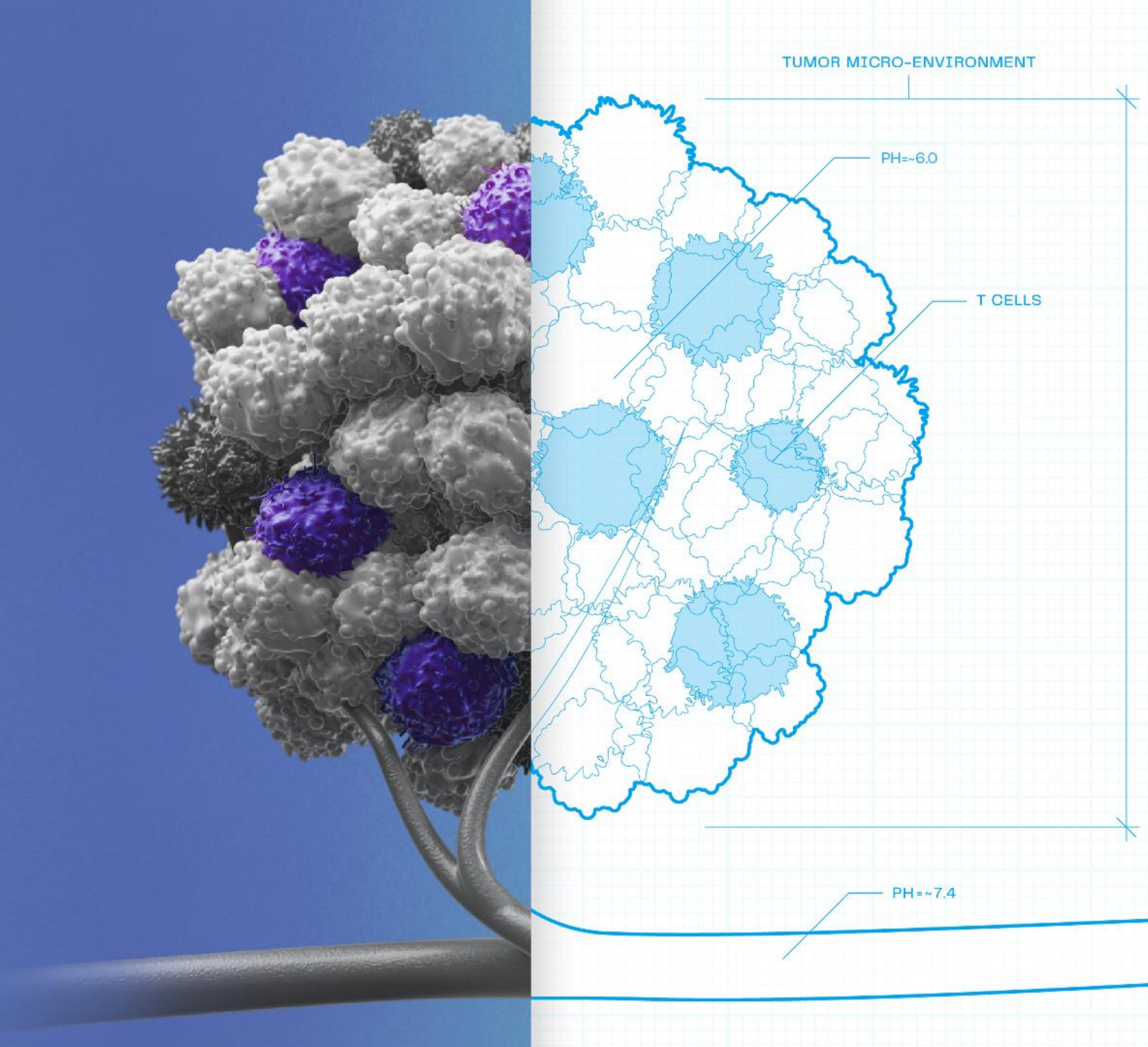
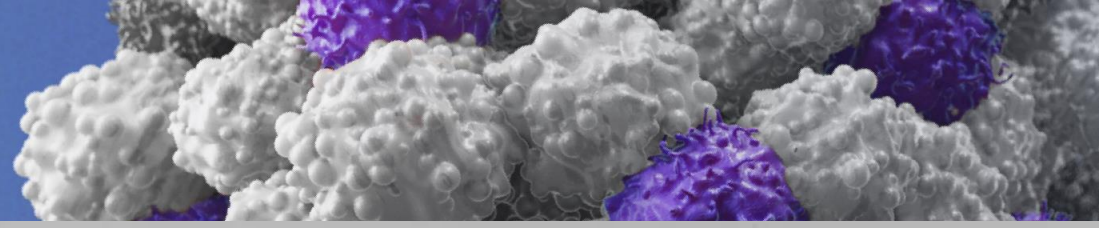


sensei™ BIO

Conditionally Active Antibodies for Immuno-oncology

Corporate Deck | January 2025

Disclaimer



This presentation has been prepared by Sensei Biotherapeutics, Inc. (the “Company,” "we," "us") and is made for informational purposes only. The information set forth herein does not purport to be complete or to contain all of the information you may desire. Statements contained herein are made as of the date of this presentation unless stated otherwise, and the delivery of this presentation at any time shall not under any circumstances create an implication that the information contained herein is correct as of any time after such date or that information will be updated or revised to reflect information that subsequently becomes available or changes occurring after the date hereof.

This presentation contains estimates and other statistical data made by independent parties and by us relating to market shares and other data about our industry. This presentation also contains "forward-looking" statements as that term is defined in the Private Securities Litigation Reform Act of 1995 that are based on our management's beliefs and assumptions and on information currently available to management. These forward-looking statements include, without limitation, expectations regarding the development and potential therapeutic benefits of our product candidates; the expected safety, pharmacokinetic and efficacy profile of our product candidates, including Solnerstotug; the expected timing of clinical data from our Phase 1/2 clinical trial of Solnerstotug; the expansion of the Phase 1 clinical trial to include additional patients with specific tumor types; and our belief that our existing cash and cash equivalents will be sufficient to fund our operations at least into the second quarter of 2026.

When used in this presentation, the words and phrases "designed to," "may," "believes," "intends," "seeks," "anticipates," "plans," "estimates," "expects," "should," "assumes," "continues," "could," "will," "future" and the negative of these or similar terms and phrases are intended to identify forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Risks and uncertainties that may cause actual results to differ materially include uncertainties inherent in the development of therapeutic product candidates, such as preclinical discovery and development; conduct of clinical trials and related regulatory requirements, including the risk of delay or cessation of any clinical trials of Sensei’s product candidates; the risk that prior results, such as signals of safety, activity or durability of effect, observed from preclinical trials and early results from the clinical trial of Solnerstotug, will not be replicated or will not continue in ongoing or future studies or clinical trials involving Sensei’s product candidates, including Solnerstotug; our reliance on third parties over which we may not always have full control; risks regarding the accuracy of our estimates of expenses, capital requirements and needs for additional financing; and other risk and uncertainties that are described in our Quarterly Report on Form 10-Q filed with the SEC on November 14, 2024 and our other Periodic Reports filed with the SEC. Forward-looking statements represent our management's beliefs and assumptions only as of the date of this presentation and include all matters that are not historical facts. Our actual future results may be materially different from what we expect. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in the forward-looking statements, even if new information becomes available in the future.

Certain information contained in this presentation relates to, or is based on, studies, publications, surveys and other data obtained from third-party sources and the Company's own internal estimates and research. While the Company believes these third-party sources to be reliable as of the date of this presentation, it has not independently verified, and makes no representation as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. In addition, all of the market data included in this presentation involves a number of assumptions and limitations, and there can be no guarantee as to the accuracy or reliability of such assumptions. Finally, while we believe our own internal research is reliable, such research has not been verified by any independent source.

sensei™ BIO

Sensei Bio Key Highlights

LEAD PROGRAM

- Solnerstotug (SNS-101), a conditionally active antibody targeting VISTA
- Clinical data demonstrated initial signs of promising clinical activity in multiple tumor types, a well-tolerated safety profile and potential best-in-class pharmacokinetic profile

TMAb PLATFORM

Conditionally active antibodies designed to widen therapeutic window and enable druggability of promising oncology targets

EXPECTED MILESTONES

- Dose expansion data in Q2 2025

FINANCIALS

- Ended Q3 2024: $47M*
- Cash runway into Q2 2026

*Consists of cash, cash equivalents and marketable securities

Leadership Team with History of Oncology Antibody Success

John Celebi, MBA
President and CEO

X4 PHARMACEUTICALS
Tularik
ARQULE

Josiah Craver, CPA
SVP, Finance

KALA BIO
SOLID BIOSCIENCES
pwc

Christopher Gerry, J.D.
SVP, General Counsel

AVROBIO
Cooley

Edward van der Horst, Ph.D.
Chief Scientific Officer

AMGEN
IGENICA BIOTHERAPEUTICS
oncomed

Stephanie Krebs, M.S., MBA
Chief Business Officer

bluebirdbio
SNIPRBIOME
A CRISPR COMPANY
Biogen

Ron Weitzman, M.D.
Chief Medical Officer
(part-time)

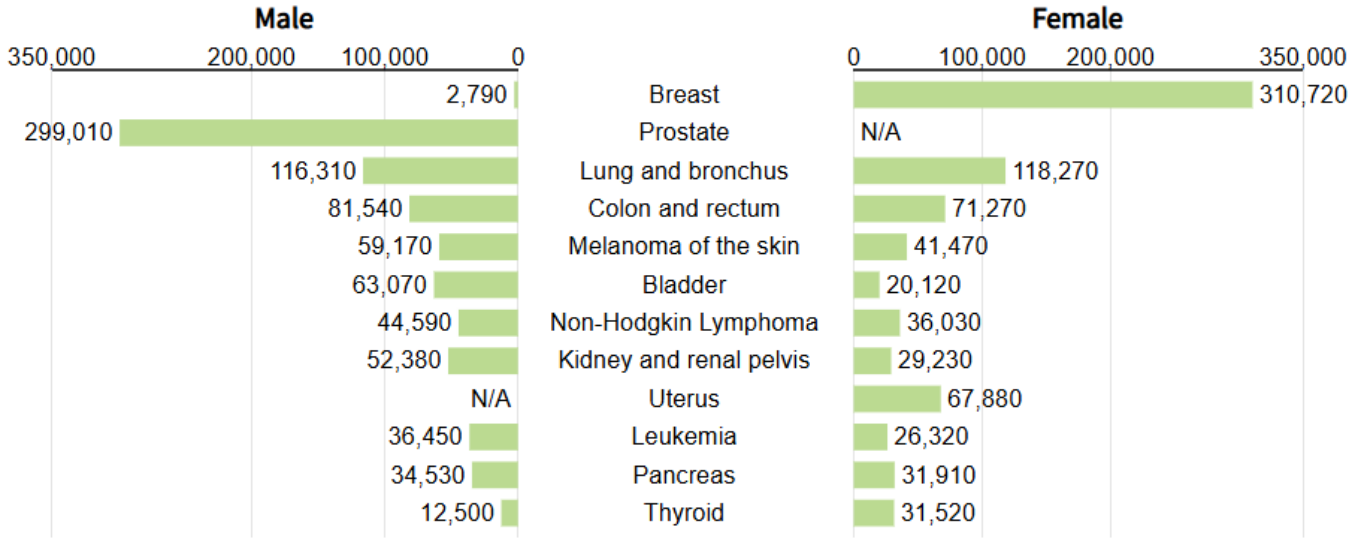
EXELIXIS
APROS THERAPEUTICS

sensei BIO

High Unmet Need Remains in Solid Tumors

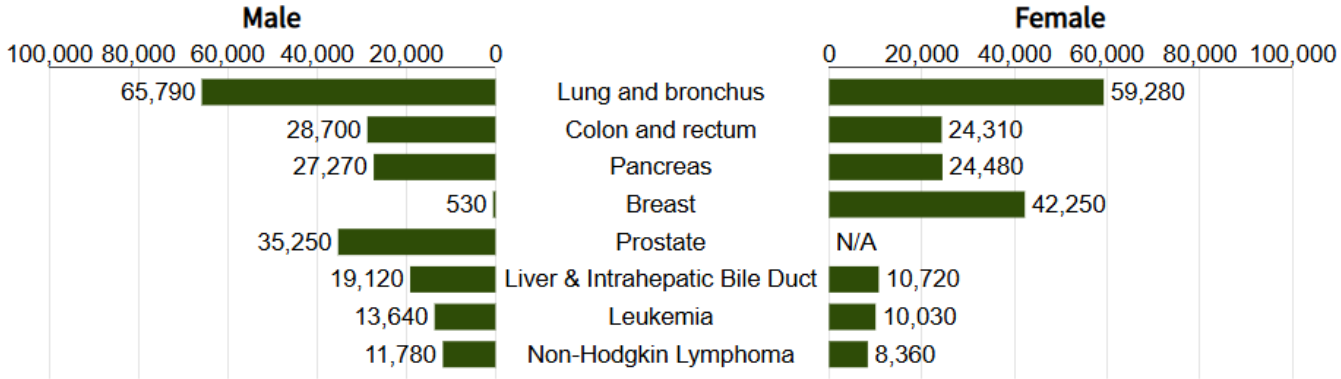
~2.0M+
New Solid Tumor Cases Per Year

2024 Estimates on Solid Tumor Incidence in U.S.



~600K+
Solid Tumor Deaths Per Year

2024 Estimates on Solid Tumor Deaths in U.S



Source: NCI SEER Data 2024

Lack of Tumor Targeting is a Major Obstacle in IO Innovation

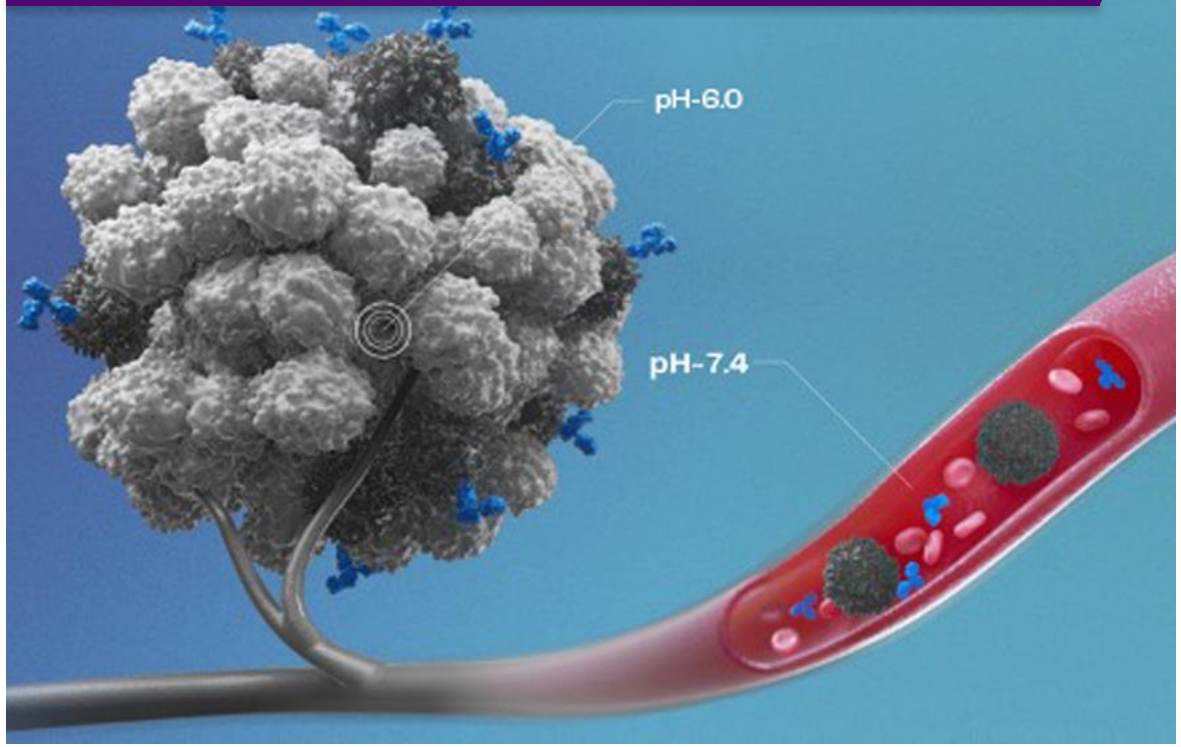
Industry Problem	Sensei's Solution
Conventional antibodies target immune checkpoints that are highly expressed in normal tissues, resulting in: • Dose-limiting toxicities due to on-target/off-tumor action • Pharmacological sink effect requires higher & more frequent dosing • Suboptimal activity due to poor PK & dose-limiting toxicities	**Conditionally active antibodies are selectively targeted to the tumor microenvironment, potentially providing:** • Little or no toxicity due to selective on-target/on-tumor action • Lower & less frequent doses with tumor-specific binding • Powerful activity selectively focused on the tumor microenvironment

One new IO checkpoint inhibitor approved after the CTLA-4 and PD-1/PD-L1 group

sensei BIO

The TMAb Platform: pH-sensitive Antibodies Selectively Bind to Targets in the Low-pH Tumor Microenvironment

The tumor microenvironment of pH ~6 is lower than physiological pH of 7.4

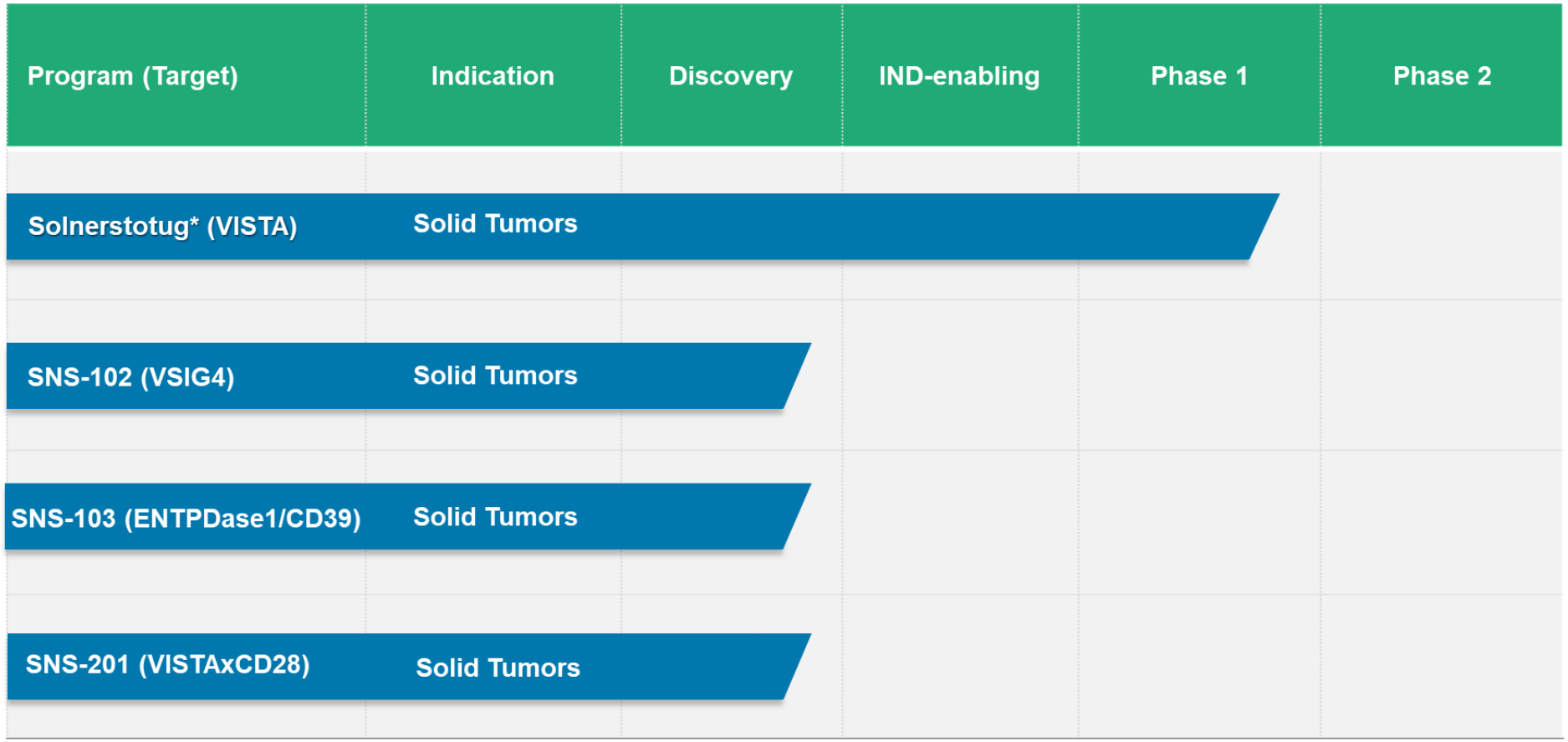


Sensei's technology identifies pH-sensitive antibodies designed to bind only at the tumor

- Exploits the tumor microenvironment using pH-selective properties
- Intended to alleviate undesirable PK/PD properties:
  - Dose-limiting toxicities due to on-target/off-tumor binding
  - Higher and more frequent dosing due to poor pharmacokinetics
- Bolsters specific activities
- Unlocks previously undruggable immune targets

sensei BIO

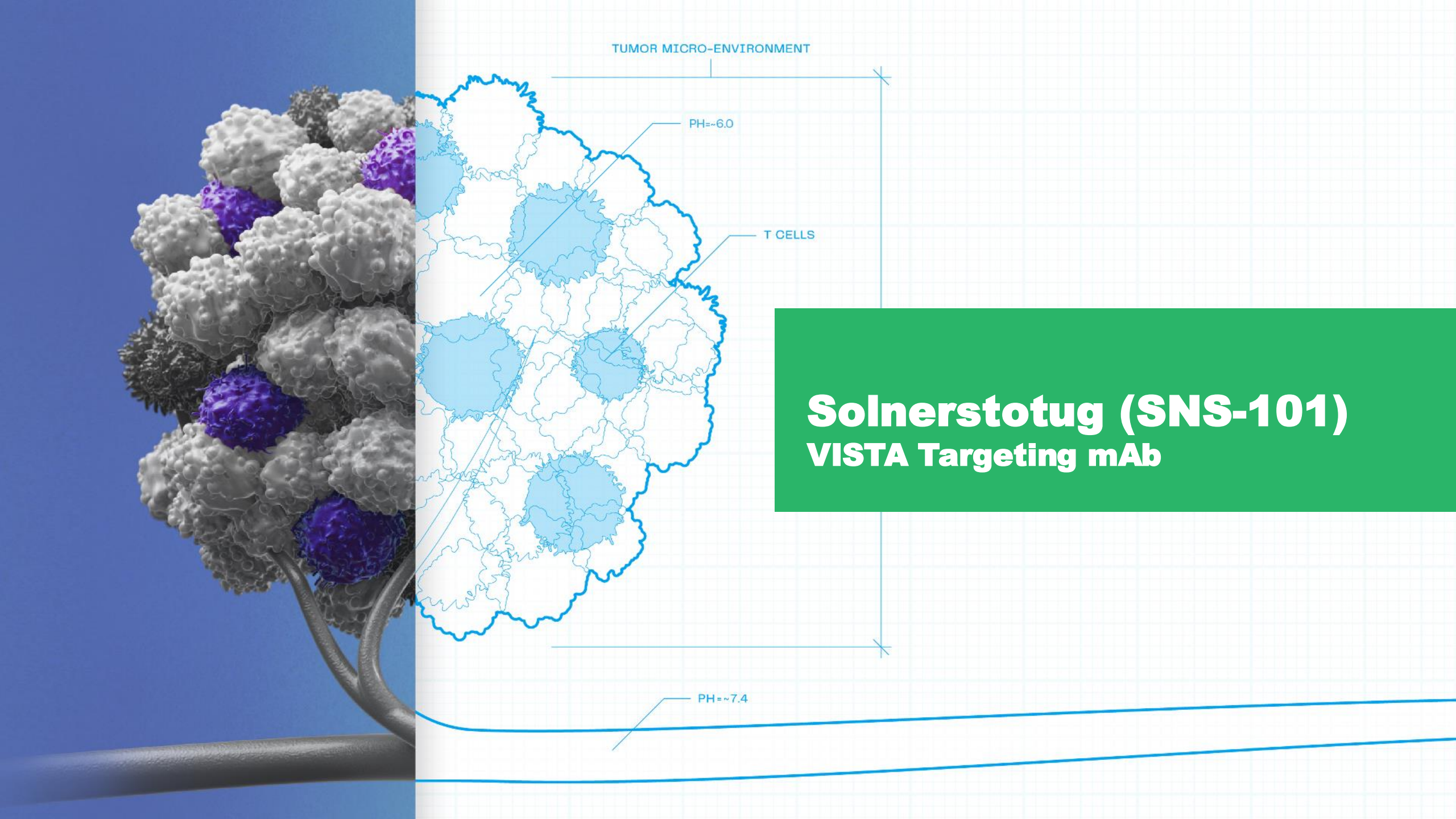
Innovative Pipeline of IO Drugs with Broad Commercial Potential



REGENERON

*Sensei has entered into a clinical supply agreement with Regeneron supporting the planned evaluation of solnerstotug in combination with Regeneron's anti-PD-1 therapy Libtayo® (cemiplimab) in a Phase 1/2 clinical trial in solid tumors.

sensei™ BIO



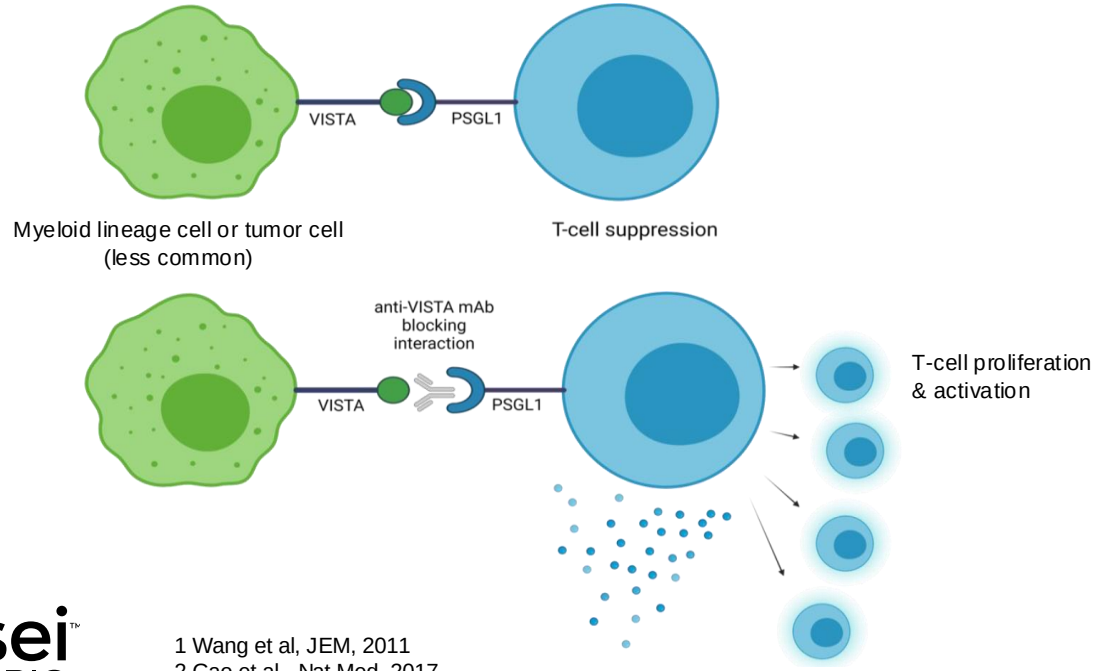
Solnerstotug (SNS-101)

VISTA Targeting mAb

VISTA is a Potent T cell Checkpoint Extensively Expressed on Myeloid Cells

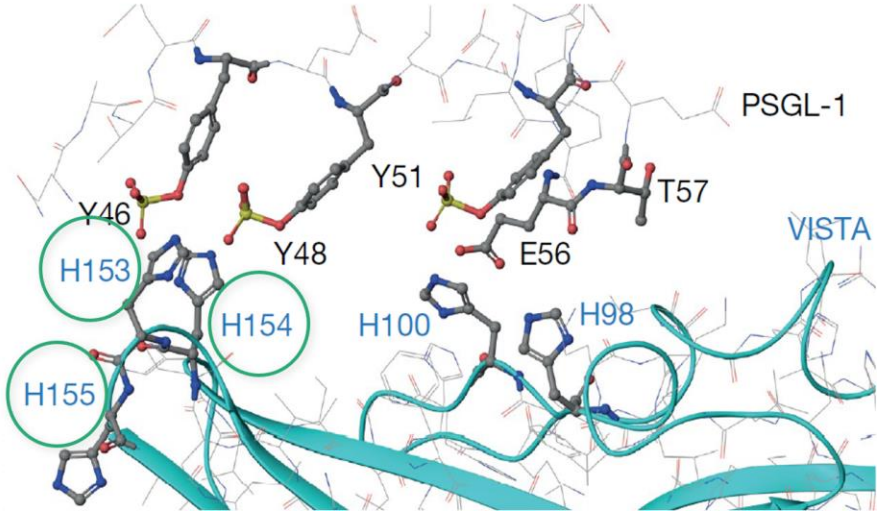
FUNCTION AND EXPRESSION PROFILE

- A B7 family member that inhibits T cell activation in a manner analogous to PD-1/PD-L1[1]
- Immunosuppressive function believed to be mediated by PSGL-1 receptor
- Broad expression on MDSCs and also found on tumors; increased expression upon checkpoint therapy failure[2]



VISTA ACTIVATION IS pH SENSITIVE

- Extensive VISTA expression on off-tumor myeloid-lineage cells demands a conditionally active antibody approach
- VISTA has inherent pH sensitivity: its extracellular domain is uniquely rich in histidines[3]



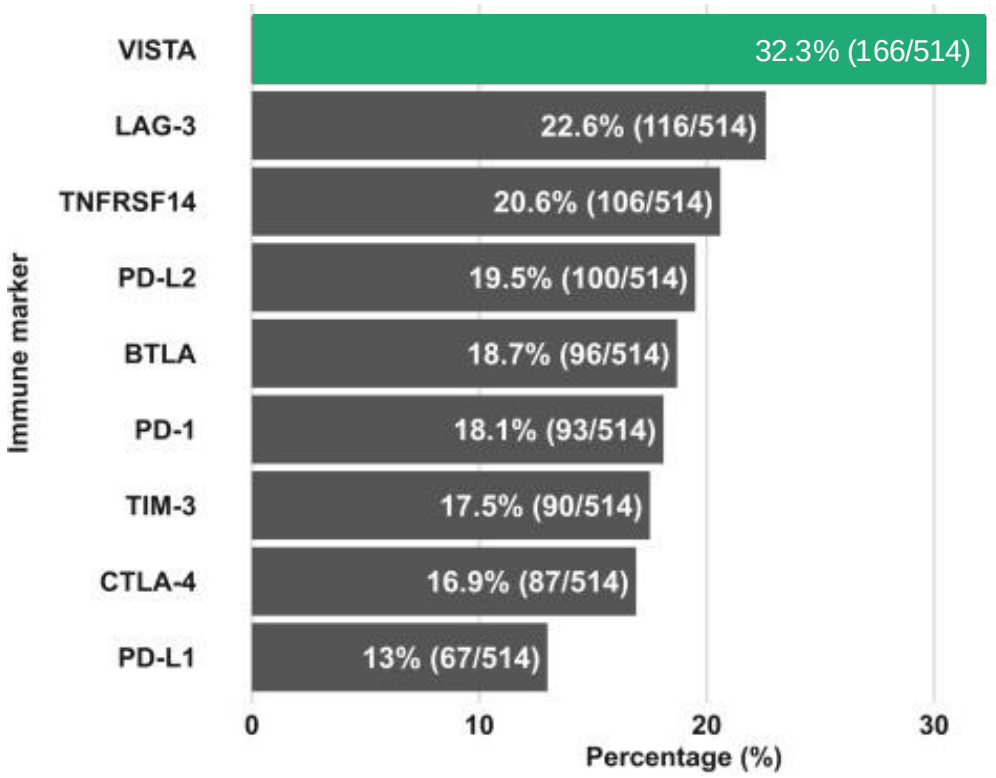
sensei BIO

1 Wang et al, JEM, 2011
2 Gao et al., Nat Med. 2017
3 Johnston et al., Nature 2019

The VISTA Opportunity

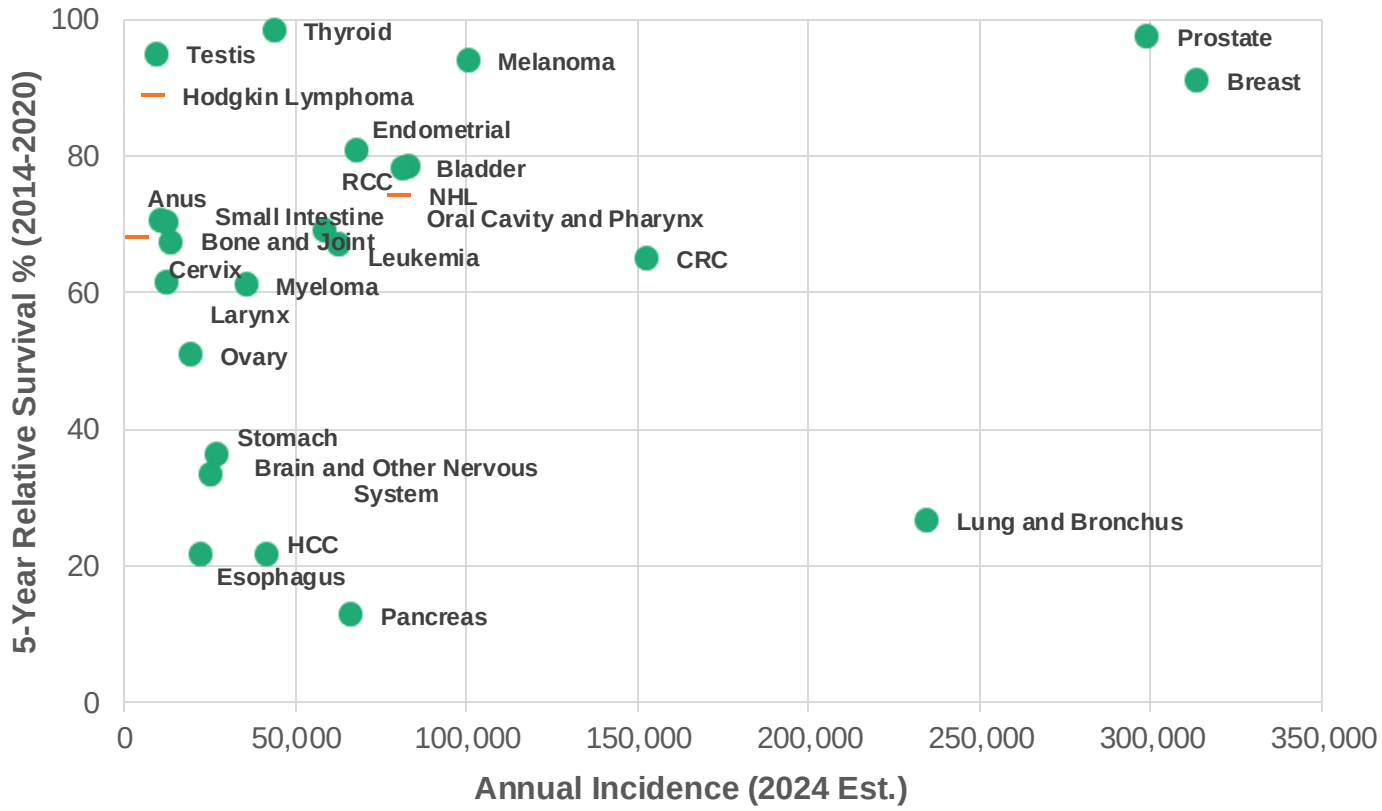
VISTA is Found in Nearly All Solid Tumors with High Unmet Need

Expression Levels Are Relatively High in Cancer Indications



Source: Nishizaki, D. et al. ESMO Open, Volume 9, Issue 4, 102942

Expression is Detected in the Majority of Solid Tumor Indications



Source: Incidence and Survival: NCI SEER Data 2024, Expression: internal data and publications

Tumors with VISTA expression

Tumors with no evidence of VISTA expression

The Challenge of Targeting VISTA

Competitors Halted Development of VISTA Antibodies as a Result of Toxicities and Poor PK

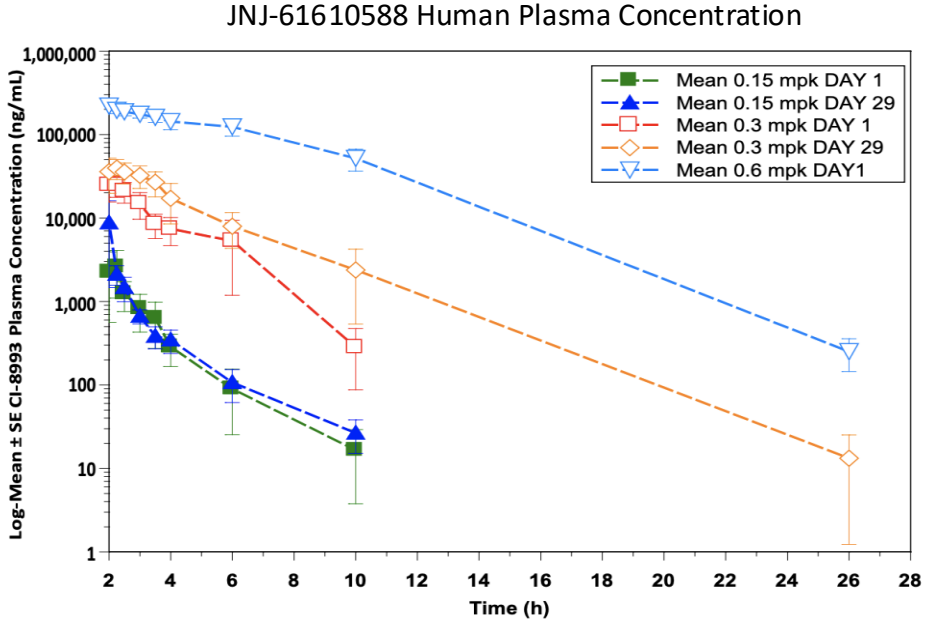
Dose-limiting toxicity

Grade 3 CRS-associated encephalopathy

- JNJ-61610588 (CI-8993) was the first anti-VISTA antibody to be studied in clinical trials in 2016 (NCT02671955) [1]
- Transient Cytokine Release Syndrome (CRS) observed in several patients at **0.15 mg/kg**
- Transient **Grade 3 CRS-associated encephalopathy** observed at **0.3 mg/kg**, after which Janssen halted the study

Challenging PK profile

Non-linear PK, short $t_{1/2}$

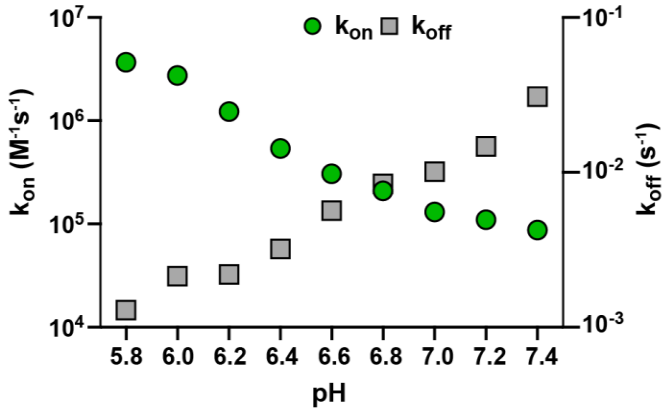


1 Curis, Inc., Corporate Presentation, Feb 2022

Solnerstotug Was Designed to Address the Challenges of VISTA

Tumor Targeting through pH Dependent Binding

Selectivity for active VISTA^{pH6} over VISTA$^{pH7.4}$



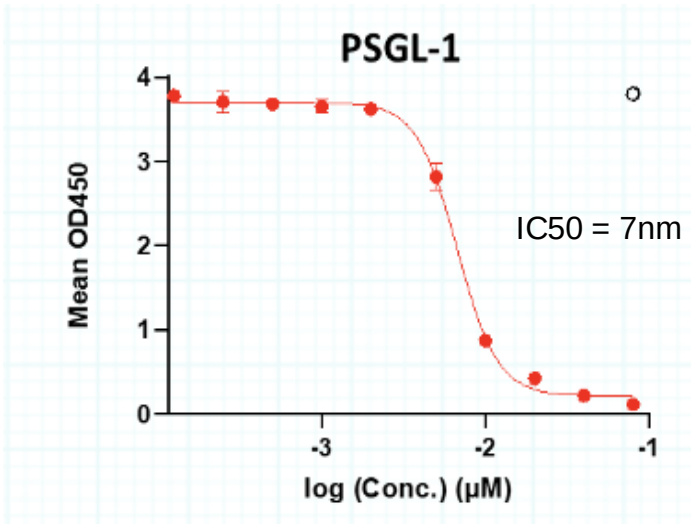
pH 6.0	pH 7.4
0.218 nM	132 nM (~No binding)

Monovalent Affinity (K_D)

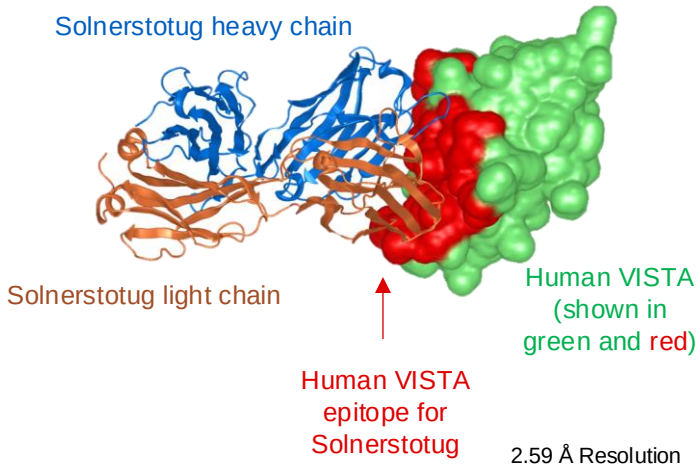
Additional Solnerstotug features

- IgG1 format
- Active Fc

Blocks the key receptor regulating VISTA's immunosuppressive activity



Solnerstotug potently inhibits the VISTA:PSGL-1 interaction and all other potential binding partners at pH 6.0 *in vitro*

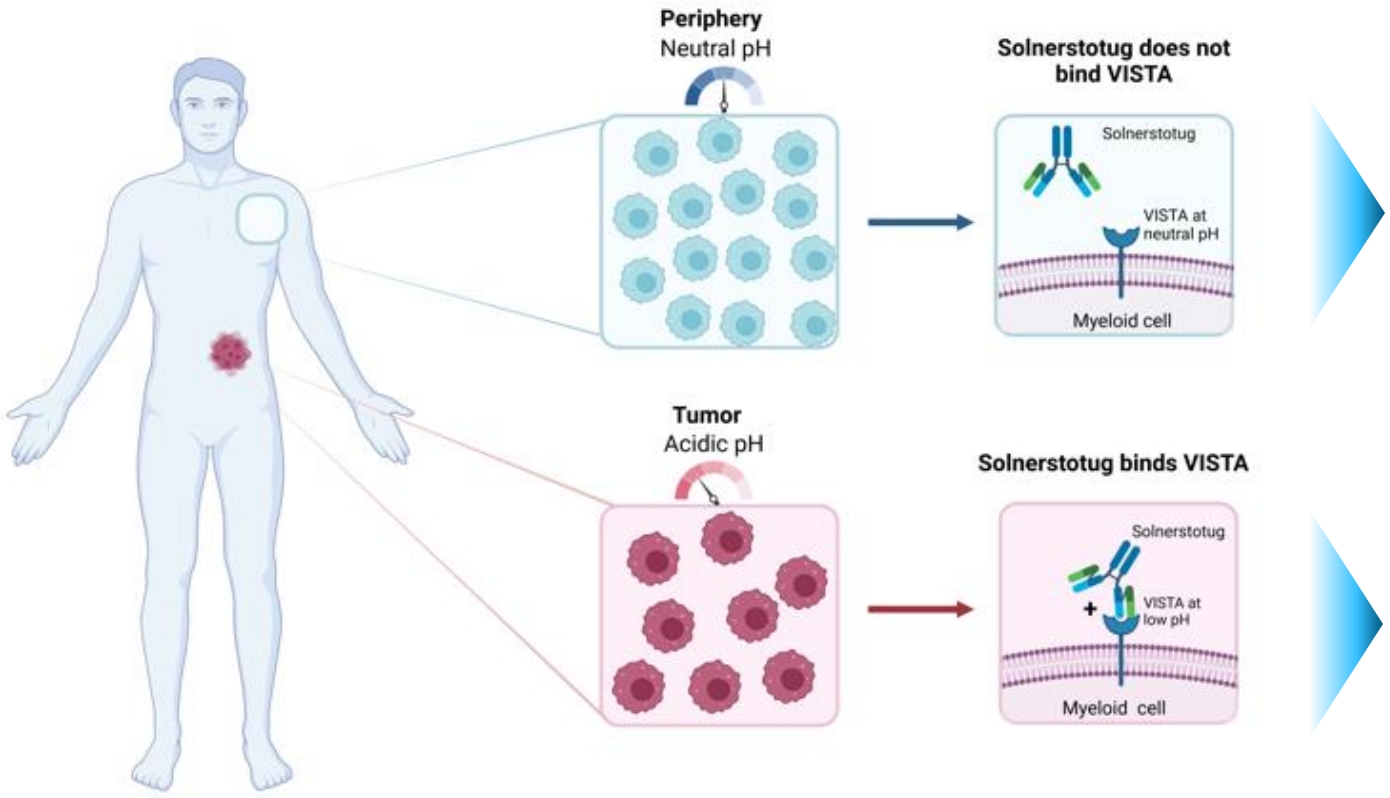


VISTA:Solnerstotug co-crystal structure demonstrates Solnerstotug encompasses VISTA's PSGL-1 epitope

sensei BIO

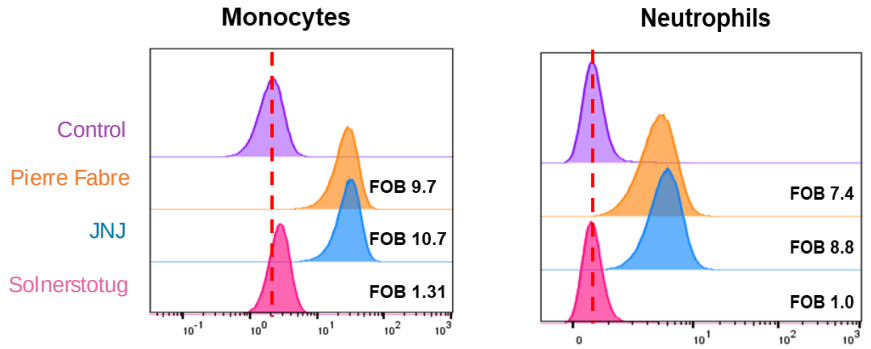
Thisted T. et al. *Nature Communications* 2024

Solnerstotug Binds VISTA Selectively at the Tumor



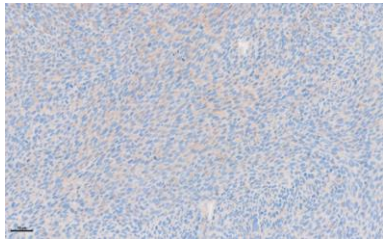
Periphery (Neutral pH) = No Binding

Solnerstotug has no detectable binding in peripheral or normal tissues

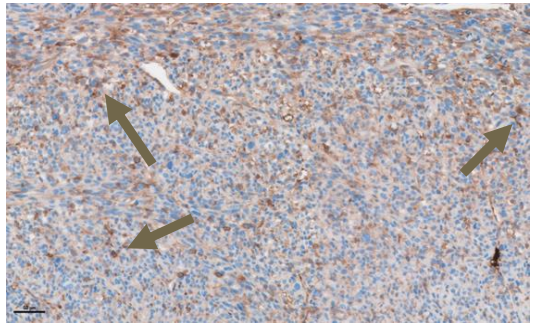


Tumor (Acidic pH) = Binding

Solnerstotug rapidly accumulates in the tumor



Isotype control
6h post-dosing



Solnerstotug
6h post-dosing

Blue = tumor
Brown = Solnerstotug

Solnerstotug is Unique and Differentiated

	Solnerstotug Sensei Bio	**HMBD-002** (Hummingbird)	**PMC-309** (PharmAbcine)	**CI-8993; JNJ-61610588** (J&J/Curis)	**K01401-020; WO180** (Pierre Fabre)	**KVA12123** (Kineta)	**VISTA.18** (BMS)
Inhibit PSGL-1 Binding	✓	✗	✓	✓	✓	✓	✓
pH Sensitive Binding	✓	✗	✗	✗	✗	✗	✓
Fc Active	✓ IgG1	✗ IgG4	✓ IgG1	✓ IgG1	✓ IgG1	✗ $IgG1^{mut}$	✗ IgG4
Most Advanced Stage	Phase 1	Phase 1	Phase 1	Phase 1	Phase 1	Phase 1	Preclinical

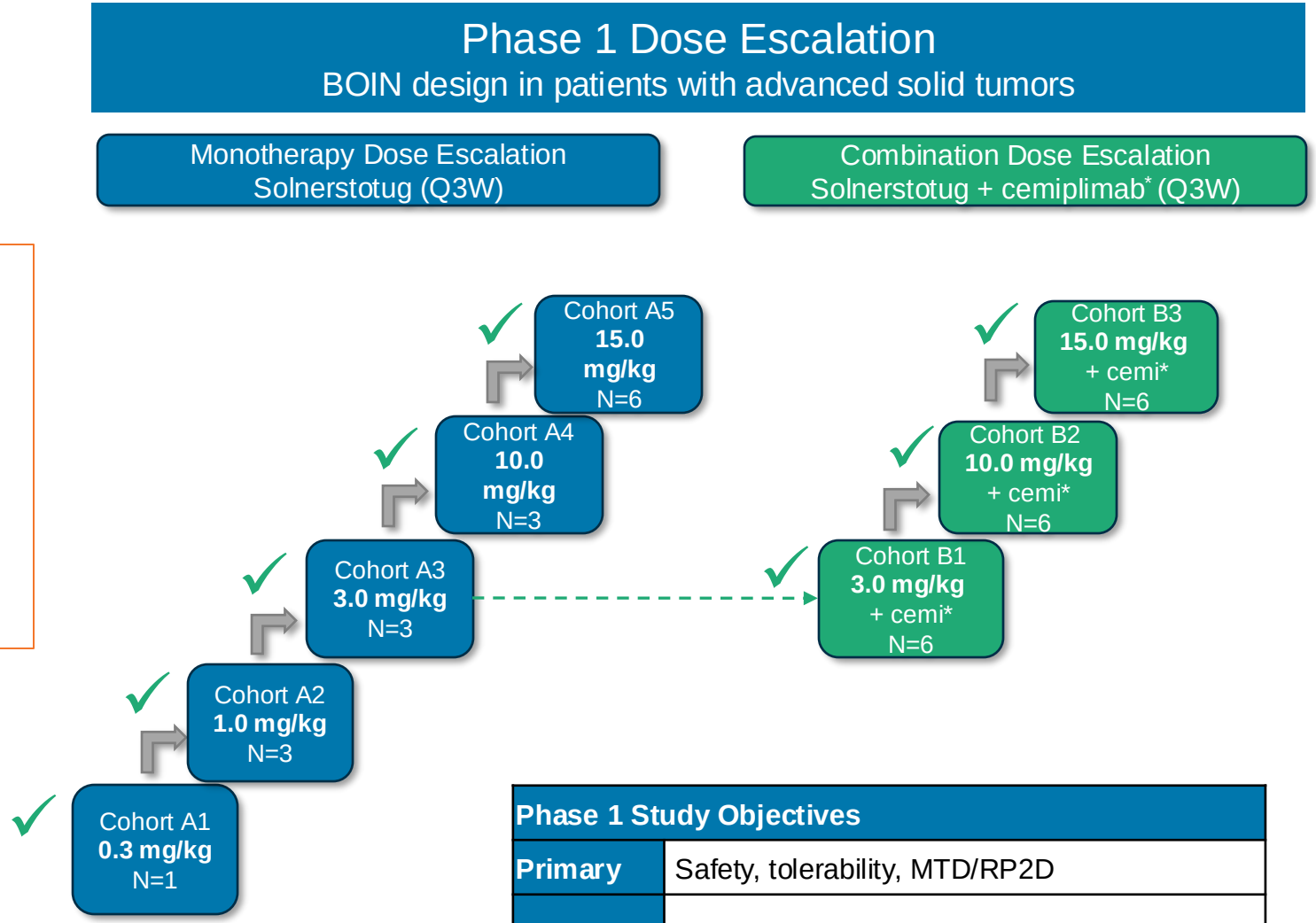
sensei BIO

Johnston et al., Nature 2019; Kineta website; Snyder et al, AACR Annual Meeting 2016; Pierre Fabre website; Hummingbird website; Thakkar et al, J of Immunother Cancer, 2022; PharmAbcine website

Solnerstotug Phase 1 Dose Escalation Study

Designed to rapidly confirm conditionally active MOA through:

1. **Lack of severe CRS**
2. **Acceptable PK**
3. **Dosing at pharmacologically relevant levels**



Phase 1 Study Objectives	
Primary	Safety, tolerability, MTD/RP2D
Secondary	PK, immunogenicity & anti-tumor activity

RP2D = Recommended Phase 2 Dose
MTD = Maximum Tolerated Dose
* cemi = Libtayo (cemiplimab) 350 mg

✓ = cleared DLT assessment period

Patient Demographics and Disease Characteristics
Solnerstotug - Phase 1 Dose Escalation

	Solnerstotug n=16 (%)	Solnerstotug + Libtayo n=18 (%)
Gender, n (%)		
Male	12 (75)	11 (61)
Female	4 (25)	7 (39)
Age, years		
Median	61.5	62
Min, Max	35, 79	33, 81
Race, n (%)		
Asian	1 (6)	1 (6)
Black or African American	0	2 (11)
Not Reported	1 (6)	1 (6)
White	14 (88)	14 (77)
Ethnicity, n (%)		
Not Hispanic or Latino	14 (88)	14 (77)
Hispanic or Latino	1 (6)	3 (17)
Not reported	1 (6)	1 (6)

	Solnerstotug n=16 (%)	Solnerstotug + Libtayo n=18 (%)
Baseline ECOG, n (%)		
0	6 (37)	4 (22)
1	10 (63)	14 (78)
Prior lines metastatic therapy		
Median	2	2.5
Min, Max	0,7	1,7

Data as of 30April2024

*Sarcoma: Leiomyosarcoma, Ewing Sarcoma, PEComa, Hemangiopericytoma (mono) and Leiomyosarcoma and Desmoplastic small round cell (combo)
**Other Tumor Types: Small cell lung carcinoma, Gallbladder, Adenocystic carcinoma maxillary sinus, and mediastinal carcinoma (mono) and Ovarian, Duodenal, granulosa cell tumor (germ cell)

Solnerstotug Was Well Tolerated
Phase 1 Dose Escalation

Summary of Adverse Events

	Solnerstotug n=16 (%)	Solnerstotug + cemi Combo n=18 (%)
At least 1 TEAE	13 (81)	14 (78)
At least 1 SAE	1 (6)	8 (44)
≥Grade 3 TEAE	2 (13)	8 (44)
At least 1 TEAE leading to discontinuation	1* (6)	1 (5)
DLTs	0	0
AESI	1 (6)	5 (28)
Immune-mediated^	0	4 (22)
CRS#	1 (6)	1 (6)

- No dose-limiting toxicities observed
- Majority of AEs were Grade 1 or 2
- Two patients experienced Grade 1 CRS, suggesting that CRS is a class effect of VISTA-targeting antibodies

Most Frequently Occurring AEs (≥ 2 Overall) Regardless of Causality

Preferred Term	Solnerstotug Mono n=16	Solnerstotug + cemi Combo n=18	Total n=34
Fatigue	0	5	**5**
Cough	3	1	**4**
Pleural effusion	1	2	**3**
Pyrexia	2	1	**3**
Rash maculopapular	1	2	**3**
Alanine aminotransferase increased	0	2	**2**
Anaemia	0	2	**2**
Aspartate aminotransferase increased	0	2	**2**
Blood bilirubin increased	0	2	**2**
Chills	1	1	**2**
COVID-19	1	1	**2**
Cytokine release syndrome	1	1	**2**
Dermatitis acneiform	2	0	**2**
Hypokalemia	1	1	**2**
Hypomagnesemia	1	1	**2**
Infusion related reaction	0	2	**2**
Lymphocyte count decreased	0	2	**2**
Nausea	0	2	**2**
Pruritis	0	2	**2**

Data as of 30April2024

**One patient experienced an SAE, Grade 5 bronchial obstruction, that resulted in death; not related to Solnerstotug, but to disease progression*
#Two patients experienced Grade 1 CRS
^One patient experienced Grade 2 rash maculo-papular at 3 mg/kg + cemi
^One patient experienced Grade 3 Diabetic Ketoacidosis at 3 mg/kg + cemi
^Two patients experienced elevated liver enzymes both at 10 mg/kg + cemi (one pt with Grade 3 ALT and Grade 1 AST and one pt with Grade 3 AST and ALT which resulted in discontinuation from treatment)

sensei BIO

Solnerstotug Has Only Been Associated with Mild IRR/CRS-like Adverse Events (Unlike First Generation VISTA Antibodies)

Subject Number	Dose Level	Adverse Event Preferred Term (Event description)	Severity (Grade)	Time of Onset Relative to Start of Infusion
01-010	Solnerstotug 15.0 mg/kg	Cytokine Release Syndrome (Chills and fever)	Grade 1	C1D1 ~4 hours post Solnerstotug Infusion
01-013	Solnerstotug 15.0 mg/kg + cemi	Cytokine Release Syndrome (Chills, no fever)	Grade 1	C1D1 ~5 hours post Solnerstotug Infusion
01-009	Solnerstotug 3.0 mg/kg + cemi	Infusion-related reaction (Chills and flushing)	Grade 2	C2D1 At the end of the Solnerstotug Infusion
04-015	Solnerstotug 15.0 mg/kg + cemi	Infusion-related reaction (chest tightness, muscle aches, hypotension) *Patient also reported grade 1 itching and flushing about 1 hour after C1D1*	Grade 2	C2D1 ~6 minutes after start of Solnerstotug infusion

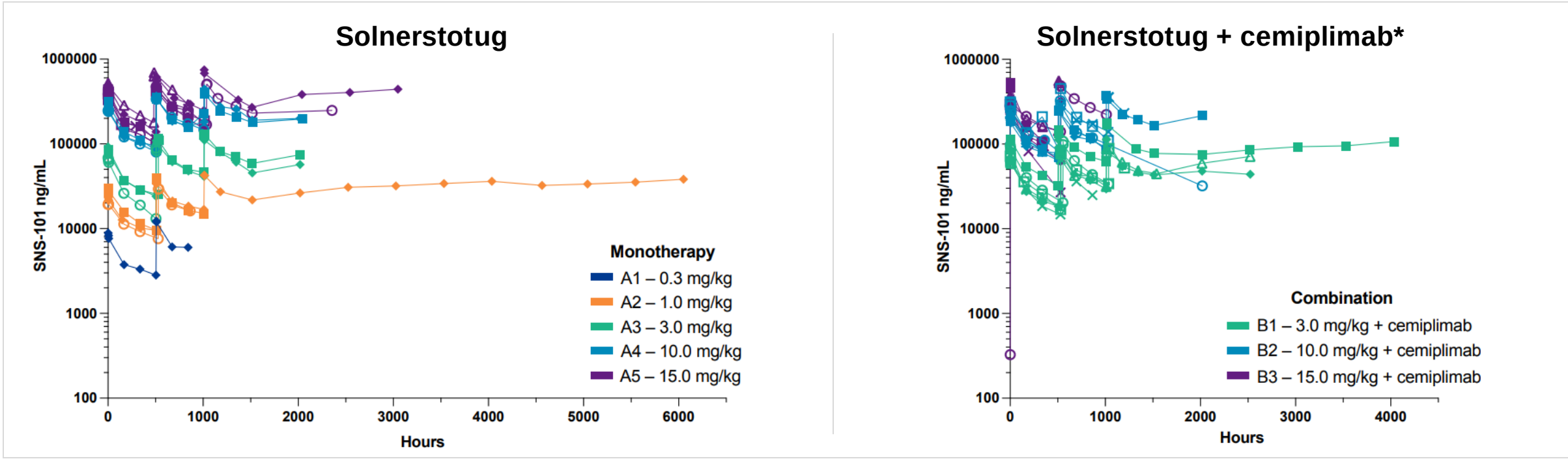
- All CRS events have been low grade and manageable
- Demonstrates that solnerstotug has the potential to overcome a key hurdle that impeded development of first-generation VISTA mAbs

sensei BIO

Data as of 30April2024

Solnerstotug Has a Long Half-Life
Phase 1 Dose Escalation

- Supports once every three week (or greater) dosing in humans
- No significant immunogenicity detected in analysis of ADAs



Data as of 30April2024
* Libtayo (cemiplimab) administered on Cycle 1 Day 2; co-administration thereafter

sensei BIO

Phase 1 Dose Escalation Data Affirms Solnerstotug's MOA

Solnerstotug is a conditionally active VISTA targeting mAb that has demonstrated promising early clinical data consistent with its mechanism of action, including:

- First VISTA-targeting mAb without dose-limiting CRS at pharmacologically relevant dose levels
- Initial signals of anti-tumor activity

Well tolerated

Potentially best-in-class PK

Achieved pharmacologically relevant dose levels

Solnerstotug is well positioned to be the first VISTA-targeted mAb to test the VISTA IO hypothesis

sensei BIO

Majority of Patients had Tumor Type Typically Unresponsive to PD-1 Monotherapy

Solnerstotug Phase 1 Dose Escalation

	Solnerstotug Mono n=16 (%)	Solnerstotug Combo n=18 (%)
Prior lines metastatic therapy		
Median	2	2.5
Min, Max	0,7	1,7
Prior PD-1/PDL-1 YES%		
% Yes	**8 (50)**	**4 (22)**
Cancer Type, n (%)		
Responsive to PD-1 monotherapy (e.g. "hot" tumors)	**3 (19)**	**2 (11)**
Head and Neck	2	0
Kidney	1	2
Typically Unresponsive to PD-1 monotherapy (e.g. "cold" tumors)	**13 (81)**	**16 (89)**
MSS Colon	4	7
MSS Endometrial	0	1
Esophageal	1	0
Pancreatic	0	3
*Sarcoma**	4	2
*Other***	4	3

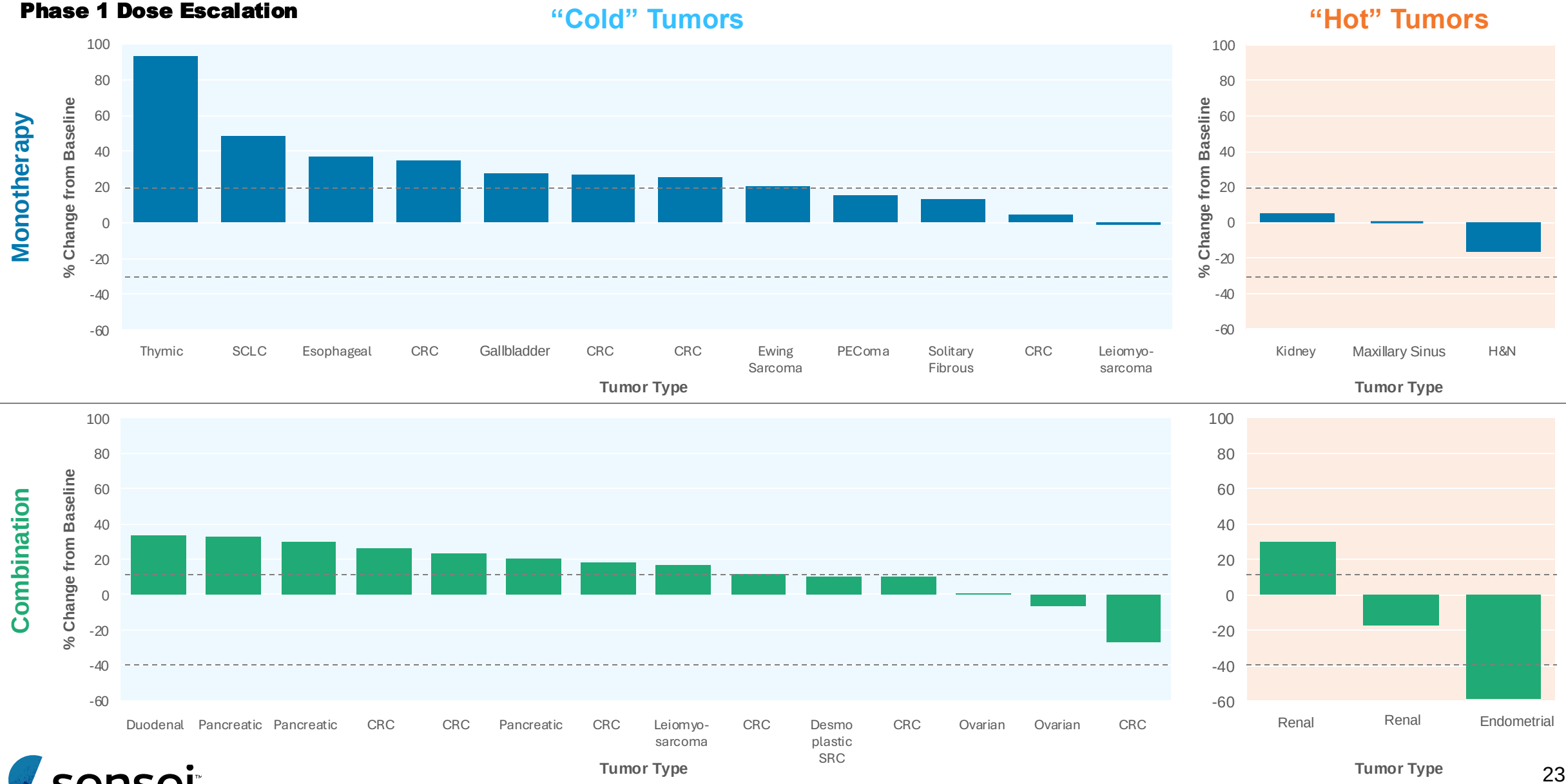
Data as of 30April2024

85% of enrolled patients had tumors typically unresponsive to PD-1/PD-L1 therapy

*Sarcoma: Leiomyosarcoma, Ewing Sarcoma, PEComa, Hemangiopericytoma (mono) and Leiomyosarcoma and Desmoplastic small round cell (combo)
**Other Tumor Types: Small cell lung carcinoma, Gallbladder, Adenocystic carcinoma maxillary sinus, and mediastinal carcinoma (mono) and Ovarian, Duodenal, granulosa cell tumor (germ cell)

Dose Escalation Data Supports Advancement into Dose Expansion Predominantly in Patients with "Hot" Tumors

Phase 1 Dose Escalation



Solnerstotug Phase 1/2 Study

Phase 1 Dose Escalation
BOIN design in patients with advanced solid tumors

Monotherapy Dose Escalation
Solnerstotug (Q3W)

Combination Dose Escalation
Solnerstotug + cemiplimab* (Q3W)

- Cohort A1 **0.3 mg/kg** N=1 ✓
- Cohort A2 **1.0 mg/kg** N=3 ✓
- Cohort A3 **3.0 mg/kg** N=3 ✓
- Cohort A4 **10.0 mg/kg** N=3 ✓
- Cohort A5 **15.0 mg/kg** N=6 ✓
- Cohort B1 **3.0 mg/kg** + cemi* N=6 ✓
- Cohort B2 **10.0 mg/kg** + cemi* N=6 ✓
- Cohort B3 **15.0 mg/kg** + cemi* N=6 ✓

✓ = cleared DLT assessment period

Phase 1 Dose Expansion
~ 60 patients

- Monotherapy 15 mg/kg → **CRC**
- Combination 3 mg/kg and 15 mg/kg + cemi → **Basket (CRC, NSCLC, H&N, Melanoma)**

Additional tumor types and doses may be considered for both the monotherapy & combination dose expansion

Phase 2

Solnerstotug (RP2D) +/- cemi (Q3W)

Indications TBD

Phase 1 Study Objectives	
Primary	Safety, tolerability, MTD/RP2D
Secondary	PK, immunogenicity & anti-tumor activity

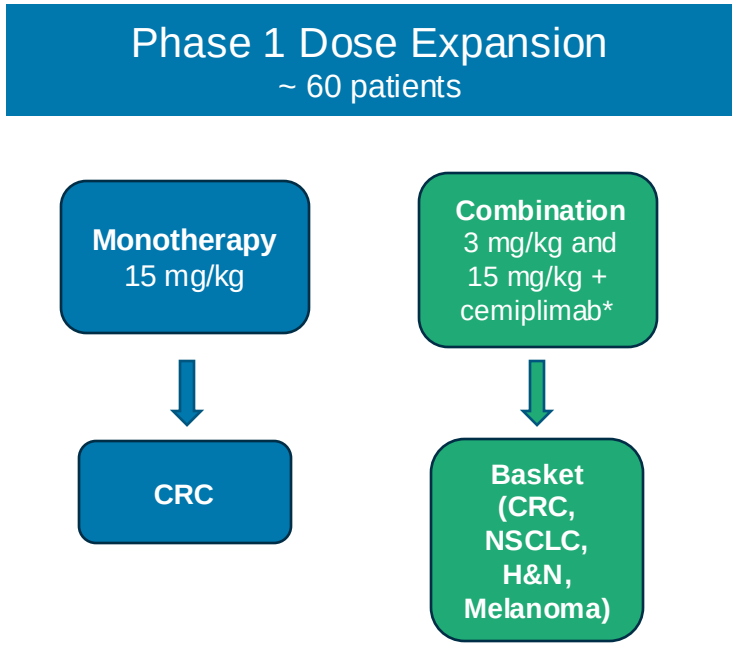
Phase 2 Study Objectives	
Primary	Anti-tumor activity
Secondary	Safety, tolerability, PK & immunogenicity

sensei BIO

* cemi = Libtayo (cemiplimab) 350 mg
Patient enrollment is ongoing for the monotherapy & combination expansion cohorts

RP2D = Recommended Phase 2 Dose
MTD = Maximum Tolerated Dose
CRC = colorectal cancer
NSCLC = non small cell lung cancer
H&N = head and neck cancer

Dose Expansion Cohort Designed to Explore Efficacy in "Hot" Tumor Population



Phase 1 Study Objectives	
Primary	Safety, tolerability, MTD/RP2D
Secondary	PK, immunogenicity & anti-tumor activity

Dose expansion cohort is focused on the activity profile of solnerstotug & optimizing the dose and patient population for Phase 2

- 45 out of ~60 patients enrolled in dose expansion cohorts^
- Anticipate full enrollment by end of Q1 2025
- Exploring two dose levels (3 and 15mg/kg) in the combination cohort to further optimize study design for Phase 2
- Expansion tumor types focused on a basket of “hot” tumors and one “cold” tumor, to rebalance between cold/hot given ~85% of patients in dose escalation had “cold” tumor types
- Additional tumor types and doses may be considered
  - The majority of patients with “hot” tumors will have received and progressed on a prior anti-PD-1 therapy or are PD-L1 negative

Data from dose expansion expected in Q2 2025

sensei BIO

^ as of 1/1/2025

* Libtayo (cemiplimab) 350 mg
"Hot" tumors: Responsive to PD-1 monotherapy
"Cold" tumors: Unresponsive to PD-1 monotherapy

RP2D = Recommended Phase 2 Dose
MTD = Maximum Tolerated Dose
CRC = colorectal cancer
NSCLC = non small cell lung cancer
H&N = head and neck cancer

Completed and Anticipated Solnerstotug Clinical Milestones

First patient dosed with Solnerstotug
May 2023

First patient dosed in combination with cemi
Sept 2023

Initial monotherapy dose escalation PK & safety data
Nov 2023

Initial combination dose escalation PK & safety data
Feb 2024

Topline Phase 1 monotherapy & combination dose escalation data
May 2024

Phase 1 dose expansion data
Q2 2025

sensei BIO

Sensei Bio Key Highlights

LEAD PROGRAM

- Solnerstotug, a conditionally active antibody targeting VISTA
- Clinical data demonstrated initial signs of promising clinical activity in multiple tumor types, a well-tolerated safety profile and potential best-in-class pharmacokinetic profile

TMAb PLATFORM

Conditionally active antibodies designed to widen therapeutic window and enable druggability of promising oncology targets

EXPECTED MILESTONES

- Dose expansion data in Q2 2025

FINANCIALS

- Ended Q3 2024: $47M*
- Cash runway into Q2 2026

*Consists of cash, cash equivalents and marketable securities

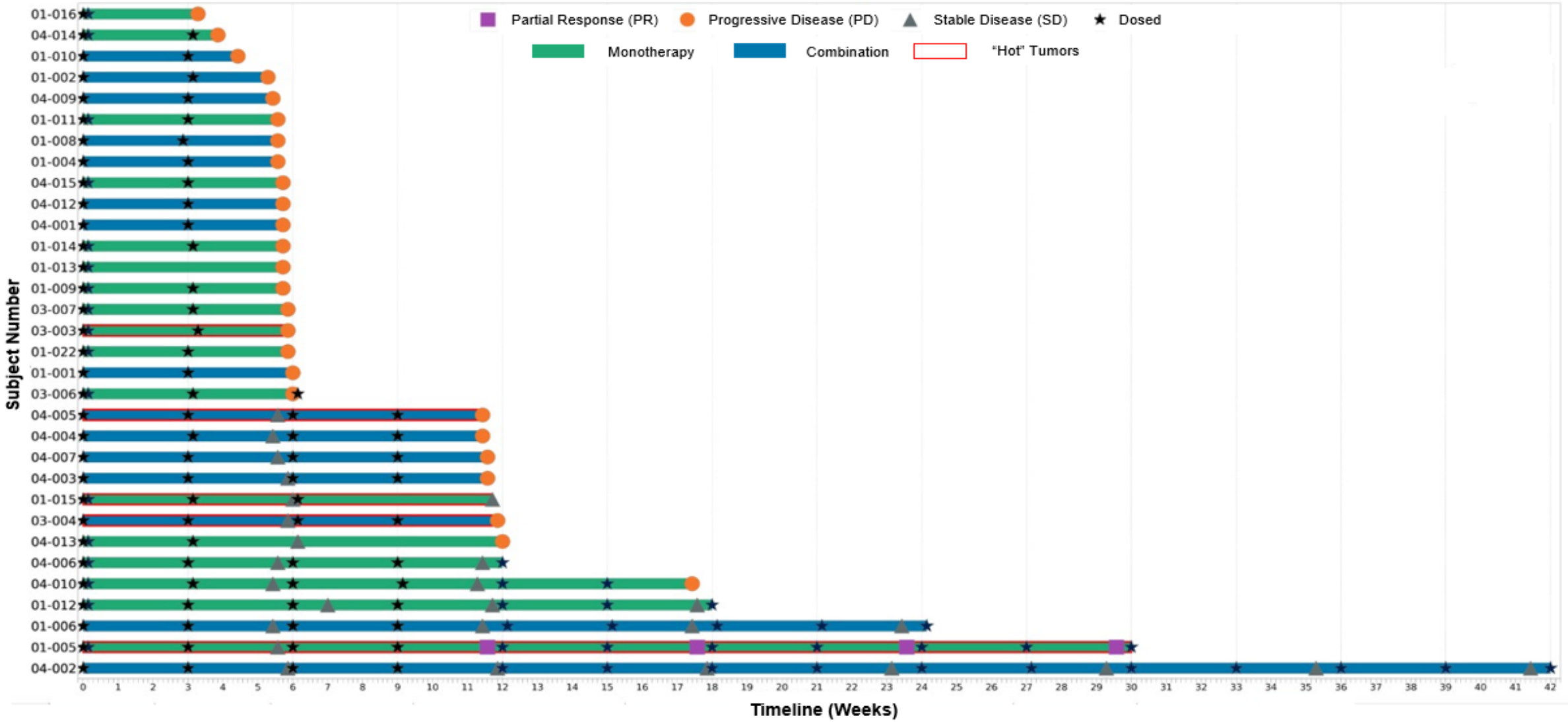
sensei™ BIO

Massachusetts
22 Boston Wharf Rd
7th floor
Boston, MA 02210

Maryland
1405 Research Blvd
Suite 125, Rockville
MD 20850

senseibio.com

Solnerstotug Duration of Treatment



sensei BIO

Data as of 30April2024

Two Examples of Patients with MSS Solid Tumors and Objective Tumor Regression

I/O-naïve MSS Endometrial Cancer with PR
3.0 mg/kg Solnerstotug + cemiplimab (Patient 01-005)

68 yr old female with endometrial carcinoma, diagnosed Dec 2020, ECOG 0

- ER/PR positive, HER negative; PD-1/PD-L1: Not tested

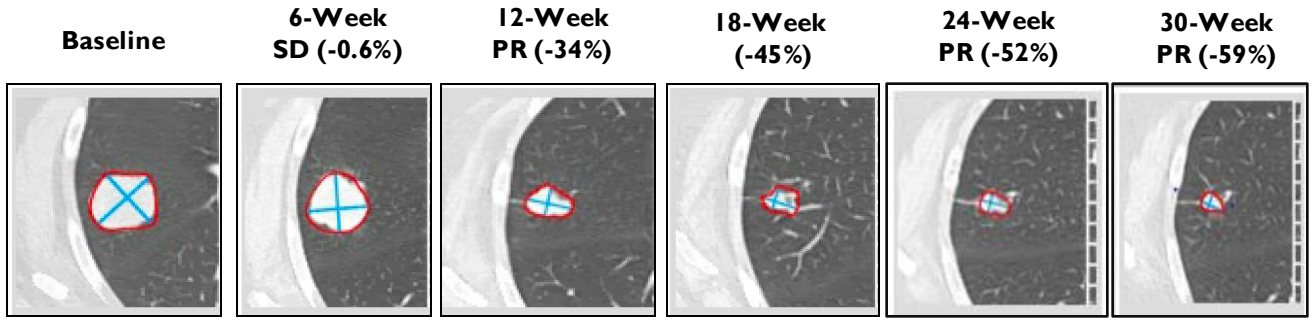
Prior Treatment/Surgery

- Total laparoscopic hysterectomy with bilateral salpingo-oophorectomy, and additional sentinel lymph node dissection, Dec 2020
- Paclitaxel/Carboplatin (adjuvant setting), Feb 2021 to Aug 2021
- Anastrozole (metastatic setting), Aug 2023 to Sep 2023

Adverse Events

- Grade 3 diabetic ketoacidosis 4 days after Cycle 3 infusions, related to Solnerstotug and Libtayo, AESI (immune-mediated) and SAE (hospitalization)
  - Patient recovered and maintained on Insulin and continued study therapy

Tumor Assessments in Solitary Target Lesion



I/O-naïve MSS Colon Cancer
3.0 mg/kg Solnerstotug + cemiplimab (Patient 04-010)

62 yr old male with colon cancer; diagnosed Jan 2017, ECOG 1

- PD-1/PD-L1: Negative

Prior Treatment/Surgery

- Received 7 prior lines of therapy in the metastatic setting with the last 3 therapies investigational

Adverse Events

- Grade 2 dry skin, related to Solnerstotug, not related to Libtayo
- Grade 2 rash maculo-popular, related to Solnerstotug and Libtayo, AESI (immune-mediated), resolved after treatment with prednisone
- Grade 2 pruritis, related to Solnerstotug and Libtayo

Tumor Assessments

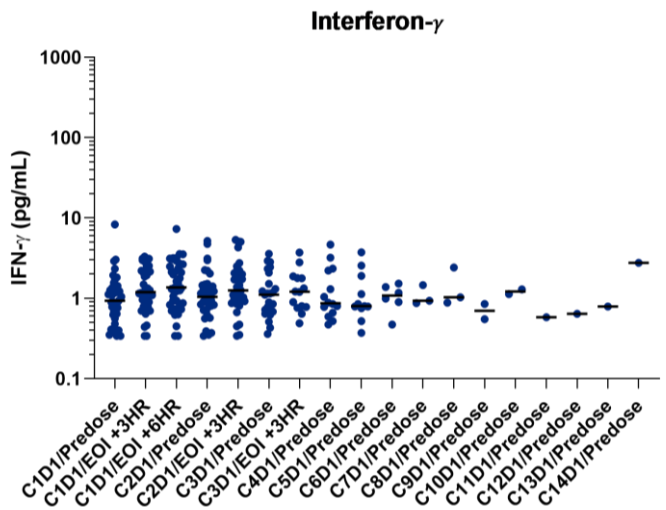
- 6-Week Scans: Stable Disease (19% decrease)
- 12-Week Scans: Stable Disease (27% decrease)
- 18-Week Scans: Progressive Disease (23% increase from nadir)

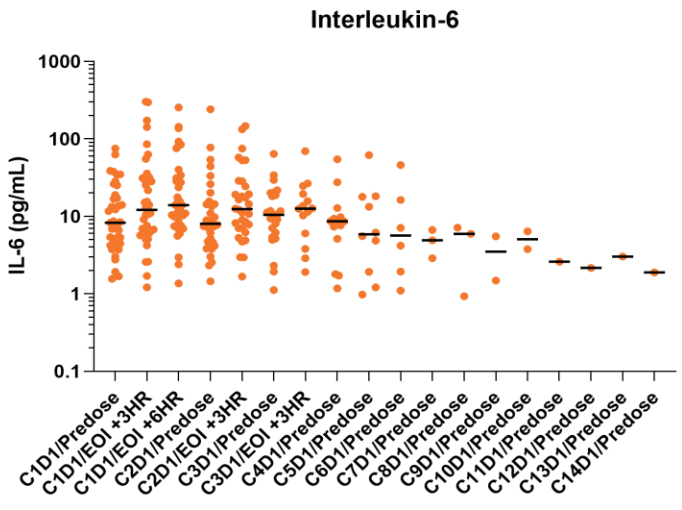
Microsatellite stable (MSS) colon and endometrial tumors are typically unresponsive to PD-1/PD-L1 single agent therapy

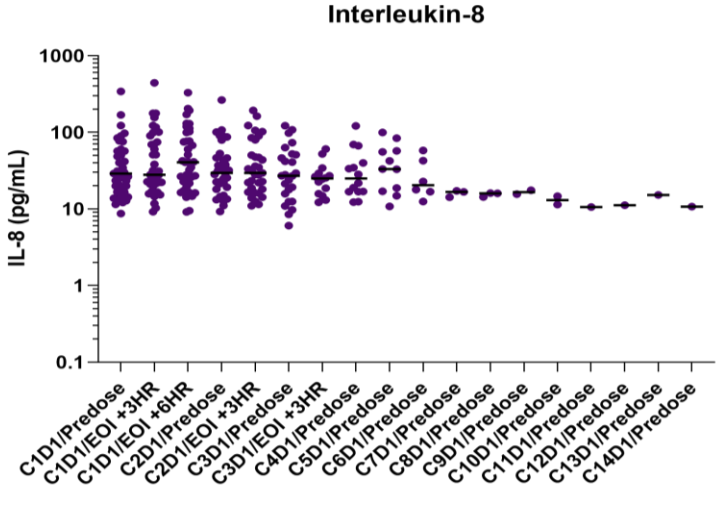
sensei BIO

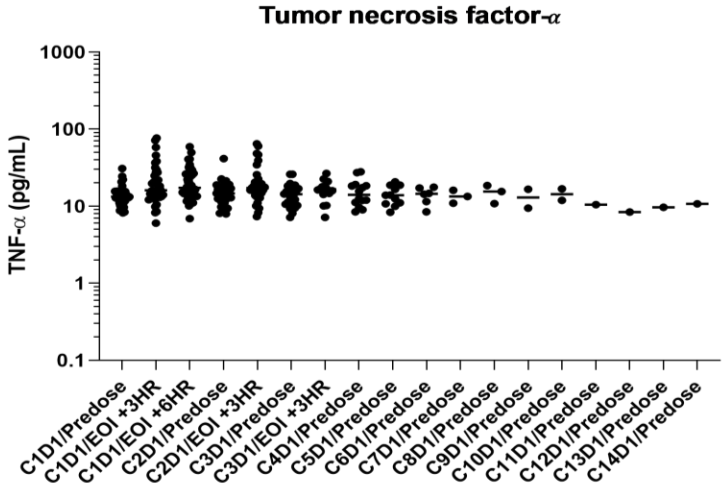
Data as of 30April2024

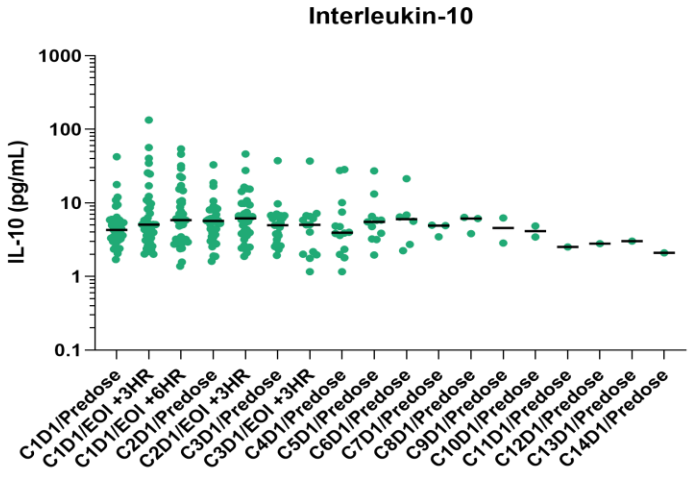
No Significant Changes in Key Inflammatory Cytokines

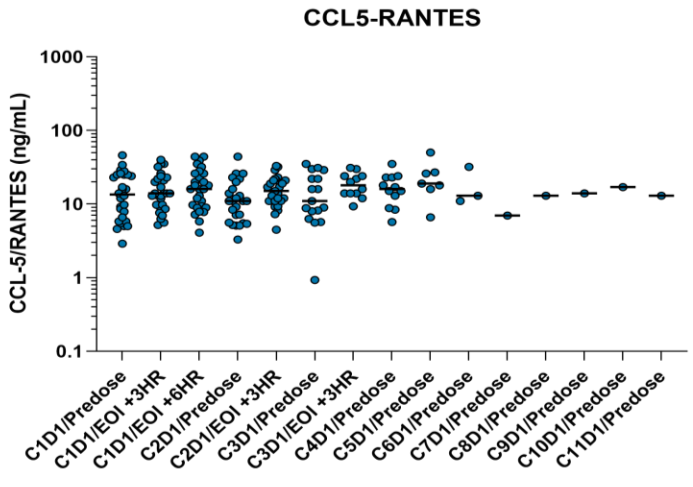








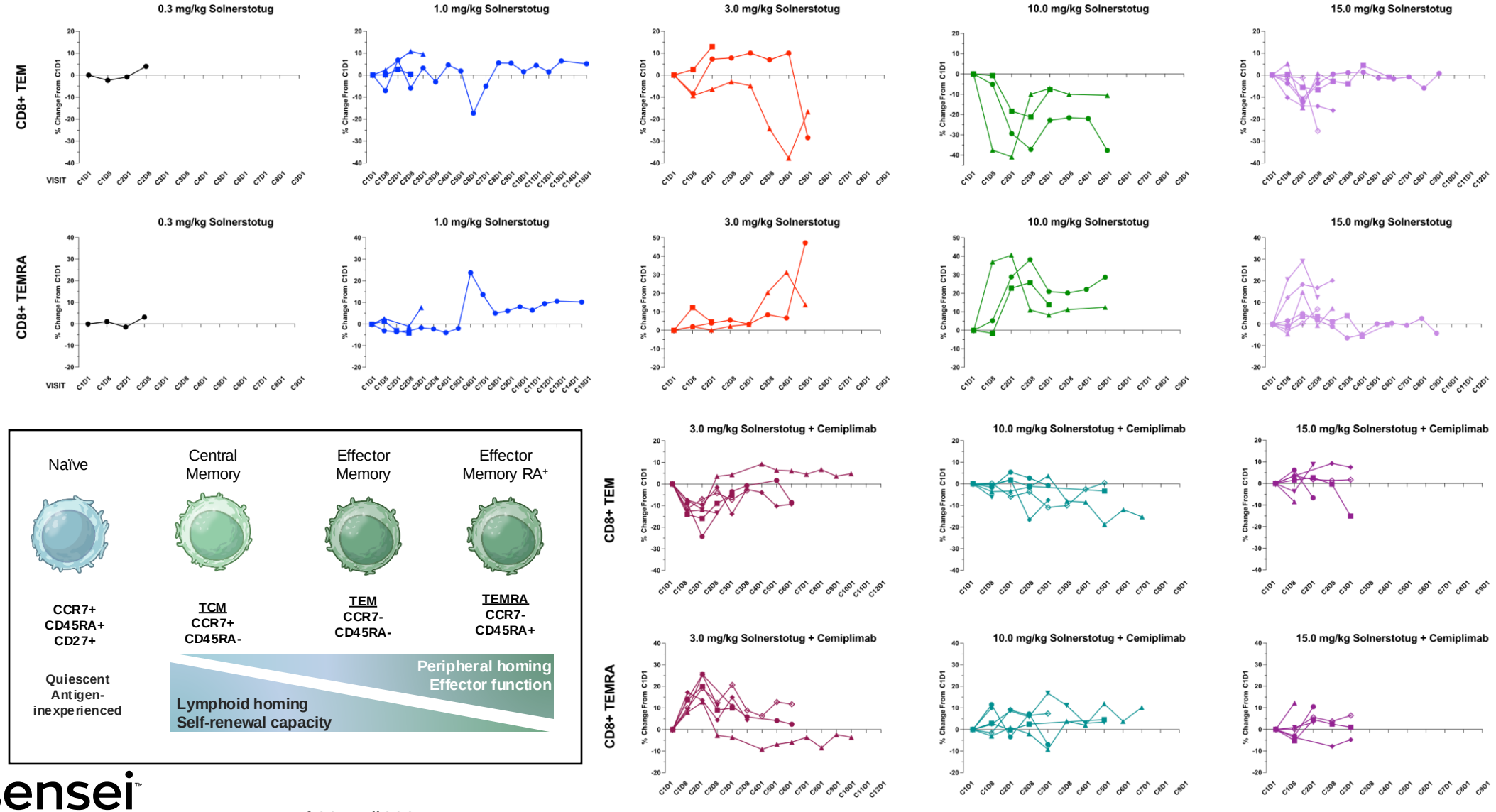




sensei BIO

Data as of 30April2024

Dose-dependent Changes in Specific T-cell Populations Indicate Potential Solnerstotug-Related Pharmacological Effect



Data as of 30April2024

Commercially Validated Precedent for pH-sensitive Approach

Soliris® (eculizumab), an anti-C5 monoclonal antibody (mAb), was considered standard of care for patients with paroxysmal nocturnal hemoglobinuria (PNH) and atypical hemolytic uremic syndrome, but had a short half-life as a result of extensive TMDD.

Engineering eculizumab using histidine substitutions resulted in a pH-sensitive mAb with markedly improved half-life.

Antibody Engineering of Solaris Led to pH Sensitivity and Half-Life Improvements

	Soliris (Eculizumab)	→	Ultomiris (Ravulizumab, ALXN1210)
K_D pH 7.4 (nM)	0.03		0.49
K_D pH 6.0 (nM)	0.6		22
$t_{½}$ (d)	**3.9**		**13.4**

Revulizumab utilized histidine insertions into the CDR regions (VH_Y27H, VH_S57H) and Fc substitutions (M428L, N434S) of eculizumab

Due to its longer half-life (13.4d vs 3.9d), ravulizumab given every 8w achieved noninferiority compared with eculizumab given every 2w for all efficacy endpoints, while maintaining a similar safety profile.

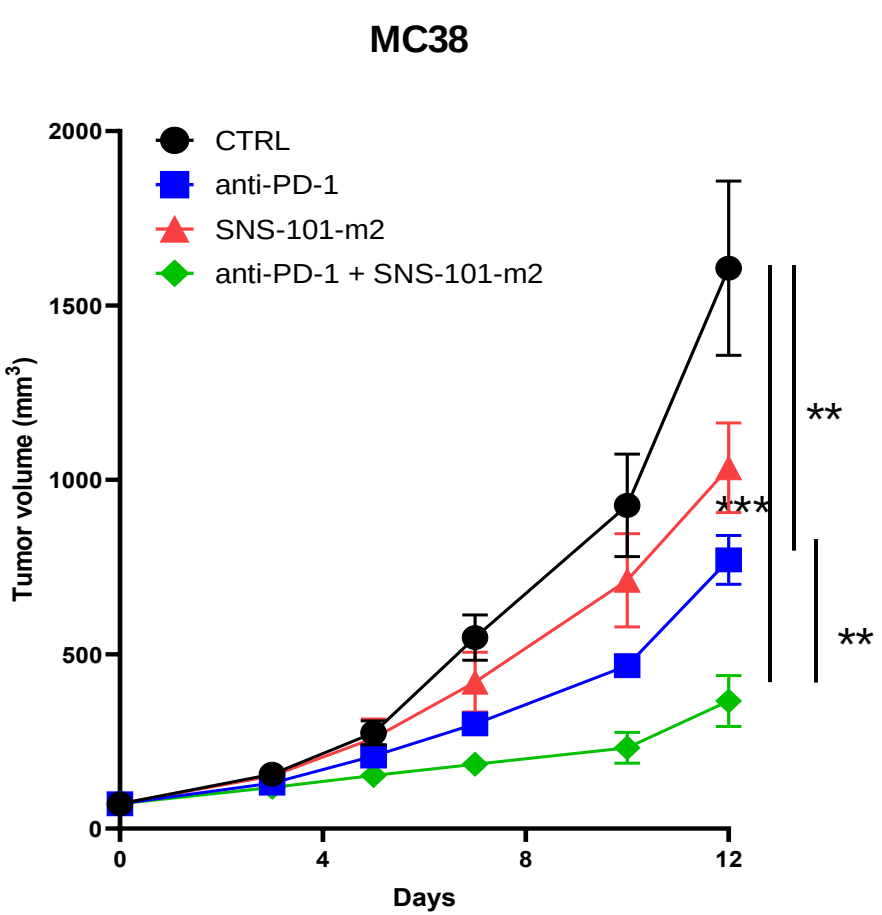
2018: FDA approves Ultomiris® (ravulizumab, ALXN1210)

2020: Ultomiris sales = $1.08 billion

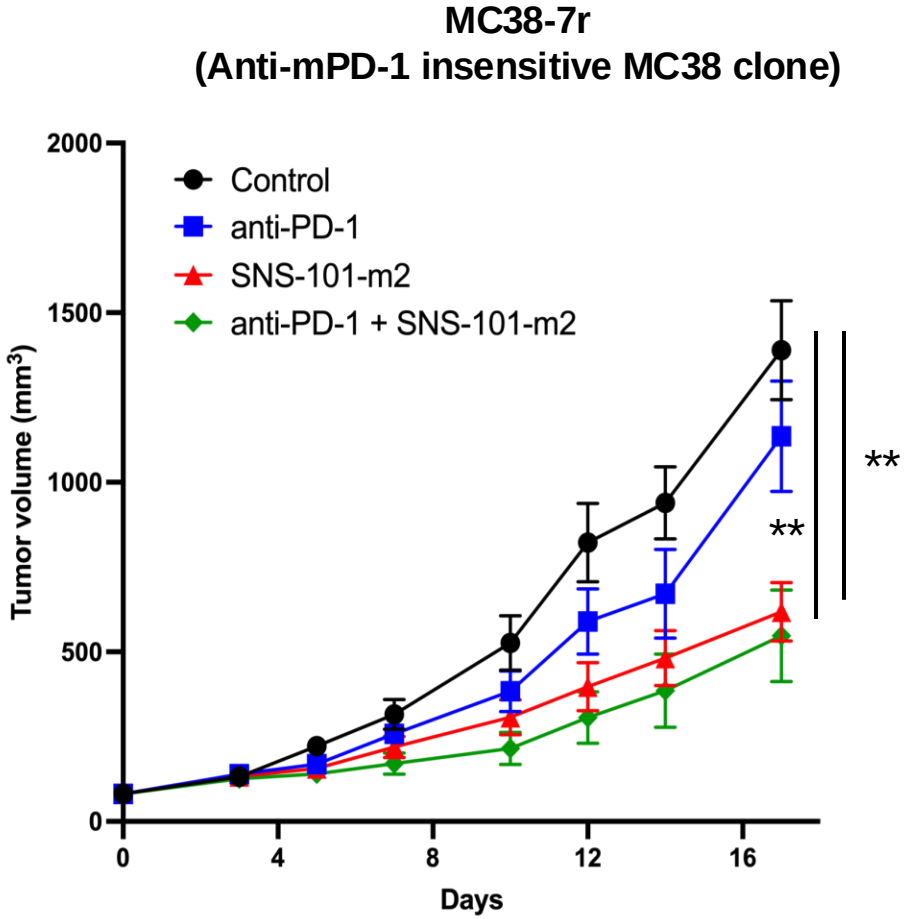
sensei BIO

Sheridan et al, PLOS One, April 2018 (https://doi.org/10.1371/journal.pone.0195909)
Lee et al, Blood, (doi:10.1182/blood-2018-09-876136)
Sales figures: https://media.alexion.com/news-releases/news-release-details/alexion-reports-fourth-quarter-and-full-year-2020-results

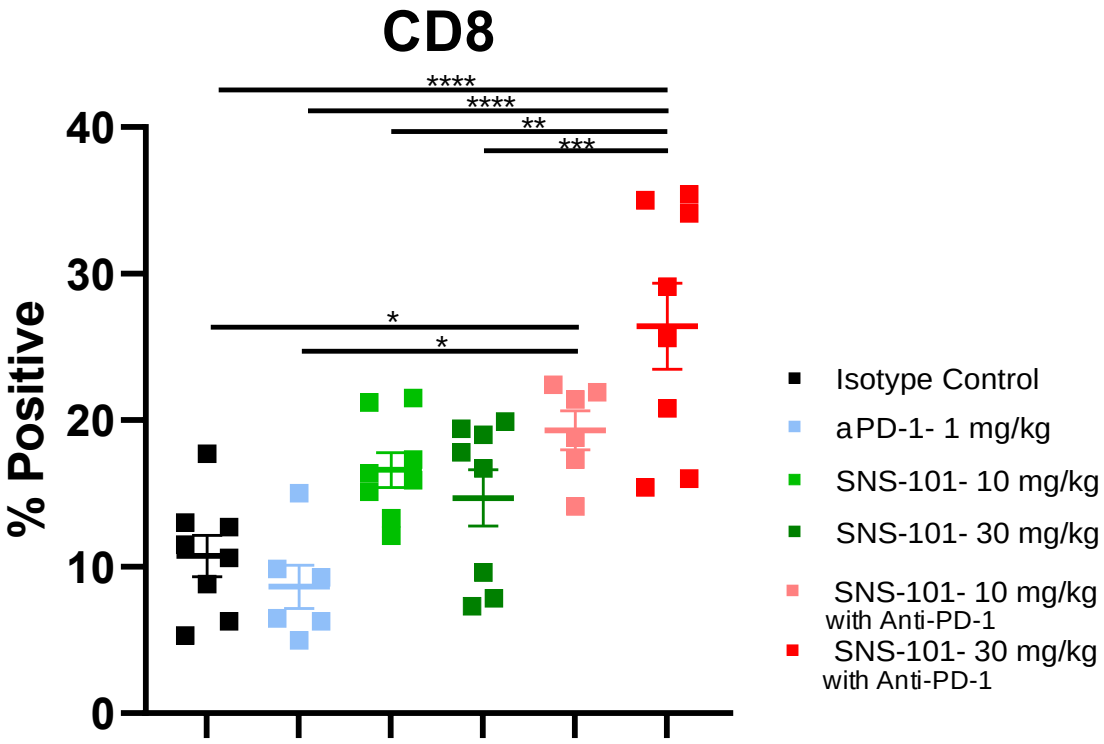
Single-agent Activity and Deepened Anti-tumor Responses to PD-1 Combo in Human VISTA KI Mice *In vivo*



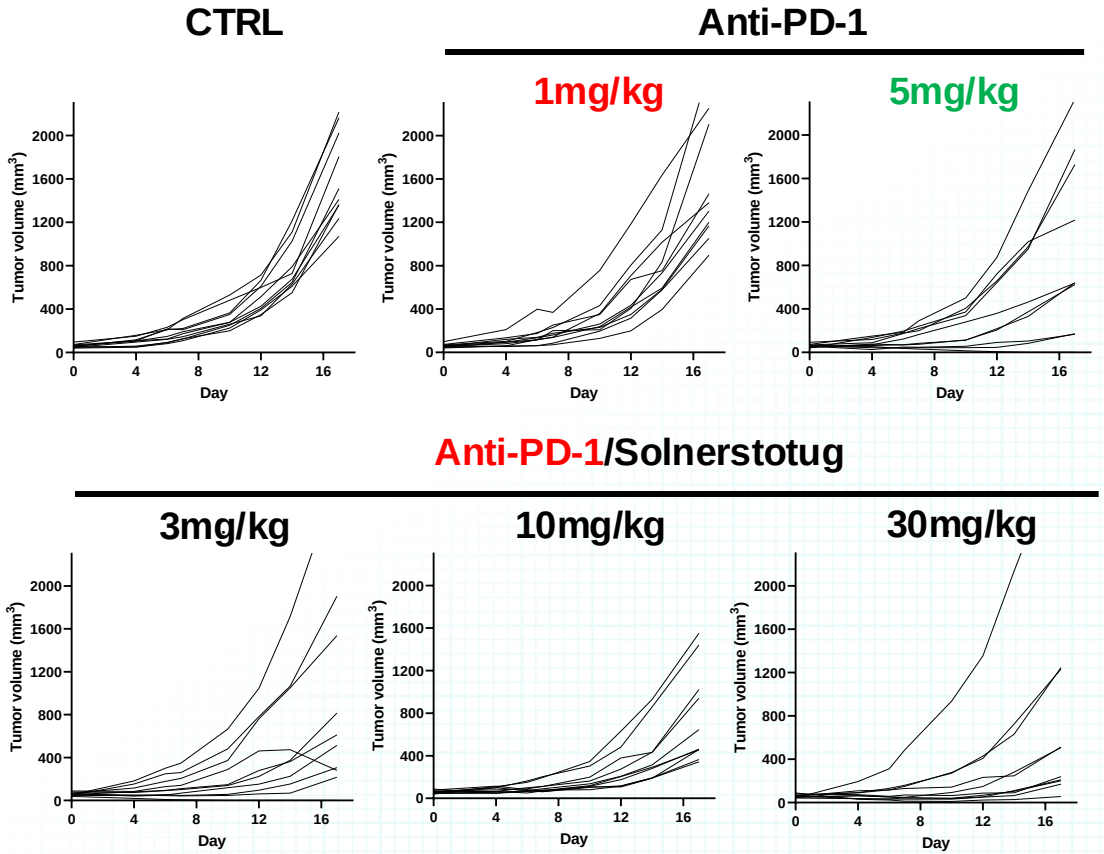
* *P*<0.05; ** *P*<0.01; *** *P*<0.001



Solnerstotug Increased CD8 T-cells in Combination With Anti-PD-1 in MC38 Tumors *In Vivo*



Frequency of Live, CD45+ Population
One-way ANOVA, Tukey Post-Hoc Analysis,
* p<0.05; ** p<0.01, *** p<0.001, **** p<0.0001

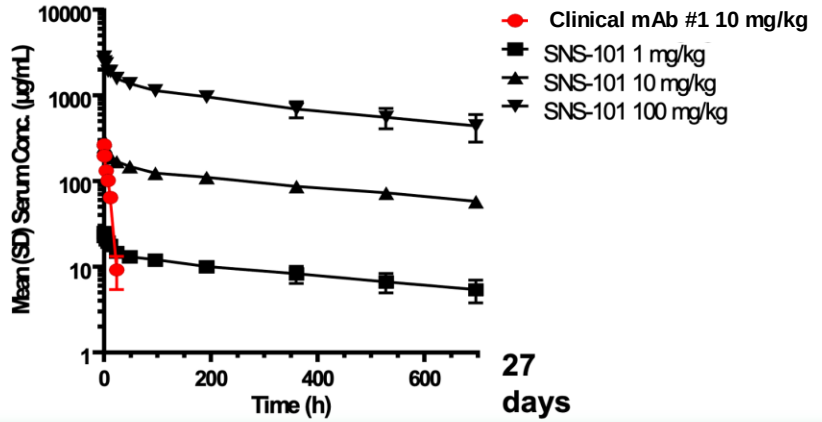


PK Sink Continues to be an Issue with Non-pH-Sensitive VISTA programs*

Solnerstotug is designed to overcome elimination kinetics and half-life related to PK sink observed in non-pH-sensitive VISTA programs

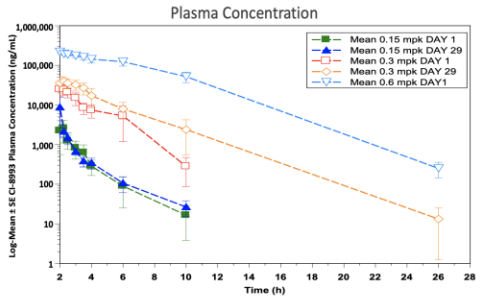
Linear

SNS-101 Cyno PK

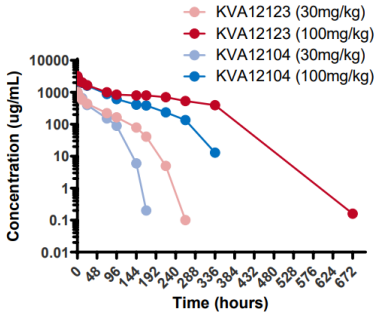


Non-linear

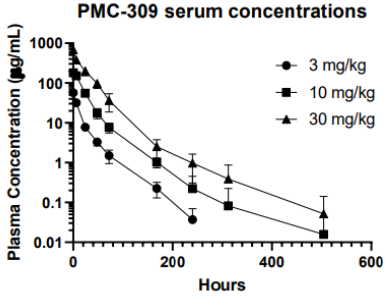
Curis CI-8993 Plasma Concentration



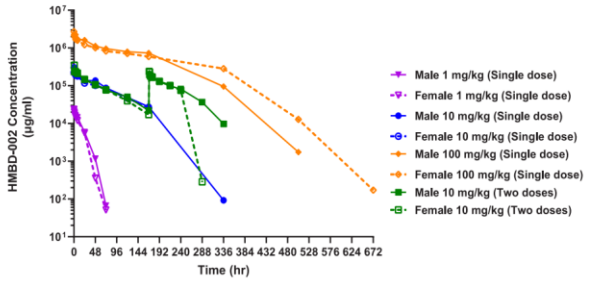
Kineta KVA12123 Cyno PK



Abcine PMC-309 Serum Conc Cyno



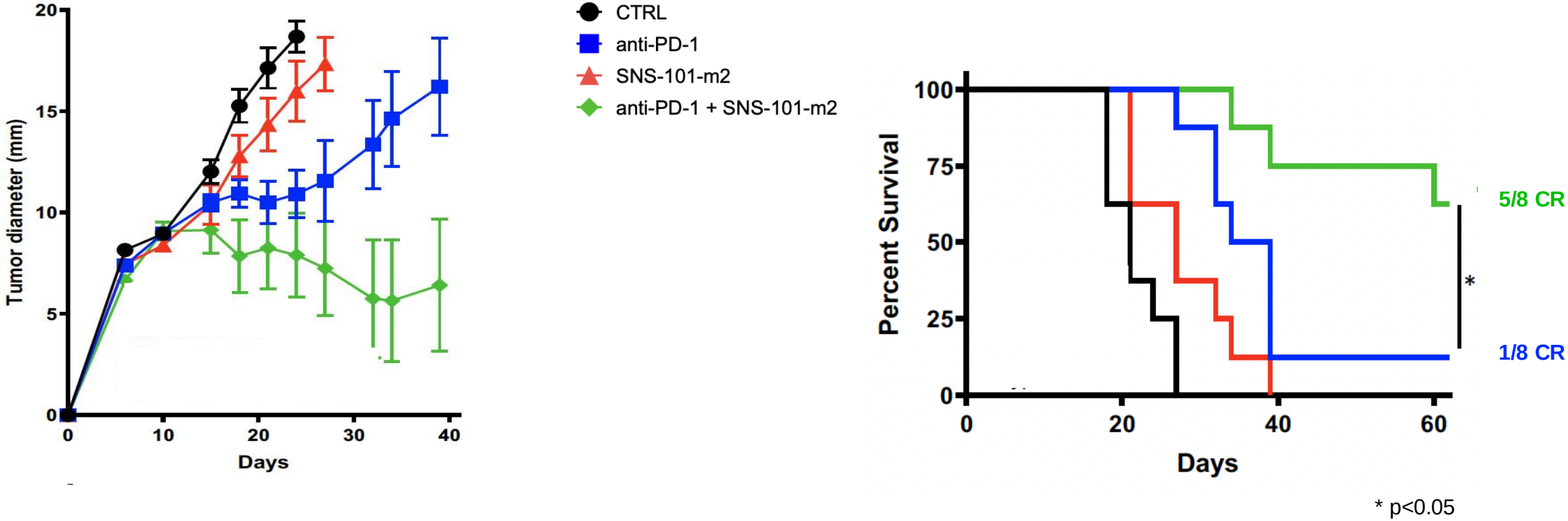
Hummingbird HMBD-002 Preclinical PK



1. Hummingbird SITC 2022; 2. Kineta Corporate Presentation; 3. Abcine, SITC 2022; 4. Curis, SITC 2022

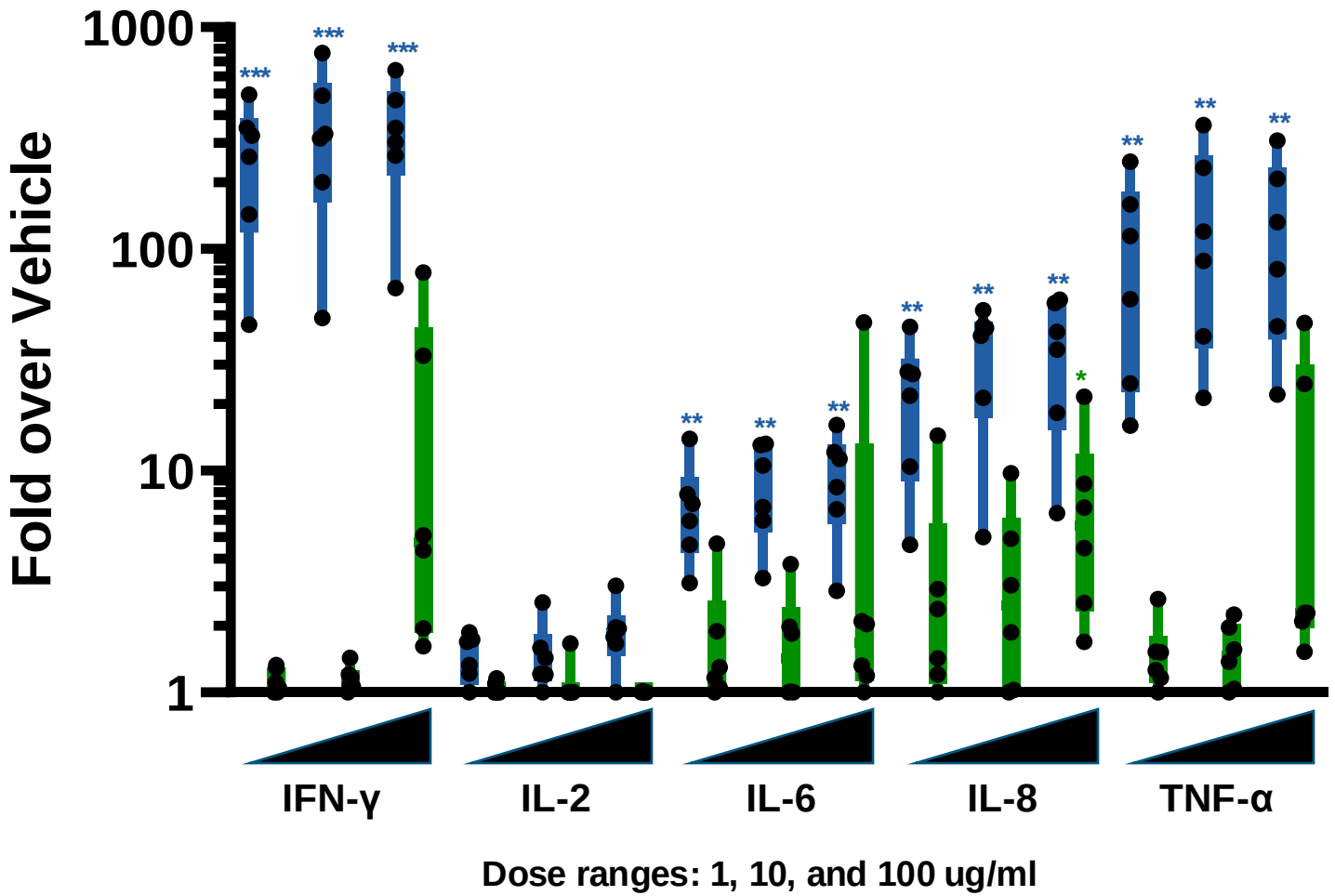
*Each graph differs by time course based on data presented

Solnerstotug Re-sensitized Anti-PD-1 Insensitive Sarcoma Tumors in Human VISTA Knock-in Mice



* p<0.05

Solnerstotug Induced Substantially Lower Cytokine Release in Whole-blood Assay at Neutral pH Compared to pH-independent VISTA Antibody



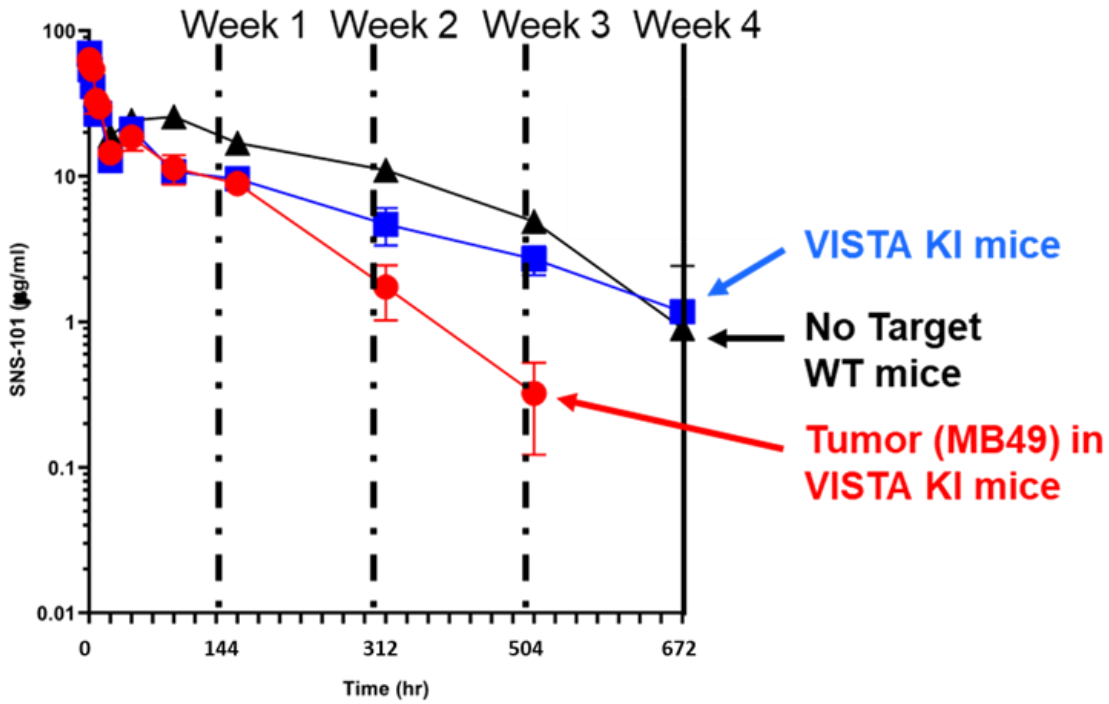
Clinical stage VISTA mAb #2

SNS-101

Paired Student's t-test, Holm-Sidak Post-Hoc Analysis,
* p<0.05; ** p<0.01, *** p<0.001, **** p<0.0001

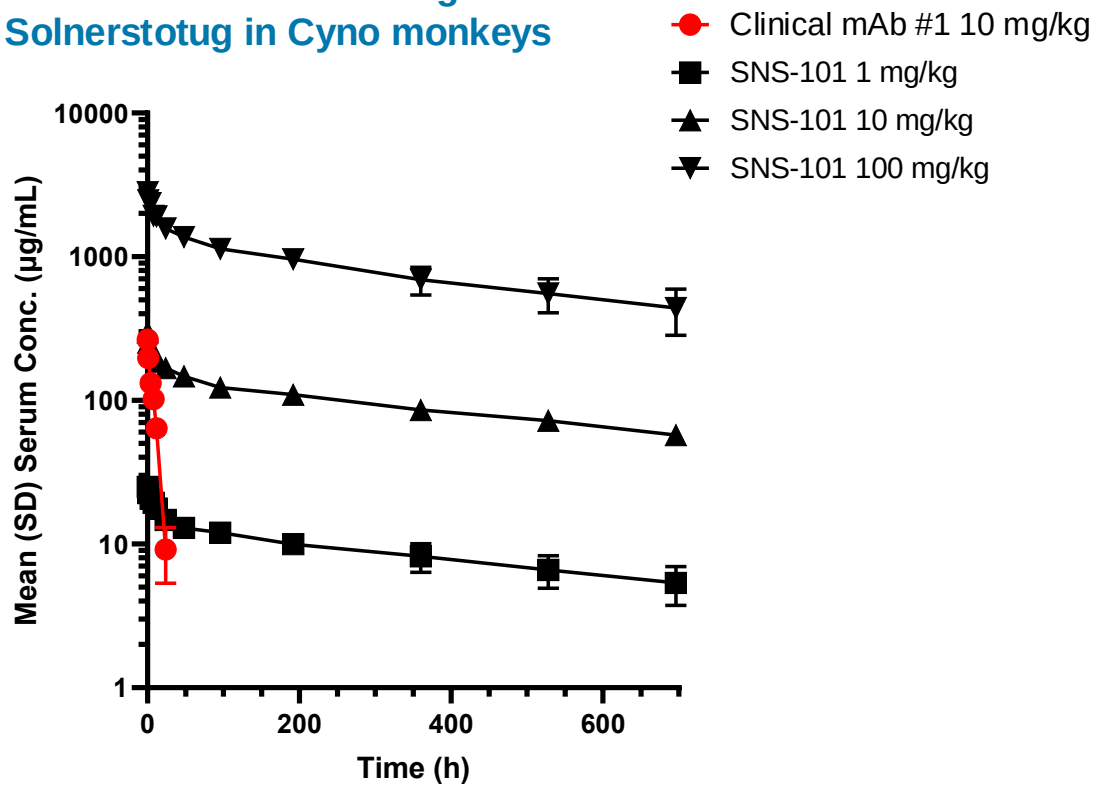
Solnerstotug Has Displayed a Favorable Single-dose PK Profile in Preclinical Studies - *No Significant TMDD in Human VISTA KI Mice or Non-human Primates*

Pharmacokinetics of Single Dose 5 mg/kg Solnerstotug in VISTA Knock-in Mice



Demonstrated a long mean residence time in the blood, indicating a lack of significant target-mediated drug disposition (TMDD) and clearance in non-malignant tissues

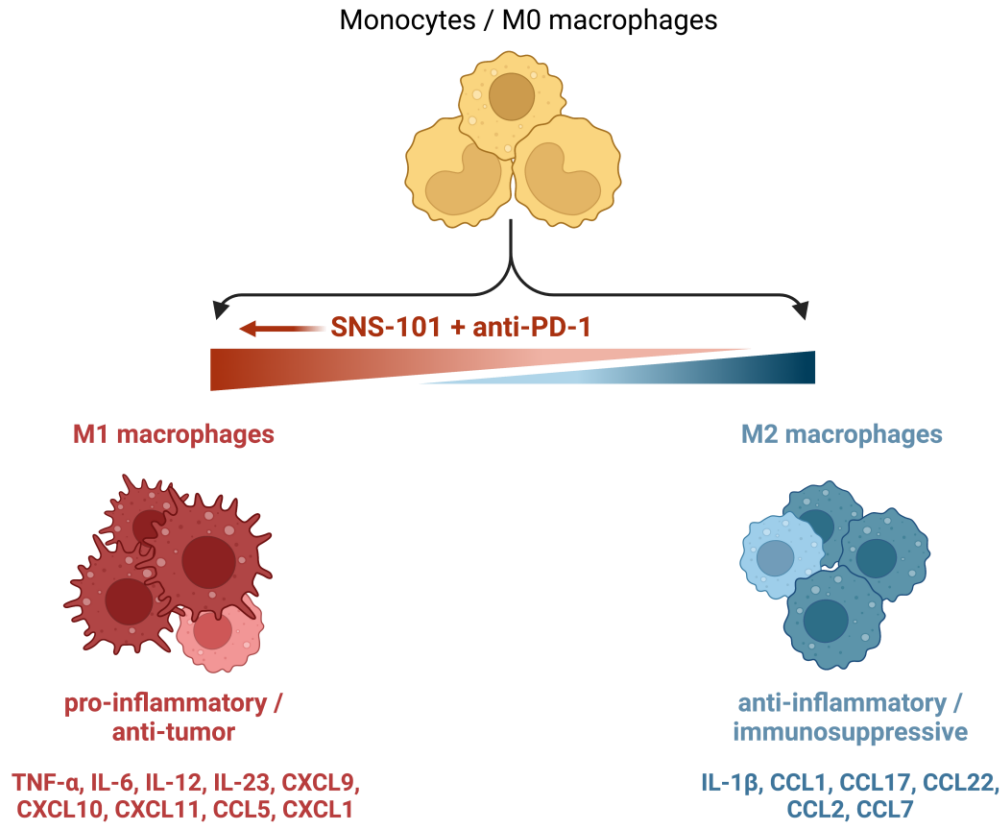
Pharmacokinetics of Single Dose Solnerstotug in Cyno monkeys



Solnerstotug displayed linear elimination kinetics unlike a pH-independent anti-VISTA mAb, which demonstrated TMDD and rapid clearance

Targeting VISTA and PD-1 Checkpoints in the TME Promotes Anti-tumoral M1 Macrophage Polarization

Solnerstotug targets suppressive signaling in the myeloid compartment, and in combination with anti-PD-1 may help shift the balance of macrophage polarization toward an anti-tumor M1 phenotype



M1 macrophages are anti-tumorigenic through secretion of pro-inflammatory cytokines and chemokines, and driving of Th1 CD4+ T cell responses

M2 macrophages are immunosuppressive; pro-tumor TAMs are a subset of M2-type cells