



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

Presenters



Göran Forsberg
CEO



David Liberg
VP Cancer Research



Lars Thorsson
VP Clinical Development

Safe Harbour Statement

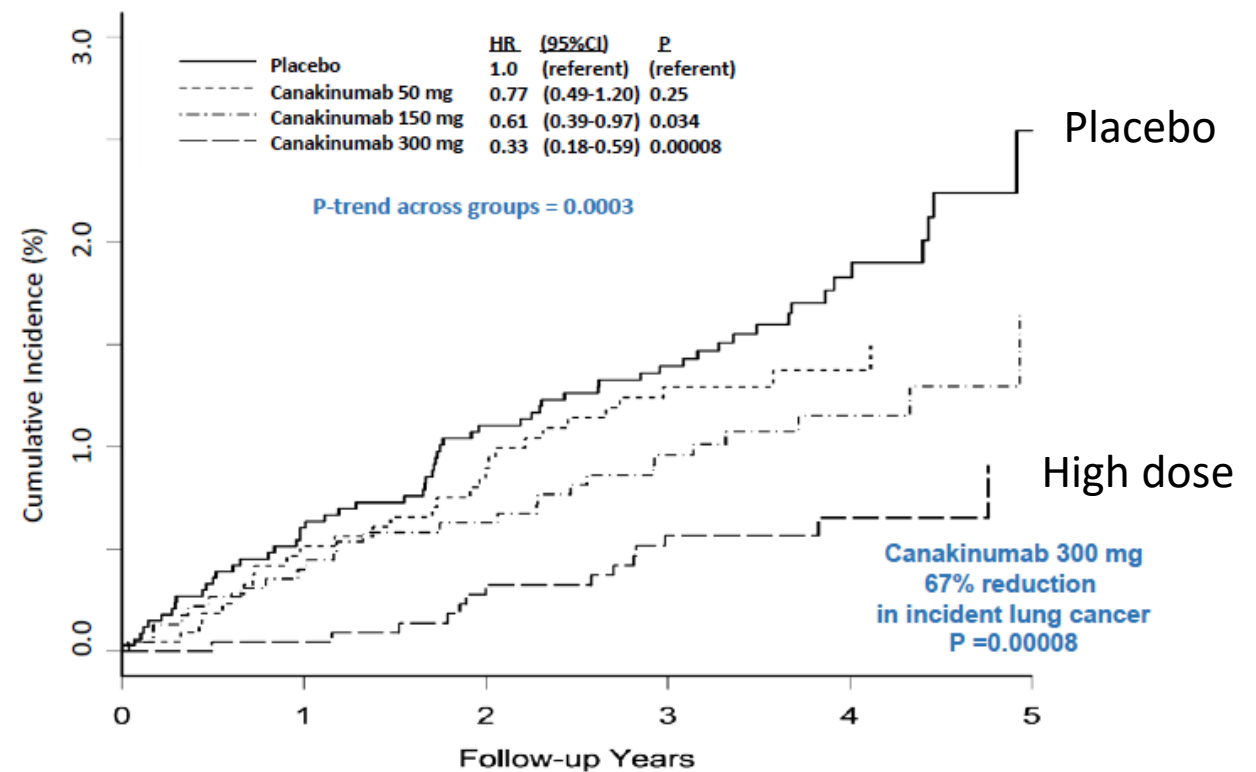
The following presentation may include predictions, estimates or other information that might be considered forward-looking. The statements regarding the surrounding world and future circumstances in this presentation reflect Cantargia's current thinking with respect to future events and financial performance. 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.

CANTOS IL-1 β blockade - Recent strong clinical data

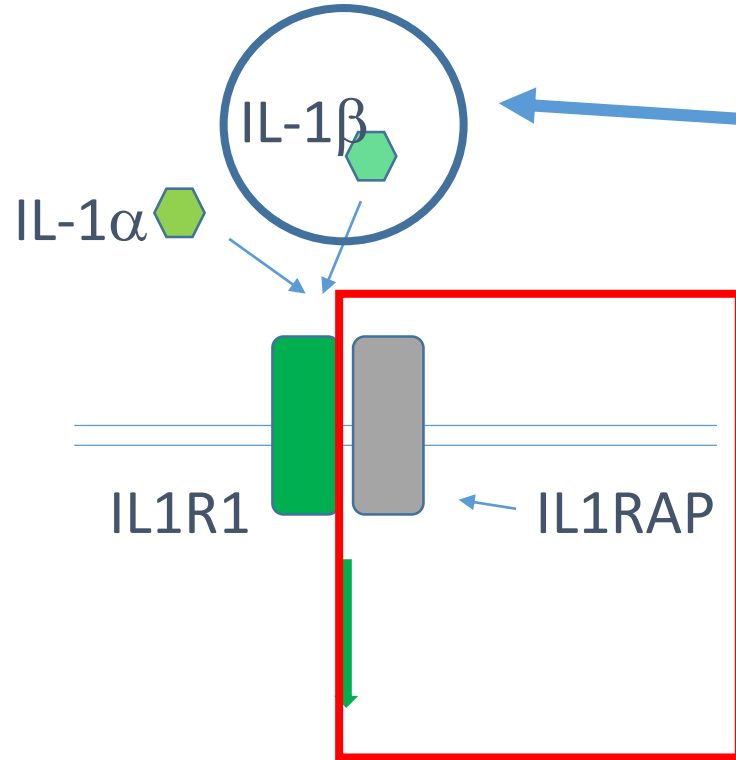
CANTOS trial

- Canakinumab (Novartis)
- 10 061 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
- Cantargia's CAN04 has higher potential than Canakinumab

CANTOS: Additional Non-Cardiovascular Clinical Benefits Incident Lung Cancer



CAN04 vs Canakinumab



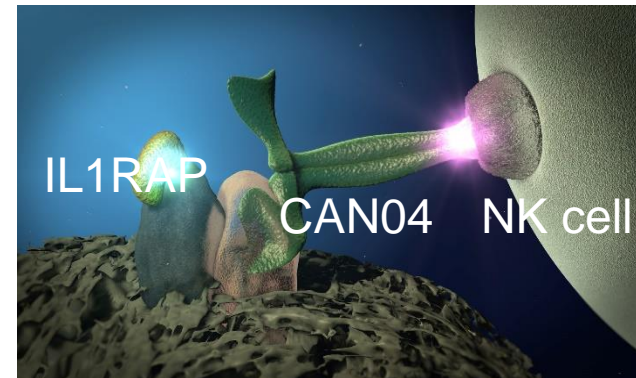
Cancer, Inflammation
(IL-6 & IL-8)

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)



CANTOS additional findings

CANCER decreased risk of death with treatment (high dose)

Lung cancer	77 %	P=0.0002	
Non-lung cancer	37 %	P=0.06	

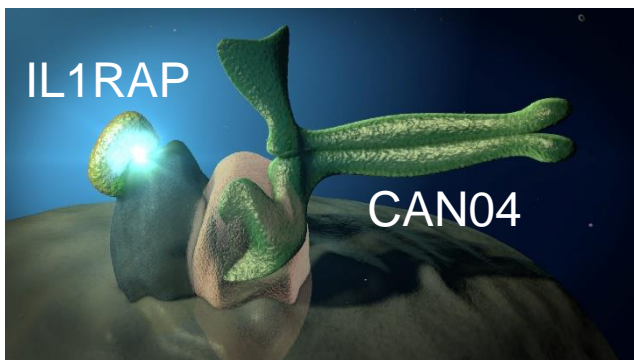
Decreased incidence of inflammatory disease (all doses)

Arthritis	32%	p<0.0001	
Osteoarthritis	28%	P=0.0005	
Gout	53%	p<0.0001	

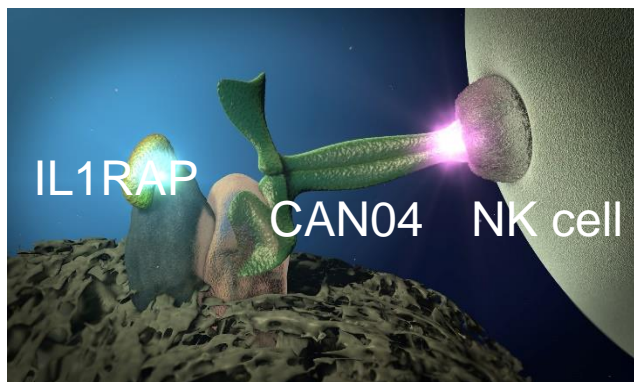
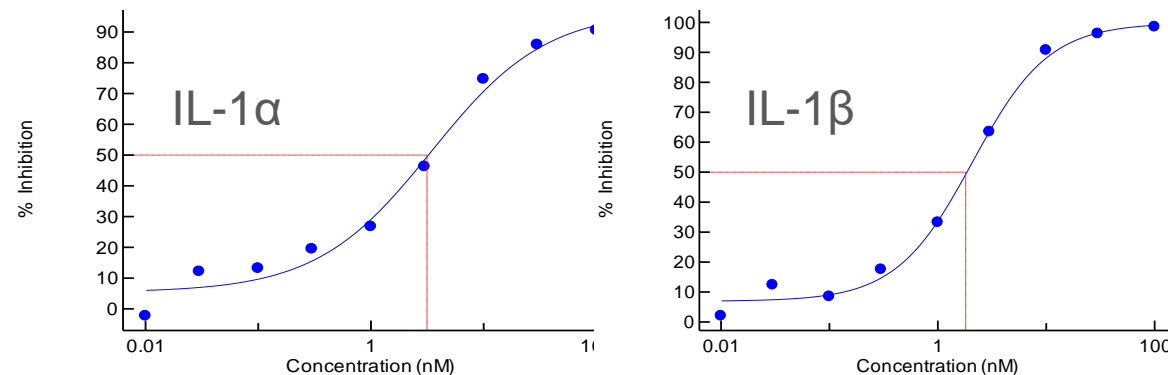
Biomarker levels (reduction)

CRP	26-41%	P<0.0001	
IL-6	25-43%	P<0.001	

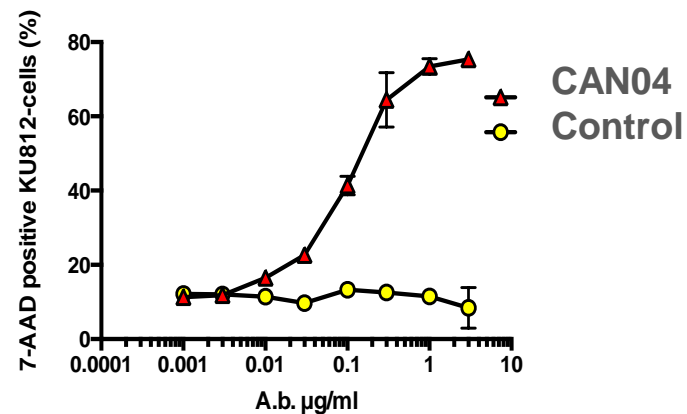
CAN04 Dual mode of action



Blocking IL-1 signaling



ADCC (stimulate immune cells to kill cancer cells)



Non-small cell lung cancer

USA estimates:

Lung cancer: 222500 new cases, 155870 deaths.

NSCLC, ~85 % of lung cancers

Subgroups (adenocarcinoma, squamous, large cell etc)

Inflammation of importance of tumor progression

IL-1 pathway externally validated

Standard therapies:

Keytruda (antibody against PD-1)

Chemotherapy

Targeted therapy (genetic form)

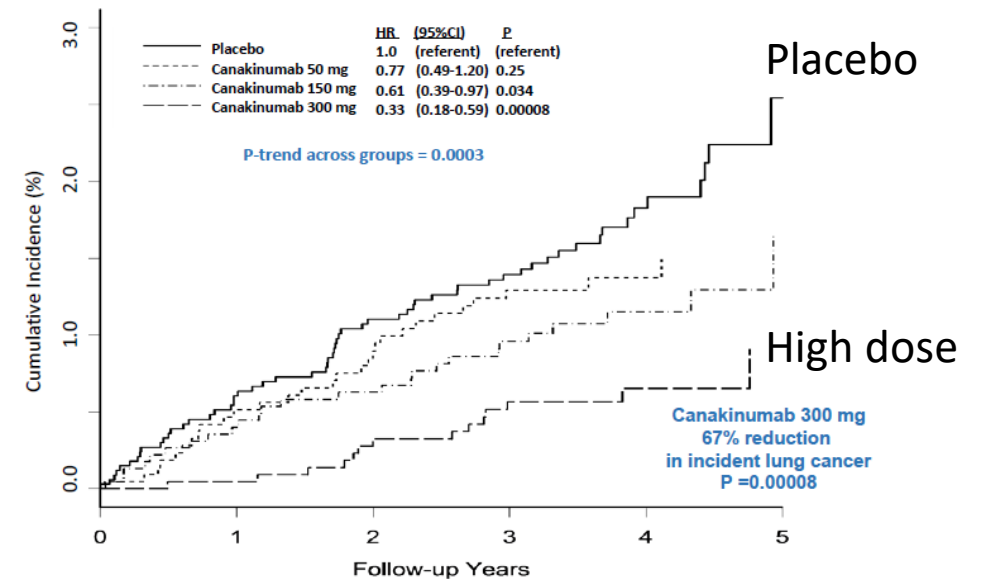
Canakinumab phase III trials in preparation (ref Novartis)

Adjuvant (after surgery)

First line with PD-1 antibody

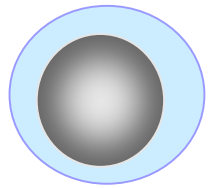
Second line

CANTOS: Additional Non-Cardiovascular Clinical Benefits
Incident Lung Cancer

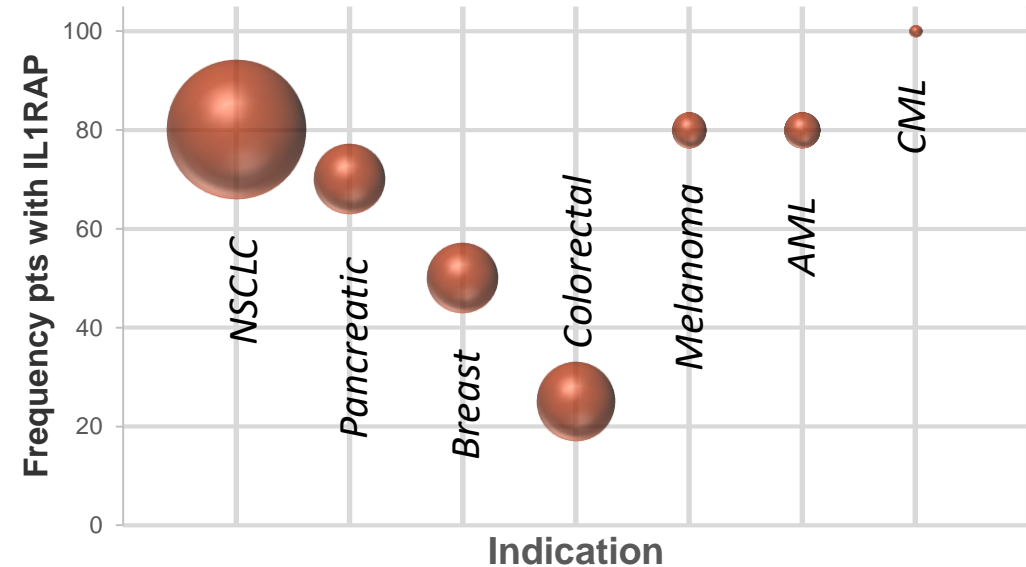
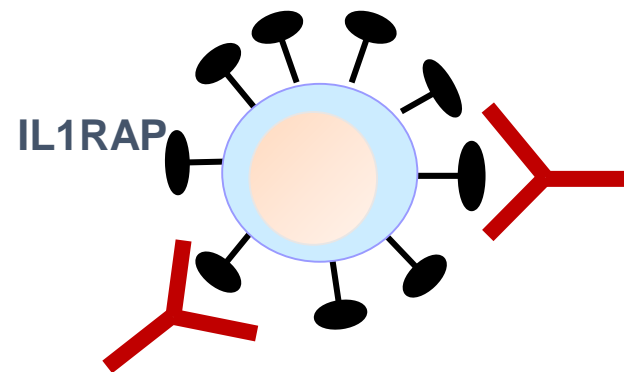


Medical need and IL1RAP

Normal cell



Cancer cell



- 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), preparations for listing on main market ongoing
- More than 3000 shareholders
- Based in Lund, Sweden
- New share issue of 232 MSEK – Dec 15 2017

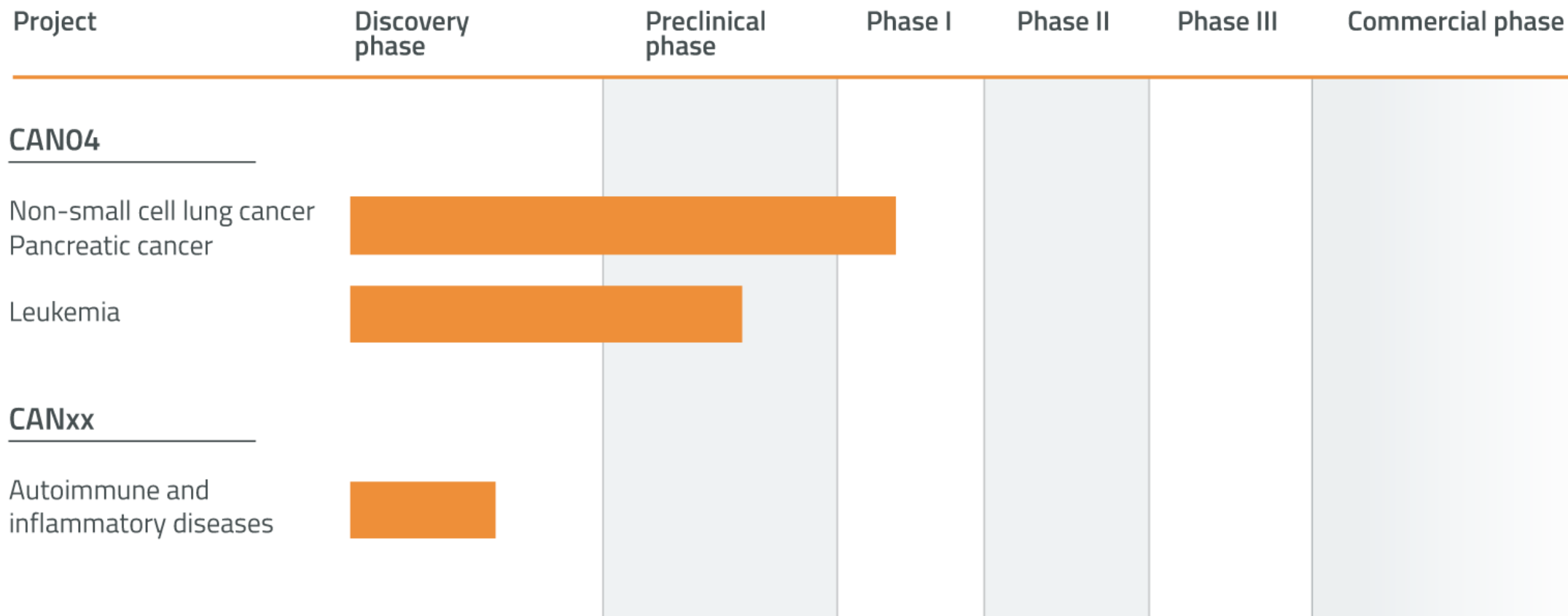
Financial highlights

- Share price: 6.80 SEK (0.84 USD), Feb 9, 2018
- Market cap: 450 MSEK (55.6 MUSD), Feb 9, 2018
- Cash: 52.4 MSEK (6.7 MUSD), Sep 30 2017 (excl new financing)

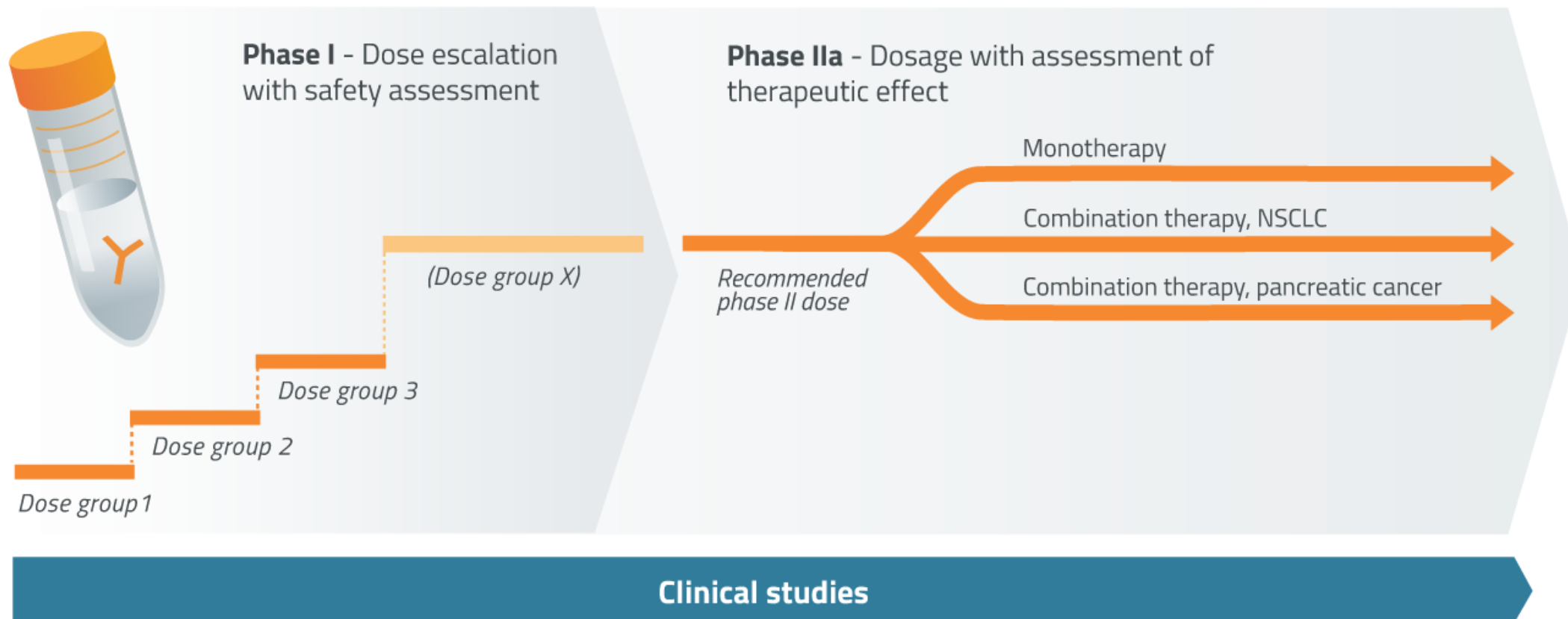
Current owners (Jan 19, 2018)

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%

Cantargia pipeline



CAN04 – CANFOUR clinical trial



Details on www.clinicaltrials.gov

Preclinical development

Tumor inflammation – key to cancer progression

Enablers

Genomic instability
and mutation (2000)



Tumor-promoting
inflammation (2011)

Deregulating cellular
energetics

Sustaining proliferative
signaling

Evading growth suppressors

Resisting cell death

Enabling replicative
immortality

Inducing angiogenesis

Activating invasion and
metastasis

Avoiding immune destruction

Cancer hallmarks

*The inflammatory cytokine IL-1
– Well established role in
cancer progression:*

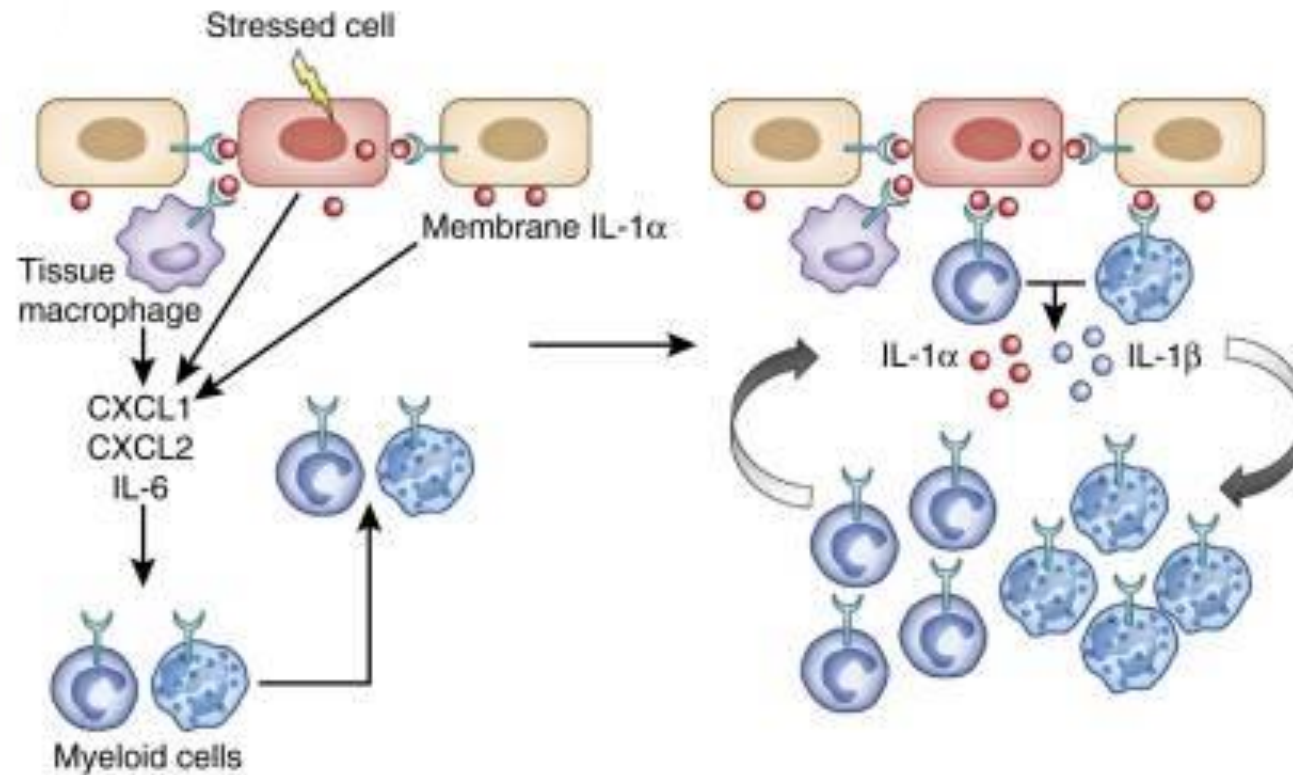
Tumor cells

- *Signaling/proliferation of cancer cells*
- *Chemoresistance*

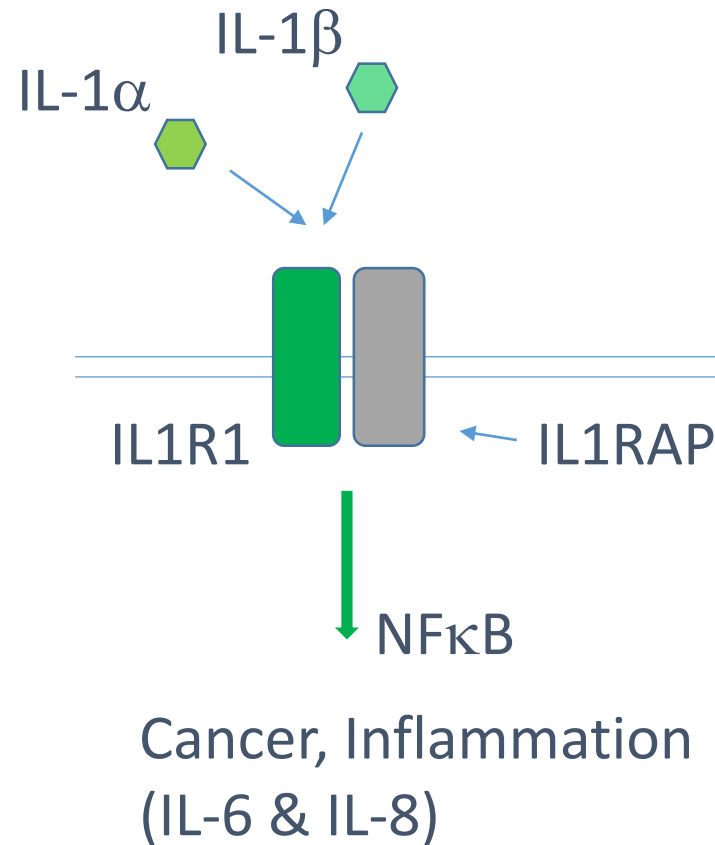
Tumor microenvironment

- *Metastasis*
- *Crosstalk between tumor cells and stroma*
- *Inflammation and local suppression of the immune system*

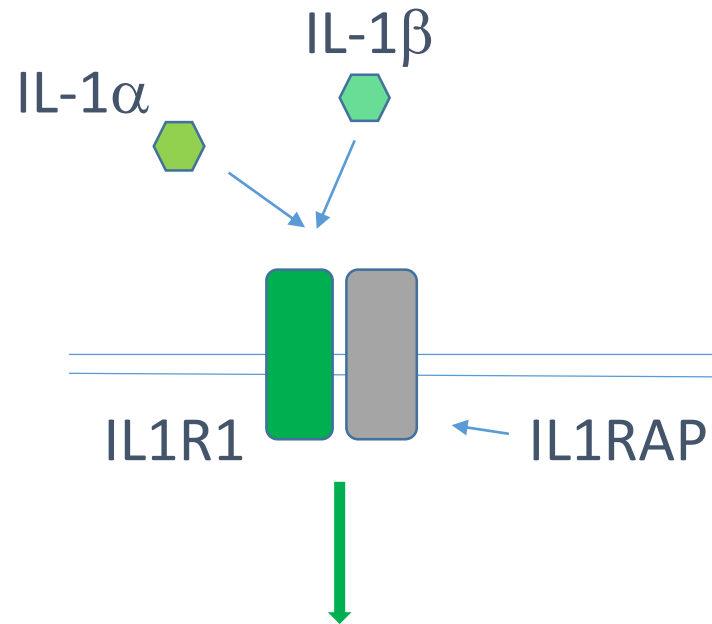
In sterile inflammation, IL-1 α drives an inflammatory loop that is amplified by IL-1 β



IL1RAP is required for Interleukin-1 signaling

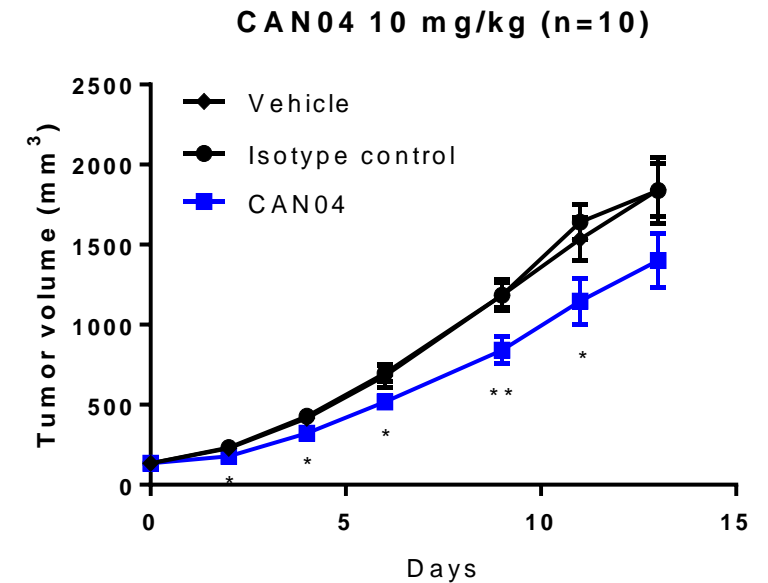
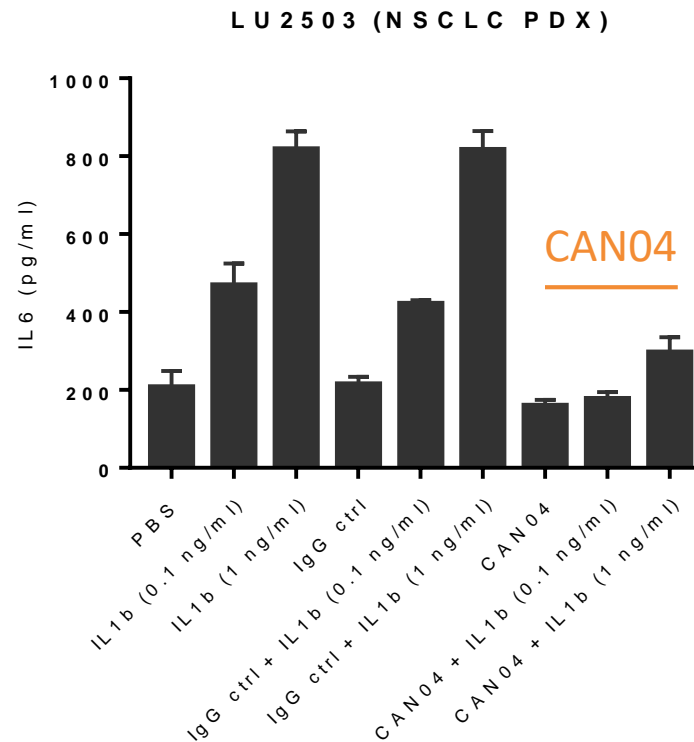


CAN04 targets IL1RAP to inhibit tumor growth



Inflammatory response e.g. IL-6

IL-6 is involved in tumor progression



CAN04 targets IL1RAP to inhibit tumor growth

Isotype treated

CAN04 treated

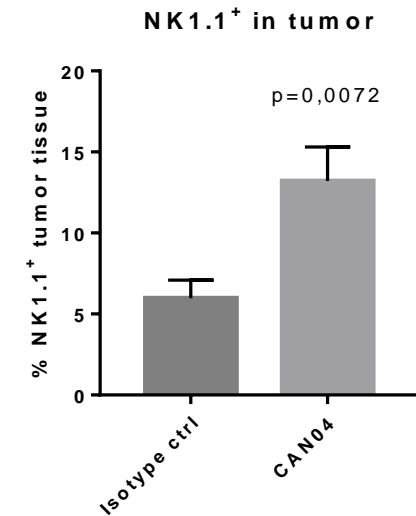
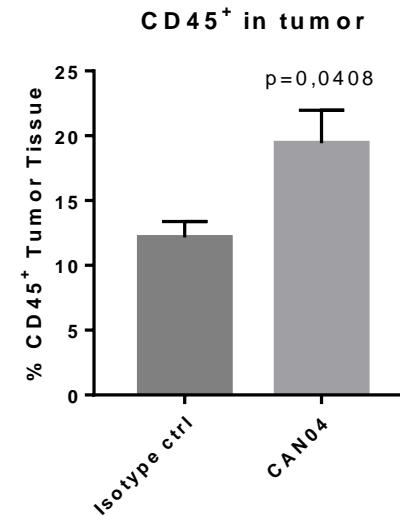
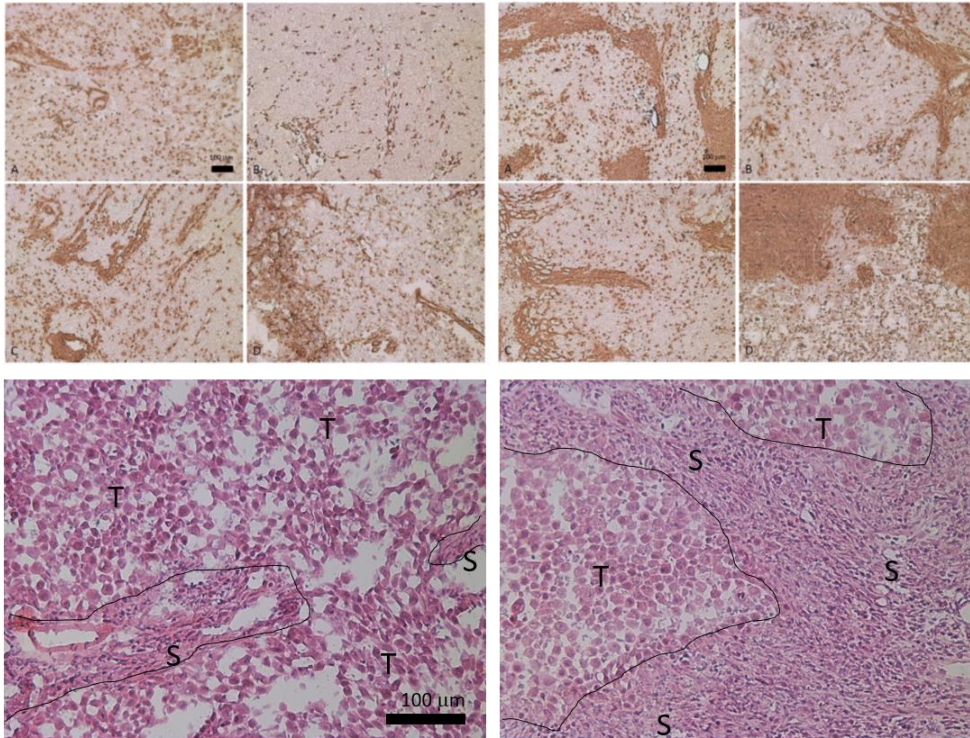
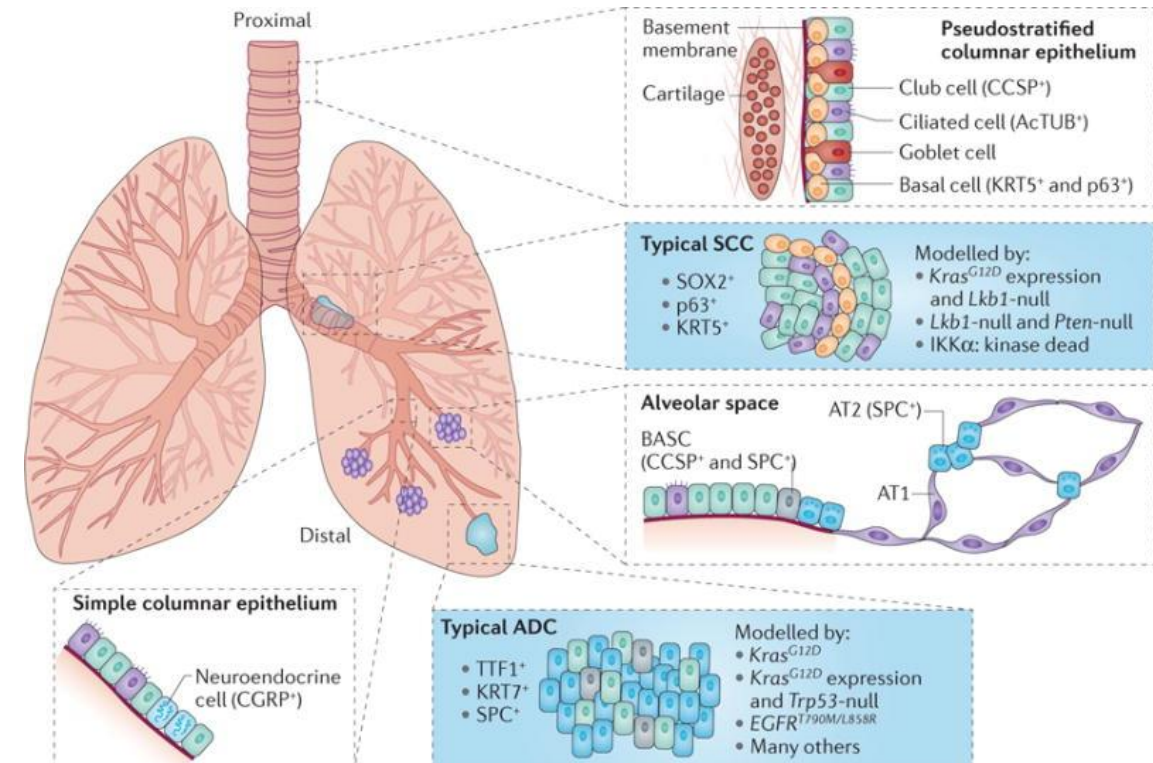
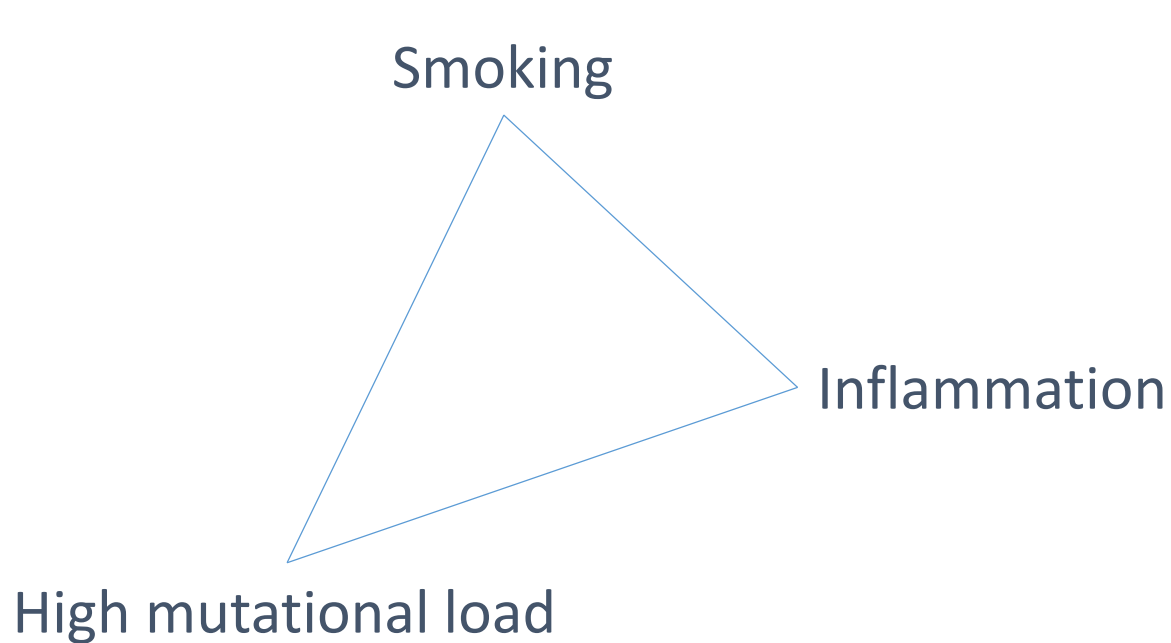


Image analysis: Isotype CAN04

CD45 ⁺	14.9 %	24.3%
Stroma (H/E)	12 %	34%

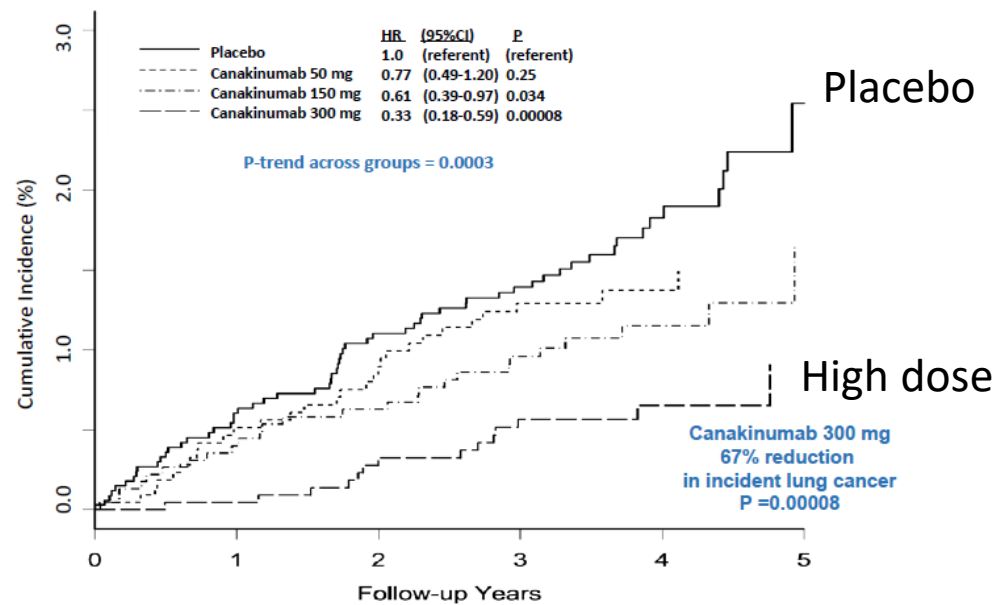
Non-small cell lung cancer (NSCLC)



Chen et.al, Non-small-cell lung cancers: a heterogeneous set of diseases, Nat Rev Cancer 2014

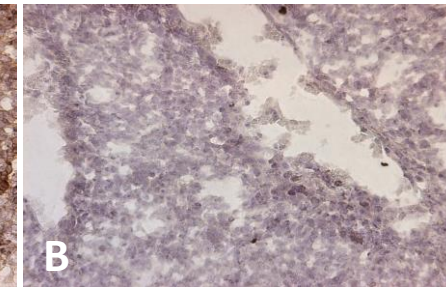
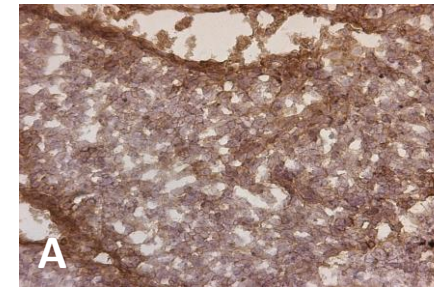
Non-small cell lung cancer (NSCLC)

CANTOS: Additional Non-Cardiovascular Clinical Benefits Incident Lung Cancer

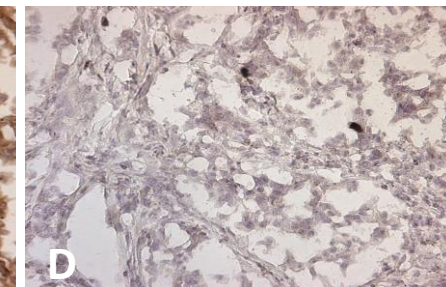
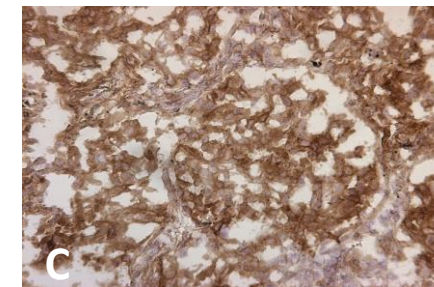


CAN04

Isotype



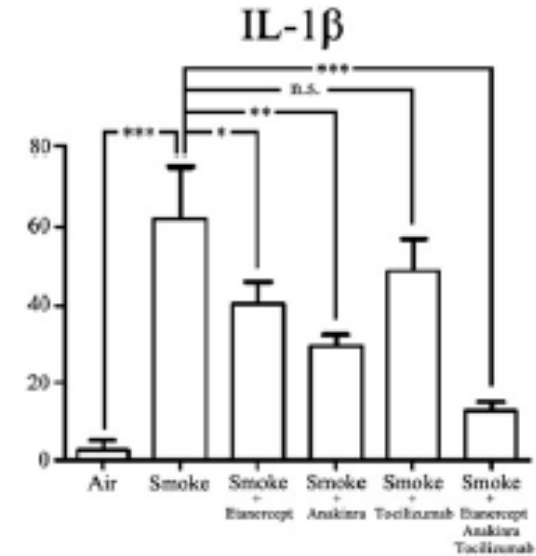
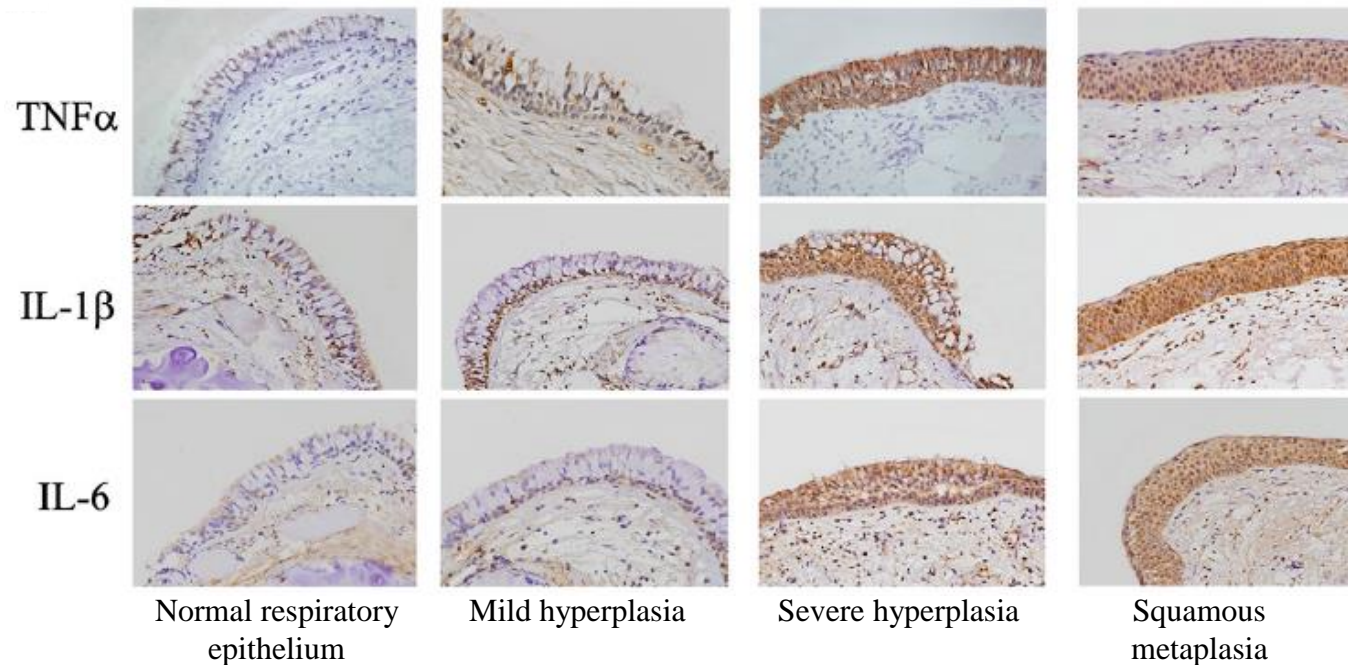
SCC



ADC

Non-small cell lung cancer (NSCLC)

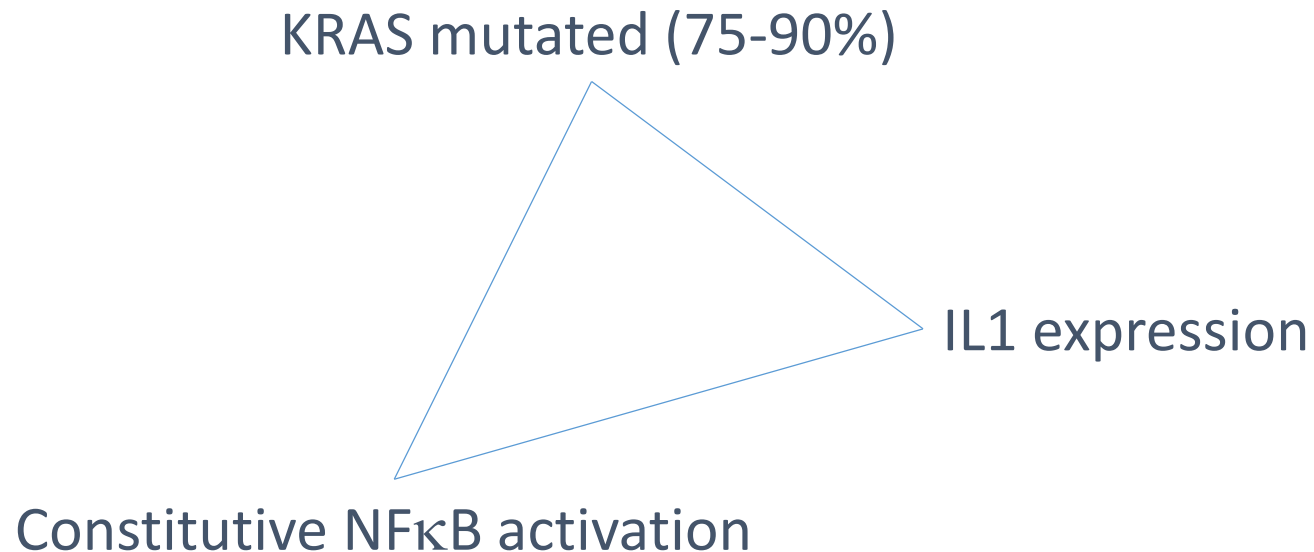
Inflammation drives metaplasia and is a hallmark of active lung cancer



Herfs et.al, Proinflammatory Cytokines Induce Bronchial Hyperplasia and Squamous Metaplasia in Smokers, Am J Respir Cell Mol Biol 2012

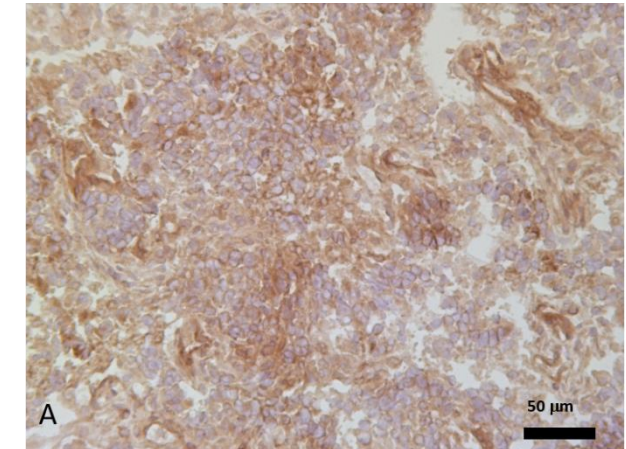
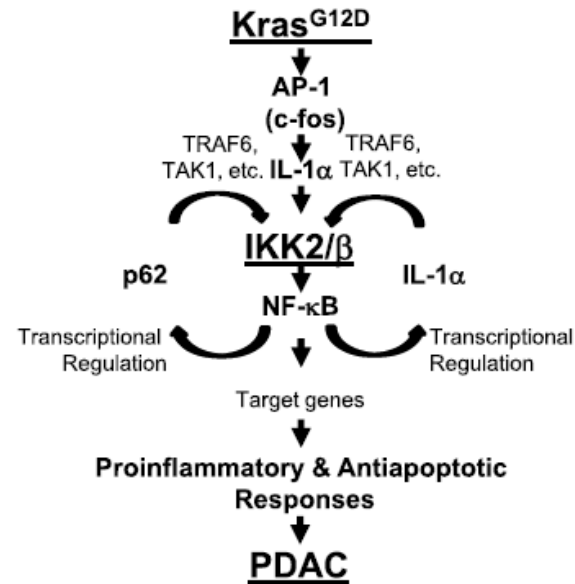
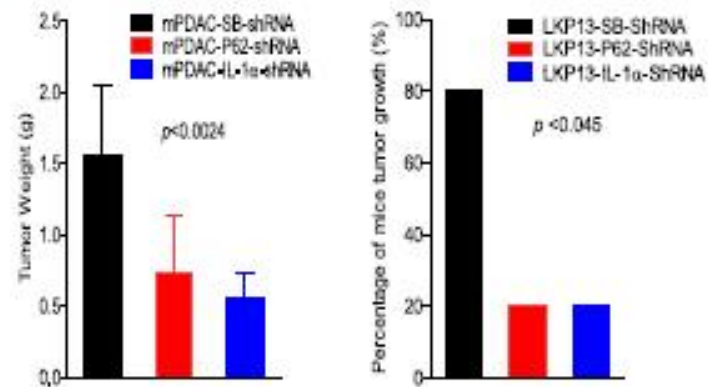
Pancreatic ductal adenocarcinoma (PDAC)

Propensity to metastasize, resistance to chemo- and radiotherapy, 5-year survival < 6%

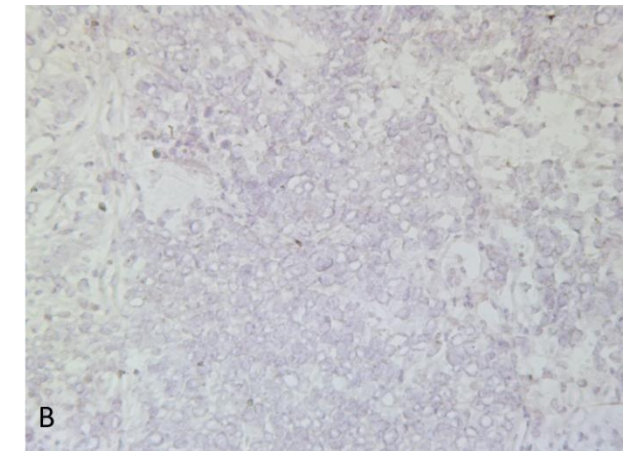


Pancreatic ductal adenocarcinoma (PDAC)

PDAC hallmarks are connected



CAN04



Control

Ling et.al, KRAS^{G12D}-Induced IKK2/ β /NF- κ B Activation by IL-1 α and p62 Feedforward Loops is Required for Development of Pancreatic Ductal Adenocarcinoma, Cancer Cell 2012

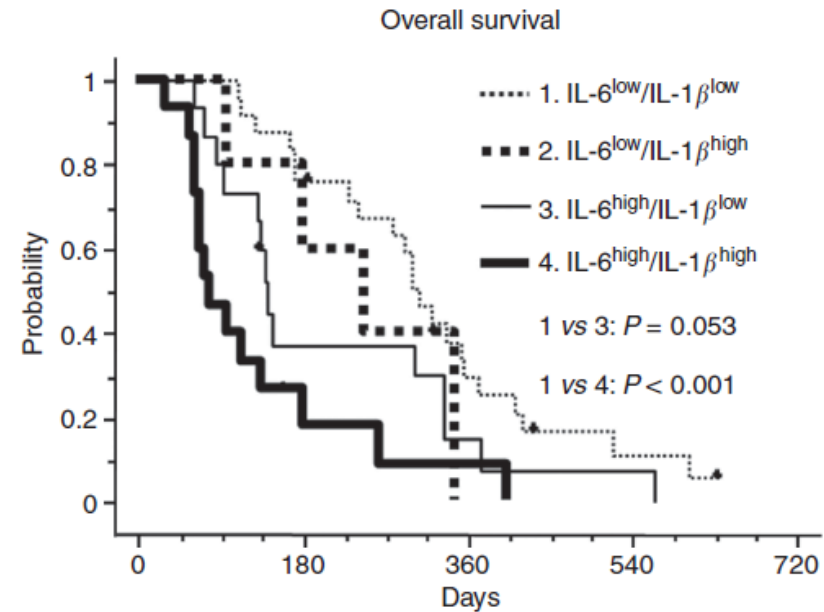
Pancreatic ductal adenocarcinoma (PDAC)

PDAC hallmarks relate to chemoresistance



Zhuang et.al; IL1 Receptor Antagonist Inhibits Pancreatic Cancer Growth by Abrogating NF-κB Activation, *Clinical Cancer Res* 2016

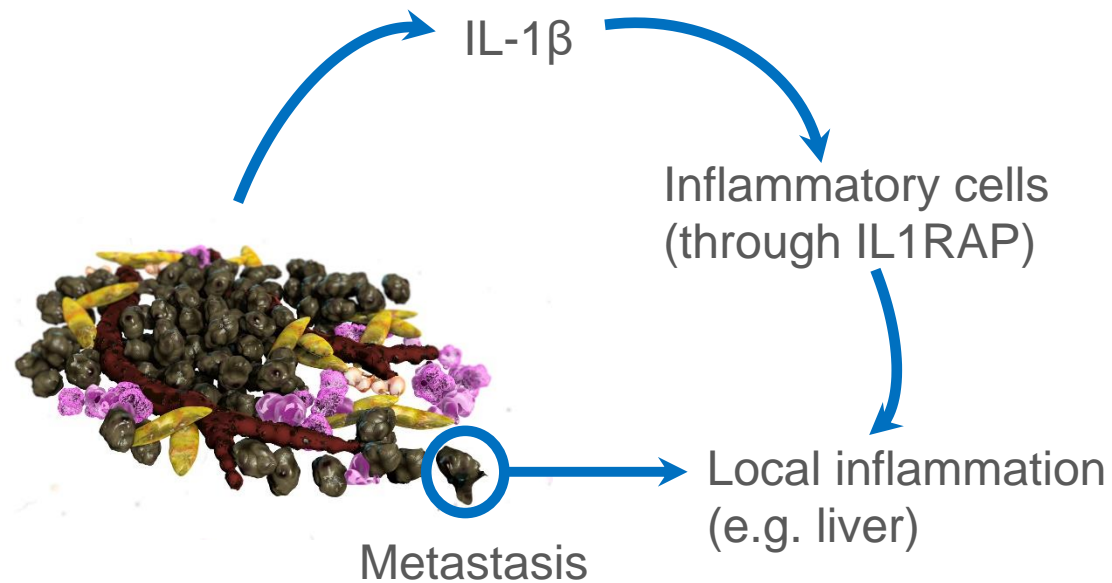
Zhang et.al; Constitutive IRAK4 Activation Underlies Poor Prognosis and Chemoresistance in Pancreatic Ductal Adenocarcinoma, *Clinical Cancer Res* 2017



Mitsanuga et.al; Serum levels of IL-6 and IL-1β can predict the efficacy of gemcitabine in patients with advanced pancreatic cancer, *Br J Cancer* 2013

Inflammation and metastasis

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



A tumor can create its own "seed and soil"

Summary

- CAN04 blocks IL-1 signaling and targets IL1RAP-expressing cells for immune-mediated killing
- Both non-small cell lung cancer (NSCLC) and pancreatic cancer (PDAC) are tumors strongly coupled to IL-1 mediated tumor inflammation
- IL1RAP is highly expressed in NSCLC and PDAC
- IL-1 is involved in cancer development and mediates resistance to chemotherapy

Clinical development

CANFOUR - Press release FIM 2017-10-13

Cantargia announces first patient treated and completed a three weeks safety evaluation period with immunoncology antibody CAN04

Cantargia AB ("Cantargia") today announces that the first patient in the CANFOUR clinical trial has received three cycles of treatment with the antibody CAN04. Thereby, the first patient has formally completed the safety evaluation period according to the clinical protocol. Two additional patients have received therapy with CAN04. No serious adverse events have been recorded. The ongoing clinical trial is a combined dose escalation/dose expansion phase I/IIa trial carried out in patients with non-small cell lung cancer, pancreatic cancer, colorectal cancer or triple negative breast cancer. The CAN04 antibody is targeted against IL1RAP, found in a number of cancer forms.

The first sites in the phase I/IIa clinical trial CANFOUR have been initiated and patient recruitment is ongoing. According to the protocol, patients are recruited in groups of three. Following the start of patient recruitment, all three patients in the first group has now each been given at least two infusions of CAN04. The first patient has completed three infusions and has been followed through a safety evaluation period of 21 days. No serious adverse events have been noted and once all three patients have received three infusions and have completed their 21-day safety evaluation period, the next dose group can be recruited.

CANFOUR

Coordinating Investigator:

Professor Ahmad Awada
Jules Bordet Institute, Brussels, Belgium

Belgium

Institut Jules Bordet, Brussels
Contact: Dr Christiane Jungels

Denmark

Rigshospitalet, Department of Oncology, Copenhagen
Contact: Dr Morten Mau Sørensen

The Netherlands

Netherlands Cancer Institute, Amsterdam
Contact: Prof Dr Jan H.M. Schellens

Erasmus MC, Rotterdam
Contact: Dr Ferry ALM Eskens

Norway

Oslo University Hospital, Radiumhospitalet, Oslo
Contact: Dr Tormod Kyrre Guren

Recruiting

Recruiting

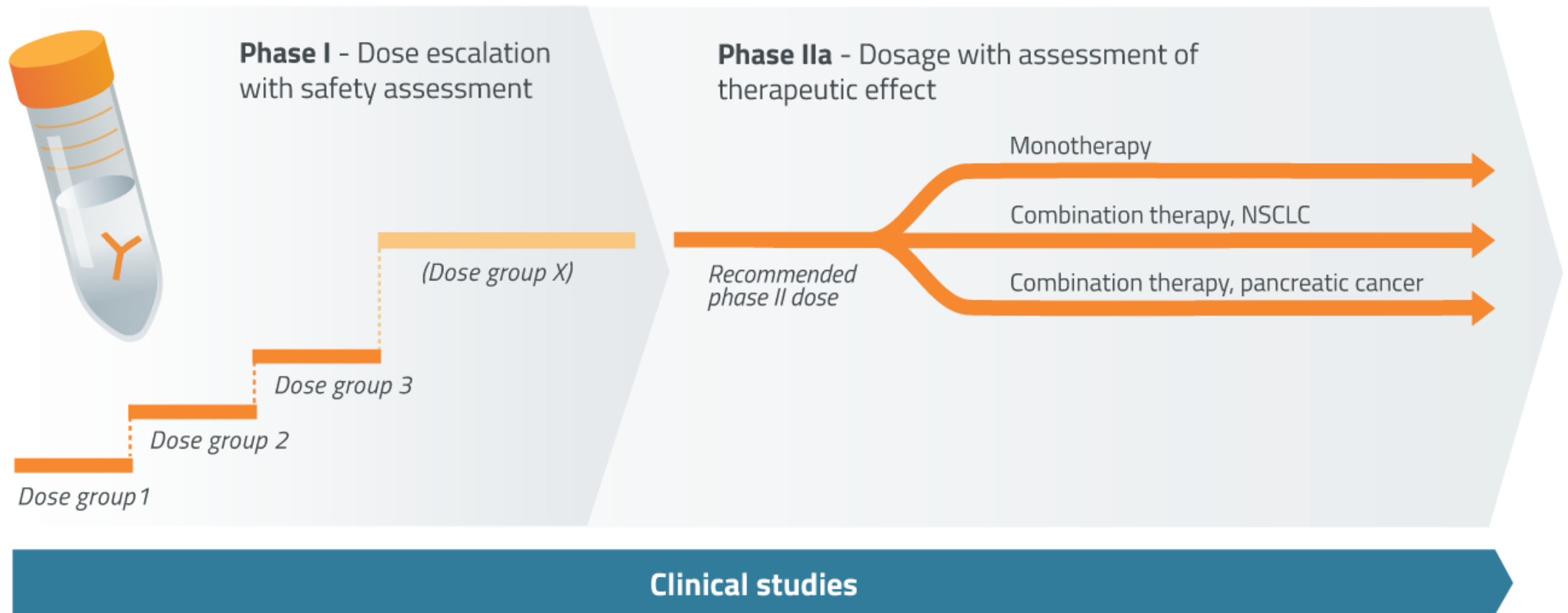
Recruiting

Recruiting

Recruiting



CAN04 – CANFOUR clinical trial



Details on www.clinicaltrials.gov

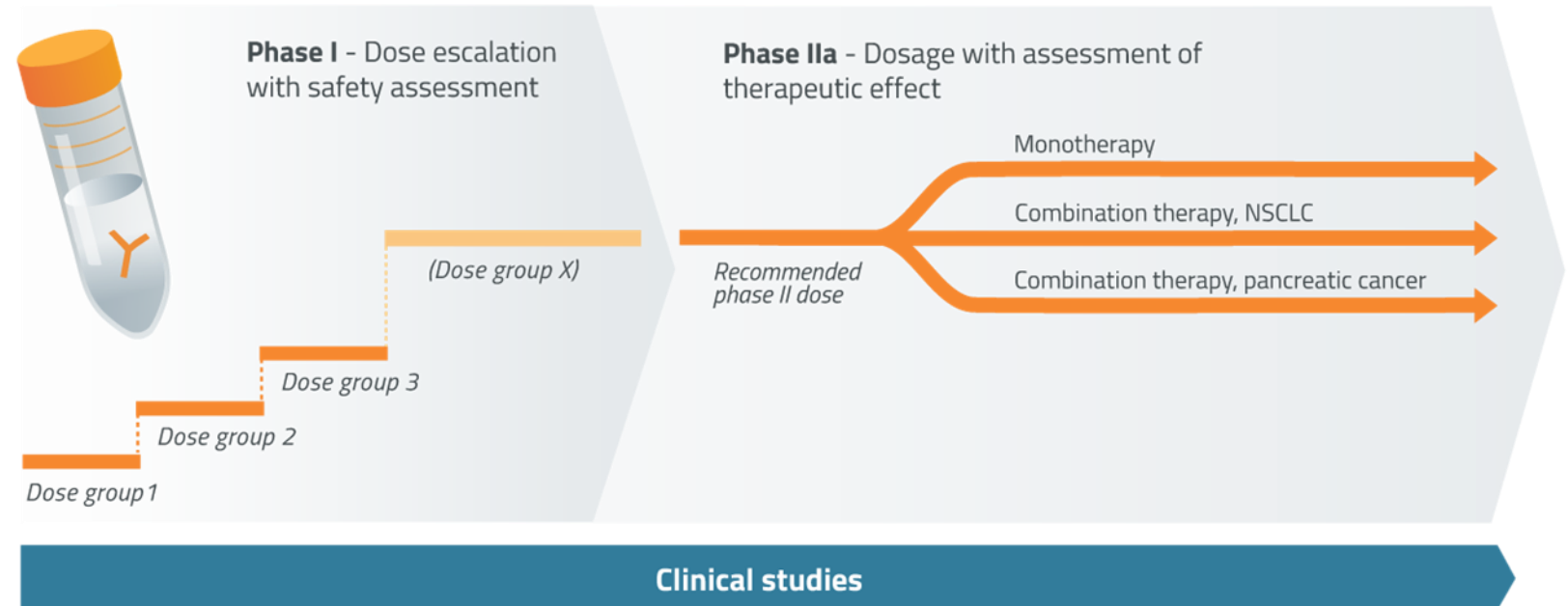
CANFOUR

Part I

- NSCLC, PDAC, CRC, TNBC
- Safety and tolerability
- Pharmacokinetics
- Biomarkers
- Efficacy
- Identify RP2D

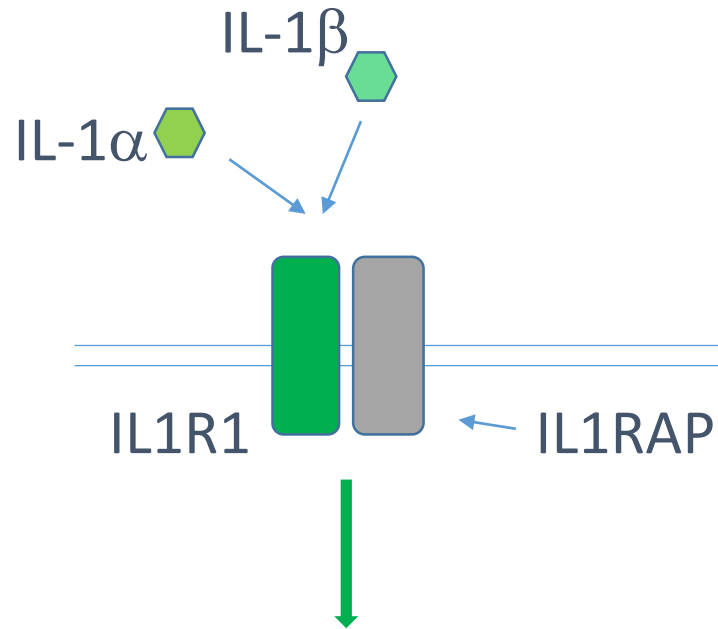
Part II

- NSCLC, PDAC
- Safety and tolerability
- Pharmacokinetics
- Biomarkers
- Efficacy
 - Monotherapy
 - Combination SoC



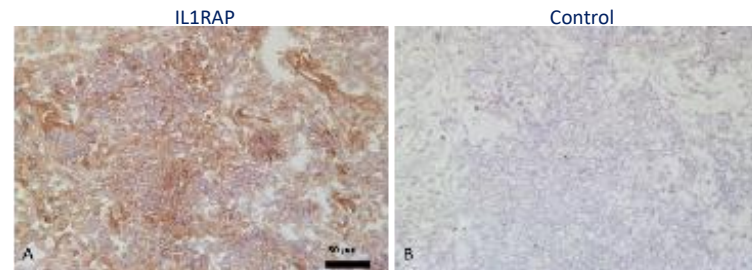
Patients will stay on treatment until disease progression, unacceptable toxicity, or discontinuation for any other reason

Biomarkers and additional assessments



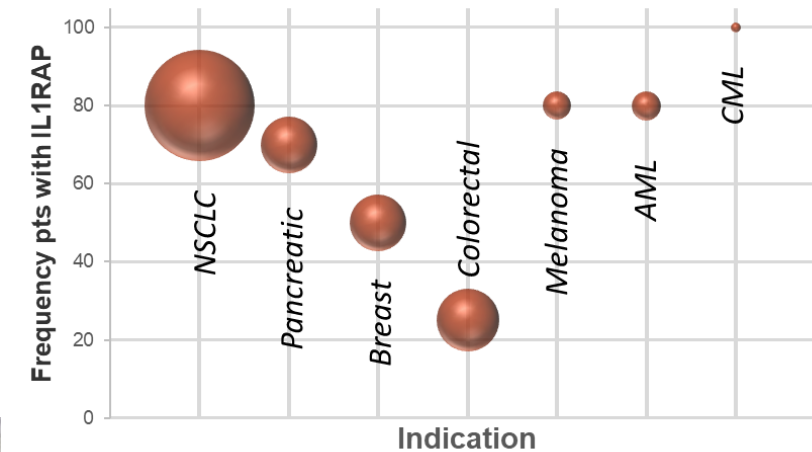
Cancer, Inflammation
(IL-6 & IL-8)

- Pharmacokinetics
- Anti-drug Antibodies (ADA)
- Biomarkers:
 - IL-1 α , IL-1 β , IL-6, IL-8, TNF- α , IL-33, IL-1Ra*
- Expression of IL1RAP
- Expression of other IL1RAP associated biomarkers

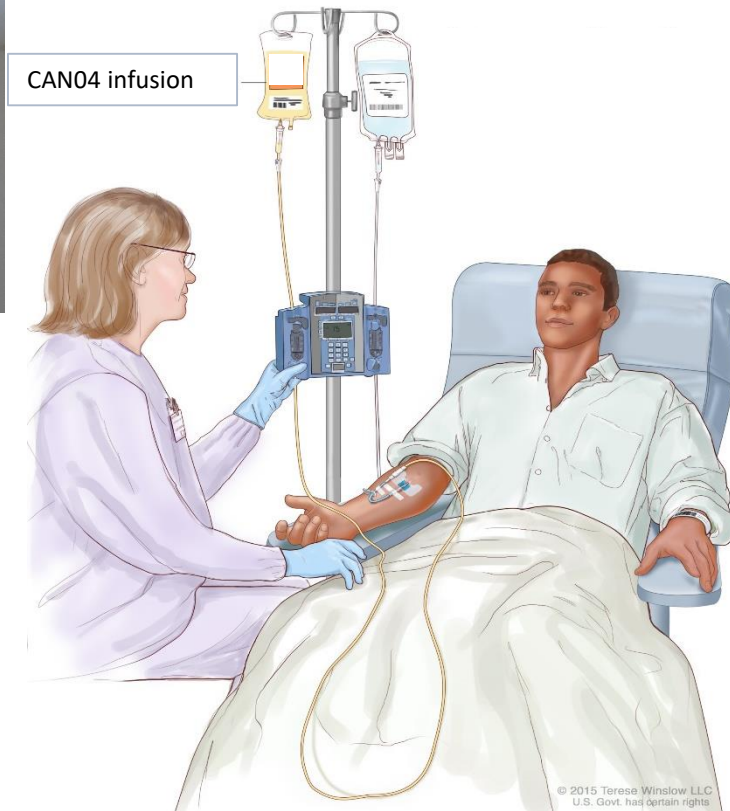


IL1RAP⁺ pancreatic cancer

*Biological matrix: Archived formalin fixed
paraffin embedded tumor tissues*



CAN04 patient administration

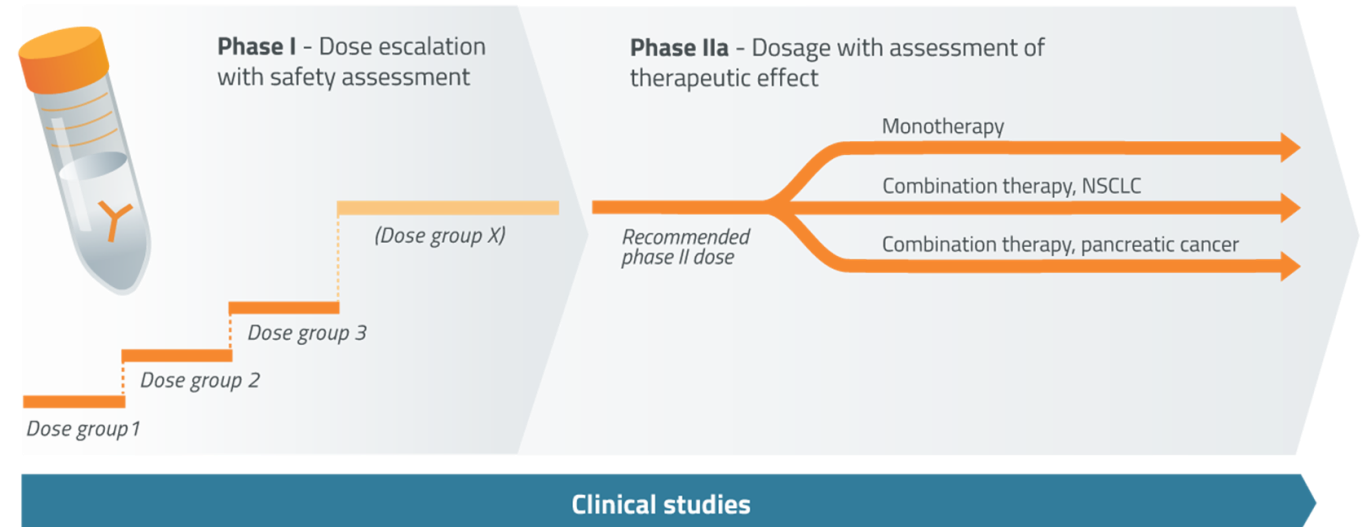


- CAN04 dose is calculated based on patient weight and the per protocol dose level
- CAN04 drug product is diluted in 0,9% NaCl infusion bag
- CAN04 study preparation is administered to the patient by intravenous infusion over 60 minutes

Combinations with SoC

“Combination therapies may dramatically improve the outcome for cancer patients, and indeed it is expected that such therapies will eventually become the standard of care for cancer treatment, but the discovery of effective combinations is a challenging endeavor”

KM Morrissey *et al.* Clin Transl Sci (2016); 9: 89–104



Combination with SoC - PAC






First line treatments available:

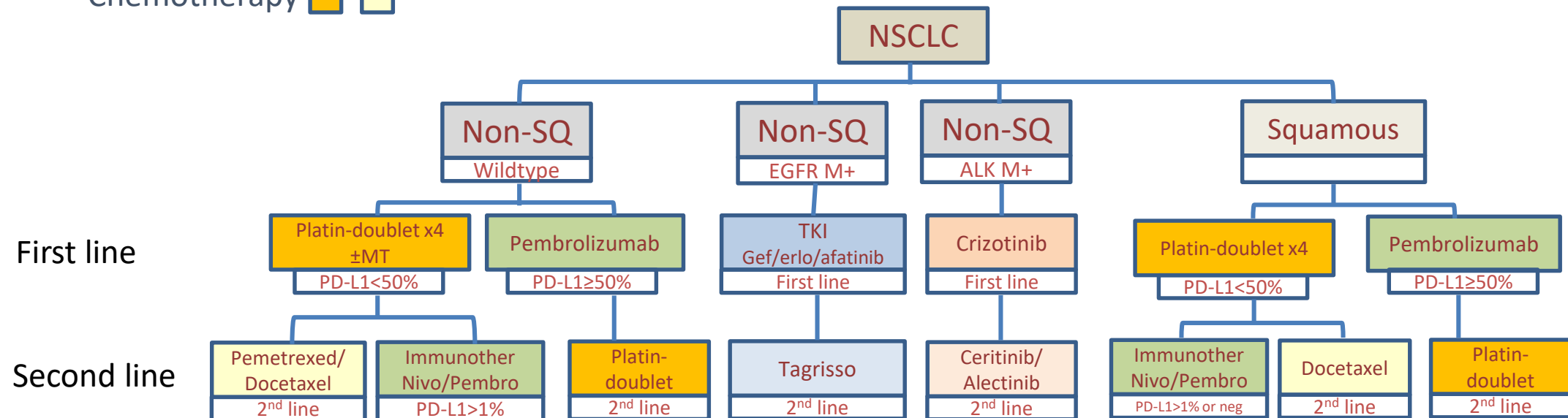
- FOLFIRINOX (5-FU, leucovorin, irinotecan and oxaliplatin)
- Gemcitabine and *nab*-paclitaxel (Abraxane)
- Gemcitabine monotherapy



Combination with SoC - NSCLC

Three major options available for treatment:

- Immunotherapy 
- Anti-EGFR/ALK /
- Chemotherapy  



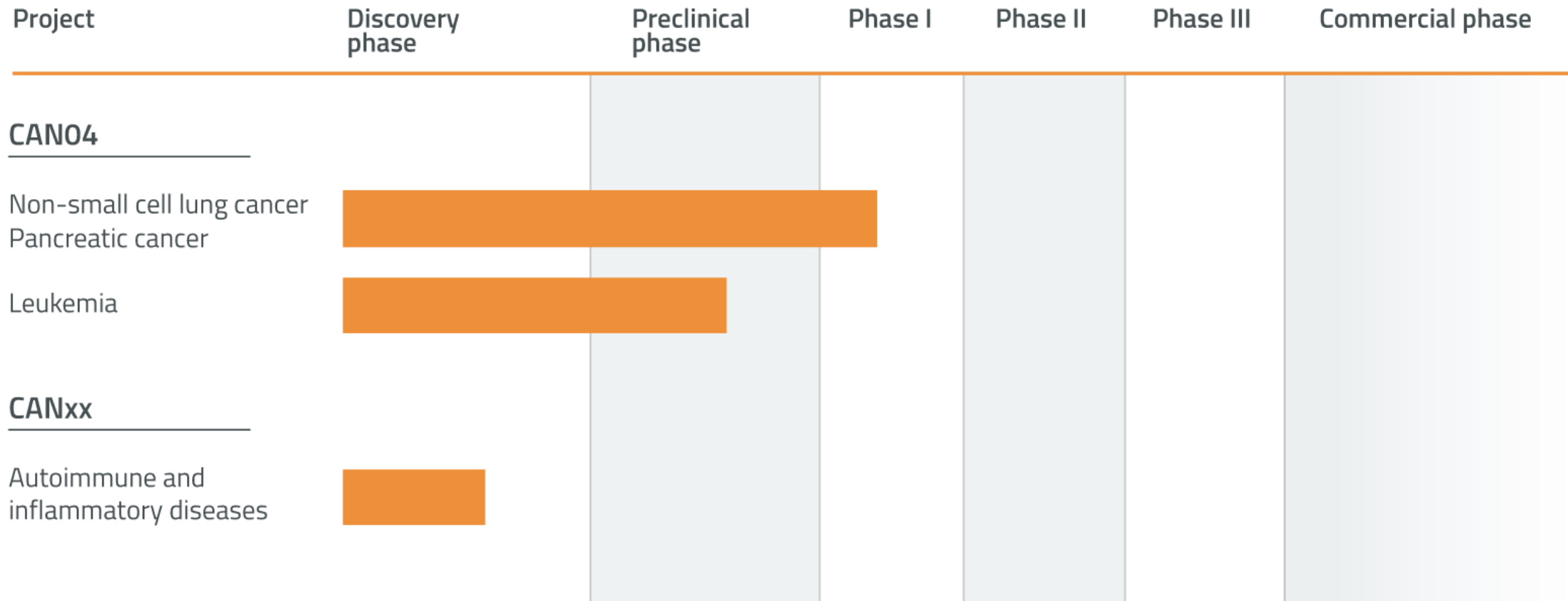
Current regimens in the treatment of NSCLC.

Adapted from Dr M Mau-Sørensen at Rigshospitalet, Copenhagen, Denmark

Summary

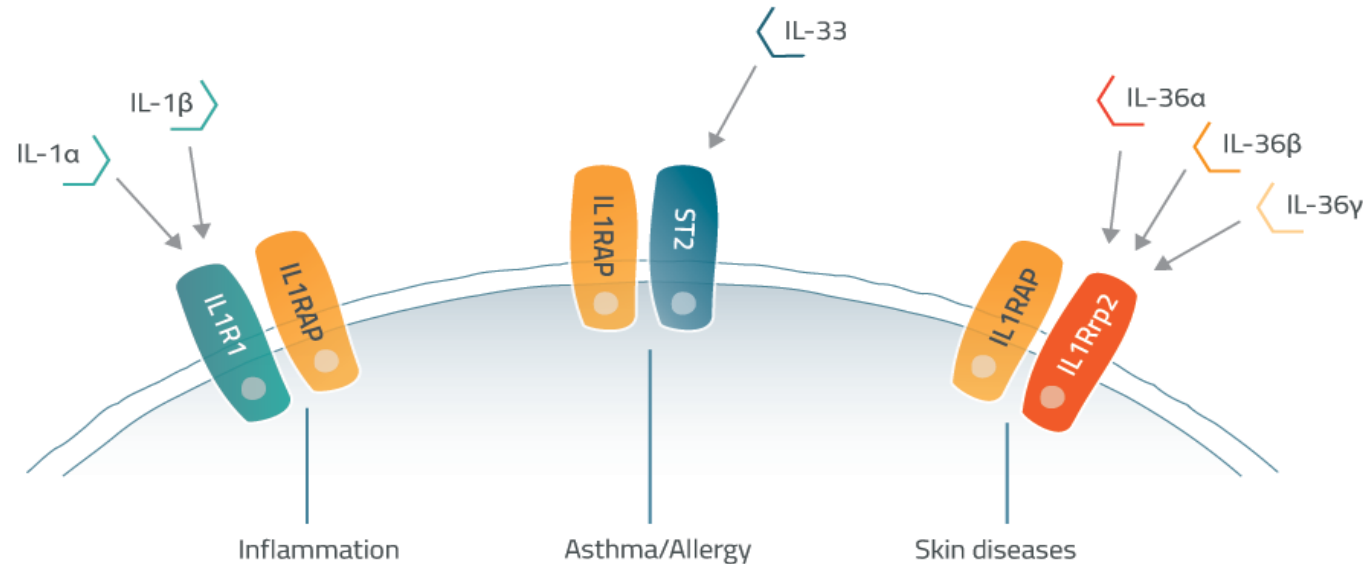
- First patient treated with CAN04 – September 2017
- Dose escalation phase (Part I) to be completed during summer 2018
- Dose expansion phase (Part II)
 - to follow directly after clinical completion of Part I
 - to evaluate CAN04 as monotherapy and in combination with SoC
 - to be completed by end of 2019

Cantargia pipeline



IL1RAP - additional potential indications to leverage the value of our asset

- Three different systems signal through IL1RAP
- These systems contribute to various inflammatory diseases
- Can be blocked by Cantargia's antibodies against IL1RAP

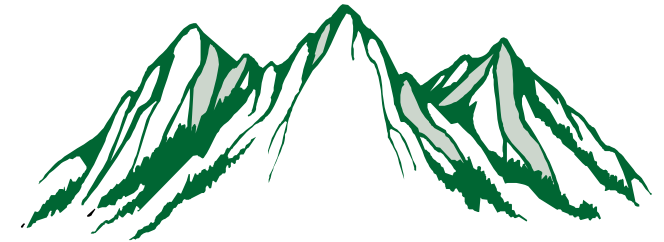


Strategic partnership with Panorama Research Inc

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



Panorama Research, Inc.
A Biotechnology Research & Development Company

-
- 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

Significant 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

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)

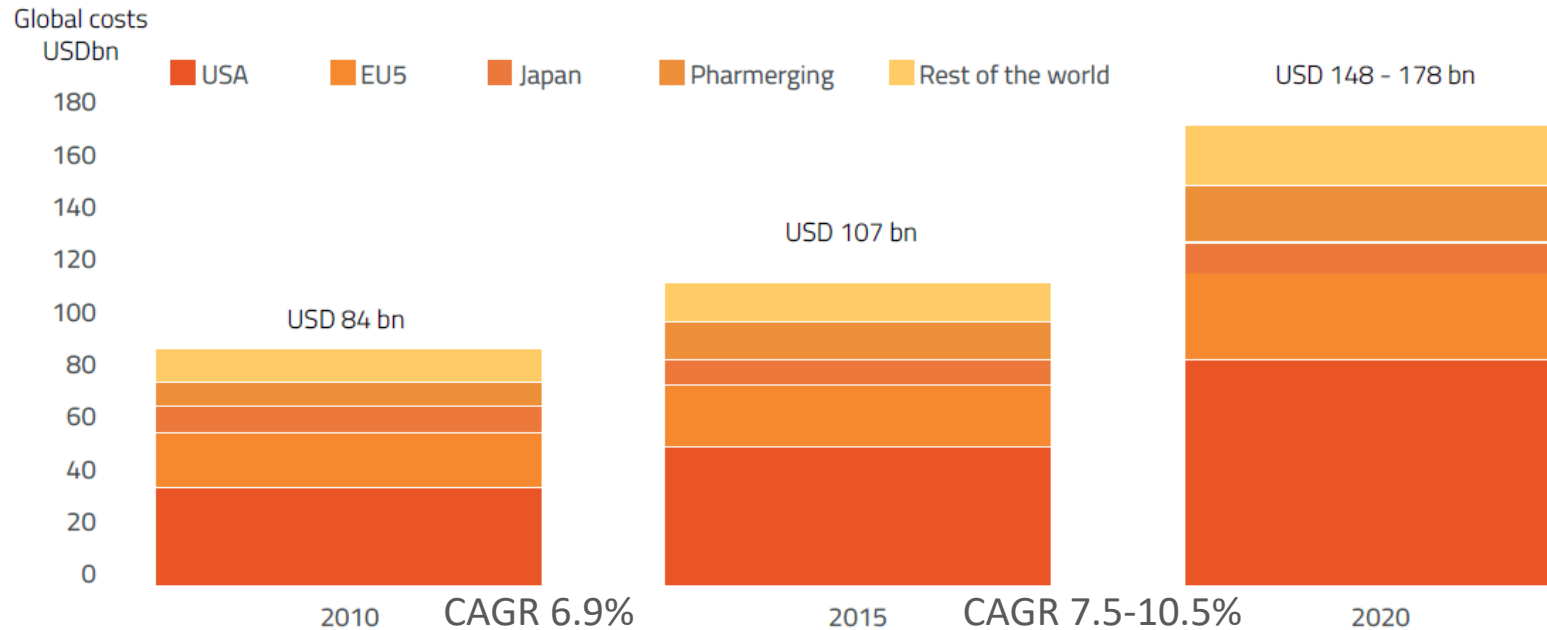
New IL1RAP antibodies (e.g. CAN03)

Filed 2014



Positive outcome third party opposition

Lead project CAN04 in the highest growth segment— Oncology antibodies



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

Rituxan/MabThera	\$8.58bn
Avastin	\$6.75bn
Herceptin	\$6.75bn

Immuno-oncology driving market growth 2016 (2015)

Opdivo	\$3.77bn (\$0.94bn)
Keytruda	\$1.40bn (\$0.57bn)

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.