

We want to save patients with severe cancer and autoimmune diseases Clinical investigations with our lead antibody CAN04 to our proprietary target

> Göran Forsberg, CEO NOVEMBER 2020

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Statements in the Investor Presentation, including those regarding the possible or assumed future or other performance of the Company or its industry or other trend projections, constitute forward-looking statements. By their nature, forward-looking statements involve known and unknown risks, uncertainties, assumptions and other factors as they relate to events and depend on circumstances that will or may occur in the future, whether or not outside the control of the Company. No assurance is given that such forward-looking statements will prove to be correct. Prospective investors should not place undue reliance on forward-looking statements. They speak only as at the date of this Investor Presentation and the Company undertakes no obligation to update these forward-looking statements. Past performance does not guarantee or predict future performance. Moreover, the Company undertakes no obligation to review, update or confirm expectations or estimates or to release any revisions to any forward-looking statements to reflect events that occur or circumstances that arise in relation to the content of the Investor Presentation.



## I. INTRODUCTION

# Cantargia – Opportunity to save lives and create value





# Cantargia at a glance



## UNIQUE IMMUNOTHERAPY ANTIBODY CAN04 IN PHASE IIA CLINICAL DEVELOPMENT

Positive interim data set with response rates higher than historic data



## PLATFORM WITH MANY POTENTIAL THERAPEUTIC AREAS

- IL1RAP found on most solid tumor forms and leukemia
- IL1RAP signalling (IL-1, IL-33 and IL-36) in large number of diseases



## VISION OF BECOMING AN IMPORTANT PART IN FUTURE CANCER TREATMENTS

• Combination strategy based on synergies with established therapies



## HIGHLY RELEVANT RESEARCH WITHIN CLINICALLY VALIDATED MECHANISMS

Focus on opportunities with major unmet medical need



#### **ROBUST PATENT PORTFOLIO**

 Global patent families on IL1RAP as antibody target in oncology until 2032 and CAN04 until 2035



## NASDAQ STOCKHOLM'S MAIN LIST >8,000 SHAREHOLDERS AND LONG TERM INVESTORS

- Market cap: SEK 5.4bn (USD ~625m) (Nov-20)
- Cash: SEK 417m (USD 48m) (Sep-20)

## Current owners (30 Sep 2020)

Swedbank Robur Funds	9.6%
4th AP fund	7.7%
Alecta	6.6%
1st AP fund	6.3%
Öhman Bank S.A.	5.0%
Avanza Pension	4.4%
Sunstone	3.8%
Handelsbanken fonder	3.8%
Morgan Stanley (HBM)	2.5%
SEB S.A. (Nordic Cross)	1.9%
Others	48.3%



# Cantargia addresses [NSCLC & PDAC]



#### SIGNIFICANT UNMET NEEDS IN LUNG AND PANCREATIC CANCER





## II. LEAD ANTIBODY CAN04

## CAN04 – Broader MoA than other IL-1 blocking approaches



Company	Compound	IL-1α	IL-1β	ADCC	Indication/dev phase	
Cantargia	CAN04	++	++	++	Pancreatic cancer, NSCLC phase IIa	
Xbiotech/ Janssen	Xilonix	++	-	+	<ul> <li>Autoimmunity, dermatology</li> <li>Pancreatic cancer, phase I</li> </ul>	
Novartis	Canakinumab Gevokizumab	-	++	-	<ul> <li>Autoimmunity, registered</li> <li>NSCLC, phase III</li> <li>Cancer comb, phase II</li> </ul>	
Flame Bioscience	FL-101	-	++	-	NSCLC	
Buzzard	Isunakinra	++	++	-	Cancer phase I	
SOBI	Kineret	++	++	-	• Autoimmunity, reg	
Regeneron/ Kiniksa	Rilonacept	++	++	-	<ul><li>Autoimmunity, reg</li><li>Pericarditis</li></ul>	
USE OF IL1RAP AS TARGET FOR HEMATOLOGICAL CANCERS		USE OF IL1RAP AS TARGET FOR SOLID TUMORS			THE PRODUCT CANDIDATE CAN04	
<ul> <li>Two families</li> <li>Valid until 2029/2030</li> <li>Granted (EPO, USA, Japan, China)</li> </ul>		<ul> <li>Valid until 2032</li> <li>Granted (EPO<sup>1</sup>, Japan, USA, China)</li> </ul>			<ul> <li>Valid until 2035</li> <li>Granted (EPO, USA, China)</li> </ul>	

**CANTARGIA HAS STRONG IP AND BROAD MOA** 



# CAN04 – Mechanism of action

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# Validating study – Counteracting tumor inflammation

## Cantos trial (n=10,061)

- Canakinumab (Novartis)
- Reduced lung cancer incidence by 67% and death by 77%
- Reduced non-lung cancer death by 37%



### Canakinumab phase iii trials



CANTOS DATA SUPPORT CAN04 AS WELL AS BROADER IL1RAP PLATFORM ACTIVITIES



# **Tumor shrinkage - PDAC combination**



- $\rightarrow$  CAN04 combination with gemcitabine/abraxane in 1<sup>st</sup> line
- → 8 out of 20 evaluable patients with metastatic PDAC showed response (40% vs historic data 23%). Two responses durable for 12 months
- Two other patients had tumor shrinkage after initial PD, with decreasing CA19-9
- → No major side effects were observed apart from those expected with chemotherapy or CAN04 alone. Neutropenia frequency higher than expected from chemo (treated with dose reductions/GCSF), fatigue and neuropathy lower than expected



POSITIVE INTERIM DATA, 31 PATIENTS RECRUITED FOR PRIMARY ANALYSIS EXTENSION PHASE IN 20–40 PATIENTS TO STUDY DOSE/RESPONSE PREPARATIONS FOR LATE STAGE DEVELOPMENT INITIATED



# PDAC Tumor shrinkage – after initial disease progression



- Two patients had tumor shrinkage of 39 and 24% after initial PD
- → CA19-9 decreased by 92 and 71%. CA19-9 is a biomarker for tumor burden



UNCOMMON RESPONSE PROFILE WITH CHEMOTHERAPY ALONE SUGGEST ADDITIONAL EFFECT FROM CAN04



# Tumor shrinkage – NSCLC combination



- Combination CAN04 gemcitabine/cisplatin. 5 patients were second line to pembrolizumab monotherapy, 4 patients first line
- → 6 of 9 evaluable patients showed response including 1 complete response (67% vs historic data 22–28%)
- $\rightarrow$  The complete response has lasted more than 1 year
- No major side effects were observed apart from those expected with chemotherapy or CAN04 alone. Neutropenia frequency higher than expected from chemo (treated with dose reductions/GCSF)



POSITIVE INTERIM DATA, RECRUITMENT CONTINUE FOR PRIMARY ANALYSIS BROADENING OF NSCLC DEVELOPMENT INTO ADDITIONAL MARKET SEGMENTS



# CAN04 – CANFOUR clinical trial



## **GENERATION OF DATA INSTRUMENTAL FOR NEXT PHASE OF DEVELOPMENT**

eantargia

# CAN04 – NSCLC cancer strategy





# Targeting IL1RAP allows unique synergistic effects with chemotherapy (AACR 2020)



SYNERGY WITH CHEMOTHERAPY IN LINE WITH CURRENT DEVELOPMENT STRATEGY



# **Chemotherapy resistance**

- $\rightarrow\,$  Most chemotherapies induce chemoresistance already after a few months of therapy
- ightarrow Chemotherapy can upregulate both IL-1lpha and IL-1eta
- $\rightarrow$  Blocking IL-1 signalling counteracts chemoresistance in preclinical models
- → High blood levels of inflammatory cytokines IL-1 and IL-6 leads to poor gemcitabine efficacy in patients
- ightarrow IL-1 mediated chemoresistance for several classes of chemotherapy
  - Platinum based chemotherapy, 5FU, Gemcitabine



## SEVERAL LINES OF EVIDENCE SUGGEST CAN04 COUNTERACT CHEMORESISTANCE



# CMC – Long term production strategy

TECHNOLOGY TRANSFER	<ul> <li>→ Transfer to Patheon (Groningen, NL)</li> <li>→ Processing method</li> <li>→ Equipment</li> <li>→ Analytical methods</li> </ul>	
SCALE-UP AND FIRST BATCH AT NEW PRODUCTION SCALE	<ul> <li>→ Assure GMP compliance</li> <li>→ Product testing to confirm equivalence with previous produced product</li> <li>→ Successful GMP 2,000 liter scale</li> </ul>	
PHASE III READINESS AND PREPARATIONS FOR REGISTRATION	<ul> <li>→ Process characterization and optimization</li> <li>→ Analytical validation</li> <li>→ Process validation batches</li> </ul>	



## CMC DEVELOPMENT TOWARDS COMMERCIAL PHASE





## III. CAN04 ONCOLOGY EXPANSION

# IL1RAP in several cancer with high medical need

## IL1RAP

#### % of patients with IL1RAP





- $\rightarrow$  Biomarker studies ongoing, identify patients most likely to respond
- → Opportunity to expand development in additional cancer forms with high unmet medical need

**CAN04 DEVELOPMENT CAN BE EXPANDED TO ADDITIONAL INDICATIONS ONWARDS** 



# IL1RAP and PD-1 blockade – Rationale for combination study

IMMUNE SUPPRESSIVE CHRONIC TUMOR INFLAMMATION IN THE TUMOR MICROENVIRONMENT

- COUNTERACTS PD-1 BLOCKADE

- → Myeloid suppressive cells, such as tumor-associated macrophages (TAMs) or myeloid-derived suppressor cells (MDSCs) are key cells in PD-1 resistance and express IL1RAP and are stimulated by IL-1, these cells counteracts PD-1 blockade
- → IL-1 upregulate PD-L1 on macrophages and induce downstream factors, such as IL-6, that also contribute to immune suppression in the TME
- ightarrow IL-1b blockade has been shown to break tolerance to anti-PD-1 in a model for TNBC
- ightarrow Novartis is exploring PD-1 combinations with canakinumab in Phase III

PD-1 ANTIBODIES – FASTEST GROWING SEGMENT IN CANCER THERAPY STRONG RATIONALE FOR COMBINING CAN04 AND PD-1 ANTIBODIES



# US phase I clinical trial

ightarrow First patient started

- Combination with checkpoint inhibitor in patients no longer responding to PD1/PDL-1 therapy
- → Primary endpoint safety, secondary endpoints include biomarkers and efficacy
- Indications include NSCLC, HNSCC, malignant melanoma and bladder cancer (18 patients)
- ightarrow Strong US centers, Coord investigator Prof Roger Cohen, Upenn
- → https://clinicaltrials.gov/ct2/show/NCT04452214



TRIAL DESIGNED TO ADVANCE CAN04 OUTSIDE CHEMOTHERAPY COMBINATIONS IMPORTANT STEP FOR COMBINING CAN04 WITH IO AND CHEMOTHERAPY





## IV. UNTAPPED POSSIBILITIES IN AUTOIMMUNE DISEASES

# CAN10 – New development project

- ightarrow IL1RAP binding antibody potently blocking IL-1, IL-33 and IL-36
- ightarrow Unique anti-inflammatory activity observed in mouse model
- → Development focusing on unmet medical need in systemic sclerosis and myocarditis. Disease selection in collaboration with experts based on scientific rational, medical need, development opportunity and competition
- ightarrow Clinical trials start early 2022



## UNIQUE OPPORTUNITY FOR CAN10 IDENTIFIED IN LIFE-THREATENING DISEASES



# CAN10 counteract inflammation in disease model

## **Total back score**



- → Mechanistic proof of concept for IL1RAP blockade in inflammatory driven psoriasis model
- ightarrow Effect not dependent on IL-1 $\beta$  blockade

## **CAN10 HAS UNIQUE ANTI-INFLAMMATORY PROPERTIES**





## V. MILESTONES AND SUMMARY

# Significant value inflection points

## **NEWSFLOW NEXT 6–9 MONTHS**

## CAN04

- ightarrow Phase IIa combination results PDAC and NSCLC
- ightarrow Next steps combination therapy PDAC and NSCLC
- $\rightarrow$  Phase IIa biomarker/biopsy results
- ightarrow New clinical trial in disease/combination outside CANFOUR

## CAN10

- $\rightarrow$  Preclinical progress
- $\rightarrow$  Production development



## SIGNIFICANT DATA TO SECURE NEWSFLOW



# Cantargia at a glance

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## UNIQUE IMMUNOTHERAPY ANTIBODY CAN04 IN PHASE IIA CLINICAL DEVELOPMENT

Positive interim data set and further phase II milestones during 2020



## PLATFORM WITH MANY POTENTIAL THERAPEUTIC AREAS

• Cancer and large number of autoimmune/inflammatory diseases



## VISION OF BECOMING AN IMPORTANT PART IN FUTURE CANCER TREATMENTS

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## HIGHLY RELEVANT RESEARCH WITHIN CLINICALLY VALIDATED MECHANISMS

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## **ROBUST PATENT PORTFOLIO – GRANTED IP FOR THERAPEUTIC TARGET IL1RAP AND CAN04**

• Global patent families – antibody target in oncology (2032) and CAN04 (2035)



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