



# Cantargia – Global Leader in IL1RAP Antibody Development



#### NOVEL IL1RAP\* ANTIBODIES: BROADLY APPLICABLE TO TREAT INFLAMMATORY DISEASES & CANCER

- IL1RAP signaling drives various autoimmune and inflammatory diseases
- IL1RAP elevated in most solid and liquid tumors



#### NADUNOLIMAB: CLEAR ACTIVITY SIGNALS IN CANCER THERAPY

- Strong clinical results in PDAC and NSCLC; >300 patients treated
- Broadly applicable due to IL1RAP expression in many solid tumor types; IL1RAP diagnostic in development for PDAC
- US Fast Track Designation in metastatic PDAC with high expression levels of IL1RAP in combination with chemotherapy\*\*
- US and EU Orphan Drug designation in PDAC



#### **CANXX: CORPORATE STRENGTH DRIVING INNOVATION**

- CANxx Technology Platform: Worldclass Leader in IL1RAP antibody development
- Robust patent portfolio: IL1RAP antibody target in oncology (2032), nadunolimab (2035) and CAN10 (2041)

#### **CAN10: TRANSFORMATIONAL DEAL VALIDATING TARGET & TECHNOLOGY**

- CAN10 delivers a broadly applicable and differentiated mechanism for treatment in inflammatory diseases
- Otsuka to develop and commercialize CAN10 following acquisition with value of \$613 million\*\*\*





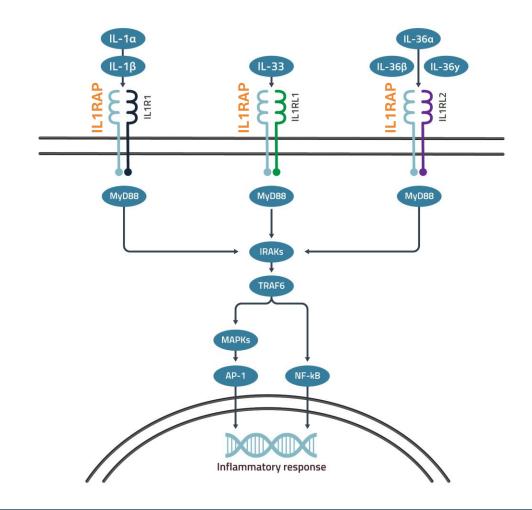
<sup>\*</sup> IL1RAP - Interleukin-1 Receptor Accessory Protein

<sup>\*\*</sup> Gemcitabine and nab-paclitaxel

<sup>\*\*\*</sup> On the 15th July 2025 Otsuka Pharmaceutical acquired CAN10 through an Asset Purchase Agreement with Cantargia AB. The transaction closed in September 2025.

## **IL1RAP – Target with Numerous Opportunities**

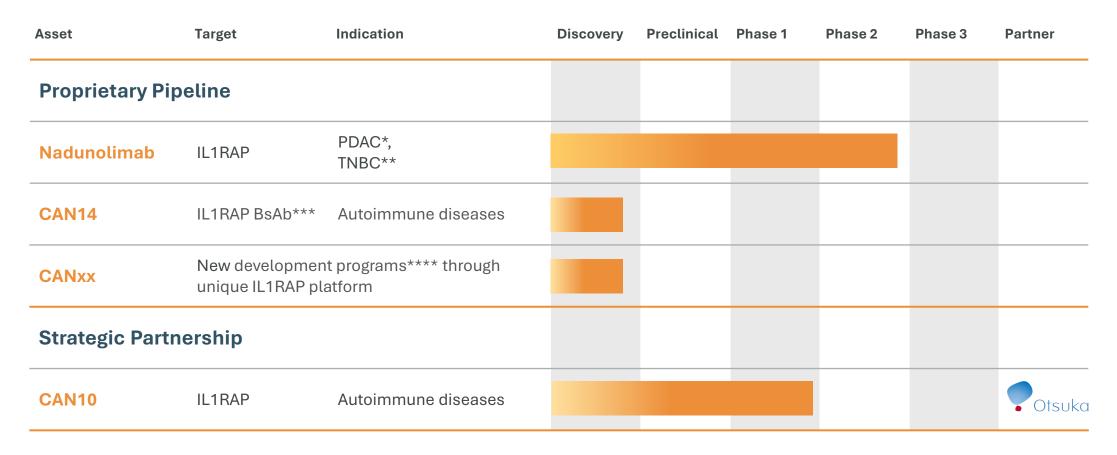
- Opportunity to target three signaling systems, IL-1, IL-33 and IL-36, counteracting redundancy and increasing efficacy
- Distinct activity in several hard-to-treat models of inflammation and cancer
- Cantargia antibodies developed for inflammation and cancer, technology validated by Otsuka deal
- Framework for additional signaling blockade at inflammatory sites (Bispecifics) or for delivery of payloads into a tumor microenvironment (ADCs)



SEVERAL OPPORTUNITIES IN COMMON AND DIFFICULT TO TREAT DISEASES WITH HIGH MEDICAL NEED



## **IL1RAP** Pipeline supported by Unique Platform



PDAC – pancreatic ductal adenocarcinoma; TNBC – triple-negative breast cancer



<sup>\*)</sup> FDA Fast Track Designation & Orphan Drug Designation; EU Orphan Drug Designation

<sup>\*\*)</sup> Randomized Phase 2 trial ongoing in TNBC

<sup>\*\*\*)</sup> IL1RAP Bispecific Antibody, 2<sup>nd</sup> target undisclosed

<sup>\*\*\*\*)</sup> E.g. IL1RAP mAbs, IL1RAP BsAbs, IL1RAP ADCs

# **Executive Management Team with Proven and Relevant Expertise**











Hilde Steineger

Patrik Renblad

David Liberg

Ton Berkien CBO

Wolfram Dempke

#### **EXECUTIVE TEAM WITH COMPREHENSIVE INDUSTRY INSIGHT**





















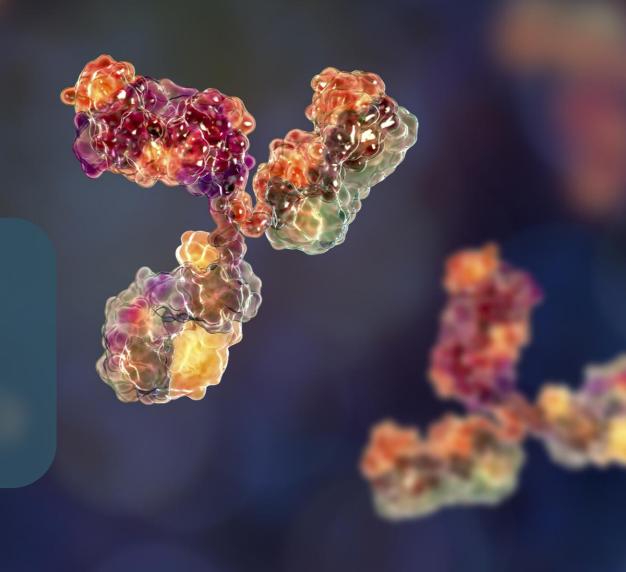




### **Nadunolimab**

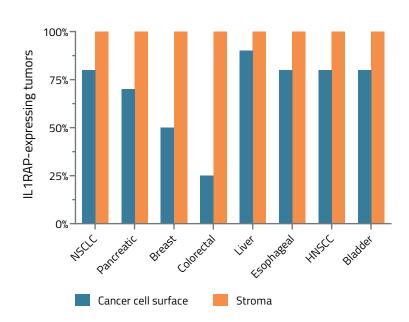
Combat cancer and enhance the immune system's ability to destroy cancer cells

Nadunolimab (CAN04) is an Anti-IL1RAP antibody for treatment of various cancer types. Nadunolimab binds strongly to its target molecule IL1RAP, expressed on tumor cells from many types of cancer. Nadunolimab blocks the signaling of interleukin-1, alpha and beta, thereby limiting tumor development as well as working synergistically with chemotherapy and adding functionality through Antibody-Dependent Cellular Cytotoxicity (ADCC)

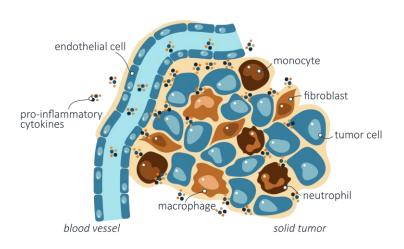


## **IL1RAP Overexpressed in Most Solid Tumors**

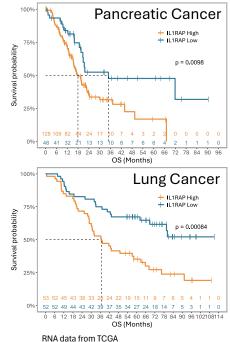
**IL1RAP IS EXPRESSED ACROSS SOLID TUMOR TYPES** 



**TUMOR-PROMOTING CELLS EXPRESS IL1RAP IN THE TUMOR MICROENVIRONMENT** 



### **IL1RAP IS A PROGNOSTIC** MARKER IN SEVERAL CANCER **INDICATIONS**

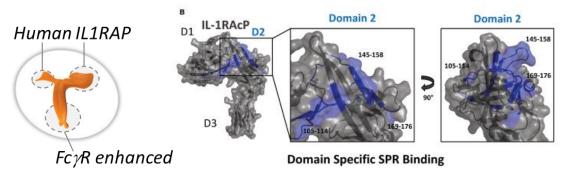


IL1RAP – DISTINCTLY OVEREXPRESSED IN TUMORS; LOW EXPRESSION IN NORMAL TISSUE



### **Nadunolimab mAb Properties**

- Nadunolimab is a humanized anti-IL1RAP monoclonal immunoglobulin G1 (IgG1) antibody with a molecular weight of 144 kDa (non-glycolylated)
- It has 2 glycan moieties deficient of fucose in the Fcregion for enhanced antibody-dependent cellular cytotoxicity (ADCC) and antibody dependent cellular phagocytosis (ADCP)
- Nadunolimab binds domain 2 of IL1RAP with high affinity
- Nadunolimab fully blocks IL-1 $\alpha$  and IL-1 $\beta$  signaling, and partially blocks IL-33 and IL-36 signaling in a HEK reporter cell system
- Nadunolimab induces ADCC with an IC50 in the single digit nM range, using human SK-MEL-5 melanoma cells as target cells and PBMC or NK-cells as effector cells.

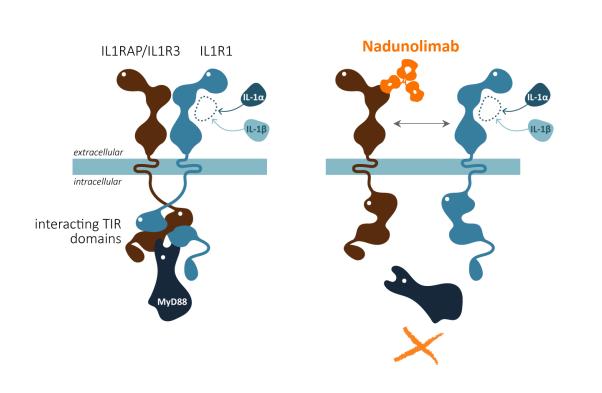


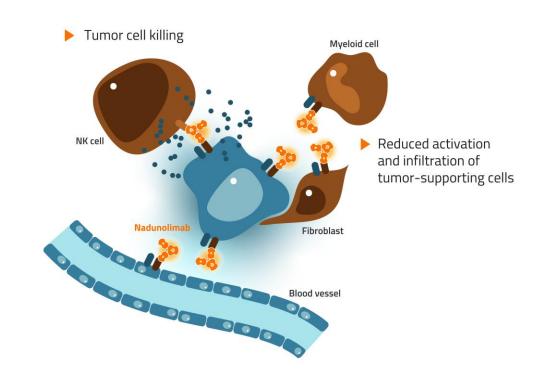
Fields et al Front. Immunol. 2021

Nadunolimab attributes	Details
Human IL1RAP, K <sub>D</sub> SPR	5.62 pM
Function blocking IL-1α/IL-1β, IC50	2.7 nM/0.2 nM
Function blocking IL-33, EC50	7.5 nM
Function blocking IL-36α/β/γ, IC50	0.2 nM/1.0 nM/0.3 nM
ADCC, IC50	<10 nM
Binding to Cyno, K <sub>D</sub> SPR	5.49 pM
Binding to rat and mouse	No cross reactivity



# Nadunolimab Provides Unique Opportunities to Treat Cancer by IL-1 $\alpha/\beta$ Blockade and ADCC





NADUNOLIMAB ATTACKS TUMOR CELLS AND DISRUPTS TUMOR PROMOTING CIRCUITRY



### **Overview of Clinical Studies with nadunolimab**

Study (mITT)	NCT number	Design	Status
CANFOUR (n=113 in combination)	NCT03267316	Nadunolimab in combination with gemcitabine/nab-paclitaxel in 1L PDAC and gemcitabine/cisplatin or carboplatin/pemetrexed in NSCLC	Completed PDAC manuscript published CCR NSCLC manuscript in Lung Cancer
CIRIFOUR (n=15)	NCT04452214	Nadunolimab in combination with pembrolizumab in patients that progressed on ICI (HNSCC, NSCLC, MM)	Completed  Manuscript published Invest  New Drugs
CAPAFOUR (n=18)	NCT04990037	Nadunolimab + mFOLFIRINOX in 1L PDAC	Completed
CESTAFOUR (n=36)	NCT05116891	Nadunolimab in combination with 1. mFOLFOX, 2. docetaxel, or 3. gem/cisplatin. Solid tumor indications.	Completed
TRIFOUR (n=15 part 1, n=102 part 2)	NCT05181462	Nadunolimab in combination with gem/carbo in patients with TNBC. Control arm in part 2 (1:1 gem/carbo).	Fully recruited





### Pancreatic Cancer (PDAC) as Primary Indication

Diagnosed Incident Cases\*

Diagnosed Incident cases with advanced or metastatic disease\*\*

Metastatic treatment rates\*\*\*

85 000

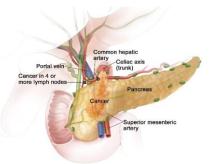
#### LOCALLY ADVANCED OR METASTATIC DISEASE

#### Median survival:

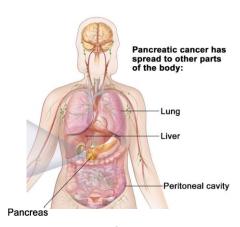
 $\rightarrow$  8.5 – 11.7 mo

#### **Treatments:**

- Gemcitabine + nab-paclitaxel
- Gemcitabine if poorer performance
- FOLFIRINOX only if good patient condition status
- → Jan 2023: 1<sup>st</sup> line NALIRIFOX



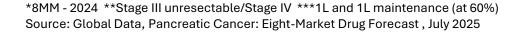
Stage III



Stage IV

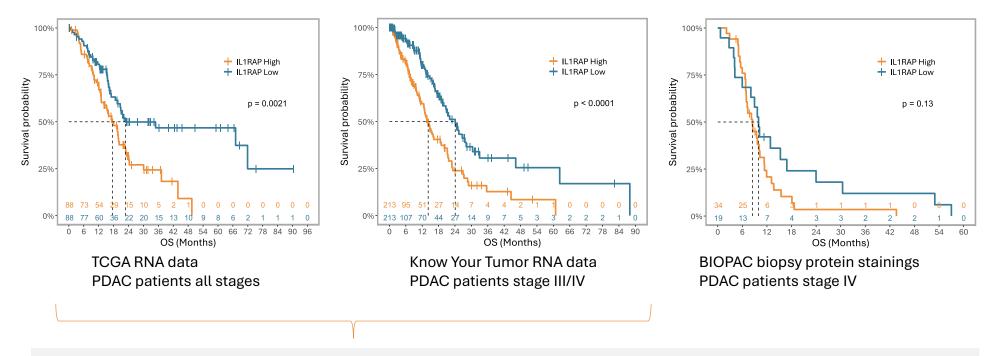
Images from National Cancer Institute

CURRENT DEVELOPMENT FOCUSES ON FIRST-LINE METASTATIC DISEASE WITH POTENTIAL TO MOVE TO EARLIER TREATMENT SETTINGS





# High IL1RAP Expression Linked to Poor Outcome in Patients with Pancreatic Tumors



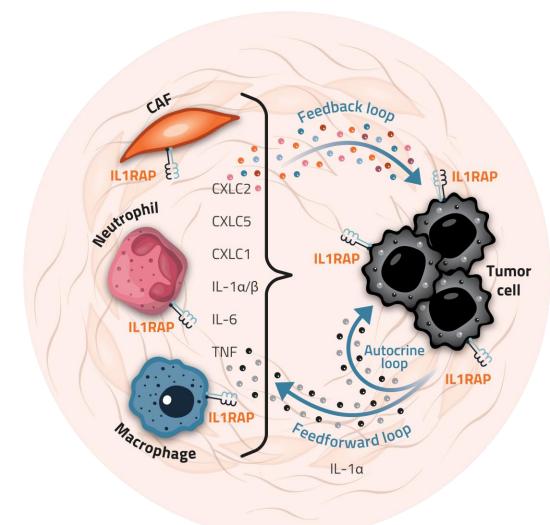
Analysis of RNA-data by Al-company show **two subnetworks enriched for IL1RAP-high genes**, the genes in the two networks correlate to worse OS (25.9x; p=4.15e-119 or 3.97x; p=1.27e-36) and basal-like subtype (78.3x; p=4.26e-57 or 11.0x; p=1.99e-13)

HIGH IL1RAP EXPRESSION IN PDAC TUMORS IS STRONGLY CONNECTED TO POOR SURVIVAL



# IL1RAP – a Fundamental Driver in the PDAC Tumor Microenvironment

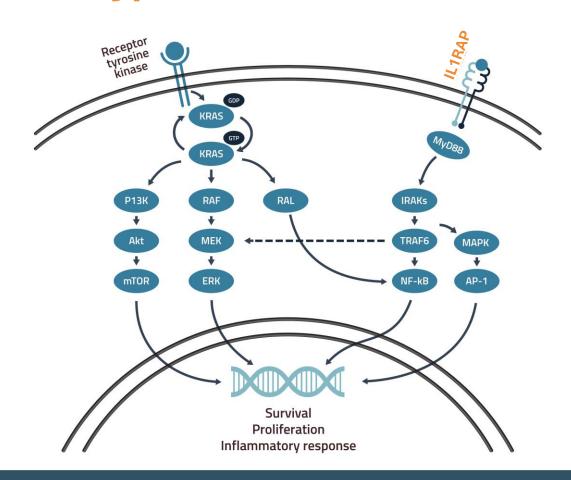
- IL1RAP is expressed as a signaling receptor on tumor cells, myeloid cells and cancer-associated fibroblasts (CAFs)
- IL-1 cytokines are induced in tumor cells and activate myeloid cells and CAFs in the TME, feedforward signaling
- Myeloid cells and CAFs secrete mediators that stimulate tumor cells, feedback signaling
- IL-1 family cytokines induce collagen formation by CAFs and contributes to establishing a fibrotic, desmoplastic stroma
- Activated CAFs attract myeloid cells that fuel the tumor inflammation and create an immune suppressive and treatment resistant niche



Onco-immune
network mediates:
Tumor survival
Proliferation
Migration/Invasion
Chemoresistance
Immune suppression



# IL1RAP Signaling Acts in Parallel to KRAS to Shape the Phenotype of PDAC



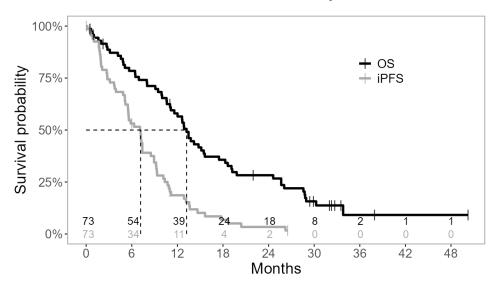
- KRAS fuels IL-1 dependent tumor inflammation, autocrine IL-1 activates IL1RAP and triggers tumor cell intrinsic IRAK-dependent signaling
- IL-1 signaling shapes the TME by activating IL1RAP on myeloid cells and CAFs, leading to a self-sustaining inflammatory circuit
- High levels of IL1RAP strongly correlate to poor survival in patients with or without KRAS mutations, IL1RAP act independently of KRAS
- Preclinical data show both strong tumor growth inhibition and TME remodeling by IL1RAP targeting, also in an aggressive KRAS-driven model\*

IL1RAP IS A MARKER FOR POOR SURVIVAL AND THERAPEUTIC RESISTANCE INDEPENDENTLY OF KRAS

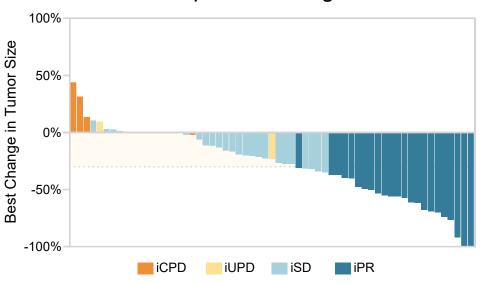


## Pancreatic Cancer – Positive Data in 1st line patients

#### OS and iPFS for mITT patients



#### Best responses according to iRECIST



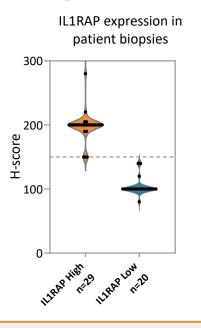
### Nadunolimab combination with gemcitabine/nab-paclitaxel in 1st line PDAC (n=73):

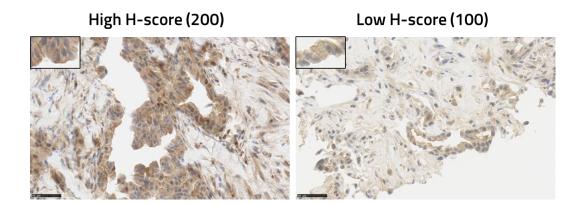
- → 32% response rate with long OS and iPFS
  - → Additional 5 (7%) patients had on-treatment benefit beyond progression
- → Promising OS (13.2 mo)

#### LONGER OS THAN EXPECTED GIVEN HISTORICAL CONTROL IN PDAC



## **IL1RAP Expression in Tumor Biopsies from PDAC Patients**





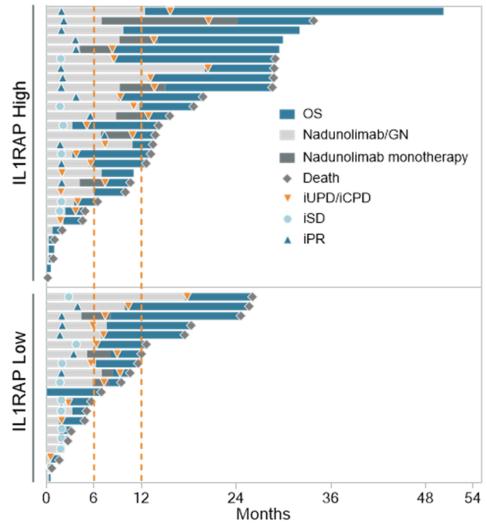
### Differential expression of IL1RAP on tumor cells at baseline in PDAC patients:

- → IL1RAP expression on tumor cells analyzed by IHC on baseline pre-treatment patient biopsies (n=49)
- → Patients were separated in two groups based on IL1RAP expression: High (n=29) vs IL1RAP Low (n=20)
- Correlation between IL1RAP expression levels and survival

PATIENT BIOPSIES HAVE VARYING IL1RAP EXPRESSION LEVELS ON TUMOR CELLS



### Efficacy and IL1RAP Levels on Tumor Cells in PDAC



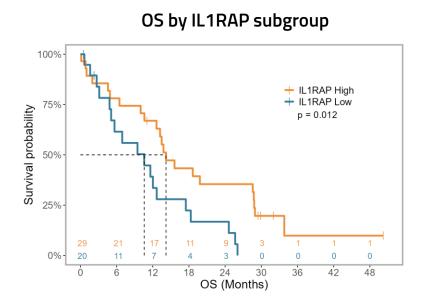
# Efficacy analysis for IL1RAP High (n=29) vs IL1RAP Low (n=20) PDAC patients

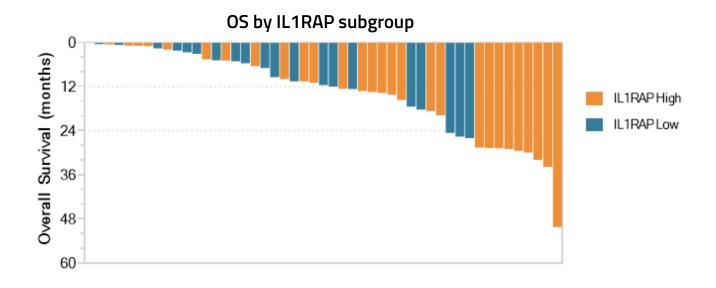
- → Individual assessment of patients in the IL1RAP high and IL1RAP low groups
- → Prolonged survival in the IL1RAP high group
- → 1-year survival was 67% and 2-year survival 35% in the IL1RAP high group



iCPD - Confirmed Progressive Disease; iUPD - Unconfirmed Progressive Disease; iSD - Stable Disease; iPR - Partial Response (all according to iRECIST)

## PDAC: Efficacy and IL1RAP Levels on Tumor Cells





### Efficacy analysis for IL1RAP High (n=29) vs IL1RAP Low (n=20) PDAC patients

- → High IL1RAP expression is a poor prognostic marker for treatment with gem/nab-paclitaxel
- → A significantly prolonged OS in ILRAP High vs IL1RAP Low patients when treated with nadunolimab + gem/nab-paclitaxel (14.2 vs 10.6 mo; p=0.012)

#### **IL1RAP HIGH PATIENTS SHOW THE STRONGEST BENEFIT**



## PDAC - Next steps

#### **IL1RAP Assay Feasibility**

Assay development; selection of one clone, one platform and one protocol



#### **Validation**

Assay validation; enable patient selection in clinical study



#### Interaction with regulatory bodies

Approval of clinical development plan including patient selection of high IL1RAP patient population



#### CDx assay (kit)

CDx kit development at commercial CDx company

### Proposed PDAC clinical study design

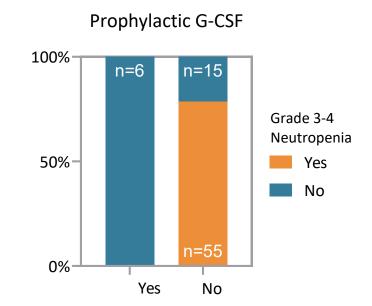
- Metastatic PDAC patients selected for high IL1RAP expression
- Treatment naive patients
- Combination with gemcitabine/nabpaclitaxel
- Randomized controlled study
- Primary read-out: OS



# PDAC – Safety Profile is Manageable and Supports MOA

- → Neutropenia manageable through G-CSF prophylaxis
  - In 6 patients given G-CSF prophylaxis, none developed grade 3-4 neutropenia
- Only 1 % peripheral neuropathy grade 3-4 observed (17% in historical controls)

Grade 3 or higher AEs	Gem/Abraxane Von Hoff, 2013 (n=421)	Nadunolimab+Gem/Abraxa ne CANFOUR (n=76)		
Neutropenia	38%	66%		
Leukopenia	31%	24%		
Thrombocytopenia	13%	13%		
Febrile neutropenia	3%	13%		
Anemia	13%	14%		
Fatigue	17%	8%		
Diarrhea	6%	3%		
Peripheral neuropathy	17%	1%		



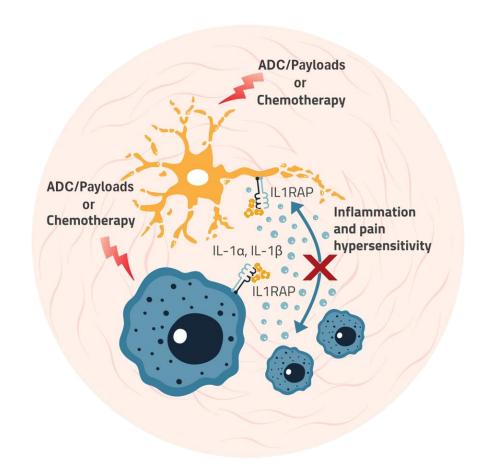
### G-CSF PROPHYLAXIS IMPLEMENTED IN FUTURE TRIALS; POTENTIAL REDUCTIONS OF SIDE EFFECTS TO BE DOCUMENTED IN RANDOMIZED TRIALS

• Most common reasons for termination: general disorders or nervous system disorders. One patient discontinued due to neutropenia.



### **IL1RAP** and Alleviation of Neuropathy

- Chemotherapy and ADCs induce neuropathy by several pathways including IL-1 (neuroinflammation)
- $\rightarrow$  High levels of inflammatory cytokines such as IL1 $\beta$  have been shown to correlate with higher risk of chemotherapy induced neuropathy<sup>1</sup>
- Preclinically, anti-IL1RAP mAb completely blocks chemotherapy induced peripheral neuropathy in animal models<sup>2, 3</sup>
- → Anti-IL1RAP mAb treatment also blocks ADC payload induced peripheral neuropathy in animal models<sup>4</sup>



#### IN ADDITION TO PROMISING EFFICACY NADUNOLIMAB COULD CONTRIBUTE TO SAFER COMBINATION THERAPIES

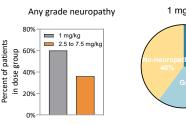
1. Kleckner et al Breast Cancer Research and Treatment, Volume 189, pages 521–532, (2021) 2. SITC Annual meeting 2024, 3. ASCO Annual meeting 2024, 4. AACR Annual meeting 2025

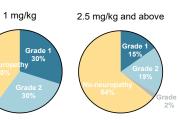


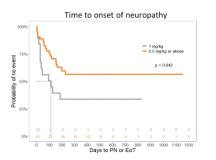
### **Neuropathy Clinical Data with nadunolimab**

- Ph2 study data from CANFOUR in 1L PDAC patients treated with nadunolimab and gemcitabine/nabpaclitaxel
  - → Lower Grade 3-4 peripheral neuropathy than expected from historical controls (1% vs 17%)
  - Reduced incidence as well as delayed onset of all grade neuropathies
- Correlation between nadunolimab dose level and protective effect
- Dose dependent reduction of neuropathies in patients treated with nadunolimab observed in two additional chemotherapy combinations:
  - mFOLFOX: Late-stage patients with solid tumor indications treated with nadunolimab + mFOLFOX
  - FOLFIRINOX: 1L PDAC patients treated with nadunolimab + FOLFIRINOX

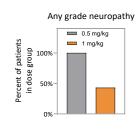
#### Gemcitabine/nab-paclitaxel

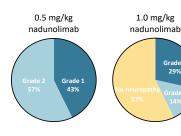


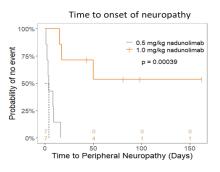




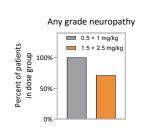
#### **mFOLFOX**

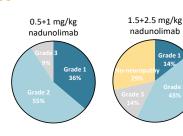


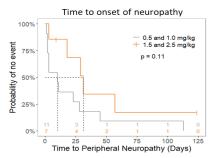




#### **mFOLFORINOX**









# Nadunolimab Positioning in 1L PDAC

	Phase	N	mOS (months)	PFS (months)	ORR (%)	6m OS (%)	9m OS (%)	12m OS (%)	24m OS (%)
soc									
GN (NAPOLI 3 <sup>1</sup> )	3	387	9.2	5.6	36.2	68.4	-	39.5	
FOLFIRINOX <sup>2</sup> (AVENGER500)	3	262	11.7	8.0	21	-	-	-	-
NALIRIFOX (NAPOLI 3 <sup>1</sup> )	3	383	11.1	7.4	41.8	72.4	-	45.6	
In development									
Nadunolimab + GN <sup>3</sup>	<b>2</b> a	73	13.2	5.6	32	78	71	58	28
Nadunolimab + GN IL1RAP high <sup>3</sup>	<b>2</b> a	29	14.2	7.4	48	78	74	67	35
Daraxonrasib <sup>4</sup>	2a	38	-	-	47	-	-	-	-
Daraxonrasib + GN <sup>4</sup>	2a	31	-	-	55	-	-	-	-
IMM-1-104 + mGN <sup>5</sup>	2a	34	-	-	39	94	86	-	-

<sup>1:</sup> Weinberg et al, Lancet, Vol 402, Issue 10904, 2023



<sup>2:</sup> Philip et al, Journal of Clinical Oncology, Vol 42, number 31, 2024

<sup>3:</sup> van Cutsem et al, Clin Cancer Res, vol 30, 2024

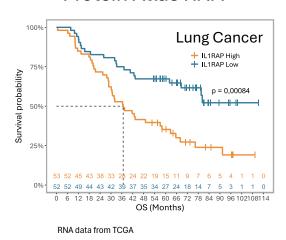
<sup>4:</sup> Revolution Medicine company presentation 2025: da93b210-ee1b-452e-97a8-7d973c694310

<sup>5:</sup> Immuneering company presentation 2025: <u>455a4d85-9f90-41bb-8ede-54a62d6f5e09</u>

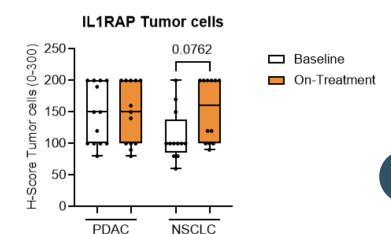


## **Tumor IL1RAP Expression in NSCLC**

#### Protein Atlas RNA



#### CANFOUR protein expression



- High IL1RAP RNA expression is a prognostic marker for poor survival in lung cancer, as in PDAC
- CANFOUR NSCLC patients do not show a correlation between high IL1RAP on tumor cells and improved response, which may be due to an upregulation of IL1RAP induced by the platinum-based chemotherapy or IL1RAP expression on supporting cells
- Nadunolimab monotherapy treated patients do not show upregulation of IL1RAP, in line with preclinical data showing that IL1RAP is upregulated in response to platinum containing chemotherapy

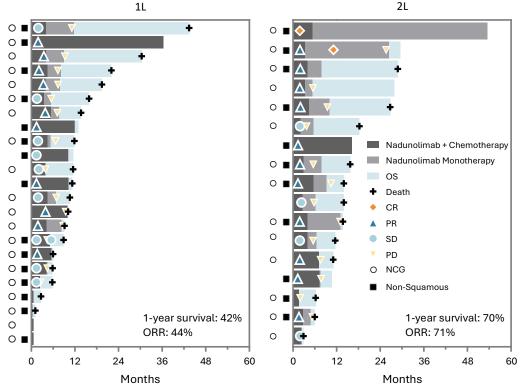
IL1RAP EXPRESSION IS UPREGULATED BY TREATMENT WITH PLATINUM CHEMO



# Promising Efficacy with nadunolimab plus Platinum Doublets: Longer Survival in Post-Pembrolizumab 2L

Efficacy parameter (95% CI)	Total (n=40)	1L (n=23)	2L (n=17)	
OS; median, months	13.7 (11.1-18.3)	11.5 (8.9-19.4)	15.7 (11.1-28.8)	
PFS; median, months	7.2 (5.6-9.2)	7.2 (4.4-9.2)	7.6 (5.3-10.4)	
1-year survival*	54% (37-69)	42% (21-62)	70% (42-86)	
ORR	55% (38-71)	44% (23-66)	71% (44-90)	
<b>DoR;</b> median, months	6.4 (4.4-9.9)	5.7 (3.4-9.9)	7.5 (3.7-20.3)	

<sup>\*</sup>The proportion of patients with 1-year survival is based on Kaplan-Meier estimation.



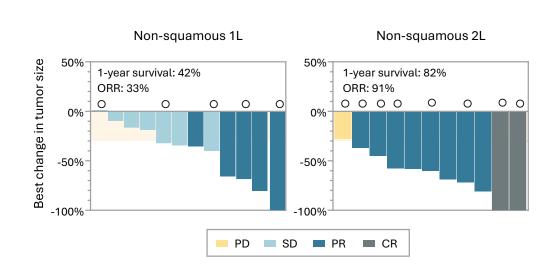
- Platinum was given for 4-6 cycles and then patients continued either on nadunolimab monotherapy or in combination with gemcitabine or pemetrexed.
- At data cut-off 3 patients were still receiving nadunolimab based therapy.
- All 2L patients received pembrolizumab as 1L treatment



# Best Efficacy in Non-Squamous NSCLC Patients Receiving nadunolimab plus Platinum doublets Post-Pembrolizumab

	Non-Squamous				
Efficacy parameter (95% CI)	1L (n=15)	2L (n=11)			
<b>OS;</b> median, months	11.6 (5.8-22.0)	26.7 (6.2-NE)			
PFS; median, months	6.3 (2.7-11.3)	10.4 (5.3-22.2)			
1-year survival*	42% (16-65)	82% (45-95)			
ORR	33% (12-62)	91% (59-100)			
DoR; median, months	9.9 (4.4-NE)	9.1 (3.7-NE)			

<sup>\*</sup>The proportion of patients with 1-year survival is based on Kaplan-Meier estimation NE; not estimable



BEST RESPONSE WAS SEEN 2L POST-PEMBROLIZUMAB IN NON-SQUAMOUS PATIENTS WITH AN OS OF 26.7 MONTHS AND ORR OF 91%

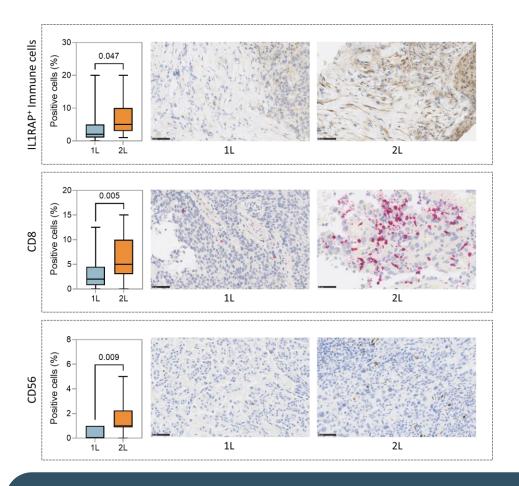
CR1: Achieved during NGC treatment, after 2 months

CR2: Achieved 8 months post-NCG, during treatment with nadunolimab monotherapy

Reference value Non-Sq 1L: OS 11.3 months Gandhi 2018



# NSCLC Biomarkers: Patients receiving pembrolizumab have Altered TME as compared to Naïve



- Screening biopsies were stained for the presence of IL1RAP<sup>+</sup> immune cells, CD8<sup>+</sup> T cells, NK cells and CD163+ macrophages
- Patients previously treated with pembrolizumab appear to have altered TME with high infiltration of immune cells
- Serum markers are also altered in 2L patients as compared to naïve patients

A significantly altered tumor microenvironment with high levels of immune cells in the patients that responds best to nadunolimab + platinum doublet treatment

HIGH IMMUNE CELL INFILTRATION IN TME CORRELATES WITH RESPONSE TO NADUNOLIMAB AND PLATINUM DOUBLETS



# NSCLC – 2<sup>nd</sup> Line Non-Squamous

Diagnosed NSCLC Incident Cases\*

640 000\*

Diagnosed Incident Cases of NSCLC – stage IIIB/IV Non-squamous

300 000 (~47%)

NSCLC – stage IIIB/IV Nonsquamous Patients without any AGAs or not tested for biomarkers

190 000 (~60%)

NSCLC - 2L Non-squamous patients irrespective PD-L1 expression status

100 000 (~53%)

\*7MM – 2024e (i.e. 8MM) \*\* Actionable genomic alterations Source: Global Data, Non-small Cell Lung Cancer (NSCLC): Seven-Market Drug Forecast Update, May 2025

#### 2L treatment for stage IV NSCLC (ASCO)

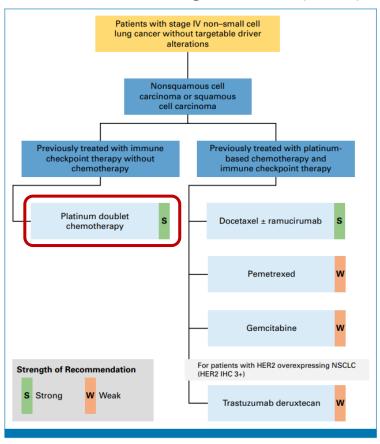


FIG A2. Second-line and subsequent treatment options for patients with stage IV NSCLC without driver alterations. For recommendations with multiple treatment options of the same evidence quality and strength of recommendation, the decision of which agent to offer should be tailored based on discussion of efficacy and toxicity with each patient. HER2, human epidermal growth factor receptor 2; IHC, immunohistochemistry; NSCLC, non-small cell lung cancer; SCC, squamous cell carcinoma.

ASCO Living Guideline, Version 2025.1





### **TRIFOUR Preliminary Results**



Very similar ORR in both the arm with nadunolimab and the chemotherapy only arm, where both arms report somewhat higher than historical benchmarks for first- to third-line treated patients (~30%).



Sub-group analyses ongoing and we await the overall survival data and <u>are cautious to not overinterpret</u> <u>these topline data</u>



Safety data in this first controlled study is supportive of development across indications; we see <u>no clear</u> <u>signal of added toxicity</u> when adding nadunolimab to chemotherapy



## Tumor Pathology in PDAC vs TNBC Overlaps & Differences

	IL1RAP levels correlate to survival	KRAS driven	IL1RAP on tumor cells	IL1RAP on stromal/ immune cells	CAF/myeloid dependent desmoplastic stroma	IL-1 involved in chemotherapy resistance	Defined responder subgroup	Nadunolimab safety & tolerability
PDAC	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
TNBC	Х	X	$\sqrt{}$	$\sqrt{}$	Х	$\sqrt{}$	Х	$\sqrt{}$

#### **PDAC**



IL1RAP mRNA levels strongly correlate to survival



Characteristic desmoplastic (fibrotic) stroma where IL1RAP-expressing cells play leading roles (CAFs, myeloid cells) and IL-1 signaling is important



CANFOUR homogenous population of metastatic PDAC patients receiving first line treatment

#### **TNBC**



IL1RAP mRNA levels are not prognostic



Different TME to PDAC, heterogeneous with higher infiltration of immune cells

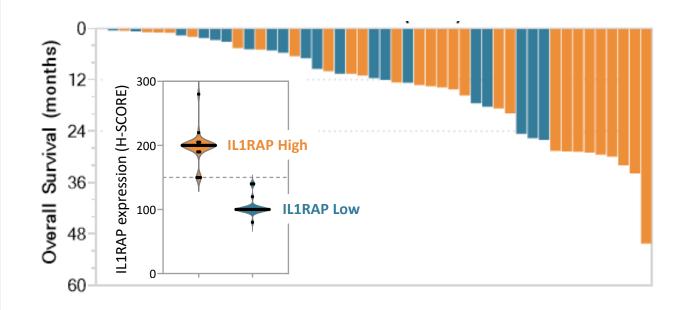


Heterogeneous patient population with diverse medical history, no single driver mutation



## Nadunolimab - Key Takeaways

- Nadunolimab, investigated in more than 300 pts, shows promising safety & efficacy.
- $\rightarrow$  The mechanism of nadunolimab includes ADCC and blocking of both IL-1 $\alpha$  and IL-1 $\beta$  signaling through IL1RAP.
- Clinical results strongly support potential unique firstin-class opportunities in PDAC and NSCLC.
- PDAC patients with high IL1RAP level respond best to nadunolimab combination therapy despite having a worse prognosis.
- → IL1RAP assay for selection of patients entering into validation phase.
- → Nadunolimab is Pivotal Study Ready and has Fast Track Designation for IL1RAP high expressing patients in PDAC.



TARGETING HIGH IL1RAP PDAC PATIENTS INCREASE PROBABILITY OF SUCCESS



### **CAN14 and CANXX**

Next generation IL1RAP therapeutics

CANXX is a program for new therapeutics and reagents comprising unique antibodies, reagents and knowledge around IL1RAP as a drug target. CAN10 was the first program originating from the CANXX platform, CAN14 is the second that adds new features to IL1RAP-blockade

# **Next Generation IL1RAP Therapeutics**

IL1RAP blockade is a potent way to block inflammation in preclinical and translational ex vivo models

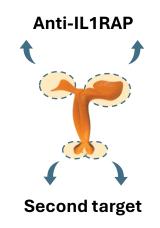
### **Bispecific mAbs**

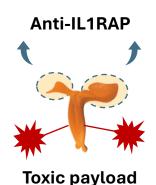
Add new functionalities to IL1RAP blockade for stronger efficacy – tailor for specific diseases

IL1RAP is expressed in a large number of solid and hematological tumors with limited normal tissue expression

#### **ADCs**

Increase efficacy and concentrate effect by combining cytotoxicity and IL1RAP-targeting in one molecule

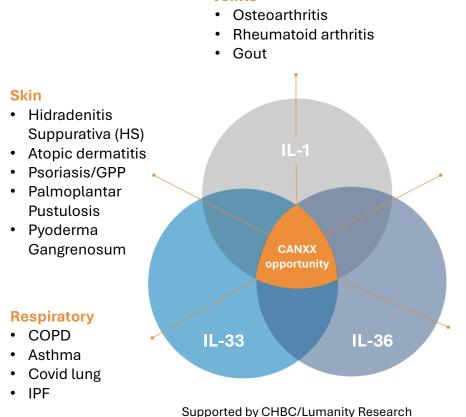






# **CAN14** and **IL1RAP-based Bispecific Antibodies**

# Anti-IL1RAP as a framework for efficacious treatments tailored for specific diseases



**Joints** 

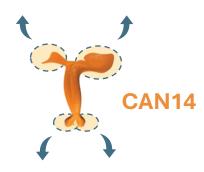
### Intestine

- Crohn's disease
- Ulcerative colitis

### Other/multi/ systemic/acute

- SSc
- Lupus / SLE
- ANCA
- Myocardial infarction
- CV disease
- Endometriosis
- Transplant rejection
- Longevity
- Neuroinflammation

### **Anti-IL1RAP**



Undisclosed target

- Dual Targeting for Better Efficacy
- Overcoming Resistance or Redundance
- Targeting to specific tissues



# CAN<sub>10</sub>

Opportunities in autoimmune/inflammatory diseases

**CAN10** is an Anti-IL1RAP antibody for treatment of autoimmune and inflammatory disease. By its binding to IL1RAP, CAN10 can block IL-1, IL-33 and IL-36 signaling pathways simultaneously. This unique function provides CAN10 with great potential for the effective treatment of various diseases whereby CAN10 can achieve a broader and stronger effect compared to treatments aimed at the individual signaling pathways.

# Transformational CAN10 Deal with Otsuka



#### **Otsuka Pharmaceutical:**

- Japanese pharmaceutical company mainly active in the field of neuroscience, oncology, nephrology and immunology
- Promotion of innovation based on proprietary drug discovery technologies to make autoimmune space as next-gen's core area\*
- Have applied an investment path through various partnerships to develop autoimmune business into the core area and to establish a global presence in immunology\*

### **Deal Summary:**

- Transaction structure: Asset Purchase Agreement (Otsuka acquires all rights to CAN10 and 3G5\*\*)
- Deal stage & territory: Phase 1; Global development, manufacturing & commercialization rights
- Financial terms (total deal value USD 613 million):
  - Upfront payment: USD 33 million (received upon closing)
  - Development, regulatory & commercial milestone payments: up to USD 580 million
  - Royalties on net sales: double digits tiered

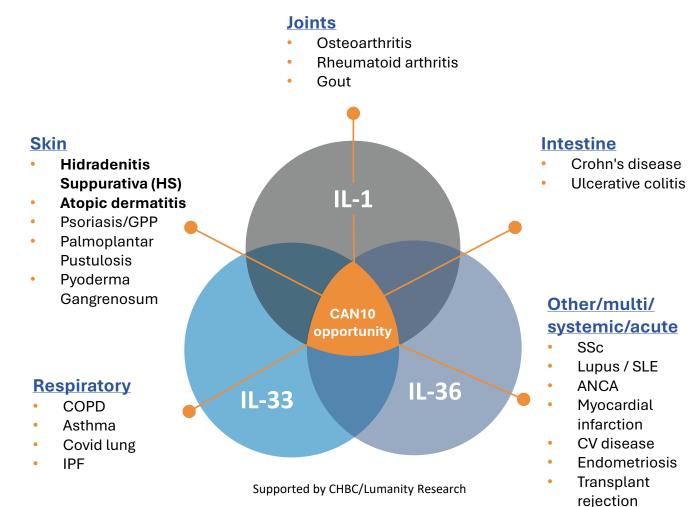
<sup>@</sup>antarqia

<sup>\*</sup> Otsuka Holding - Briefing on Business Strategy for Autoimmune Space, 16<sup>th</sup> July 2025

<sup>\*\* 3</sup>G5 is a pre-clinical IL1RAP targeting antibody, similar to CAN10

# CAN10 Provides a Unique Opportunity to Block IL-1 Superfamily Signaling

- The IL-1superfamily of ligands and receptors is primarily associated with acute and chronic inflammation<sup>1</sup>
- Strong evidence of IL-1 family cytokines (IL-1, IL-33, IL-36) is driving multiple inflammatory diseases
- Individual blockade of IL-1 family members<sup>2</sup> have not resulted in sufficient clinical efficacy in diverse diseases
- CAN10 broader mechanism is highly relevant in dermatological, fibrotic and cardiovascular diseases

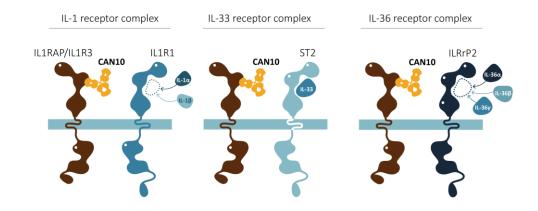


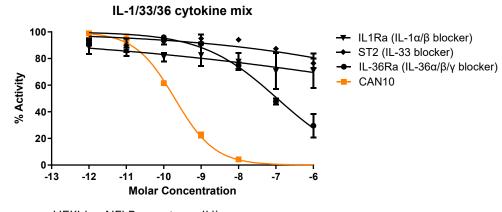
- 1. Interleukin-1 in the pathogenesis and treatment of inflammatory diseases Charles A. Dinarello, Blood (2011) 117 (14): 3720–3732.
- 2. Canakinumab, spesolimab



# **CAN10** is Developed to Block IL-1 Family with Precision

- CAN10 blocks multiple IL-1 family signaling by targeting a single receptor
  - Binds crucial epitope on common accessory protein (IL1RAP)
  - Prevents signaling from IL-1 $\alpha/\beta$ , IL-33 and IL-36 $\alpha/\beta/\gamma$
- CAN10 has shown robust efficacy in preclinical models of several diseases
  - Differentiation: blocks inflammation and fibrosis where IL-1α/β or IL-1β blockade only does not





HEKblue NFkB reporter cell line assay

CAN10 IS UNDERGOING PHASE 1 (SAD/MAD) DEVELOPMENT - NO SAFETY ISSUES REPORTED



# CAN10 First-in-Human study (FIH) - SAD/MAD

# SAD (IV)



- Healthy volunteers (N=76)
- Placebo controlled
- 10 dose cohorts
- Finalized

# MAD - Healthy (SC)



- Healthy volunteers
- 2 dose cohorts, placebo controlled
- SC Day 1, 7 followed by every 14 days

## MAD – Psoriasis (SC)



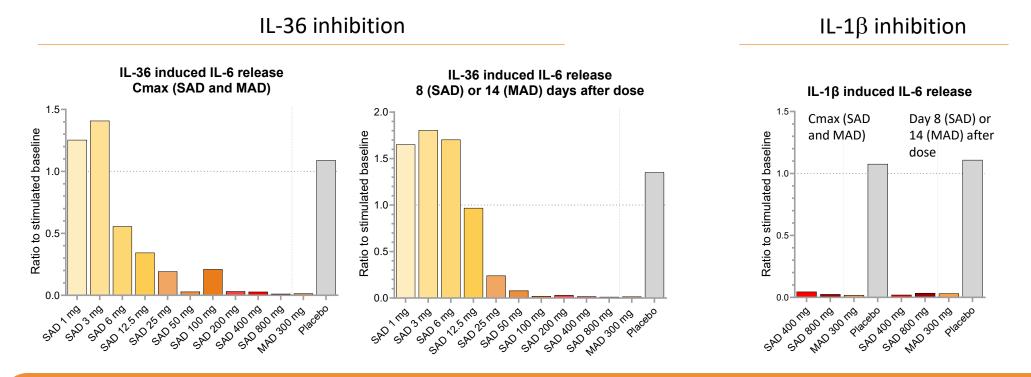
- Mild-Moderate plaque psoriasis
- Enable mechanistic studies

FULL RECEPTOR OCCUPANCY, IL-1 FAMILY CYTOKINE BLOCKADE & NO SAFETY CONCERN DEMONSTRATED



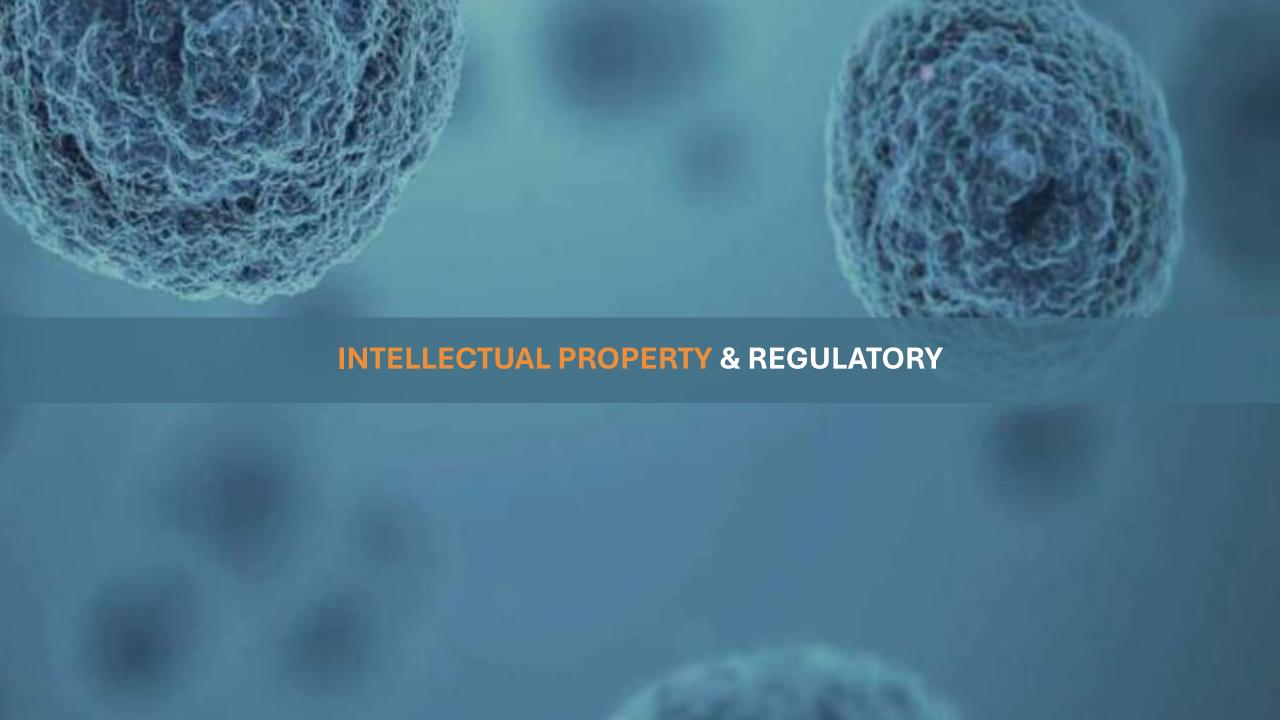
# CAN10 FIH – Full blockade of both IL-36 and IL-1 $\beta$ Signaling

• Inhibition of IL-36 and IL-1 $\beta$  signaling documented at C<sub>max</sub> (SAD and MAD) and day 8 (SAD) or 14 days after 3<sup>rd</sup> dose (MAD)  $\rightarrow$  long lasting effect



**HIGHLIGHTS UNIQUE POTENTIAL OF CAN10 TO HIT DIFFERENT IL-1 SUPERFAMILY PATHWAYS SIMULTANEOUSLY** 





# **Cantargia IP**

### **Proprietary Pipeline**

- Lead candidate anti-IL1RAP antibody CAN04
   Expiry year 2035
   Granted patents (e.g. Europe, USA, China, Japan)
- Anti-IL1RAP for treatment of solid tumors
   Expiry year 2032
   Granted patents (e.g. Europe, USA, China, Japan)
- Anti-IL1RAP for treatment of hematological disorders
   Expiry year 2030
   Granted patents (e.g. Europe, USA, China, Japan)
- Anti-IL1RAP for treatment of myeloproliferative disorders
   Expiry year 2029
   Granted patents (USA), acquired
- Additional anti-IL1RAP antibodies of CANxx
   Expiry year 2037
   Library of anti-IL1RAP antibodies for CANxx project(s)
   Granted patents (USA, China, Japan)

### **Strategic Partnership**

Anti-IL1RAP antibody CAN10
 Expiry year 2041
 Granted patents (USA) and pending in worldwide territory





# **US Designation & Protections in Addition to Patents**

### Fast Track Designation Benefits – Granted in 2025 for nadunolimab in high-level IL1RAP PDAC

- Provides sponsors with frequent communication and meetings with the FDA, which can help clarify requirements and resolve issues quickly during drug development.
- Makes drugs eligible for Accelerated Approval and Priority Review, allowing faster access to the market if certain criteria are met.
- Permits Rolling Review, so sponsors can submit completed sections of a New Drug Application (NDA) or Biologics License Application (BLA) for FDA review rather than waiting until the application is complete.

### Orphan Drug Designation Benefits – Granted in 2021 for nadunolimab in pancreatic cancer

- Grants up to 25-50% tax credits for qualified clinical trial expenses related to orphan drug development.
- Provides seven years of market exclusivity for the approved indication, independent of patent status—no other company can market the same drug for the same indication during this time.

### US Exclusivity for Biologics

- Biologics approved by the FDA get 12 years of exclusivity from the date of first licensure under the Biologics Price Competition and Innovation Act (BPCIA).
- For the first 4 years, the FDA does not accept any biosimilar applications relying on reference data; for the full 12 years, biosimilars cannot be approved for that product.
- Pediatric exclusivity can extend this period by 6 months.



# **EU Designations & Protections in Addition to Patents**

- Orphan Drug designation in EU Granted in 2021 for nadunolimab in pancreatic cancer
  - **Grants market exclusivity period of 10 years** from the date of marketing authorization during which no similar medicinal product can be placed on the market for the same therapeutic indication.
  - Potential to extend by 2 additional years (making a total of 12 years) if the sponsor completes an agreed pediatric investigation plan (PIP) related to the orphan condition.
- EU Exclusivity for Biologics
  - The EU uses an "8+2+1" system for market and data exclusivity:
    - 8 years of data exclusivity, during which competitors cannot rely on the innovator's data for regulatory approval.
    - 2 additional years of market exclusivity, so biosimilars can be approved but not marketed until after 10 years total.
    - 1 optional year is added for a new indication that demonstrates significant clinical benefit.





# **Investment Highlights**

#### **CAN10: TRANSFORMATIONAL DEAL WITH OTSUKA**

- Validation of IL1RAP as a target, Cantargia's technology, and transaction ability
- Upfront of \$33 million provides financial flexibility. Total deal value of \$613 million

#### NADUNOLIMAB: FOCUS ON DEVELOPING IN PDAC PATIENTS WITH HIGH IL1RAP

- High IL1RAP expression drives pathophysiology target confirmed by independent data sets
- Pivotal Study Ready; FDA Fast Track in PDAC patients with high expression of IL1RAP
- IL1RAP diagnostic for selection of patients in next clinical trial, in development on track

### **CANXX: UNIQUE IL1RAP PLATFORM**

- Initiating CAN14 as first IL1RAP Bispecific mAb (undisclosed 2<sup>nd</sup> target)
- Exploring IL1RAP ADC opportunity
- IL1RAP platform source for future therapeutics, diagnostics and reagents



