We want to save patients with severe cancer and autoimmune diseases

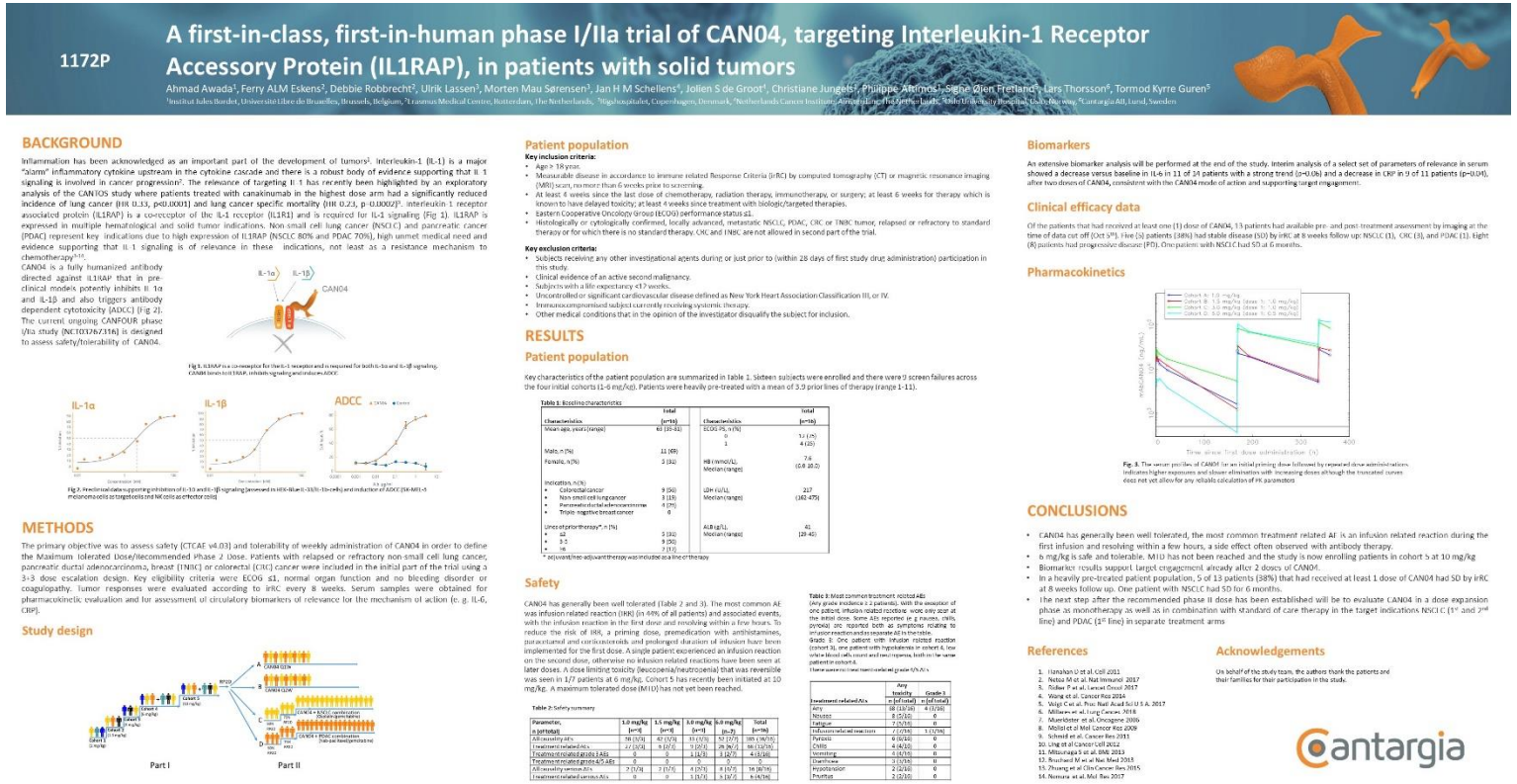
Clinical investigations with our lead antibody CAN04 to our proprietary target

Göran Forsberg, CEO

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 well-considered, but the audience should note that, as with all prospective assessments, they are associated with risks and uncertainties.

CAN04 phase I clinical data at ESMO



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A first-in-class, first-in-human phase I/IIa trial of CAN04, targeting Interleukin-1 Receptor Accessory Protein (IL1RAP), in patients with solid tumors

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BACKGROUND

Inflammation has been acknowledged as an important part of the development of tumors[1]. Interleukin-1 (IL-1) is a major "alarm" inflammatory cytokine upstream in the cytokine cascade and there is a robust body of evidence supporting that IL-1 signaling is involved in cancer progression[2]. The relevance of targeting IL-1 has recently been highlighted by an exploratory analysis of the CANTOS study where patients treated with canakinumab in the highest dose arm had a significantly reduced incidence of lung cancer (HR 0.33, p<0.0001) and lung cancer specific mortality (HR 0.23, p<0.0002)[3]. Interleukin-1 receptor associated protein (IL1RAP) is a co-receptor of the IL-1 receptor (IL1R1) and is required for IL-1 signaling (Fig 1). IL1RAP is expressed in multiple hematological and solid tumor indications. Non-small cell lung cancer (NSCLC) and pancreatic cancer (PDAC) represent key indications due to high expression of IL1RAP (NSCLC 80% and PDAC 70%), high unmet medical need and evidence supporting that IL-1 signaling is of relevance in these indications, not least as a resistance mechanism to chemotherapy[4-10].

CAN04 is a fully humanized antibody directed against IL1RAP that in pre-clinical models potently inhibits IL-1α and IL-1β and also triggers antibody dependent cytotoxicity (ADCC) (Fig 2). The current ongoing CANFOUR phase I/IIa study (NCT03267316) is designed to assess safety/tolerability of CAN04.

Fig 1. IL1RAP is a co-receptor for the IL-1 receptor and is required for both IL-1α and IL-1β signaling. CAN04 binds to IL1RAP, inhibits signaling and induces ADCC

Fig 2. Pre-clinical data supporting inhibition of IL-1α and IL-1β signaling (assessed in HEK-Blue IL-1α/IL-1β cells) and induction of ADCC (SK-MEL-5 melanoma cells as target cells and NK cells as effector cells)

METHODS

The primary objective was to assess safety (CTCAE v4.03) and tolerability of weekly administration of CAN04 in order to define the Maximum Tolerated Dose/Recommended Phase 2 Dose. Patients with relapsed or refractory non-small cell lung cancer, pancreatic ductal adenocarcinoma, breast (TNBC) or colorectal (CRC) cancer were included in the initial part of the trial using a 3+3 dose escalation design. Key eligibility criteria were ECOG ≤1, normal organ function and no bleeding disorder or coagulopathy. Tumor responses were evaluated according to irRC every 8 weeks. Serum samples were obtained for pharmacokinetic evaluation and for assessment of circulatory biomarkers of relevance for the mechanism of action (e. g. IL-6, CRP).

Study design

Patient population

Key inclusion criteria:

- Age > 18 year.
- Measurable disease in accordance to immune related Response Criteria (irRC) by computed tomography (CT) or magnetic resonance imaging (MRI) scan, no more than 6 weeks prior to screening.
- At least 4 weeks since the last dose of chemotherapy, radiation therapy, immunotherapy, or surgery; at least 6 weeks for therapy which is known to have delayed toxicity; at least 4 weeks since treatment with biologic/targeted therapies.
- Eastern Cooperative Oncology Group (ECOG) performance status ≤1.
- Histologically or cytologically confirmed, locally advanced, metastatic NSCLC, PDAC, CRC or TNBC tumor, relapsed or refractory to standard therapy or for which there is no standard therapy. CRC and TNBC are not allowed in second part of the trial.

Key exclusion criteria:

- Subjects receiving any other investigational agents during or just prior to (within 28 days of first study drug administration) participation in this study.
- Clinical evidence of an active second malignancy.
- Subjects with a life expectancy <17 weeks.
- Uncontrolled or significant cardiovascular disease defined as New York Heart Association Classification III, or IV.
- Immunocompromised subject currently receiving systemic therapy.
- Other medical conditions that in the opinion of the investigator disqualify the subject for inclusion.

RESULTS

Patient population

Key characteristics of the patient population are summarized in Table 1. Sixteen subjects were enrolled and there were 0 screen failures across the four initial cohorts (1-6 mg/kg). Patients were heavily pre-treated with a mean of 3.3 prior lines of therapy (range 1-11).

Table 1: Baseline characteristics

Characteristics	Total (n=16)	Characteristics	Total (n=16)
Mean age, years (range)	62 (39-82)	ECOG PS, n (%)	
		0	12 (75)
		1	4 (25)
Male, n (%)	11 (69)		
Female, n (%)	5 (31)	Hb (mmol/L), Median (range)	7.6 (6.0-10.2)
Indication, n (%)			
• Colorectal cancer	9 (56)	LDH (U/L), Median (range)	227 (142-475)
• Non-small cell lung cancer	3 (19)		
• Pancreatic ductal adenocarcinoma	4 (25)		
• Triple-negative breast cancer	0	ALB (g/L), Median (range)	41 (28-46)
Lines of prior therapy*, n (%)			
• ≤2	5 (31)		
• 3-5	9 (56)		
• >6	2 (13)		

* (neo)adjuvant therapy was included as a line of therapy

Safety

CAN04 has generally been well tolerated (Table 2 and 3). The most common AE was infusion related reaction (IRR) (in 44% of all patients) and associated events, with the infusion reaction in the first dose and resolving within a few hours. To reduce the risk of IRR, a priming dose, premedication with antihistamines, paracetamol and corticosteroids and prolonged duration of infusion have been implemented for the first dose. A single patient experienced an infusion reaction on the second dose, otherwise no infusion related reactions have been seen at later doses. A dose limiting toxicity (leucopenia/neutropenia) that was reversible was seen in 1/7 patients at 6 mg/kg. Cohort 5 has recently been initiated at 10 mg/kg. A maximum tolerated dose (MTD) has not yet been reached.

Table 2: Safety summary

Parameter, n (pt/tot)	1.0 mg/kg (n=3)	1.5 mg/kg (n=3)	3.0 mg/kg (n=3)	6.0 mg/kg (n=7)	Total (n=16)
All-causality AEs	38 (3/3)	42 (3/3)	33 (3/3)	92 (7/7)	185 (16/16)
Treatment related AEs	22 (3/3)	9 (2/3)	5 (2/3)	29 (6/7)	66 (13/16)
Treatment related grade 3 AEs	0	0	1 (1/3)	3 (2/7)	4 (3/16)
Treatment related grade ≥3 AEs	0	0	0	0	0
All-causality serious AEs	2 (1/3)	2 (1/3)	4 (2/3)	8 (4/7)	16 (8/16)
Treatment related serious AEs	0	0	1 (1/3)	3 (3/7)	4 (4/16)

Table 3: Most common treatment related AEs (Any grade incidence ≥ 2 patients), with the exception of one patient, infusion related reactions were only seen at the initial dose. Some AEs reported in 3 reactions, chills, pyrexia) are reported both as symptoms relating to infusion reaction and as separate AE in the table. Grade 3: One patient with infusion related reaction (cohort 3), one patient with hypokalemia in cohort 4, low white blood cells count and neutropenia, both in the same patient in cohort 4.

Treatment related AEs	Any toxicity n (of total)	Grade 3 n (of total)
Any	58 (13/16)	4 (3/16)
Nausea	8 (5/16)	0
Fatigue	7 (5/16)	0
Infusion related reactions	7 (7/16)	1 (1/16)
Pyrexia	6 (4/16)	0
Chills	4 (4/16)	0
Vomiting	4 (4/16)	0
Diarrhoea	3 (2/16)	0
Hypotension	2 (2/16)	0
Pruritus	2 (2/16)	0

Biomarkers

An extensive biomarker analysis will be performed at the end of the study. Interim analysis of a select set of parameters of relevance in serum showed a decrease versus baseline in IL-6 in 11 of 14 patients with a strong trend (p=0.06) and a decrease in CRP in 9 of 11 patients (p=0.04), after two doses of CAN04, consistent with the CAN04 mode of action and supporting target engagement.

Clinical efficacy data

Of the patients that had received at least one (1) dose of CAN04, 13 patients had available pre- and post-treatment assessment by imaging at the time of data cut off (Oct 1st). Five (5) patients (38%) had stable disease (SD) by irRC at 8 weeks follow up: NSCLC (1), CRC (3), and PDAC (1). Eight (8) patients had progressive disease (PD). One patient with NSCLC had SD at 6 months.

Pharmacokinetics

Fig. 3. The serum profiles of CAN04 for an initial priming dose followed by repeated dose administrations. Indicates higher exposures and slower elimination with increasing doses although the truncated curves does not yet allow for any reliable calculation of PK parameters

CONCLUSIONS

- CAN04 has generally been well tolerated, the most common treatment related AE is an infusion related reaction during the first infusion and resolving within a few hours, a side effect often observed with antibody therapy.
- 6 mg/kg is safe and tolerable. MTD has not been reached and the study is now enrolling patients in cohort 5 at 10 mg/kg
- Biomarker results support target engagement already after 2 doses of CAN04.
- In a heavily pre-treated patient population, 5 of 13 patients (38%) that had received at least 1 dose of CAN04 had SD by irRC at 8 weeks follow up. One patient with NSCLC had SD for 6 months.
- The next step after the recommended phase II dose has been established will be to evaluate CAN04 in a dose expansion phase as monotherapy as well as in combination with standard of care therapy in the target indications NSCLC (1st and 2nd line) and PDAC (2nd line) in separate treatment arms

References

1. Hanahan D et al. Cell 2011
2. Netea M et al. Nat Immunol 2017
3. Ridker P et al. Lancet Oncol 2017
4. Wang et al. Cancer Res 2014
5. Voigt C et al. Proc Natl Acad Sci U S A. 2017
6. Millrud C et al. Lung Cancer. 2016
7. Mantovani et al. Oncogene 2008
8. Mollica et al Mol Cancer Res 2009
9. Schmid et al. Cancer Res 2013
10. Ung et al Cancer Cell 2022
11. Mitsunaga S et al. BMC 2013
12. Boulland M et al Nat Med 2015
13. Zhuang et al Clin Cancer Res 2015
14. Nomura et al. Mol Res 2017

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Cantargia

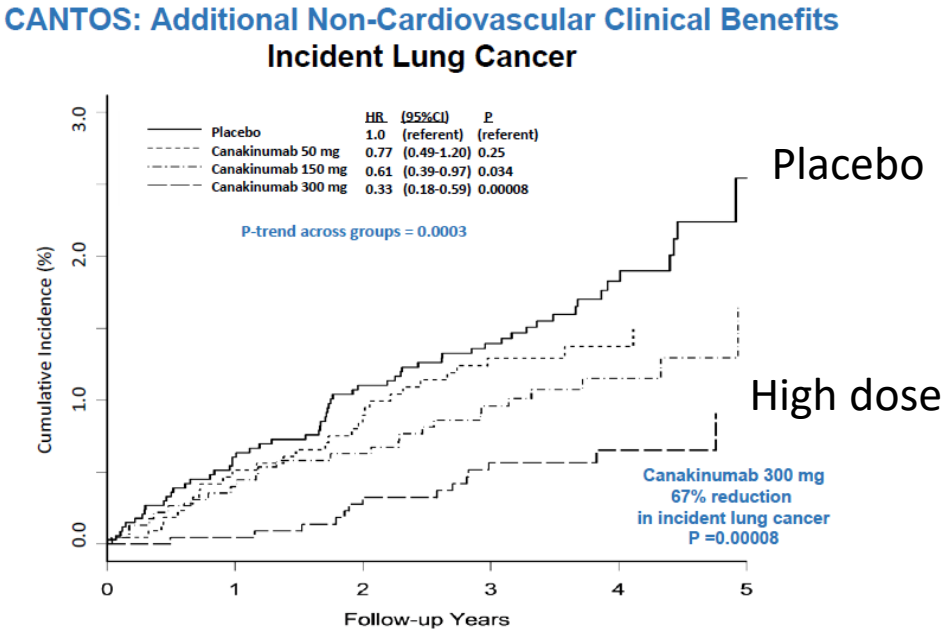
- **CAN04 has generally been well tolerated**
- **6 mg/kg is safe**
- **Biomarker results (IL-6 and CRP) supportive**
- **In a heavily pre-treated patient population, 5 of 13 patients (38%) had SD. One patient with NSCLC had SD for 6 months.**

Cantargia

IL-1 blockade in cancer- Recent supportive clinical data

CANTOS trial

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



- Clinical validation of IL-1 pathway
- Cantargia's CAN04 has broader MOA

Canakinumab phase 3 trials

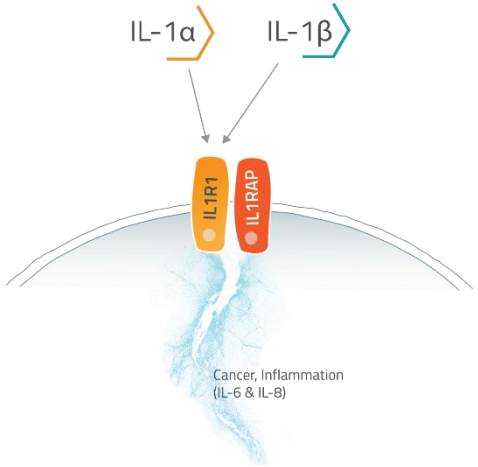
Adjuvant NSCLC
After surgery, no mets, placebo control
1500 patients, recruitment ongoing
Completion 2021/22

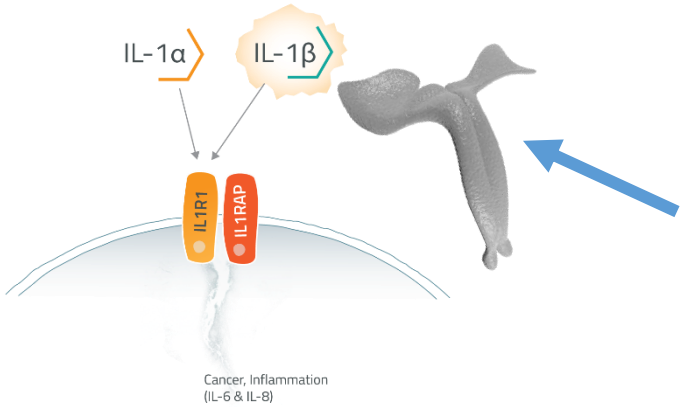
First line (CANOPY-1)
Untreated locally advanced/metastatic
Combination Pembro/Platinum doublet
627 patients, start Dec 2018
Completion 2021/22

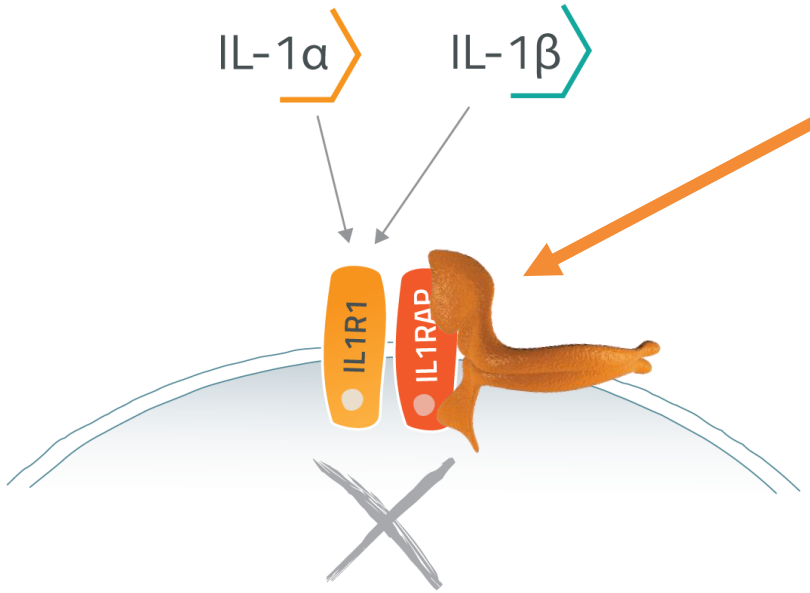
Second line metastatic (CANOPY-2)
Previously treated loc adv/metastatic
Combination Docetaxel
240 patients, start Dec 2018
Completion 2021

Source clinicaltrials.gov

CAN04 (nidanilimab) vs Canakinumab





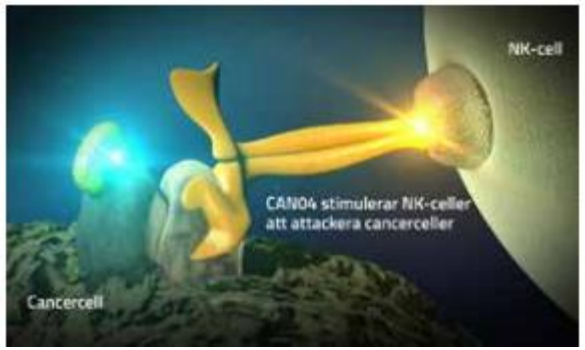


Canakinumab

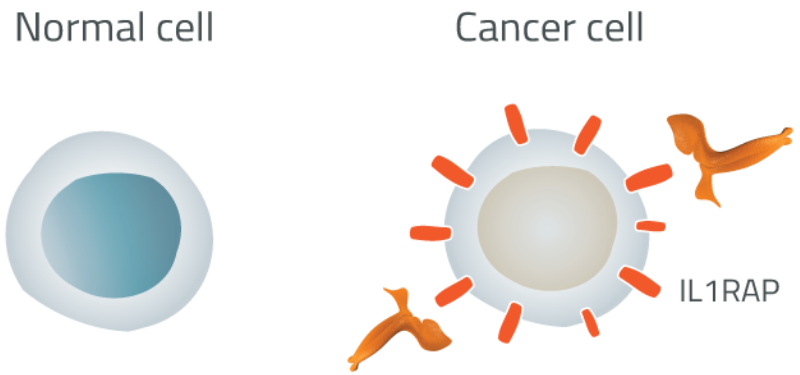
- Antibody directed against one of the two IL-1 ligands, IL-1β

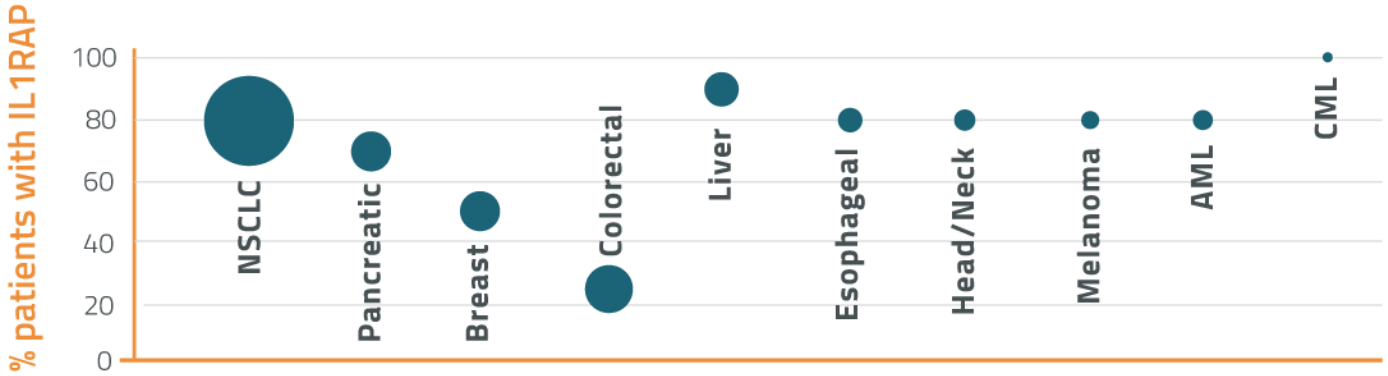
CAN04:

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



Medical need and IL1RAP





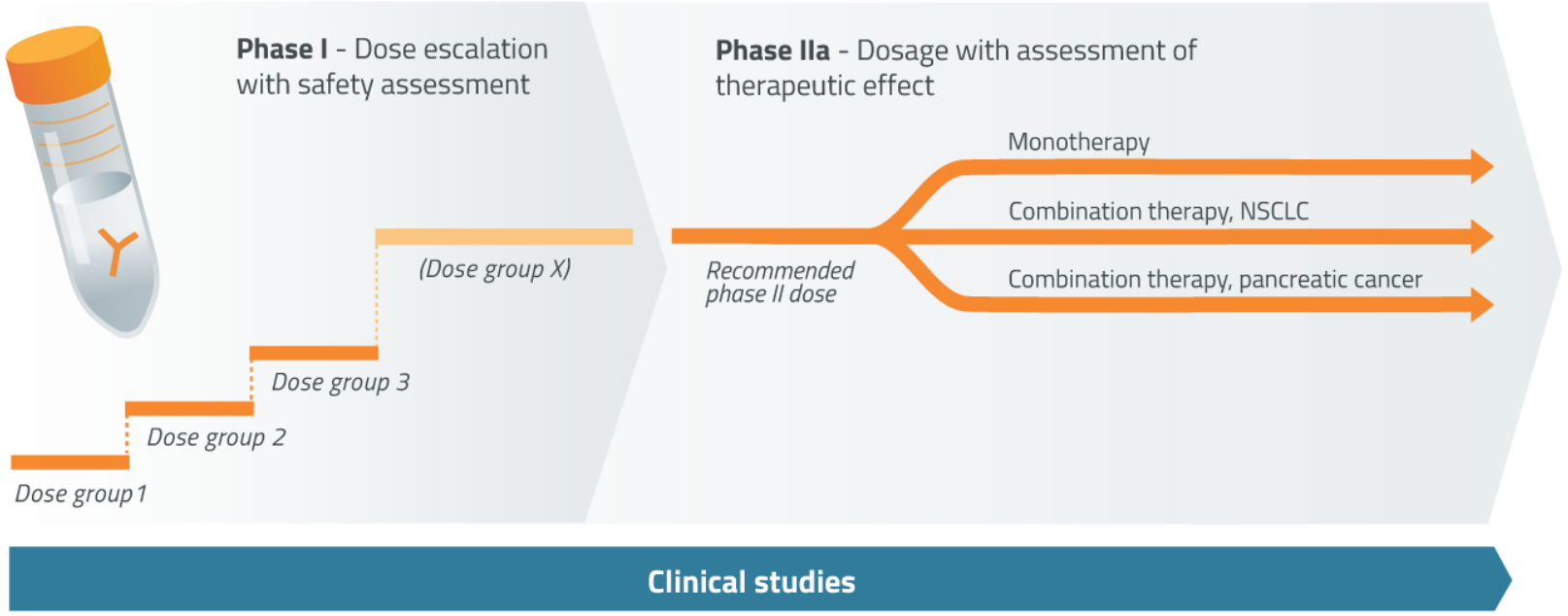
Size of each indication corresponds to annual deaths in USA

- Cantargia founded based on:
  - Discovery of IL1RAP on cancer cells
  - Antibodies against IL1RAP - antitumor effects
  - Patents on antibody therapy against IL1RAP
- Primary indications. NSCLC and pancreatic cancer
- Biomarker studies ongoing, identify patients most likely to respond
- Opportunity to expand development in additional cancer forms

CAN04 – CANFOUR clinical trial

Phase I/IIa trial - NSCLC and pancreatic cancer

- Norway, Denmark, Netherlands and Belgium
- Well renowned centres (Jules Bordet, Brussels; Erasmus Rotterdam, NKI, Amsterdam; Rigshospitalet, Copenhagen; Radiumhospitalet, Oslo)
- 16 patients treated, good safety
  - NSCLC, pancreatic cancer, colon cancer, triple negative breast cancer
- Phase IIa: focused on NSCLC and pancreatic cancer (appr 20 centres)
  - Monotherapy
  - Combination with standard therapy
    - NSCLC Cisplatin/Gemcitabine
    - Pancreatic cancer Gemcitabine/nab-paclitaxel



Q4 2018

Early 2020

Details on www.clinicaltrials.gov

Cantargia at a glance

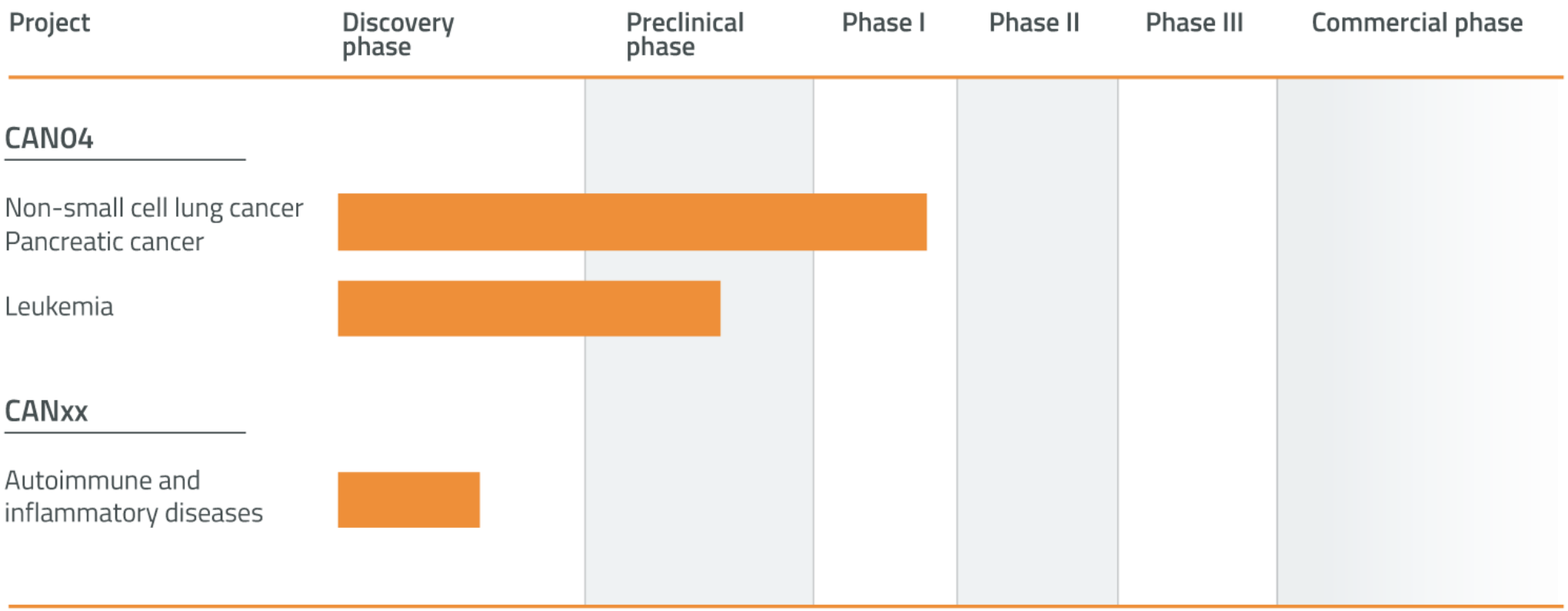
- Specialized in antibody therapy/immunology, with initial focus on oncology
- Granted IP - therapeutic target IL1RAP and drug candidate
- Lead antibody CAN04 (nidanilimab) in clinical development
- Strong management team with proven track record in clinical development and business development
- Listed on Nasdaq Stockholm
- Approximately 5000 shareholders
- Based in Lund, Sweden

Financial highlights

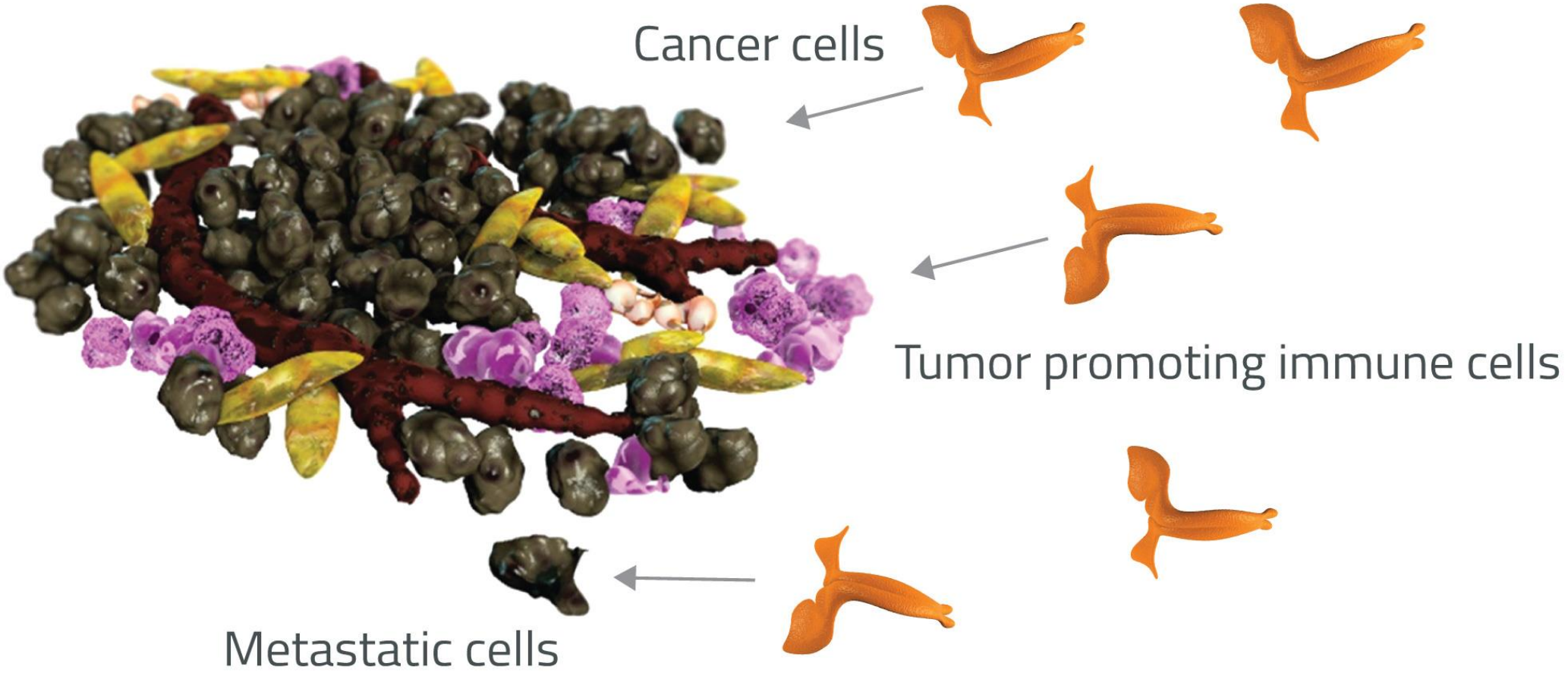
- Share price: 15.10 SEK (1.68 USD), Nov 19, 2018
- Market cap: 999 MSEK (111 MUSD), Nov 19, 2018
- Cash: 191 MSEK (20.9 MUSD), Sep 30 2018

Current owners (Sep 30, 2018)	
Sunstone	9.0%
1st AP fund	6.9%
Avanza Pension	5.2%
4th AP fund	4.6%
2nd AP fund	3.3%
Öhman Bank S.A.	3.3%
SEB S.A. clients	3.2%
Mats Invest AB	2.0%
Tibia konsult	1.9%
Kudu AB	1.9 %
Others	58.6%

Cantargia pipeline

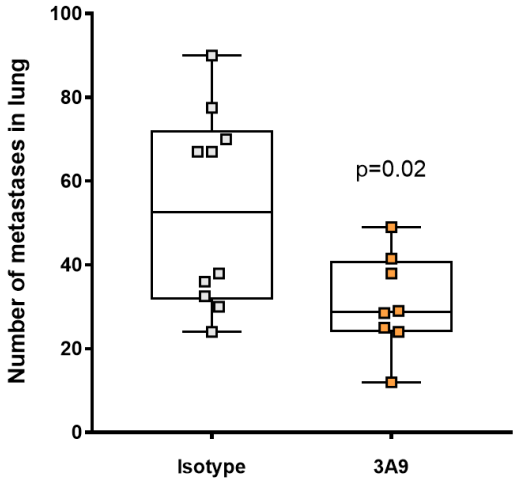


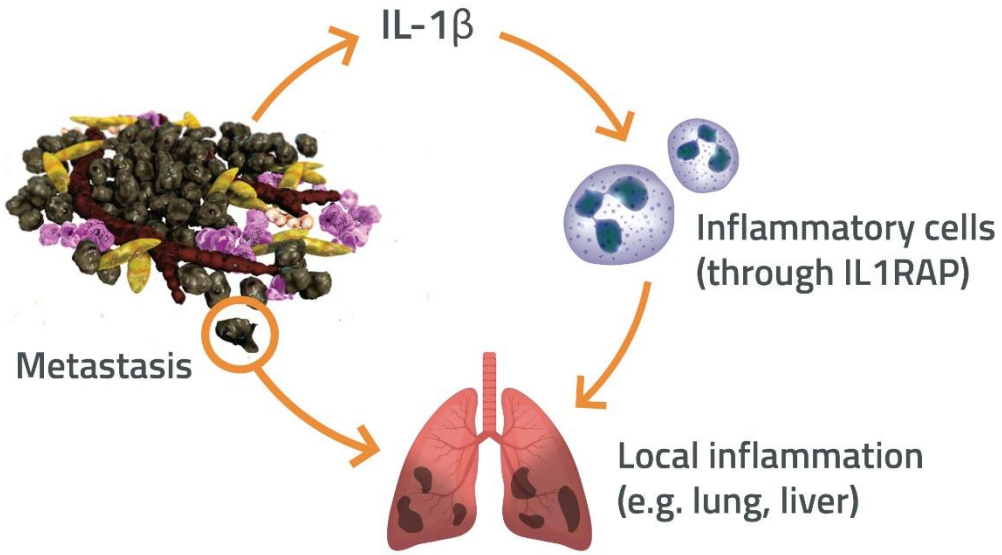
CAN04 attacks several cell types in the tumor



Inflammation and metastasis

- Cancer cells (seeds) needs a good soil to form a metastasis
- The IL-1 system (inflammation) can provide such environment (soil)





A tumor can create its own ”seed and soil”

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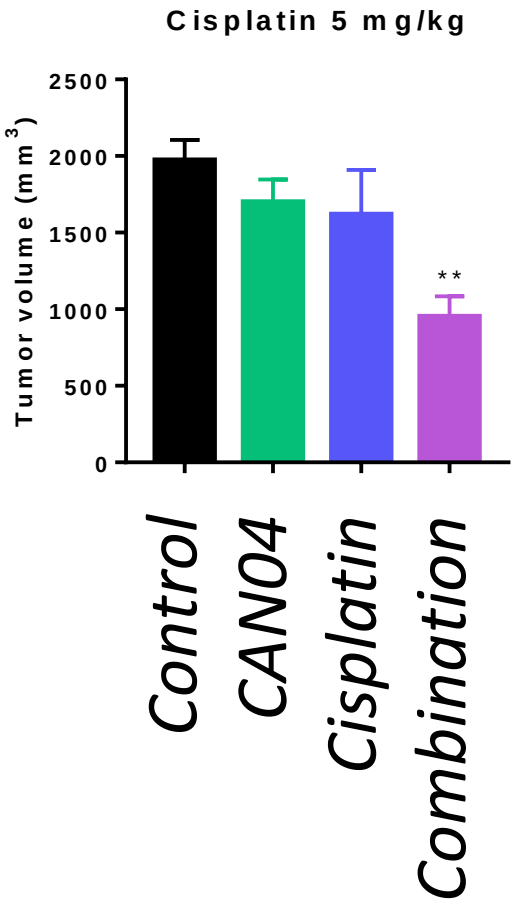
NSCLC CAN04/Cisplatin combination



	Control	CAN04	Cisplatin	Combination
Animals withdrawn	20 % (Tumor)	0 %	50 % (Toxicity)	20 % (Toxicity)
Tumor reduction	N/A	14%	18%	52 %
Comment	*Highest tumor burden*	*Best safety*	*Highest toxicity*	*Superior efficacy and reduced toxicity*

Combination CAN04/Cisplatin superior to individual agents

- **Reduction in severe toxicity**
- **Increased efficacy**

Cantargia

Significant value inflection points ahead

2018

- Preclinical data (immuno-oncology effects, combinations etc)
- Phase I clinical data final dose level (Q4 2018)
- Initiation of Phase IIa portion of the clinical trial (Q4 2018)
- US regulatory and clinical strategy

2019/2020

- Clinical progress and Phase IIa results
- Preclinical progress
- CANxx progress

Cantargia summary

- Lead candidate antibody CAN04 in clinical trials against cancer
  - Encouraging interim phase I data
  - Double mechanism of action
  - Initial development in NSCLC and pancreatic cancer (cancer forms with poor prognosis)
  - 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
  - Funding through phase IIa - until mid 2020.