

We want to save patients with severe cancer and autoimmune diseases Entering clinical phase with our lead antibody CAN04 to our proprietary target

Göran Forsberg, CEO

### Safe Harbour Statement

The following presentation may include predictions, estimates or other information that might be considered forward-looking. The statements regarding the surrounding world and future circumstances in this presentation reflect Cantargia's current thinking with respect to future events and financial performance. Prospective statements only express the assessments and assumptions the company makes at the time of the presentation. These statements are wellconsidered, but the audience should note that, as with all prospective assessments, they are associated with risks and uncertainties.

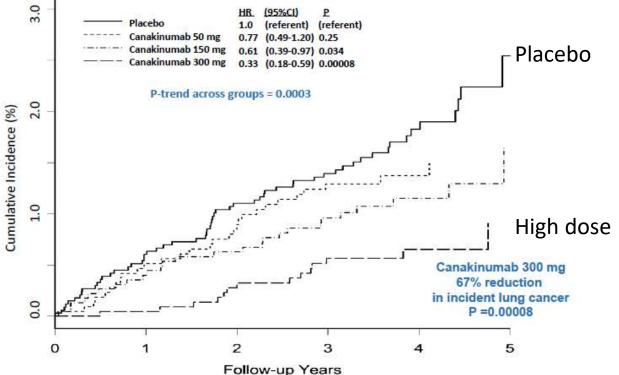


# IL-1β blockade - Recent strong clinical data

### **CANTOS trial**

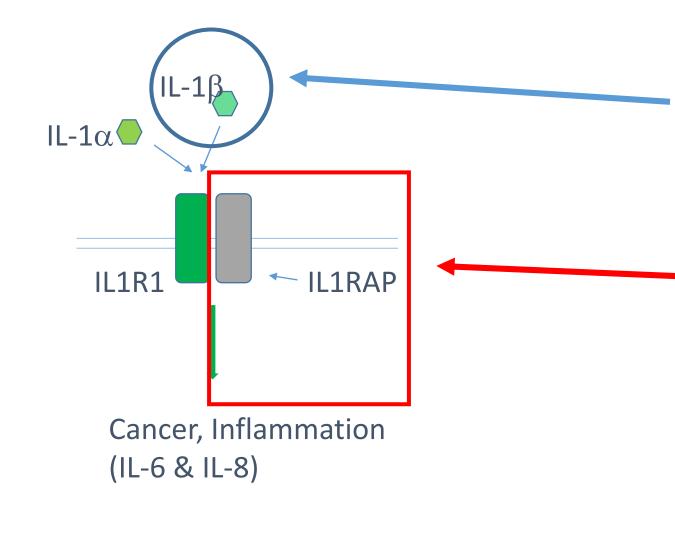
- Canakinumab (Novartis)
- 10061 patients
- Designed to reduce cardiovascular events in patients with previous myocardial infarction
- Reduced lung cancer incidence by 67 % and death by 77 %.
- Novartis has clinically validated the IL-1 pathway
- Cantargias CAN04 has higher potential than Canakinumab

#### CANTOS: Additional Non-Cardiovascular Clinical Benefits Incident Lung Cancer



eantargia

### CAN04 vs Canakinumab



### Canakinumab

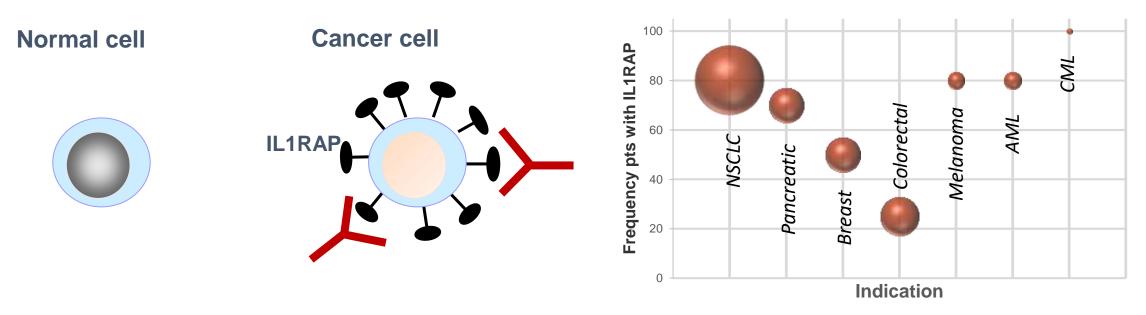
 Antibody directed against one of the two IL-1 ligands, IL-1β

#### **CAN04**:

- Binds the common signalling
  receptor and counteracts both
  ligands
- Induce killing via the immune system (ADCC)



### Medical need and IL1RAP



- Based on in house data, external data, medical need and market size, NSCLC and pancreatic cancer are primary indications.
- Biomarker studies ongoing, to identify patients most likely to respond
- Low levels of IL1RAP in normal tissue (analyzed following FDA and EMA guidelines)

Size of each indication corresponds to annual deaths in USA



### Cantargia at a glance

- Specialized in antibody therapy/immunology, with initial focus on oncology
- Granted IP around therapeutic target and drug candidates
- Lead antibody CAN04 in clinical development
- Strong management team with proven track record in clinical development and business development
- IPO March 2015 (Nasdaq First North, Stockholm)
- More than 3000 shareholders
- Based in Lund, Sweden
- New share issue of 232 MSEK Dec 15 2017

#### **Financial highlights**

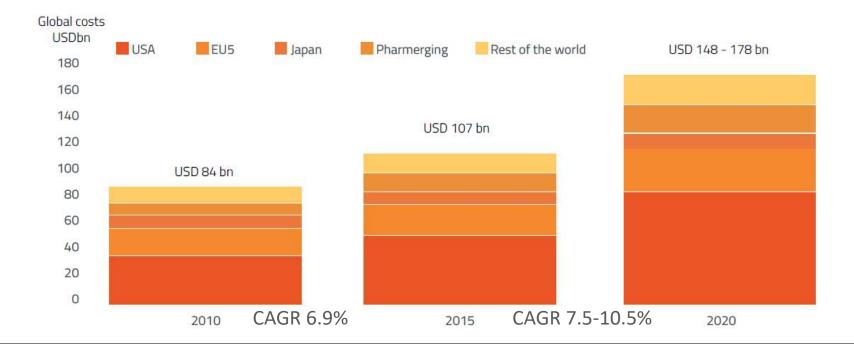
- Share price: 7.78 SEK (0.99 USD), Jan 26, 2018
- Market cap: 515 MSEK (65.4 MUSD), Jan 26, 2018
- Cash: 52.4 MSEK (6.7 MUSD), Sep 30 2017 (excl new financing)

Current owners (Jan 19, 2019)

| Sunstone         | 9.0%  |
|------------------|-------|
| 1st AP fund      | 6.9%  |
| LU Bio           | 6.1%  |
| Avanza Pension   | 5.6%  |
| 4th AP fund      | 4.2%  |
| 2nd AP fund      | 3.3%  |
| SEB S.A. clients | 3.0%  |
| Mats Invest AB   | 1.8%  |
| Tibia konsult    | 1.7%  |
| Brushamn Invest  | 1.6%  |
| SHB Pharm Fund   | 1.5%  |
| Others           | 55.2% |



# Lead project CAN04 in the highest growth segment– Oncology antibodies



World's most sold cancer drugs are antibodies (2016)

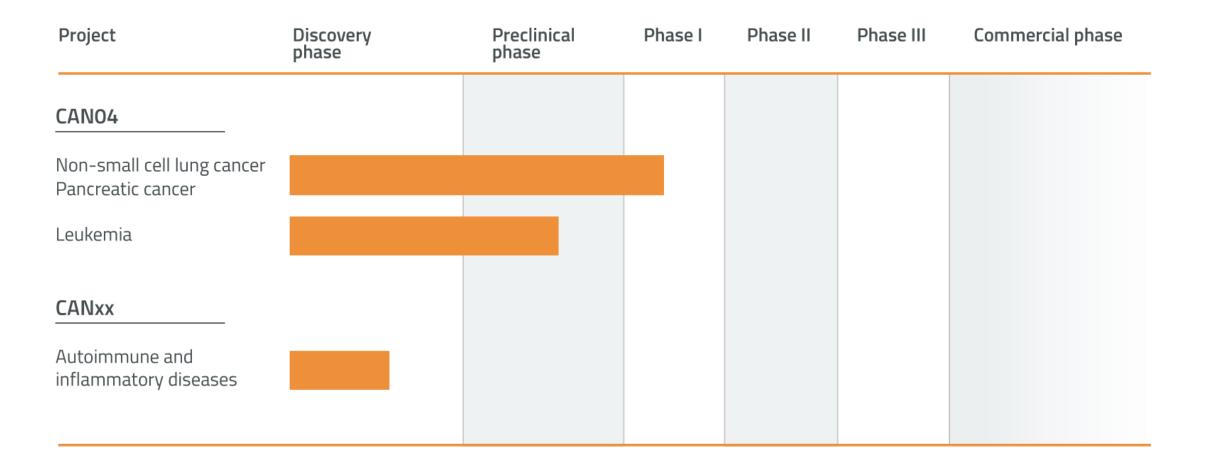
#### Immuno-oncology driving market growth 2016 (2015)

| Rituxan/MabThera | \$8.58bn | Opdivo   | \$3.77bn (\$0.94bn) |   |
|------------------|----------|----------|---------------------|---|
| Avastin          | \$6.75bn | Keytruda | \$1.40bn (\$0.57bn) |   |
| Herceptin        | \$6.75bn |          |                     | 6 |

Source IMS Health



### Cantargia pipeline





### Tumor inflammation – key to cancer progression

Enablers

Genomic instability and mutation (2000)

Tumor-promoting inflammation (2011)

**Deregulating cellular** energetics *The inflammatory cytokine IL-1* – Well established role in Sustaining proliferative signalling *cancer progression:* **Evading growth suppressors Tumor cells** *Signalling/proliferation of cancer* **Resisting cell death** Cancer cells hallmarks Enabling replicative Chemoresistance . immortality Tumor microenvironement • Metastasis Inducing angiogenesis Crosstalk between tumor cells and . stroma Activating invasion and metastasis Inflammation and local suppression of the immune system Avoiding immune destruction



Hanahan D & Weinberg RA, The Hallmarks of Cancer, Cell 2000, Hanahan D & Weinberg RA, Hallmarks of Cancer, the Next Generation, Cell 2011,

# Nonsmall cell lung cancer

**USA** estimates:

Lung cancer: 222500 new cases, 155870 deaths.

NSCLC, ~85 % of lung cancers

Subgroups (adenocarcinoma, squamous, large cell etc)

Standard therapies:

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Keytruda (antibody against PD-1)
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Chemotherapy

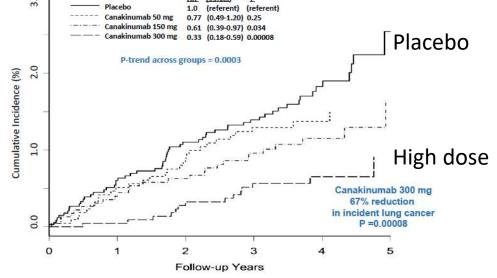
Targeted therapy (genetic form)

### Canakinumab phase III trials in preparation (ref Novartis)

Adjuvant (after surgery)

- First line with PD-1 antibody
- Second line







### Interleukin 1 system in pancreatic cancer

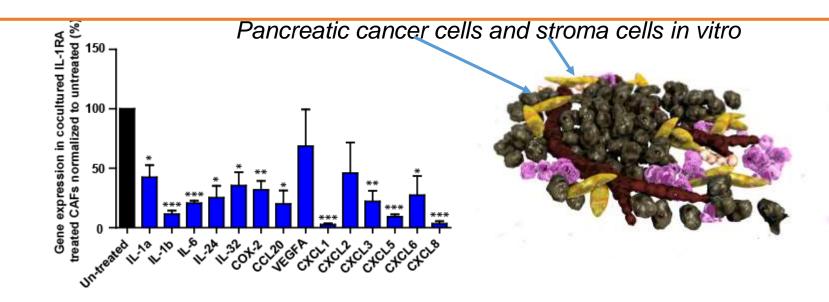
**USA** estimates:

53670 cases, 43090 deaths

Inflammation of importance for tumor progression

Role for IL-1 in chemoresistance

Blocking tumor IL-1 downregulate stromal cell secretion of tumor promoting factors



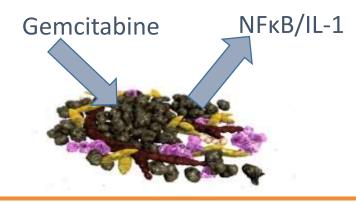
Refs (Tjomsland Neoplasia 2011, Wörmann Oncogene 2014, Zhuang Clin Cancer Res 2015)



### Pancreatic cancer – chemotherapy insensitivity

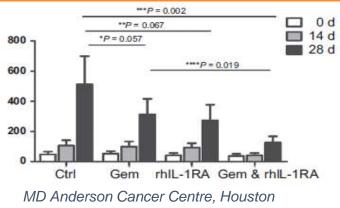
- Gemcitabine insensitivity caused by NFκB/IL-1
- IL-1 blockade reverse the effect
- Synergistic antitumor effect of combination

#### Patients with high IL-1 respond poorly to gemcitabine



| IL-6/IL-1 $\beta$ classification                       | N  | Median OS (95%CI) (days) |
|--|----|--------------------------|
| IL-6 <sup>Low</sup> /IL-1 $\beta$ <sup>Low</sup>       | 25 | 306 (228–355)            |
| IL-6 <sup>Low</sup> /IL-1 <sup>βHigh</sup>             | 5  | 246 (97–346)             |
| IL-6 <sup>High</sup> /IL-1 <sup>βLow</sup>             | 15 | 140 (83–334)             |
| IL-6 <sup>High</sup> /IL-1 <sup>β<sup>High</sup></sup> | 15 | 79 (61–134)              |

National Cancer Centre, Chiba, Japan Mitsunaga et.al, Br. J. Cancer, 2013

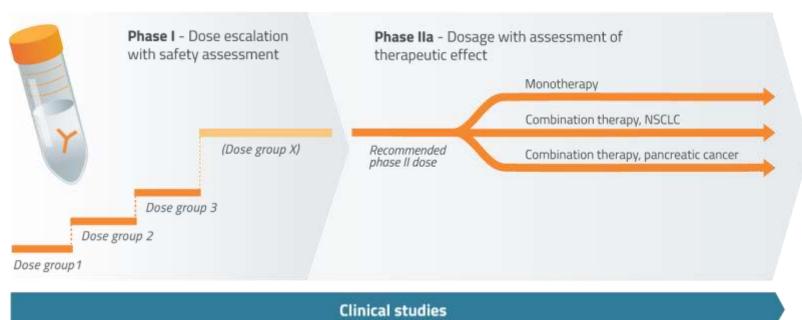


Zhuang et.al, Clin Cancer Res 2016



### CAN04 – CANFOUR clinical trial

- Phase I/IIa trial NSCLC and pancreatic cancer
  - Recruitment in Norway, Denmark Netherlands and Belgium
  - Well renowned centres (Jules Bordet, Brussels; Erasmus Rotterdam, NKI, Amsterdam; Rigshospitalet, Copenhagen; Radiumhospitalet, Oslo)
  - Dose group 1, safety evaluation completed
  - Phase I: carried out in NSCLC, pancreatic cancer, colon cancer, triple negative breast cancer
  - Phase IIa: focused on NSCLC and pancreatic cancer
    - Monotherapy
    - Combination with existing therapy



#### Details on www.clinicaltrials.gov



# Strategic partnership with Panorama Research Inc

### Panorama Research Inc

- Privately-owned biomedical R&D company in Silicon Valley California
- Leader in antibody technology, managed by Dr James W. Larrick

Deal structure: Panorama share risk in exchange for a fraction of future incomes

- Development of new antibody binding IL1RAP with high affinity/potent inhibition of signaling
- Focus on autoimmune/inflammatory disease
- Selection of clinical candidate 2019
- Cantargia IL1RAP antibody, affinity matured and humanized using Panorama's proprietary technology
- Panorama also generates cell lines optimized for high level GMP production
- Cantargia responsible for subsequent development



Panorama Research, Inc. A Biotechnology Research & Development Company



### Signficant value inflection points ahead

### 2018

- Preclinical data on combination therapy
- Clinical progress
- Preclinical studies
- Phase I clinical data (summer 2018)
- Initiation of Phase IIa portion of the clinical trial (summer 2018)
- US regulatory and clinical strategy



## Cantargia IP – opposition (Europe)

- Filing
- Review
- Grant (one or several patents)
- Opportunity to file opposition
  - (third party may e.g. provide additional documents)
- Opposition division (oral hearing)





### Cantargia IP

Use of IL1RAP as target hematological cancers

Filed 2009

Granted (EPO, USA, Japan, China)

Use of IL1RAP as target solid tumors

Filed 2011

Granted (EPO, Japan, USA, China)

The product candidate CAN04

Filed 2014

Granted (EPO, USA)

New IL1RAP antibodies (e.g. CAN03) Filed 2014



Positive outcome third party opposition



## Why invest in Cantargia?

- Focus on immuno-oncology the strongest growing pharmaceutical segment
  - Taking advantage of the well established antibody technology to design novel targeted pharmaceuticals
- Lead candidate antibody CAN04 with double mechanism of action in clinical trial with multiple value inflection points 2018-2019
  - Initial development in NSCLC and pancreatic cancer (cancer forms with poor prognosis)
  - Important clinical data expected
  - Recent external validation of pathway
- Second generation antibodies for autoimmune disease
- Unique and strong IP
- Strong lead investors with high competence and well known track record
- Recent new share issue of 232 MSEK funding until mid 2020.

