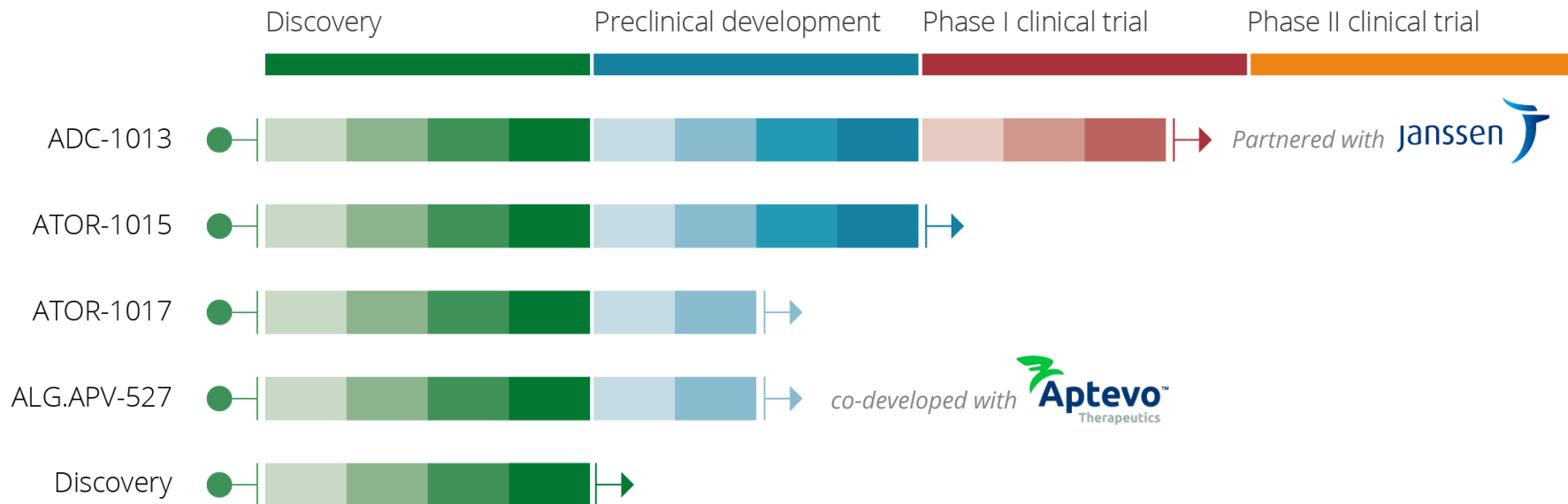
General immune activation is associated with risk of severe adverse effects



## TUMOR-DIRECTED IMMUNE-ACTIVATION

Selective activation of tumor-specific immune cells results in systemic immunity with limited toxicity

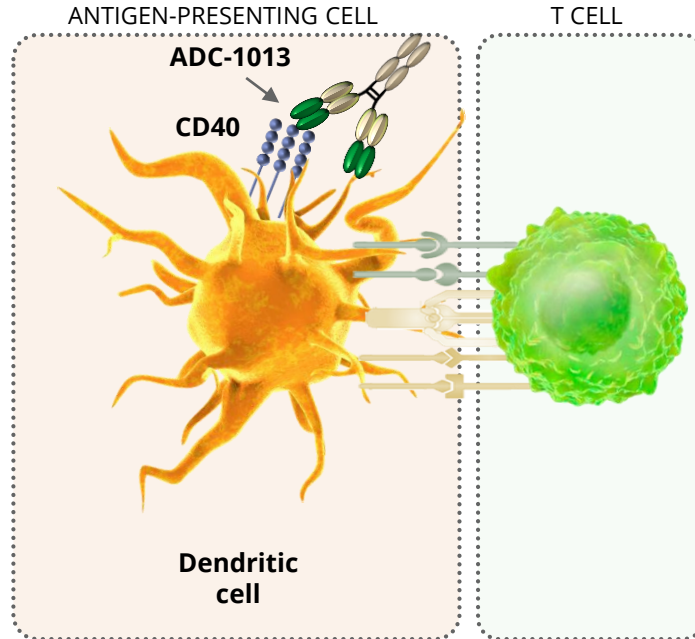
# Drug development pipeline



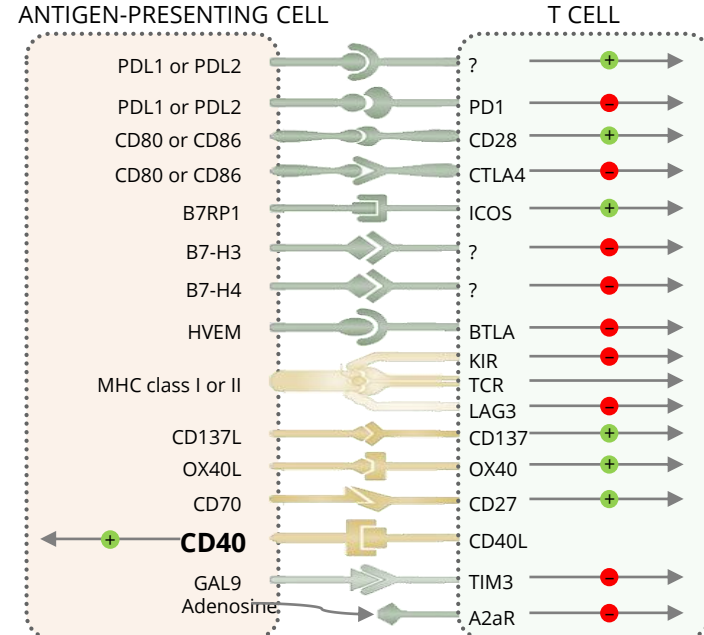


# ADC-1013 targeting CD40

## ADC-1013 Mode of Action



## Immuno-modulating receptors



CD40 is the only defined receptor that selectively activates the antigen-presenting cell and is a highly promising target for combination with T-cell activating antibodies such as PD-1 and CTLA-4



# Immuno-oncology market and pipeline

Compound	Company	Indication	Phase	Target
Yervoy® (ipilimumab)	Bristol-Myers Squibb	Melanoma	M	CTLA-4
Keytruda® (pembrolizumab)	Merck	Melanoma, lung cancer, H&N cancer	M	PD-1
Opdivo® (nivolumab)	Bristol-Myers Squibb	Melanoma, lung, renal, H&N, bladder	M	PD-1
Tecentriq® (atezolizumab)	Roche	Bladder cancer, lung cancer	M	PD-L1
Bavencio® (avelumab)	Pfizer & Merck KGaA	Merkel cell cancer	M	PD-L1
Imfinzi® (durvalumab)	AstraZeneca	Bladder cancer	M	PD-L1
tremelimumab	AstraZeneca	Lung, bladder and H&N cancer	III	CTLA-4
PDR-001	Novartis	Melanoma	III	PD-1
RG7888	Roche	Solid tumors	II	OX40
urelumab	Bristol-Myers Squibb	Solid tumors and lymphoma	II	CD137
varlilumab	Celldex	Solid tumors	II	CD27
IMP-321	Prima Biomed	Solid tumors	II	LAG3
BMS-986016	Bristol-Myers Squibb	Solid tumors	II	LAG3
APX005M	Apexigen	Solid tumors	I/II	CD40
<b>ADC-1013</b>	<b>Alligator &amp; Jnj</b>	<b>Solid tumors, hematological cancer</b>	<b>I</b>	<b>CD40</b>
RG7876	Roche	Solid tumors	I	CD40
SEA-CD40	Seattle Genetics	Solid tumors, hematological cancer	I	CD40
ABBV-428	Abbvie	Solid tumors	I	CD40-TAA
BMS-986178	Bristol-Myers Squibb	Solid tumors	I	OX40
MEDI0562	AstraZeneca	Solid tumors	I	OX40
GSK-3174998	GlaxoSmithKline	Solid tumors	I	OX40
PF-04518600	Pfizer	Solid tumors	I	OX40
INCAGN1949	Agenus and Incyte	Solid tumors	I	OX40
utomilumab	Pfizer	Solid tumors	I	CD137
BMS-986156	Bristol-Myers Squibb	Solid tumors	I	GITR
MK-4166	Merck	Solid tumors	I	GITR
MK-1248	Merck	Solid tumors	I	GITR
MEDI1873	AstraZeneca	Solid tumors	I	GITR
GWN-323	Novartis	Solid tumors and lymphoma	I	GITR
INCAGN1876	Agenus and Incyte	Solid tumors	I	GITR
JTX-2011	Jounce Therapeutics	Solid tumors	I	ICOS
MBG-403	Novartis	Solid tumors	I	TIM-3

- > Approx. 70 immuno-oncology antibodies in clinical development
- > Five CD40-targeting antibodies in clinical development
- > Best and first in class potential

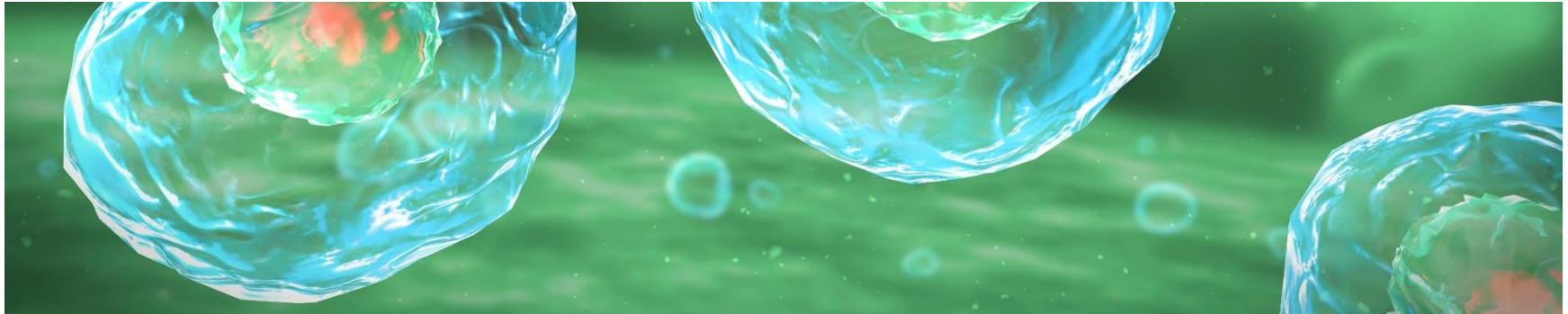
# ADC-1013 first-in-human clinical phase I

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ADC-1013 intratumoral dose escalation every 14 days to evaluate safety and tolerability in patients with advanced solid tumors

## Status:

- > Study completed March 2017, 24 patients enrolled
- > Five clinical centers in Sweden, Denmark and UK
- > Results presented at SITC, Nov 2017



# Results ADC-1013 clinical phase I

## ADC-1013 is well tolerated by cancer patients at clinically relevant doses

- > Adverse events mainly low grade and transient as expected
- > ADC-1013 induces CD40-mediated pharmacodynamics effects
- > Best overall response: stable disease in one patient for at least 12 months

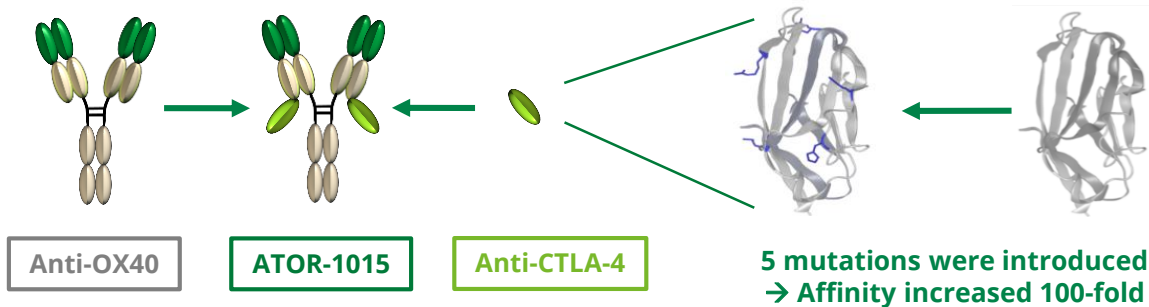


- > A second clinical phase I study is ongoing, performed by Janssen Biotech, Inc.
- > > 50 patients enrolled to date
- > Intravenous dose escalation, with 3 expansion cohorts
- > Combination studies are planned
- > All further clinical development is run by Janssen

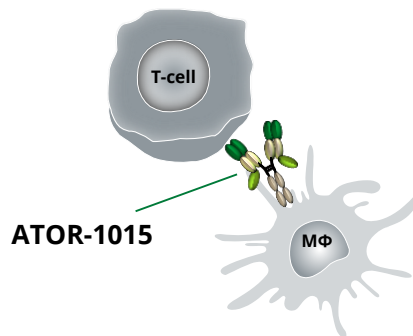


# ATOR-1015: Dual binding to CTLA-4 and OX40

## Design and optimization of the CTLA-4 binding part



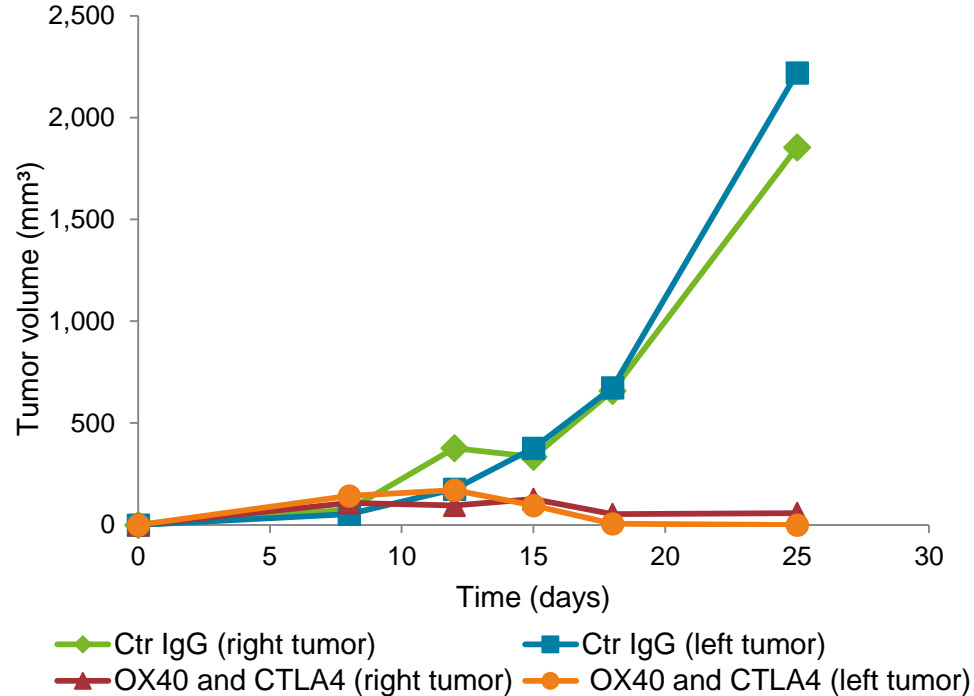
## Next generation CTLA-4 antibody with augmented Treg depletion



- DEPLETION OF REGULATORY T-CELLS
- ACTIVATION OF EFFECTOR T-CELLS

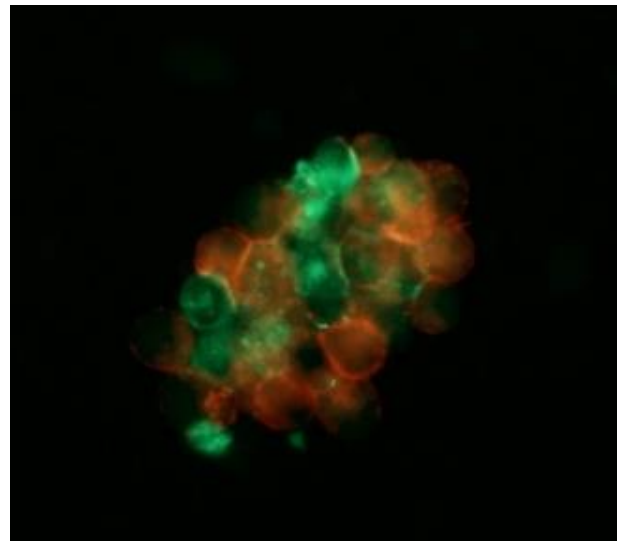
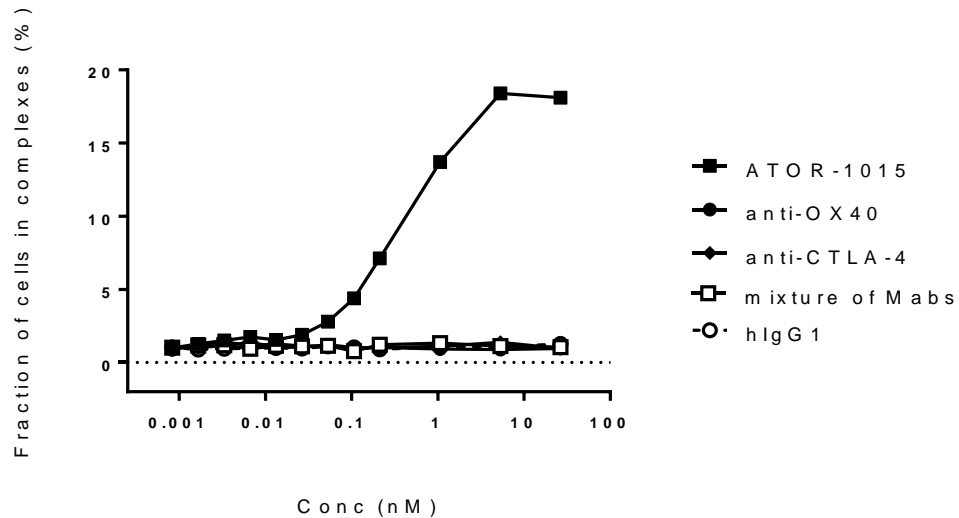
# ATOR-1015: In vivo synergy

## OX40 and CTLA-4 surrogate (mouse) antibodies



Source: Hebb and Kohrt, American Society of hematology (ASH) 20156

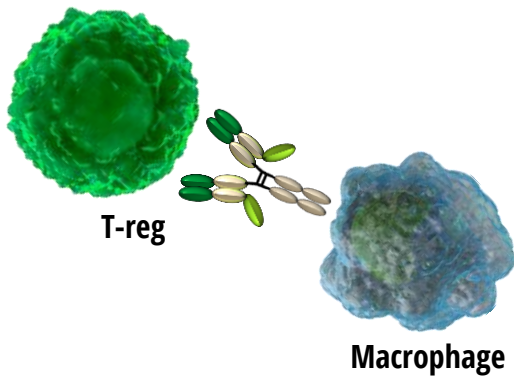
# ATOR-1015 promotes cell-to-cell interactions



# ATOR-1015: In vitro synergy

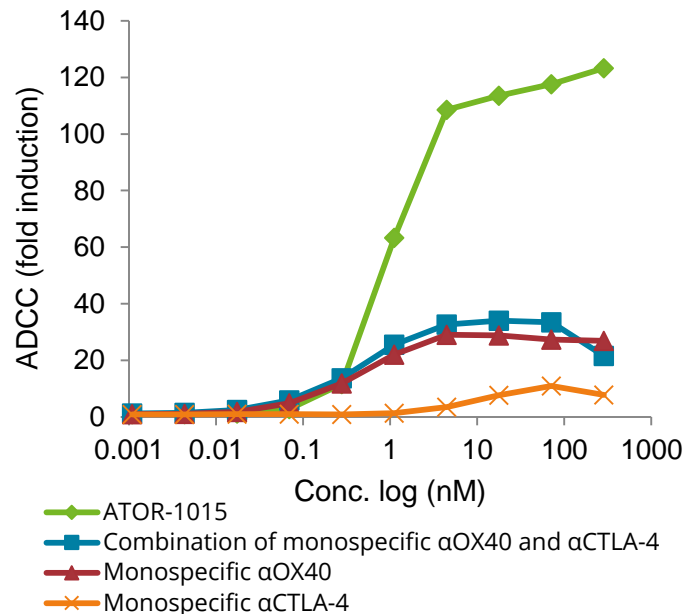
ATOR-1015 is superior to the combination of the two monospecific antibodies

ATOR-1015 induces ADCC on CTLA-4/OX40 expressing T-reg



- > ATOR-1015 kills regulatory T-cells (ADCC)
- > ATOR-1015 is superior to the combination of monospecific  $\alpha$ OX40 and  $\alpha$ CTLA-4 binders

Synergistic T-reg depletion

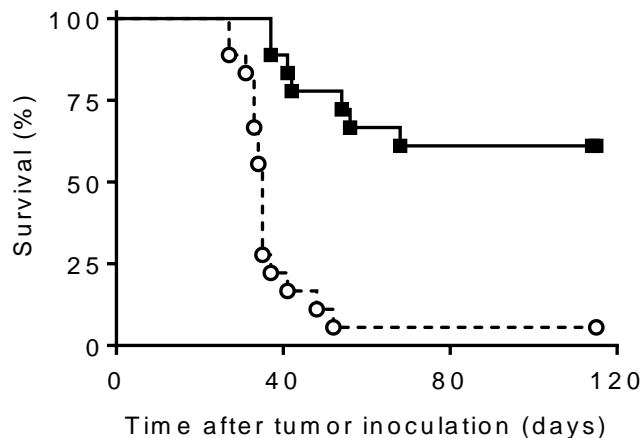




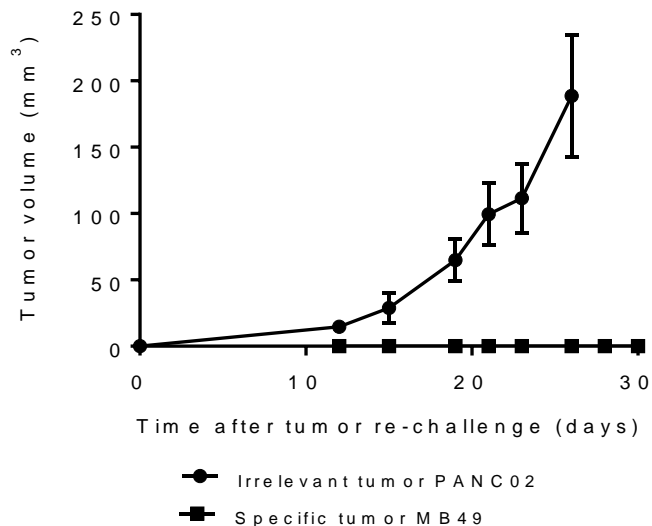
# ATOR-1015: anti-tumor efficacy

Anti-tumor efficacy in multiple tumor models: bladder, colorectal, melanoma and pancreas

## Survival bladder cancer (MB49)



## Tumor-specific long-term immunity

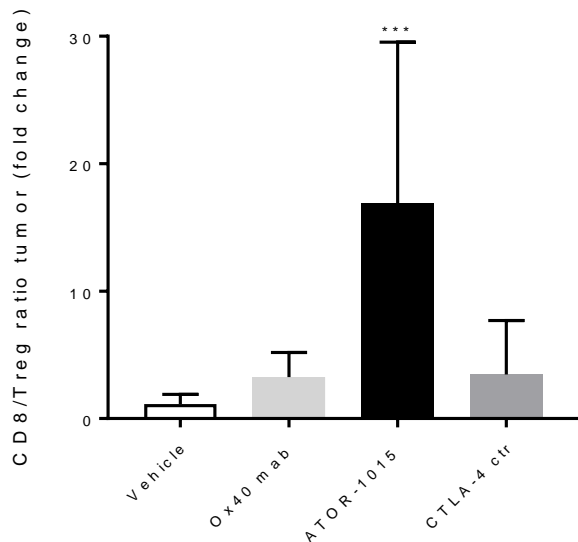


# Tumor-directed suppression of regulatory T cells

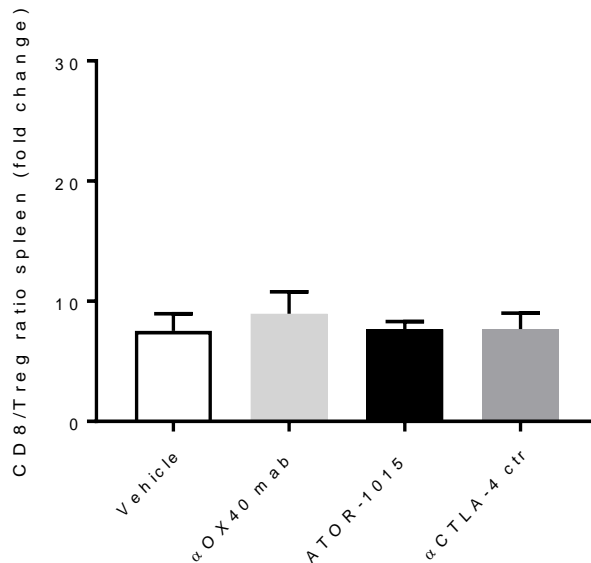
ATOR-1015 activates the immune system in tumors, but not elsewhere in the body

## ATOR-1015 increases Teff/Treg ratio in tumor

### Colon carcinoma model

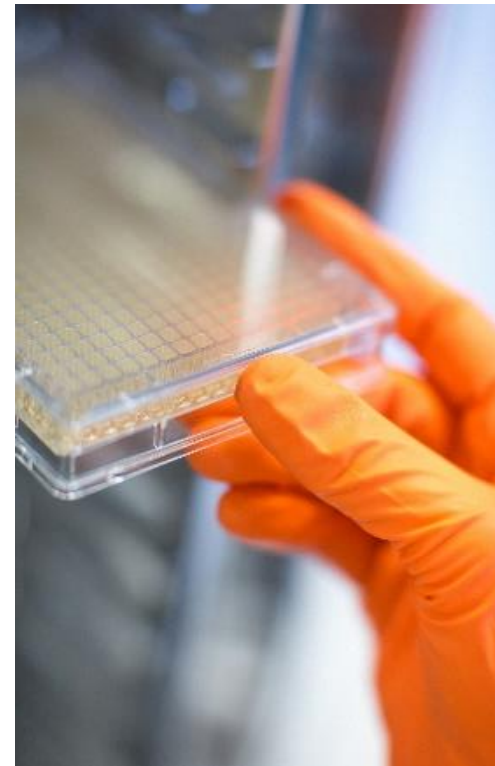


## ATOR-1015 does not affect systemic T-cells

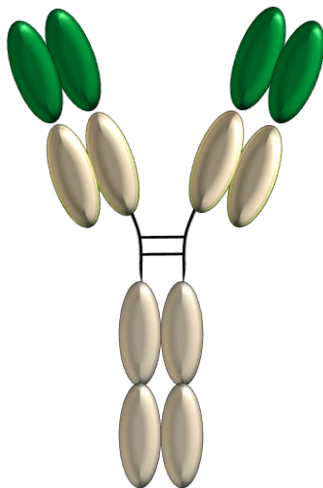


# ATOR-1015 positioning

- > Tumor-directed CTLA4 antibody with augmented T-reg depletion
- > First in class dual immune activator
- > Expected synergy with PD-1
- > Excellent bispecific format
- > Clinical trial in cancer patients starts 2018

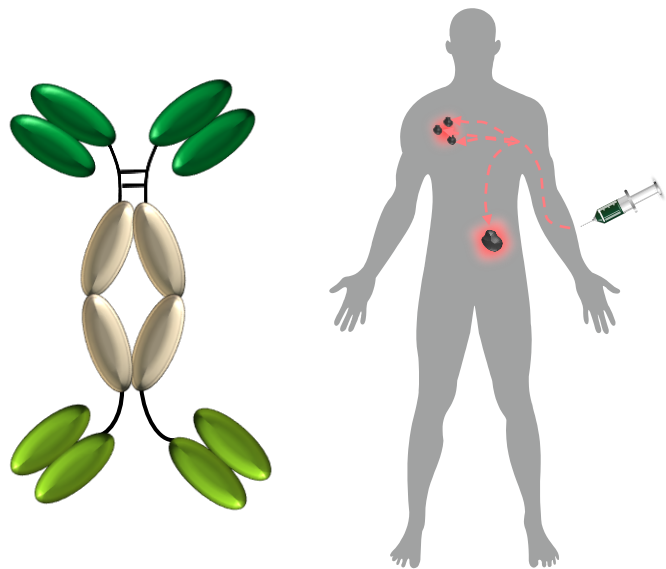


# ATOR-1017 targeting 4-1BB



- > Best-in-class 4-1BB antibody
  - > Strong efficacy due to efficient FcγR mediated crosslinking in the tumor
  - > Tumor-directed T-cell activation enabling a superior safety profile
- > In preclinical development
- > Cell line development in progress
- > Clinical trial to start 2019

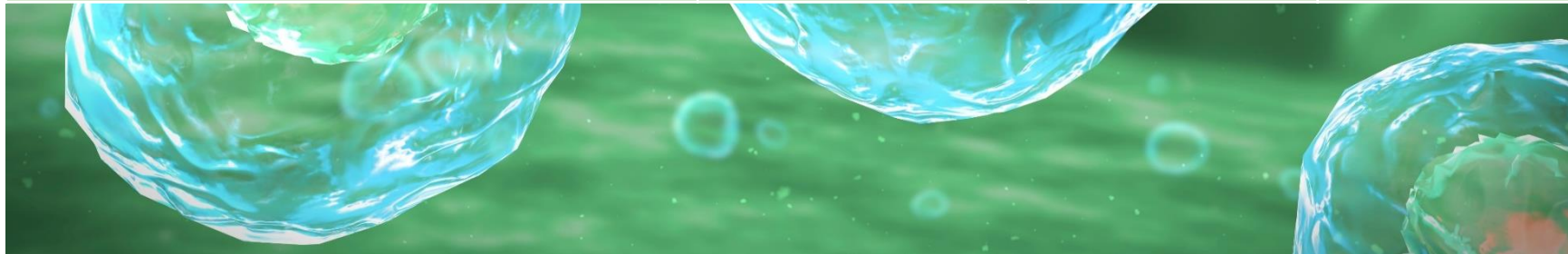
# ALG.APV-527 targeting 4-1BB & 5T4



- > Bispecific 5T4 tumor-directed 4-1BB antibody
- > In preclinical development
- > Co-development agreement signed 2017 with Aptevo Therapeutics, US  
- the companies will equally own and finance the development of the drug candidate through Phase II
- > Clinical trial to start 2019

# Financials Q1-Q3 2017

(MSEK)	Actual Jan - Sep 2017	Actual Jan - Sep 2016	Actual FY 2016
Net Revenue	5.6	51.8	58.2
Net Loss	-76.3	-29.0	-48.4
R&D expenses as % of total expenses	69.5%	62.2%	64.3%
Liquidity incl bonds at end of the period	588	346	659
Equity per share, after dilution (SEK)	8.48	5.91	9.47
Number of FTE's at end of the period	44	35	36
Market cap	2 020	N/A	2 440



# Major shareholders as of December

Shareholder	Number of shares	% of total shares
Banque Internationale à Luxembourg SA	13 588 121	19.0
Janssen Biotech	5 762 523	8.1
Sunstone Life Science Ventures Fund II K/S	5 758 485	8.1
Lars Spånberg	3 213 858	4.5
Goldman Sachs & Co.	2 640 000	3.7
Atlas Antibodies AB	2 620 000	3.7
Norron	1 968 318	2.8
Öresund, Investment AB	1 757 072	2.5
Catella funds	1 524 052	2.1
Johan Rockberg	1 436 662	2.0
10 largest shareholders total	40 269 091	56.4
Total number of shares	71 388 615	100.0



# Experienced Management team



## **Per Norlén**

– born 1970, CEO since 2015 – is a registered medical doctor with a doctoral degree and specialist doctor in clinical pharmacology, and associate professor in exp and clin pharmacology at Lund University. Per Norlén has 25 years of research experience in pharmacology including 15 years' experience in clinical drug development with a focus on clinical phase I/II studies.



## **Peter Ellmark**

– born 1973, VP Discovery since 2018 – holds a PhD in Immunotechnology from Lund University and he is also an associate professor at Lund University. Peter has more than 15 years' experience of developing antibodies for immunotherapy of cancer.



## **Christina Furebring**

– born 1964, Senior Vice President Research and Development since 2001 – is a Swedish graduate engineer and has a doctorate in immune technology from Lund University. She is also a co-founder of the FIND technology which is a cornerstone of Alligator's technology platform. Christina Furebring has more than 20 years' experience of working on the optimization of proteins and antibodies.



## **Charlotte A. Russell**

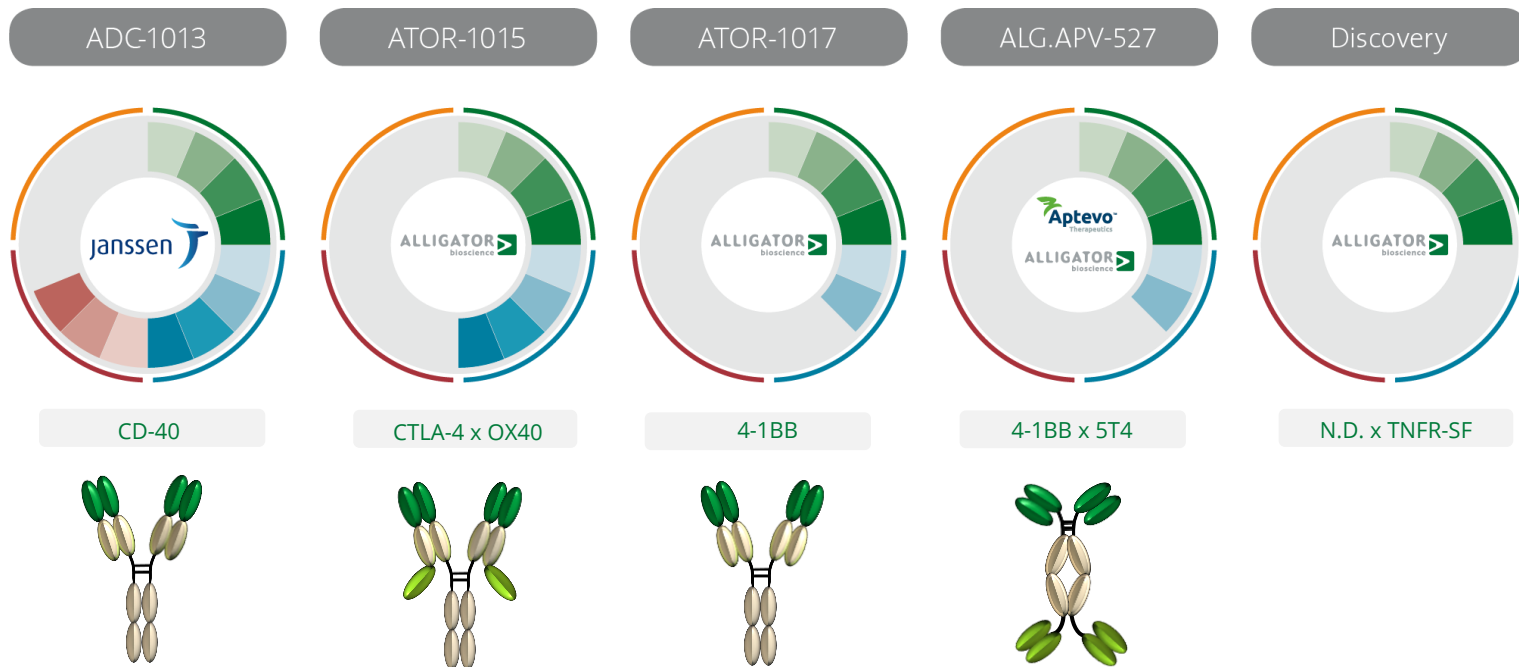
– born 1964, Chief Medical Officer since 2018 – is a medical doctor with board certifications in haematology and internal medicine, and has a doctor of medical science degree from Copenhagen University. Charlotte has more than 25 years of research and clinical experience, including 10 years with clinical drug development in biotech/pharmaceutical companies.



## **Per-Olof Schrewelius**

– born 1963, Chief Financial Officer since 2016 – has an MSc in Business Administration and Economics from Lund University and has over 20 years of experience from different CFO and Finance Manager positions in various industries including medical technology and engineering.

# Strong immuno-oncology pipeline



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