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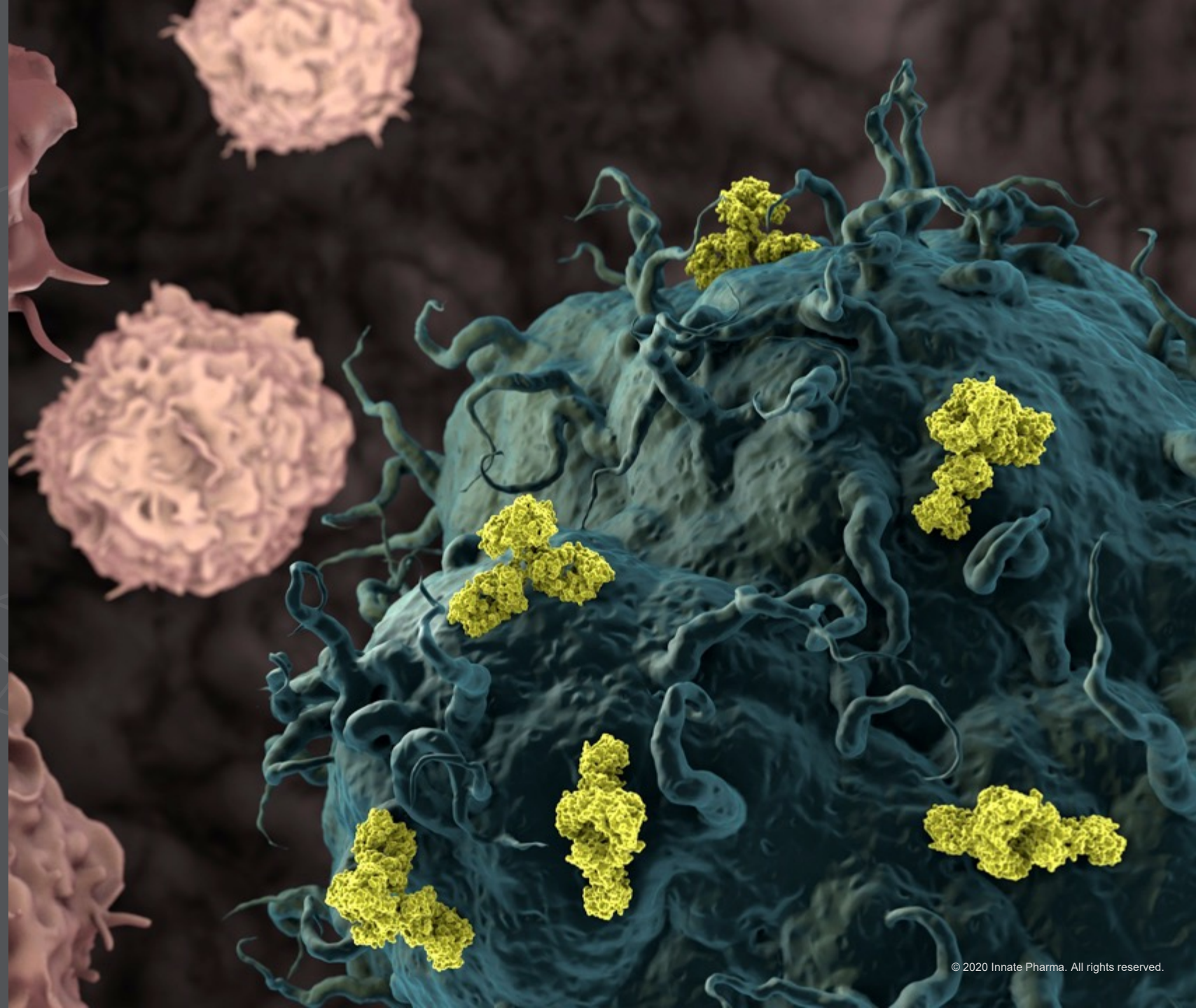
Company Overview

May 2021

PARIS: IPH.PA NASDAQ: IPHA



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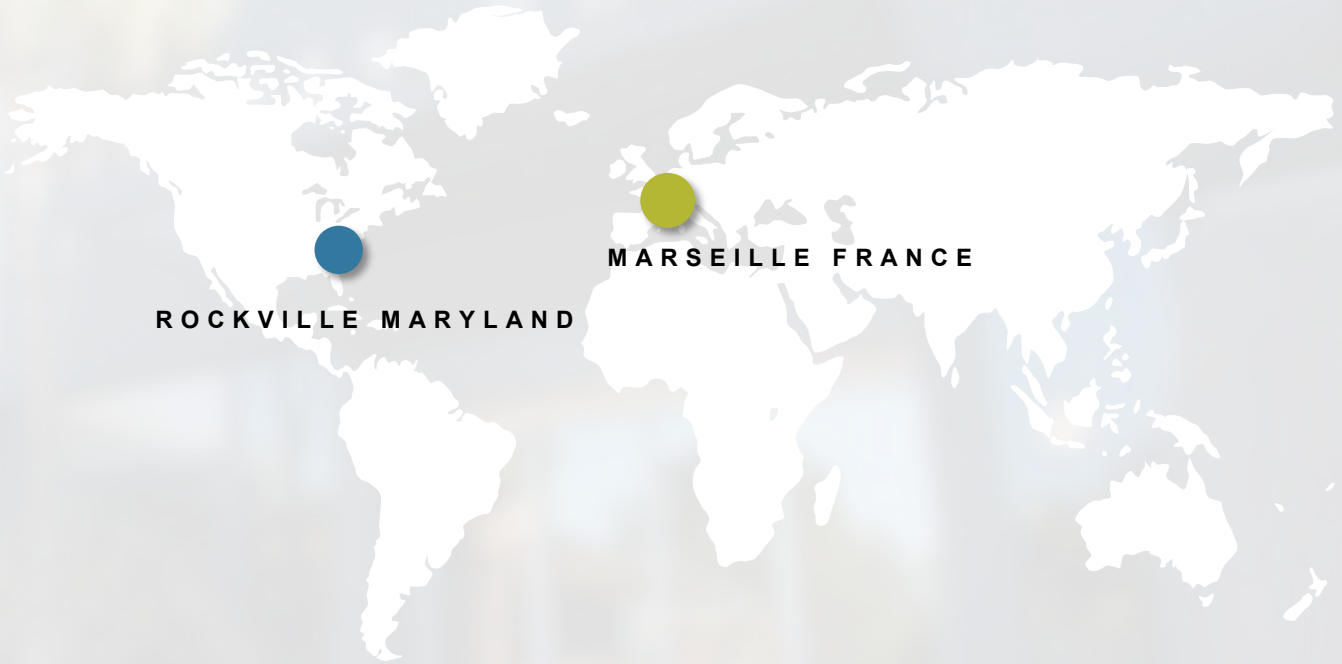
A Leading Company in the Field of Innate Immunity

- Global, clinical-stage oncology-focused biotech company.
- Scientific excellence in the field of innate immunity with expertise in natural killer cell biology and antibody engineering.
- Focused pipeline of antibodies, including several potentially first-in-class clinical and preclinical candidates in cancers with high unmet medical need.



Founded: 1999

Paris Euronext listing: 2006

Nasdaq listing: 2019

Scientific Innovation Drives Our Strategy

We aim to harness our scientific know-how in innate immunity and antibody engineering to develop oncology products that improve the lives of patients

Drive near-term value with Lacutamab

Advance our innovative R&D pipeline

Build a sustainable business

Strong Science + Strong Partnerships = Robust Pipeline

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Validated Science
in high-impact publications

+

Strong Track Record of Collaborations
with industry and academia

=

Robust Pipeline
with innovative pre-clinical and clinical assets

THE LANCET Oncology

nature Cell

Science JOURNALS AAAS

Ciml IMMUNOLOGY

EORTC The future of cancer therapy

GUSTAVE ROUSSY CANCER CAMPUS GRAND PARIS

SANOFI

Hôpitaux Universitaires de Marseille | ap·hm

AstraZeneca

novo nordisk®

Lysa

Bristol Myers Squibb

Innate's Approach: Harnessing Innate Immunity in Cancer

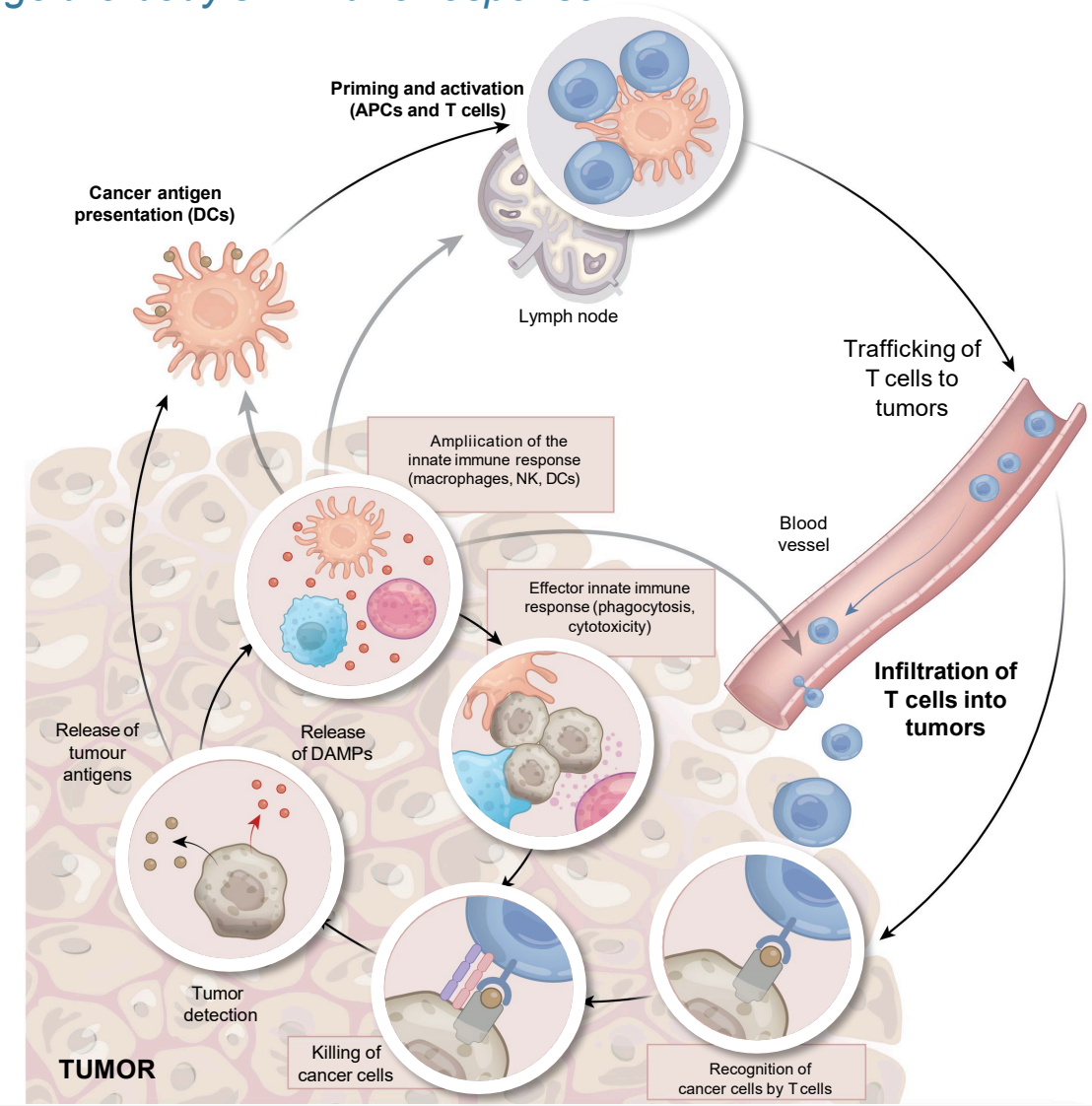
Choosing the right targets to leverage the body's immune response

2 Unleash NK cells

Monalizumab (NKG2A)

1 Engage NK cells towards tumor

Lacutamab (KIR3DL2)
NK cell engagers (NKp46)



3 Reverse suppression

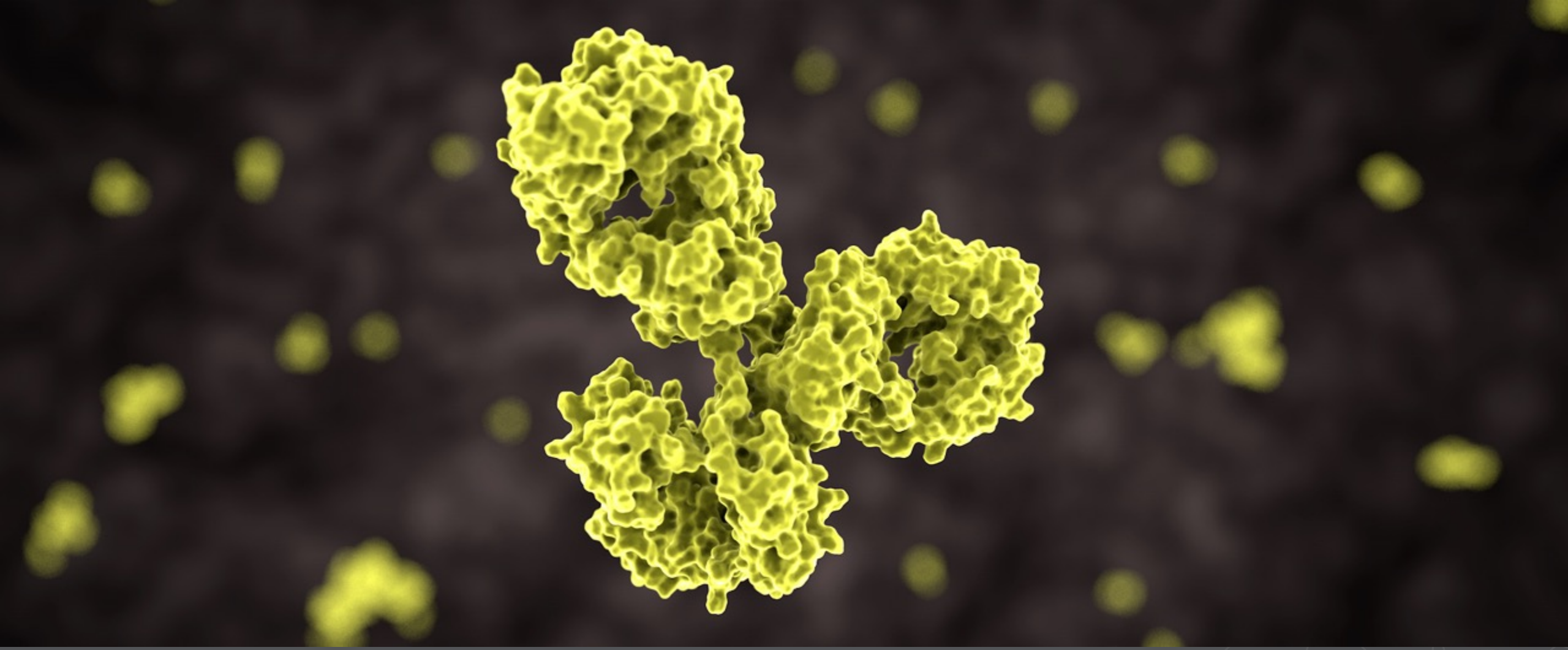
IPH5201 (CD39)
IPH5301 (CD73)

Adapted from Demaria et al., Nature 2019

Our Pipeline

Program	Target	Indication	Pre-Clinical	Phase 1	Phase 2	Phase 3	Partner
Lacutamab (IPH4102)	KIR3DL2	Sézary Syndrome			PHASE 2 (FDA FAST TRACK/EMA PRIME DESIGNATION)		–
		Mycosis Fungoides			PHASE 2		–
Monalizumab	NKG2A	Squamous Cell Carcinoma of the Head and Neck			PHASE 3		AstraZeneca
		Solid Tumors (including CRC and NSCLC)			PHASE 1/2		
Avdoralimab (IPH5401)	C5aR	Bullous pemphigoid			PHASE 2		-
		COVID-19			PHASE 2		-
IPH5201	CD39	Cancer (solid tumors)		PHASE 1			AstraZeneca
Preclinical portfolio	IPH5301 (CD73), IPH6101**(NKCE) IPH25*, IPH26* (siglec-9), IPH43* (MICA/B), IPH62* (NKCE), IPH64**(NKCE), IPH45, IPH65 (NKCE)		PC				* AstraZeneca ** SANOFI

"CRC" = Colorectal Cancer; "NSCLC" = Non-Small Cell Lung Cancer



Driving Our Proprietary Portfolio

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Lacutamab: Lead Proprietary Asset

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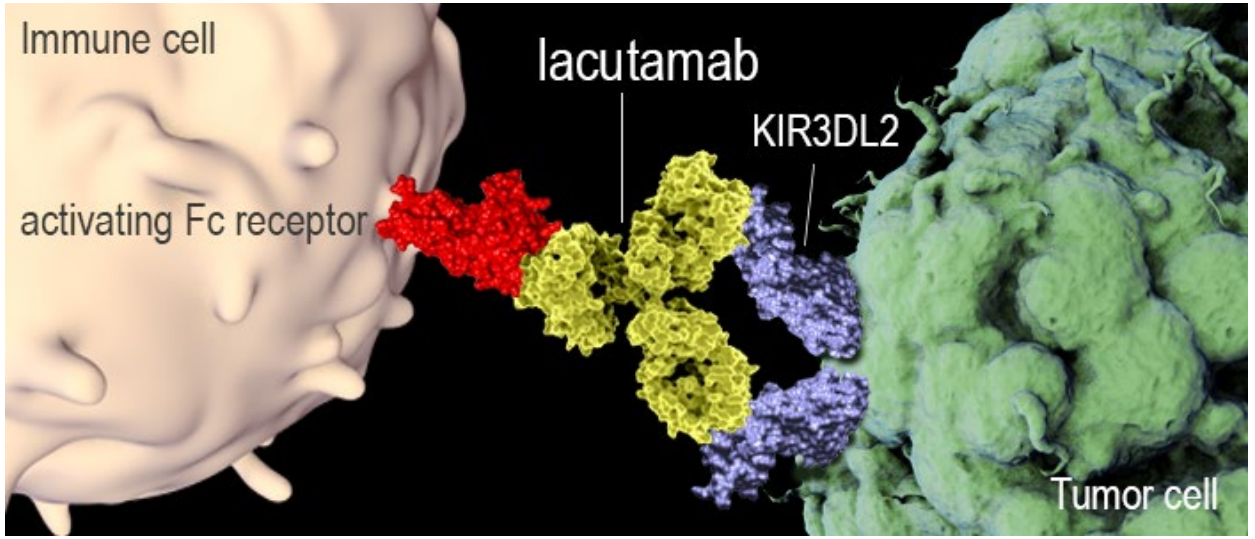
First-in-class anti-KIR3DL2 humanized cytotoxicity-inducing antibody

- Lacutamab under development for the treatment of various forms of T-cell lymphomas (TCL)
- Compelling Phase 1 data in Sézary syndrome (SS), published in *Lancet Oncology*
- EMA PRIME and FDA Fast Track designations for SS patients who have received at least two prior systemic therapies
- Orphan drug designation in the EU and US for the treatment of cutaneous TCL (CTCL)
- Development strategy:
  - Fast to market strategy in SS
  - Expansion in other forms of T-cell lymphomas: mycosis fungoides (MF) and peripheral T-cell lymphoma (PTCL)



Development Informed by Target Expression

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KIR3DL2 EXPRESSION	INCIDENCE *Major markets (US, EU5, Japan), 2025*
SEZARY SYNDROME • >90% of patients express target* • All tissues involved (skin, blood and lymph nodes)	~80–200 patients[1]
MYCOSIS FUNGOIDES • ~50% of patients express target*	2,200–4,000 patients[1]
PERIPHERAL T-CELL LYMPHOMA • KIR3DL2 is expressed in multiple PTCL subtypes • ~50% of patients express target*	~18,000 patients[2]

SS: Roelens, M. et al. (2019); MF: Battistella, Blood 2017; PTCL: M. Cheminant et al, ICML-15 2019
*Target expression is defined by % of KIR3DL2-expressing tumor cells > 1%
1. SS and MF: SEER Incidence Rates and Annual Percent Change by Age at Diagnosis — All Races, Both Sexes, 2008-2017; SEER Cancer Statistics Review 1975-2017; -- Dobos, G. et al. (2020)
2. PTCL: Delve Insights MR Report

Developing New Standard of Care in KIR3DL2-Expressing T-Cell Lymphomas

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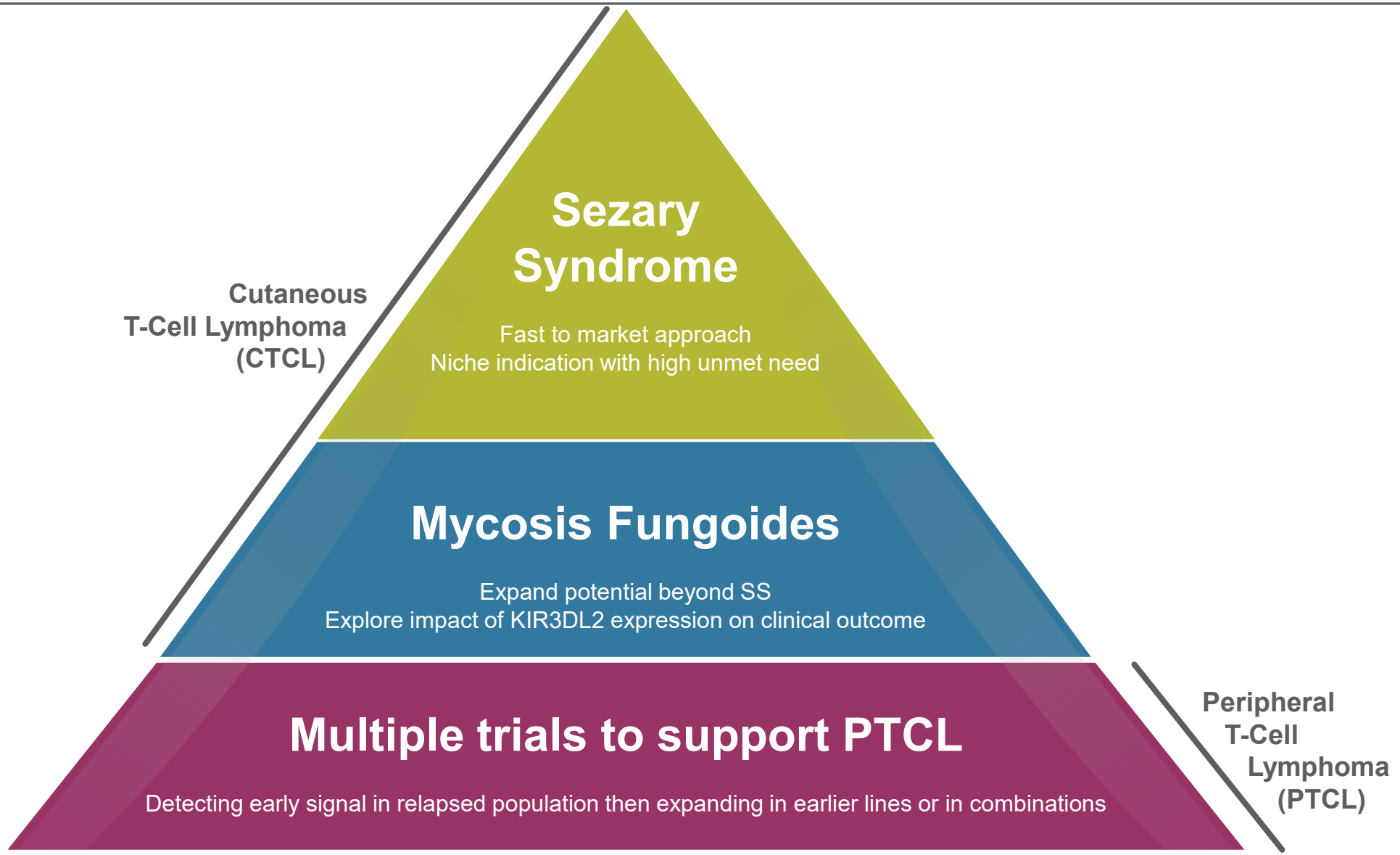


Phase 1 Trial Design and Key Results

FDA Fast Track Designation granted based on these results

Total 44 patients with CTCL ≥ 2 lines of therapy

- 25 (incl. 20 SS) in dose escalation (intra-patient dose escalation was allowed)
- 19 (incl. 15 SS) in cohort expansion

Recommended Phase 2 Dose: 750mg QW x 4 then Q2W x 10 then Q4W until progression

Safety:

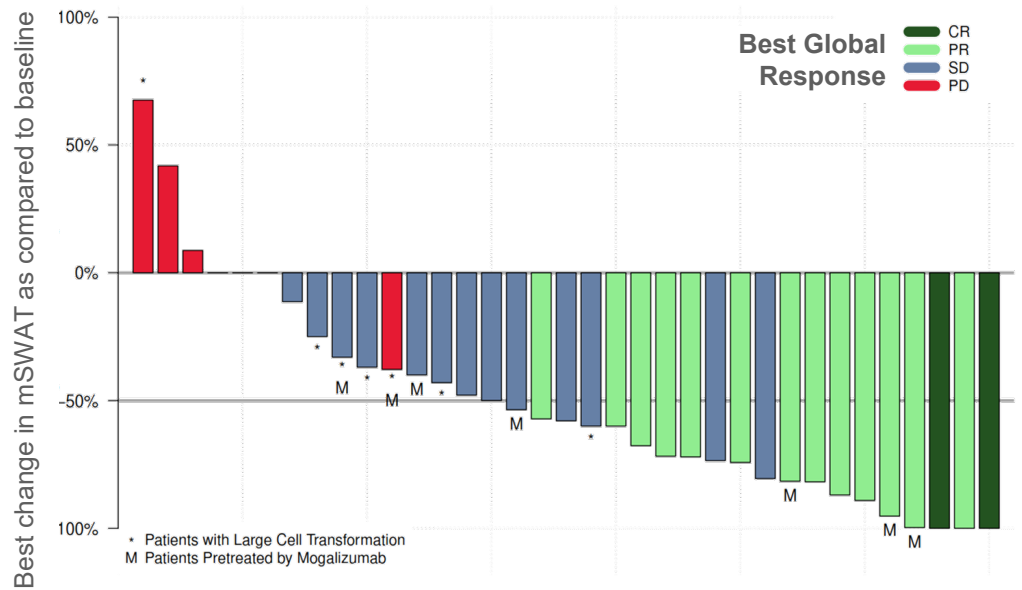
- Maximum tolerated dose was not reached
- No DLT[1]s. Most common AE[2]: lymphopenia, fatigue (mostly grade 1–2)

Mavoric[3] Phase 3 efficacy results for SS ≥ 1 line (without LCT[4]):

- Mogamulizumab: ORR: 37% | TTNT[5]: 12.9 months
- Comparator: Vorinostat[6]: ORR: 2% | TTNT: 3.3 months

[1]DLT = dose limiting toxicity
[2]AE = adverse event
[3] MAVORIC trial: Mogamulizumab vs. vorinostat in previously-treated CTCL. Source: Kim et al, Lancet Oncology 2018
[4]LCT = large cell transformation
[5] TTNT = Time-to-Next Significant Treatment
[6]Only drug approved in 2L+

Sézary Syndrome Subgroup (n=35)



	All SS N=35	SS without LCT N=28	Prior mogamulizumab N=7
Best global response	**42.9%**	**53.6%**	**42.9%**
DOR	13.8	13.8	13.8
PFS	11.7	12.8	16.8

TELLOMAK Phase 2 Study in Two CTCL Subtypes

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Potential for Sézary syndrome cohort to serve as pivotal trial

Sézary Syndrome (N~60) ≥ 2 prior systemic therapies	Mycosis Fungoides (N~90) ≥ 2 prior systemic therapies	
Cohort #1 All comers, SS, must include mogalizumab as prior therapy	**Cohort #2** KIR3DL2 expressing, Simon 2 stage	**Cohort #3** KIR3DL2 non-expressing, Simon 2 stage
Enrollment ongoing; preliminary data expected in 2022	*Advanced Cohort 2 to Stage 2 with earlier-than-expected positive signal; preliminary Stage 1 data expected in 2021*	

STUDY ENDPOINTS

- Primary endpoint: objective response rate
- Key secondary endpoints: progression-free survival, duration of response, quality of life and adverse events

TARGET EXPRESSION

- KIR3DL2 expression is defined as ≥1% using central evaluation of KIR3DL2 by immunohistochemistry

Initiating Data-Driven Strategy in PTCL

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NOW

RELAPSE SETTING
Highest unmet medical need; two-pronged approach:

- Single agent activity (monotherapy)
- Combination studies with: 1) GemOx* and 2) other SOC

NEXT STEPS

FRONTLINE
Driven by data in relapse setting to advance into earlier lines

- Combination with CHOP

*Gemcitabine and oxaliplatin
SOC: Standard of Care

Developing a New Standard of Care Across KIR3DL2-Expressing T-Cell Lymphomas

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Cutaneous T-Cell Lymphoma (CTCL)

Peripheral T-Cell Lymphoma (PTCL)

Phase 2 TELLOMAK Trial

Sezary Syndome

80-200 patients
>90% KIR3DL2 expression

- Fast to market approach
- Niche indication with high unmet need
- Trial expanded (pivotal potential)
- Fast Track Designation & PRIME

Mycosis Fungoides

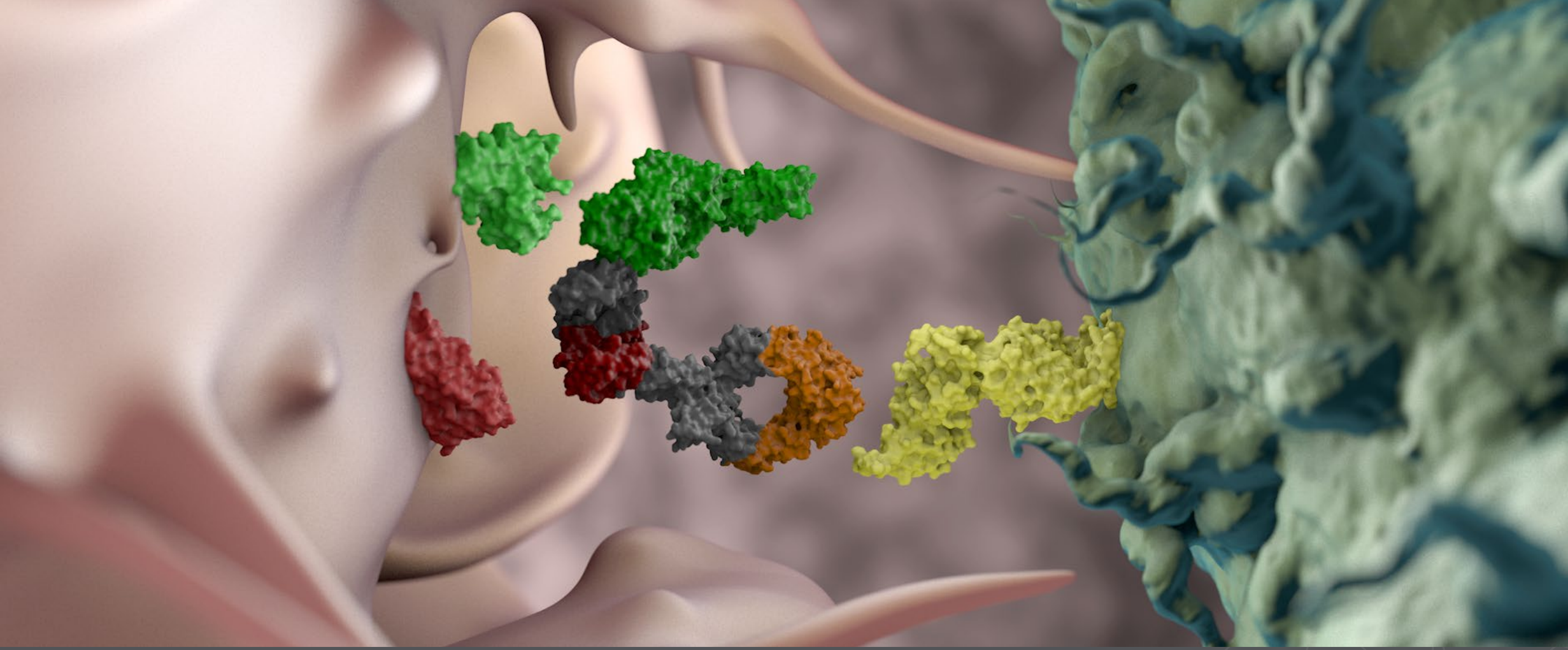
2,200-4,400 patients
~50% KIR3DL2 expression

- Expand potential beyond SS
- Explore impact of KIR3DL2 expression on clinical outcome
- Reached the pre-determined no. of responses needed to advance to stage 2
- Non expressors enrolling

Multi-trial Strategy From Relapsed to Frontline PTCL

~18,000 patients
~50% KIR3DL2 expression

- Monotherapy
- Combination + GemOX (LYSA) & SOC in relapsed setting
- Follow data into earlier lines (in combination with CHOP)



Next-Generation Assets: NK Cell Engagers

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Proprietary Multi-specific Platform Therapeutically Harnessing NK cells via NKp46: **NKCE**

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MULTISPECIFIC

- Target two activating receptors on NK cells NKp46 plus CD16 and a tumor antigen

PROPRIETARY

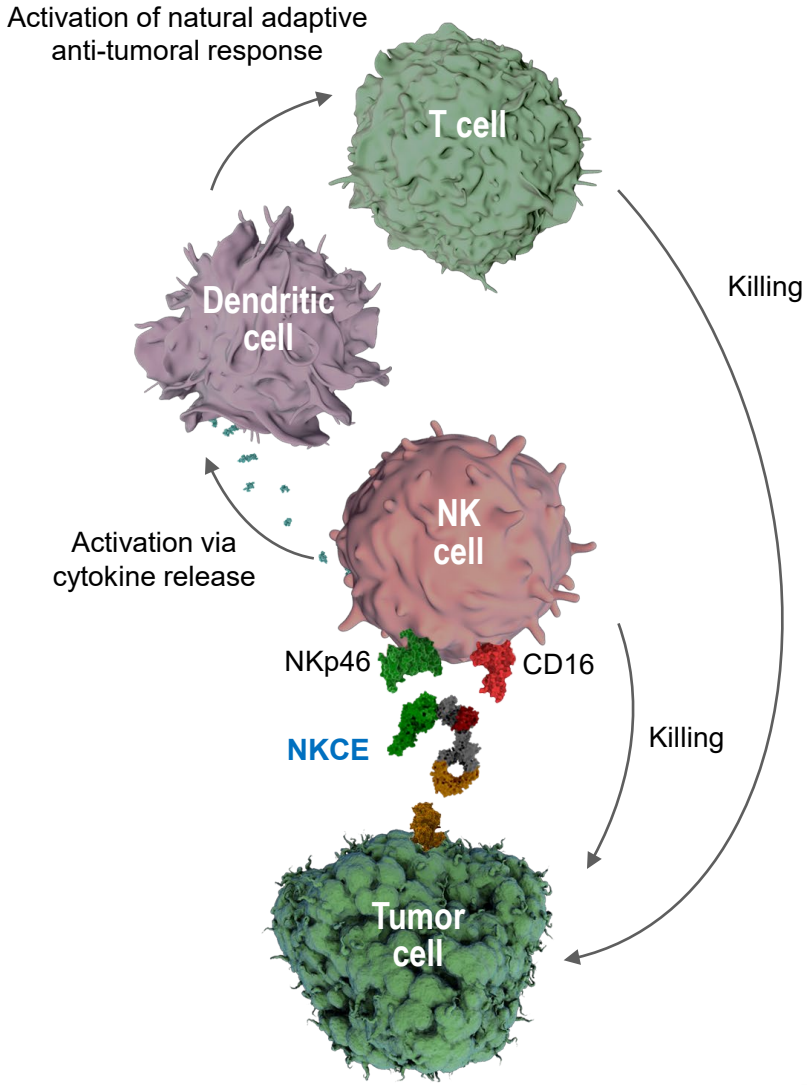
- Patents on NKp46 binders
- Non-exclusive license to Sanofi for two tumor antigens

VERSATILE

- Applicable to multiple tumor antigens
- Two under collaboration with Sanofi, one under AstraZeneca option

FORMAT

- GMP manufacturability
- Stability
- Antibody-like pharmacokinetic



Innate's NKCE Technology Offers Unique Cancer-Fighting Abilities

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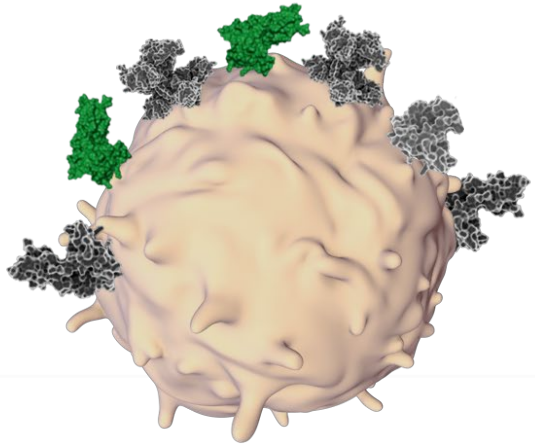
NK SPECIFICITY

- NK cells are not expected to produce a cytokine storm
- NKp46 is the most specific activating receptor of NK cells

NK cells in periphery

NKp46

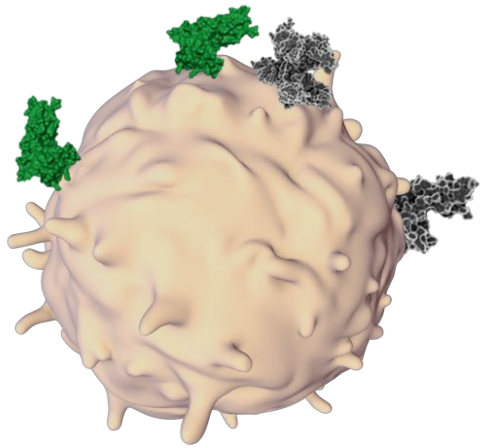


NKp46 EXPRESSION STABILITY

- Unlike many other activating receptors, NKp46 is conserved on NK cells infiltrating solid tumors

NK cells in solid tumors

NKp46

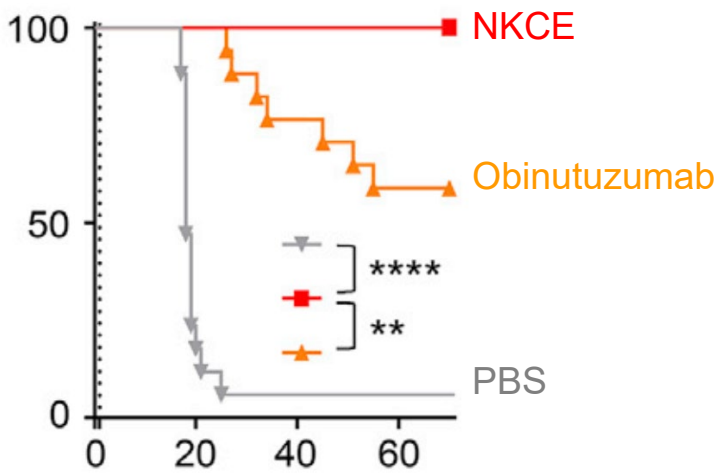


Tumor-infiltrating Natural Killer cells. Cózar et al., Cancer Discovery 2021
Multifunctional Natural Killer Cell Engagers targeting NKp46 trigger protective tumor immunity. Gauthier et al., Cell 2019
Harnessing innate immunity in cancer therapy. Demaria et al., Nature 2019
Identification, activation, and selective in vivo ablation of mouse NK cells via NKp46. Walzer et al., PNAS 2007
p46, a novel natural killer cell-specific surface molecule that mediates cell activation. Sivori et al, J Exp Med. 1997

Innate's NKCE Technology is Active in Pre-Clinical Models

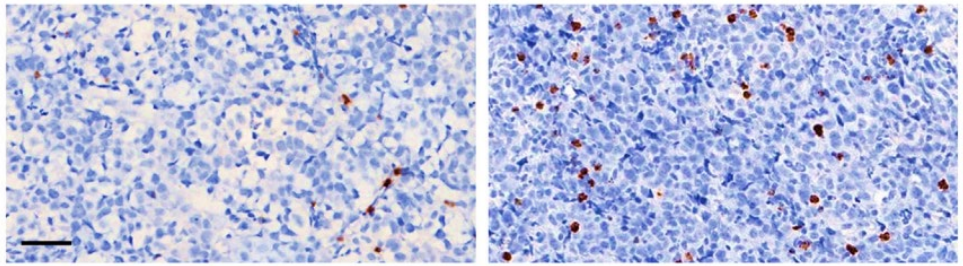
Efficacy

- Activity in preclinical *in vivo* models
- Efficacy NKCE > approved benchmark antibodies in a cancer model *in vivo*



Mode of Action

- Optimized killing activation by co-engagement of NKp46 and CD16
- Increased NK cell number in the tumor



Control *NKCE*

Gauthier et al., Cell 2019

First NKCE Drug Candidate: IPH6101/ SAR443579

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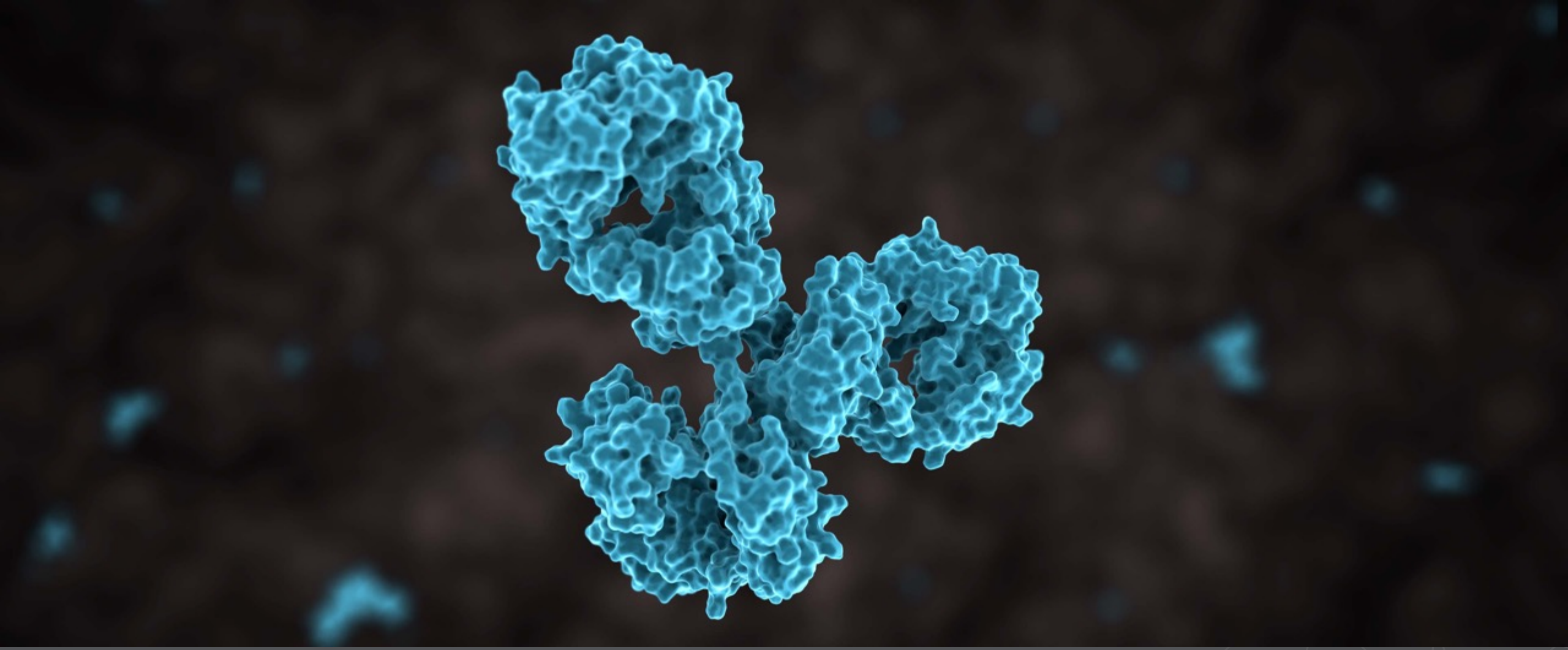
Research collaboration with Sanofi

First NKCE selected by Sanofi as drug candidate for development

Uses Innate's proprietary multispecific antibody format

Has triggered €7M milestone payment to Innate to date

- Companies are collaborating on the generation and evaluation of up to two NKCEs.
- Sanofi is responsible for the development, manufacturing and commercialization of products resulting from the research collaboration.
- Innate is eligible for up to €400m in development and commercial milestone payments and royalties on net sales.



Building a Sustainable Business

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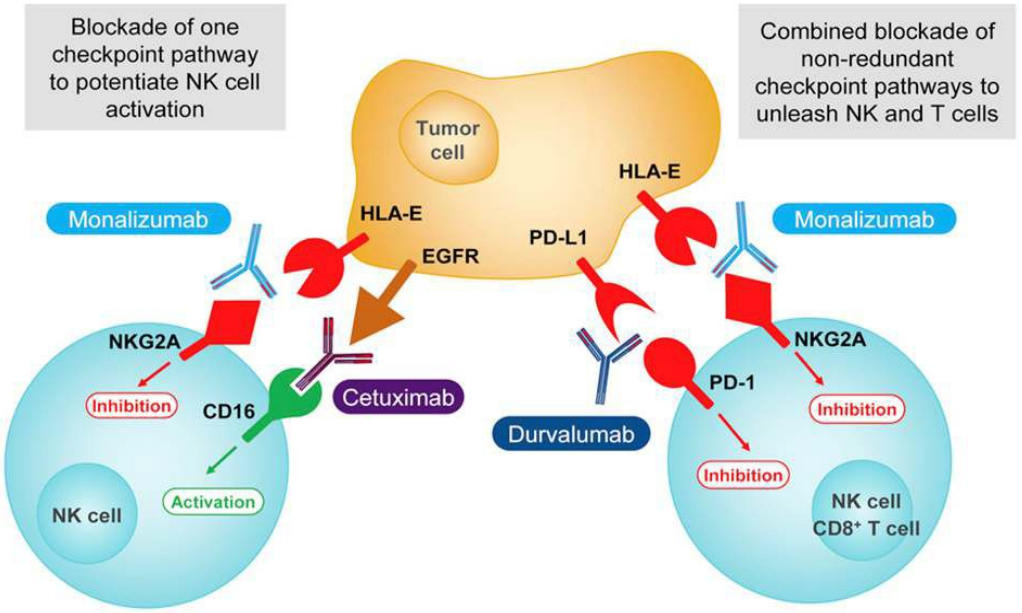
Monalizumab: Strategic Asset Providing Scientific Validation and Revenue Streams

Innate's first Phase 3 program, sponsored by AstraZeneca, for patients with IO-pretreated SCCHN

Promotes Anti-tumor Immunity by Unleashing Both T and NK Cells



Source: André, Vivier et al., Cell 2018

2H20: Phase 3 Start Triggered First of Two $50M Milestones from AstraZeneca

- **Phase 3 program:** monalizumab + cetuximab in IO-pretreated R/M SCCHN
- **Revenue creation from collaboration:**
  - Total milestone package $1.275B, $400M received to date
  - Double digit royalties on net sales worldwide, except in Europe where Innate will receive 50% share of the profits and losses in the territory
  - Second $50M milestone payment after the interim analysis demonstrates the combination meets a pre-defined threshold of clinical activity.
- **Opportunity:** R/M SCCHN[1] is an indication of high unmet need
  - Monalizumab + cetuximab has potential to improve over cetuximab alone (SOC[2])

SCCHN: Squamous Cell Carcinoma of the Head and Neck
SOC: Standard of Care

Avdoralimab: Exploring C5a/C5aR1 Pathway

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Inflammatory Diseases

- Targeting C5a/C5aR1 has been demonstrated scientifically and through positive clinical trials in some complement-driven inflammatory diseases
- Two investigator-sponsored studies:
  - 2H 2020: Bullous pemphigoid (BP)
  - 2021: Chronic spontaneous urticaria (CSU)

COVID-19 Severe Pneumonia

- FORCE Phase 2 trial has completed enrollment and is ongoing for patient follow-up and data analysis
- Published translational data in *Nature*[1] supporting a C5a/C5aR1 axis blockade to prevent excessive lung inflammation associated with ARDS[2] and severe COVID-19
- Obtained €6.8m from the French government to fund COVID-19 R&D activities

INVESTIR L'AVENIR bpifrance

1. Cavelli et al., Nature 2020
2. ARDS: Acute Respiratory Distress Syndrome

Catalysts and Summary

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Key Catalysts Over the Next 24 Months

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2021

PRECLINICAL

- Update on NKCE platform development (FOCIS meeting)

LACUTAMAB

- Preliminary Phase 2 MF data (ICML Lugano meeting)
- Start of PTCL monotherapy and combination trials

MONALIZUMAB

- Preliminary data on the combination of monalizumab, cetuximab and durvalumab in IO-naïve patients with R/M SCCHN

2022

PRECLINICAL

- Further progress with preclinical pipeline

LACUTAMAB

- Preliminary Phase 2 efficacy SS data
- Preliminary stage 2 MF data
- Preliminary PTCL data

AVDORALIMAB

- BP Phase 2 data

Summary: Driving Value Across our Business

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Driving near-term value with Lacutamab

- TELLOMAK read-outs beginning in 2021; expanding into PTCL

Progressing an innovative and robust R&D portfolio

- Advancing proprietary NK cell-targeted platform and portfolio

Building a sustainable business

- Monalizumab: Phase 3 trial ongoing, triggering $50M upon positive interim analysis
- Cash position of €181.7 million* as of March 31, 2021 with runway to end of 2022

Harnessing innate immunity to create novel therapeutics in areas of unmet medical need

*Including short term investments (€15.5 million) and non-current financial instruments (€39.8 million)

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THANK YOU

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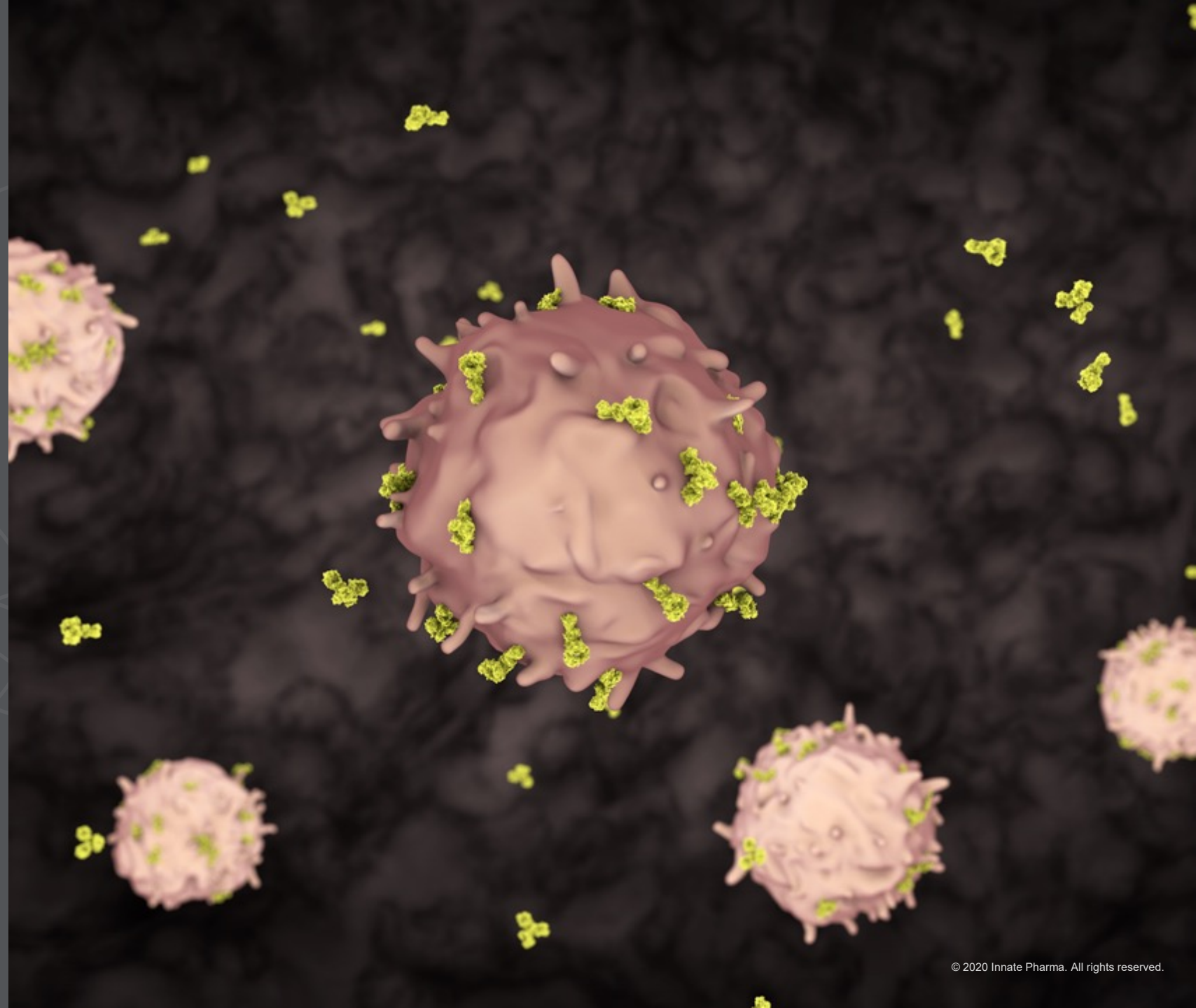

Appendix

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Lumoxiti: Transitioning US and EU Commercial Rights Back to AstraZeneca

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Strategic Decision

- Innate will no longer pursue Lumoxiti commercialization activities in US or EU
- Lower than anticipated sales and COVID-19 impact to real-world treatment landscape
- Lumoxiti infrastructure not synergistic for future products

Creating Value with Our Pipeline

- Refocus investments in R&D portfolio
- Lumoxiti helped create a strong commercial foundation for Innate; expanded US footprint
- Flexibility in commercial focus on product-by-product basis

Next Steps

- Transition Lumoxiti EU and US commercialization activities in 2021
- Innate and AstraZeneca to ensure availability of Lumoxiti to patients during transition period

Full Year 2020 Financial Highlights

In thousands of euros, except for data per share	December 31, 2020	December 31, 2019
Revenue and other income	**70,451**	**85,814**
Research and development	(58,613)	(78,844)
Selling, general and administrative	(31,246)	(25,803)
Total operating expenses	**(89,859)**	**(104,647)**
Net income (loss) from distribution agreements	861	(8,219)
Operating income (loss) before impairment	**(18,547)**	**(27,052)**
Impairment of intangible assets	(43,529)	0
Operating income (loss) after impairment	**(62,076)**	**(27,052)**
Net financial income (loss)	(1,908)	6,293
Net income (loss)	**(63,984)**	**(20,759)**
Weighted average number of shares outstanding (in thousands)	78,935	66,908
Basic income (loss) per share	(0.81)	(0.31)
Diluted income (loss) per share	(0.81)	(0.31)
	December 31, 2020	**December 31, 2019**
Cash, cash equivalents and financial asset	190,571	255,869
Total assets	307,423	401,361
Shareholders' equity	155,975	217,416
Total financial debt	19,087	18,723

Putting Lacutamab Phase 1 Data into Clinical Context

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Recent results in MF/Sézary patients

	Mogamulizumab	Vorinostat
Patient population	Patients who received at least one prior systemic therapy	
Response rate	MF/SS: 28% MF: 21% SS: 37%	MF/SS: 5% MF: 7% Sézary: 2%
Median progression-free survival	MF/Sézary: 7.7 months	MF/Sézary: 3.1 months
Time to next treatment*	MF/SS: 11 months MF: 8.8 months SS: 12.9 months	MF/SS: 3.5 months MF: 4.1 months Sézary: 3.3 months
FDA label	Patients who received at least one prior systemic therapy	Patients who received at least two prior systemic therapies

Pro et al, Proc Am Soc Clin Oncol 2019; ^ Kim Y et al, Lancet Oncol 2018

Monalizumab R/M SCCHN: Updated Results from Phase 2 Trial

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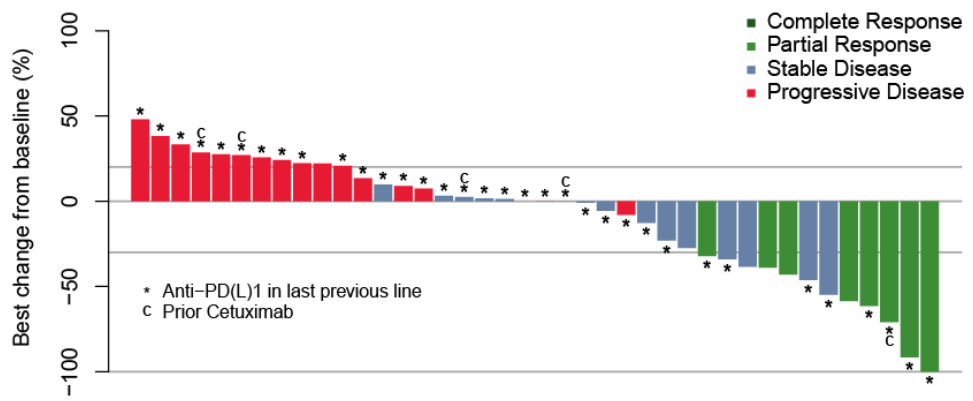
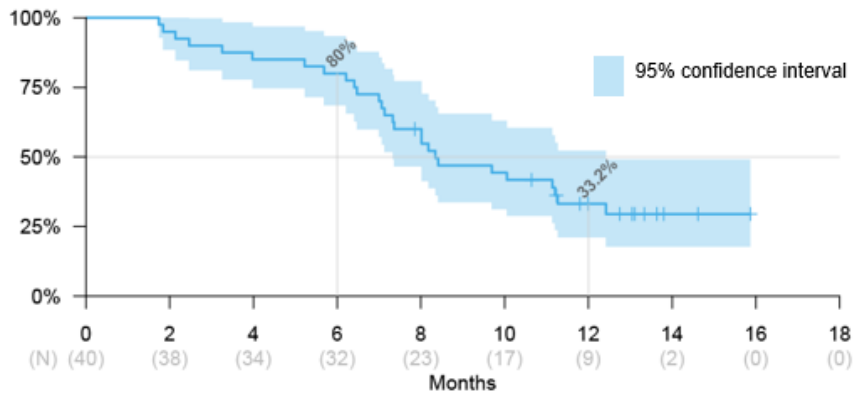
Cohort 2 post platinum and post anti-PD-(L)1 (n=40)

Best Change of Tumor Size From Baseline



Overall Survival



- **Population with high medical need**
  - R/M SCCHN post platinum and post anti-PD-(L)1 where no treatment options are currently approved globally.
- **Promising activity**
  - Response rate of 20% and 6- and 12-month OS of 80% and 33%
- **Manageable safety profile**

Based on these results, a randomized phase 3 trial is underway to evaluate the combination of monalizumab + cetuximab versus cetuximab + placebo in R/M SCCHN post platinum and post anti-PD-(L)1 patients.

ESMO-IO 2020 Abstract 235 Poster 81P

IPH5201* (Anti-CD39) and IPH5301 (Anti-CD73)

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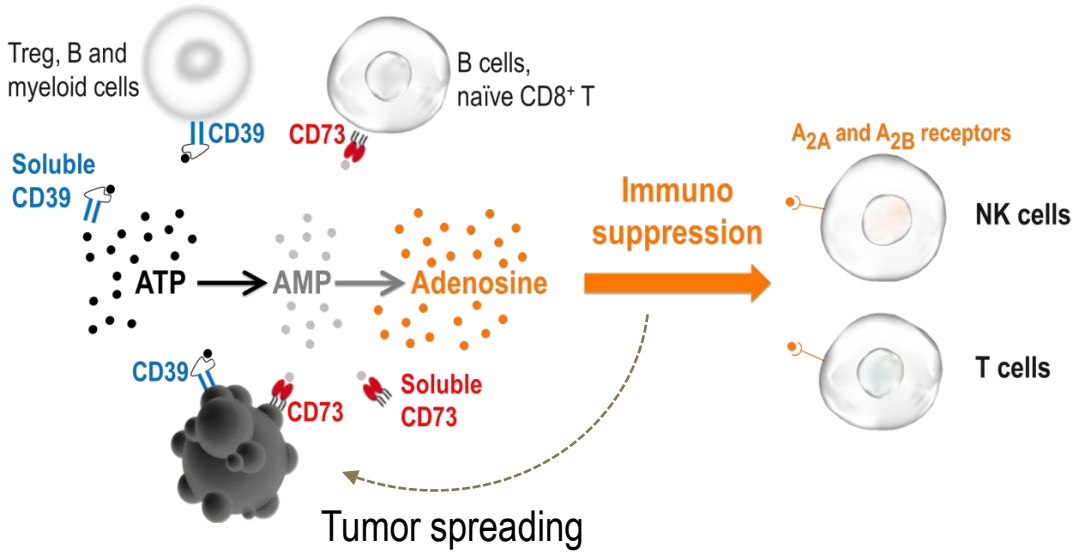
Targeting immunosuppressive tumor microenvironment

- CD39 and CD73 are enzymes expressed on different cells in the TME
  - Promote immuno-suppression by degrading pro-inflammatory ATP into immunosuppressive adenosine
- IPH5201: ongoing Phase 1 trial being conducted by AstraZeneca; evaluating IPH5201 in monotherapy or in combination with durvalumab +/- oleclumab (anti-CD73) in patients with advanced solid tumors
- IPH5301: Filed IND in 1H 2020

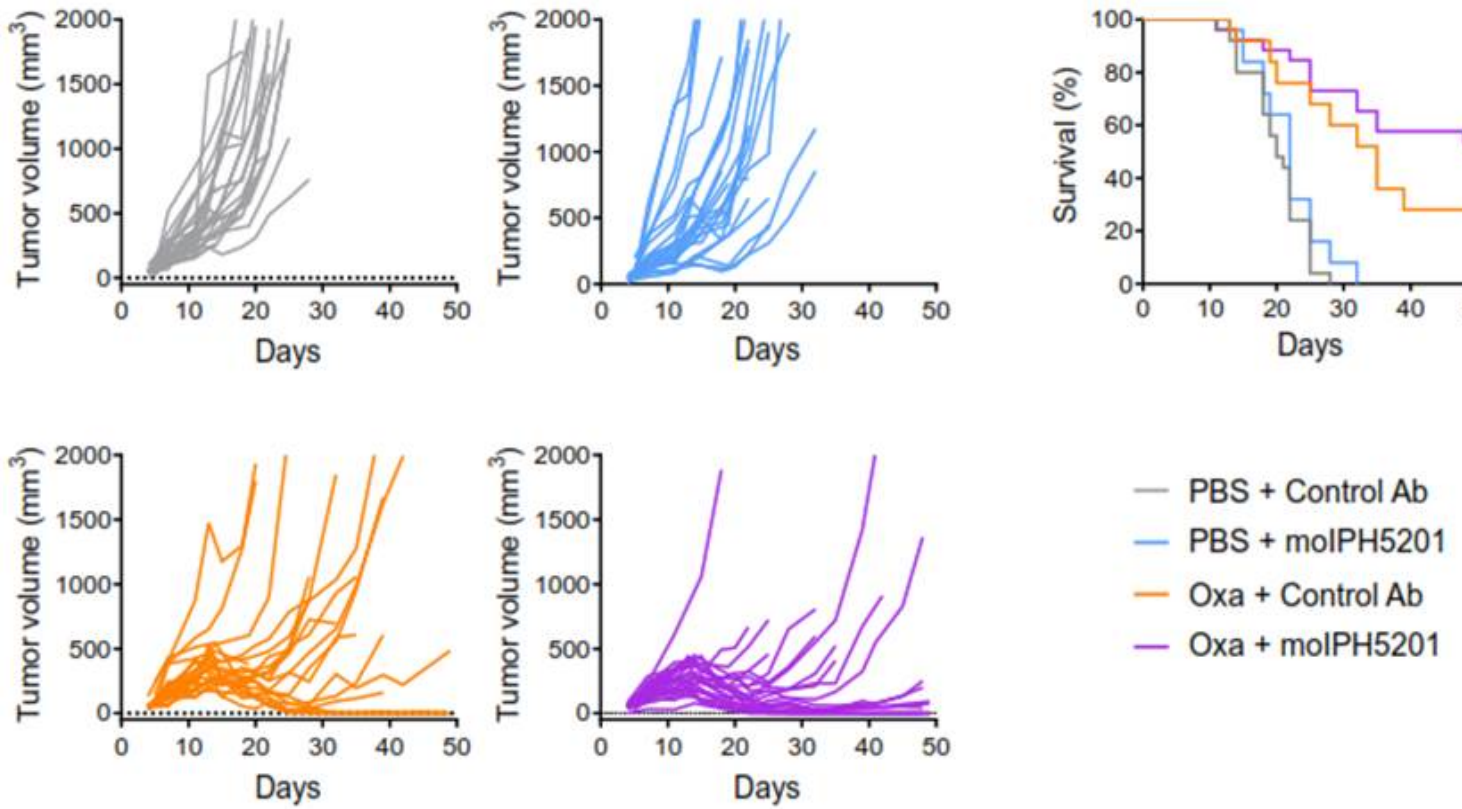


Sources: Perrot et al., Cell Reports 2019
*2018 collaboration and option agreement with AstraZeneca

AMP: adenosine monophosphate
ATP: adenosine triphosphate

IPH5201*: Preclinical Data

Significant tumor responses observed in response to treatment with PD-1 inhibitors and ADCC-inducing antibodies, as well as with immunogenic chemotherapy, compared to responses to these agents in wild-type mice



Sources: Perrot et al., Cell Reports 2019
*2018 collaboration and option agreement with AstraZeneca

IPH5301: Preclinical Data

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IPH5301 more potent in restoring CD4+ and CD8+ T-cell proliferation in an ATP-suppression assay, than the most advanced clinical candidates