

# Full Dose Expansion Data for Solnerstotug in PD-(L)1 Resistant Tumors

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## Presenters:

**Dr. Kyriakos Papadopoulos**

Co-Director of Clinical Research START, San Antonio  
Principal Investigator for Ph1 trial of Solnerstotug

**John Celebi**

Chief Executive Officer

**Ron Weitzman**

Chief Medical Officer



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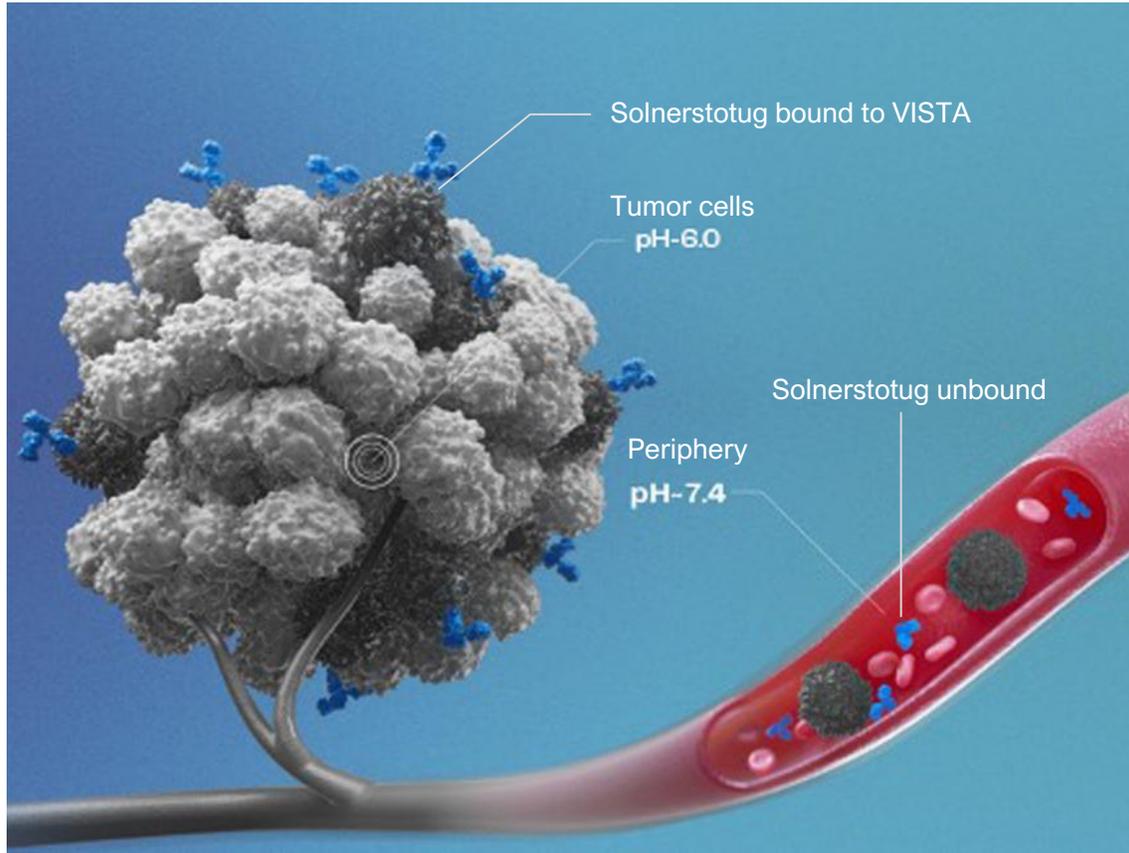
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# Solnerstotug is a Potential First-in-Class VISTA Targeting Mab Designed to Improve Therapeutic Index



## Targets VISTA:

- An immune checkpoint protein and B7 family member that drives immunosuppression analogous to PD-1/PD-L1
- Unique and extensive expression pattern, found on tumors and myeloid-lineage cells
- Plays a key role in both primary (innate) and secondary (acquired) resistance to checkpoint blockade

## Solnerstotug MOA:

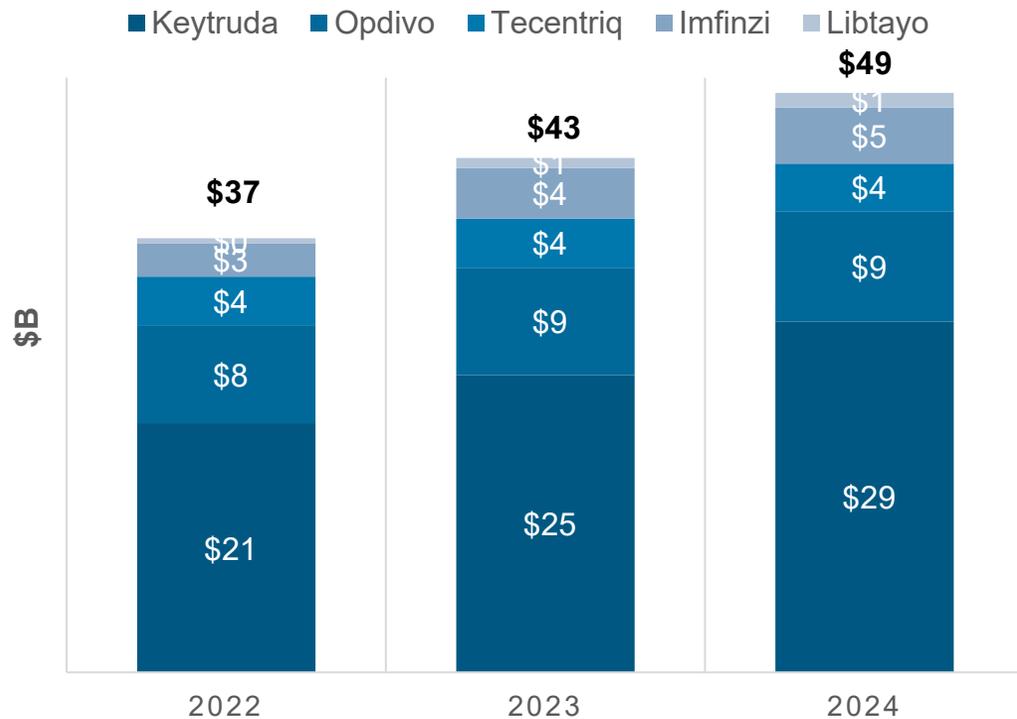
- Inhibits VISTA:PSGL-1 interaction selectively within the acidic TME
- Drives anti-tumor activity by reversing immunosuppression

**Solnerstotug is a pioneering approach designed to overcome the toxicity and PK issues of 1st-generation VISTA-targeted antibodies**

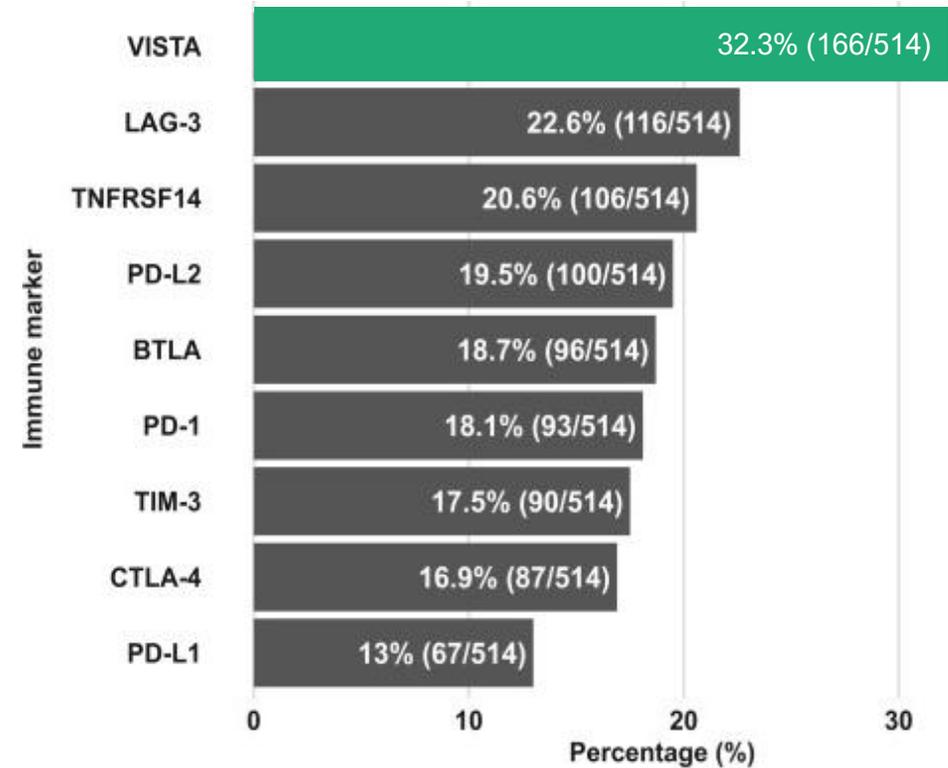
# The Broad VISTA Commercial Opportunity

## PD-(L)1 Targeted Therapies Are One of the Largest Classes of Drugs Across All Therapeutic Areas

Sales of Top 5 PD-(L)1 Targeted Therapies



## VISTA Has the Most Prevalent Expression Across Cancer Indications Among Immune Checkpoints



Sources:  
 AstraZeneca press releases February 8, 2024 and February 6, 2025  
 BMS press releases February 2, 2023, February 2, 2024, and February 6, 2025  
 Merck press releases February 1, 2024 and February 4, 2025  
 Regeneron press releases February 3, 2023 and February 4, 2025  
 Roche press releases February 1, 2023, January 31, 2024, and January 29, 2025

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

# The Challenge of Targeting VISTA

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

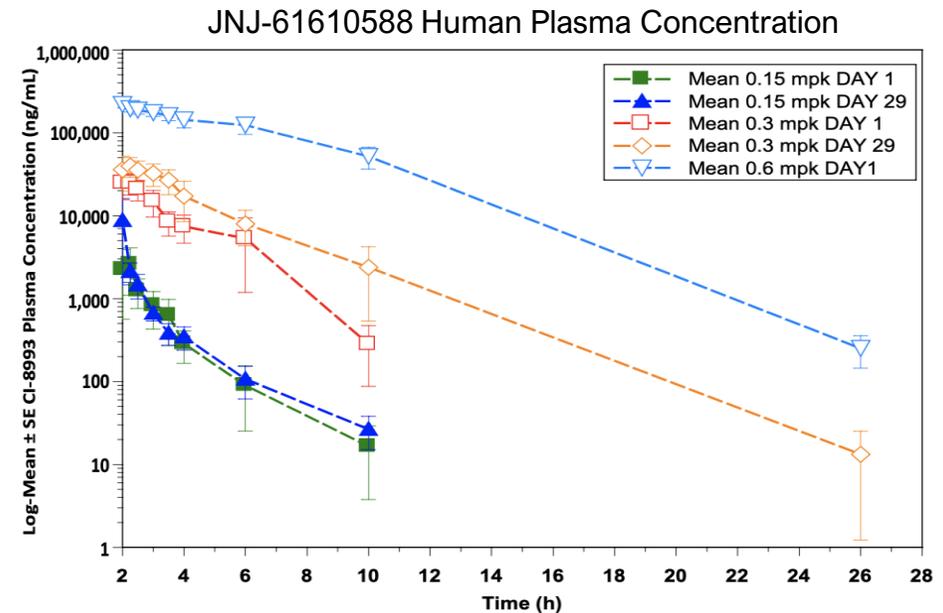
### Dose-limiting toxicity

Grade 3 CRS-associated encephalopathy

- J&J ran the first clinical trial for a VISTA antibody in 2016 (NCT02671955)<sup>1</sup>
- 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**, leading to termination of the study after treating 12 patients

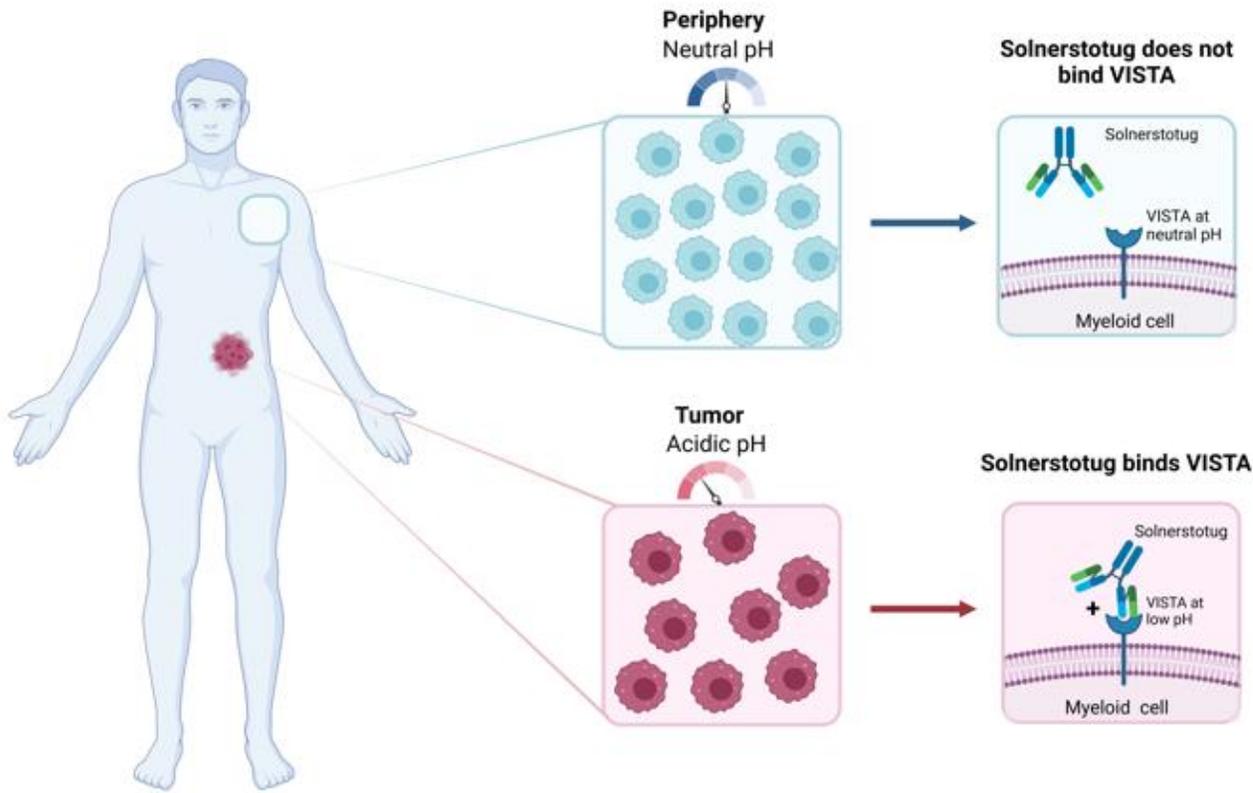
### Challenging PK profile

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



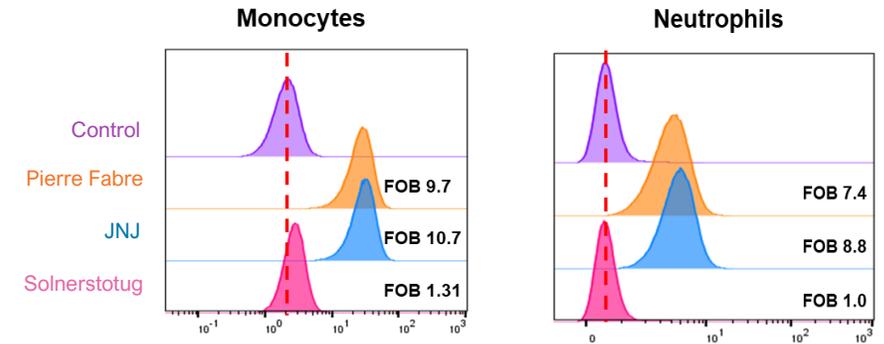
Key issues likely driven by extensive off-tumor expression of VISTA

# Solnerstotug Binds VISTA Selectively at the Tumor



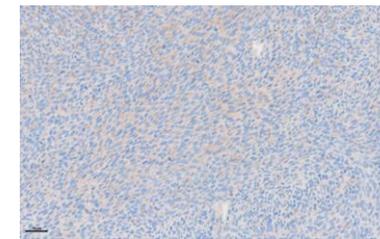
## Periphery (Neutral pH) = No Binding

Solnerstotug has no detectable binding in peripheral or normal tissues

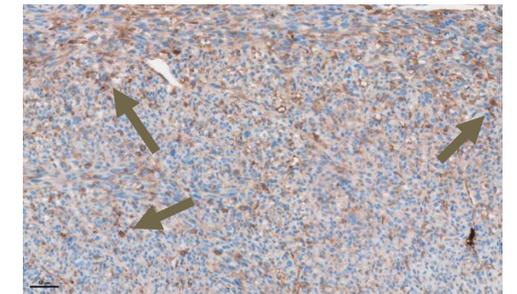


## Tumor (Acidic pH) = Binding

Solnerstotug rapidly accumulates in the tumor



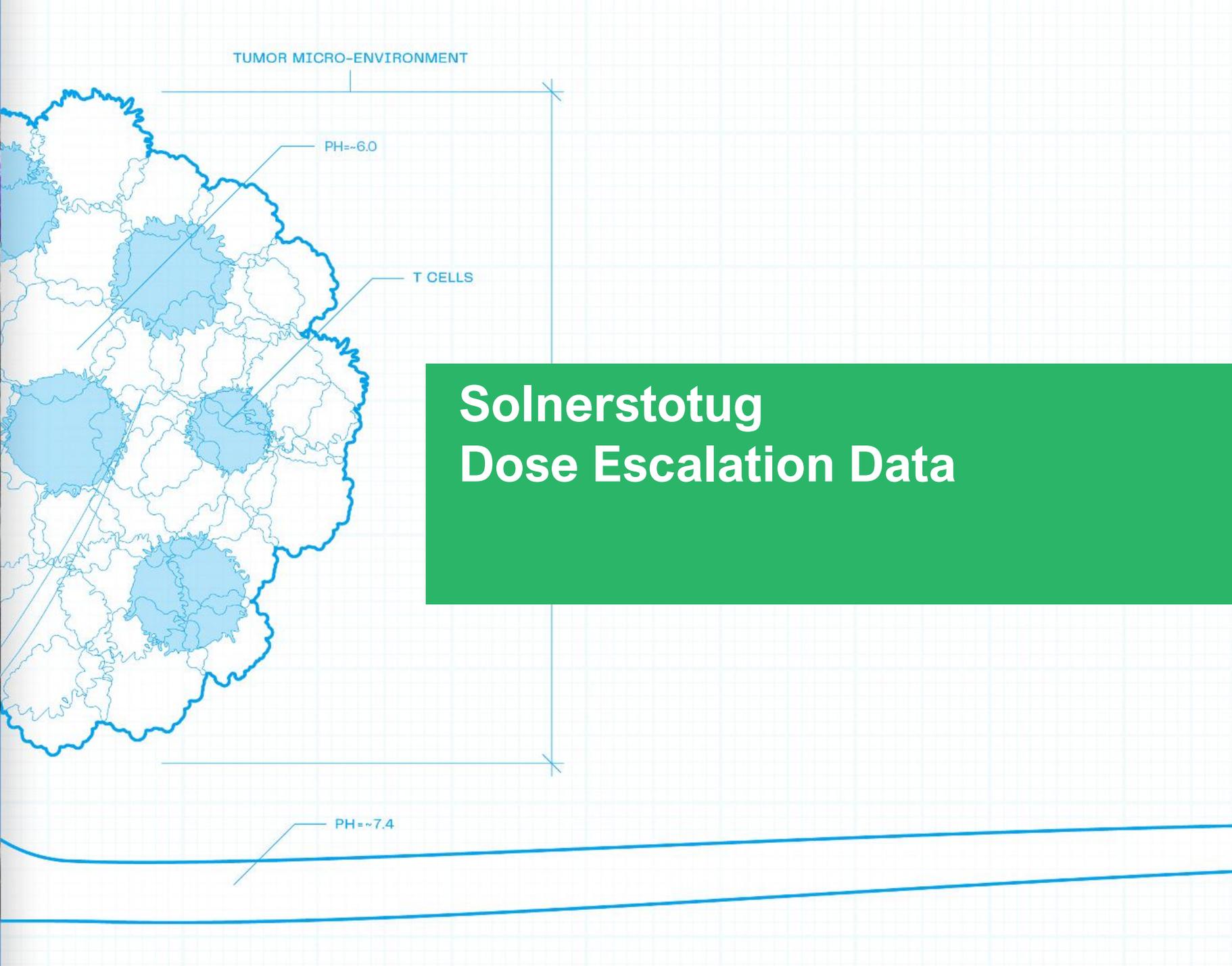
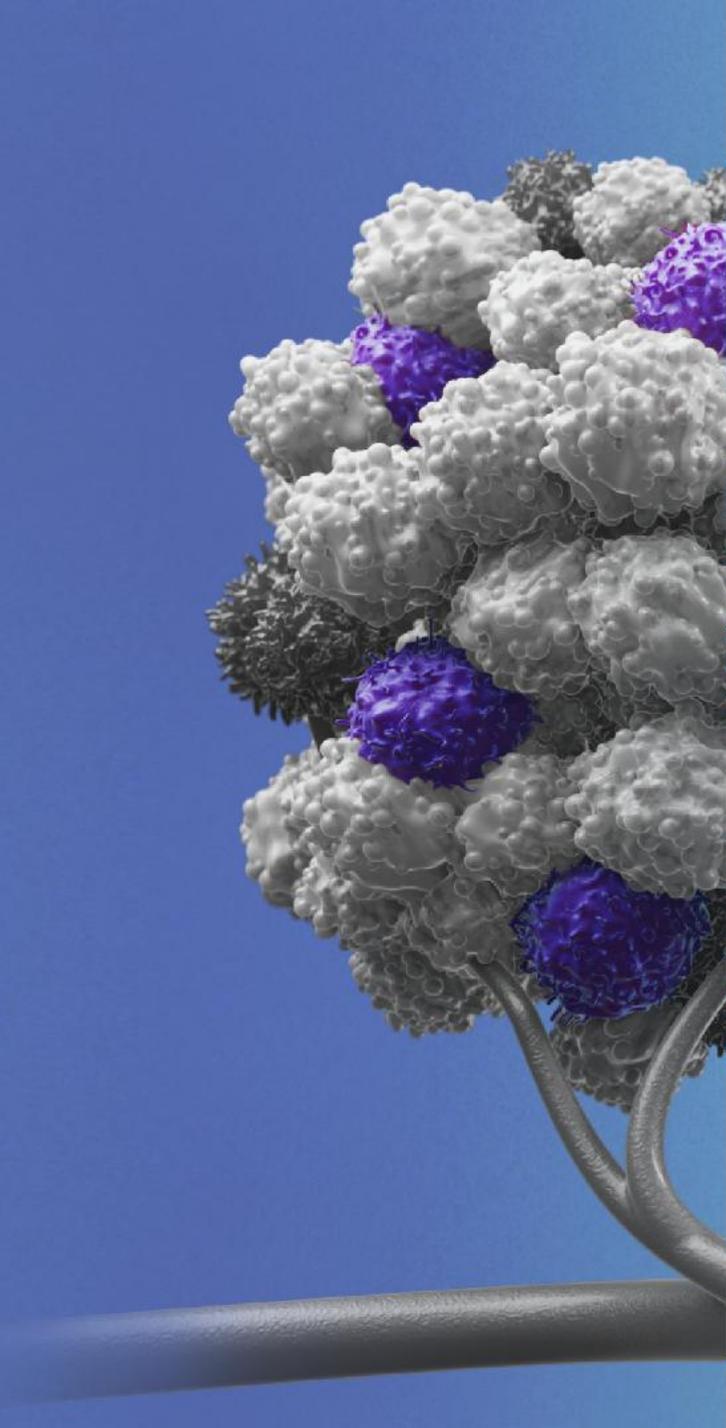
Isotype control  
6h post-dosing



Solnerstotug  
6h post-dosing

Blue = tumor  
Brown = Solnerstotug

Solnerstotug minimizes off-tumor binding, providing potential for an improved toxicity and PK profile



# Solnerstotug Dose Escalation Data

# Solnerstotug Phase 1 Dose Escalation Study

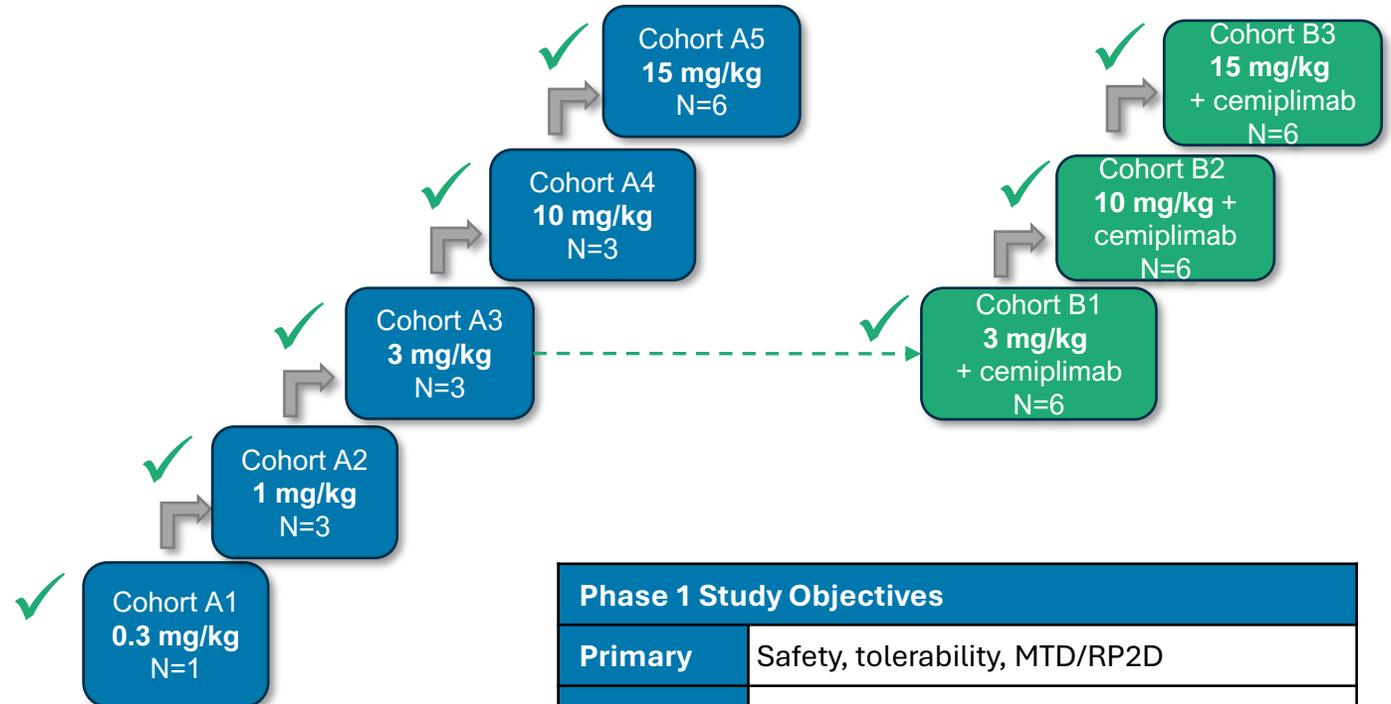
Given prior history of VISTA antibodies, Sensei prioritized establishing:

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

## Phase 1 Dose Escalation BOIN Design in Patients with Advanced Solid Tumors

Monotherapy Dose Escalation  
Solnerstotug (Q3W)

Combination Dose Escalation  
Solnerstotug + Cemiplimab (Q3W)



### Phase 1 Study Objectives

|           |  |
|-----------|--|
| Primary   | Safety, tolerability, MTD/RP2D           |
| Secondary | PK, immunogenicity & anti-tumor activity |

✓ = cleared DLT assessment period

# Phase 1 Dose Escalation Data Affirms Solnerstotug's MOA and Focused Patient Population in Dose Expansion



Well-tolerated



Commercially acceptable and potentially best-in-class PK profile



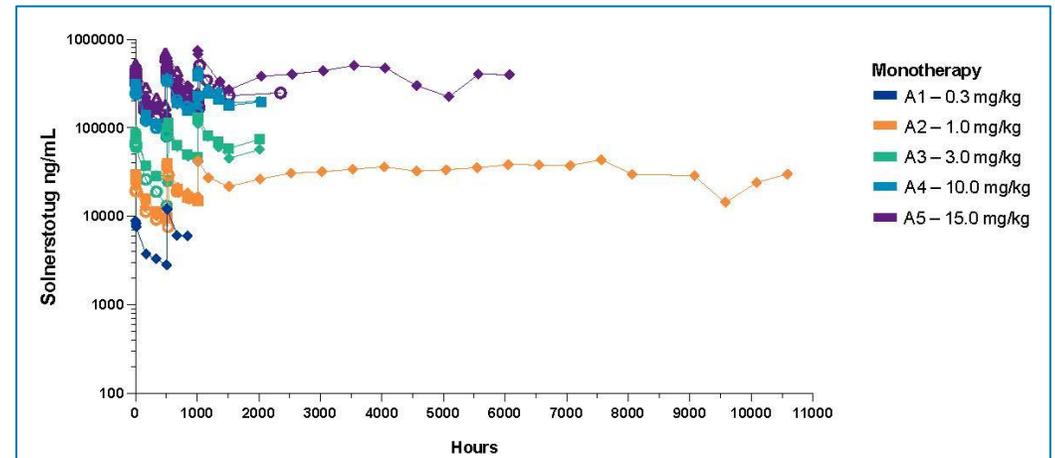
First and only agent to be dosed at pharmacologically relevant levels



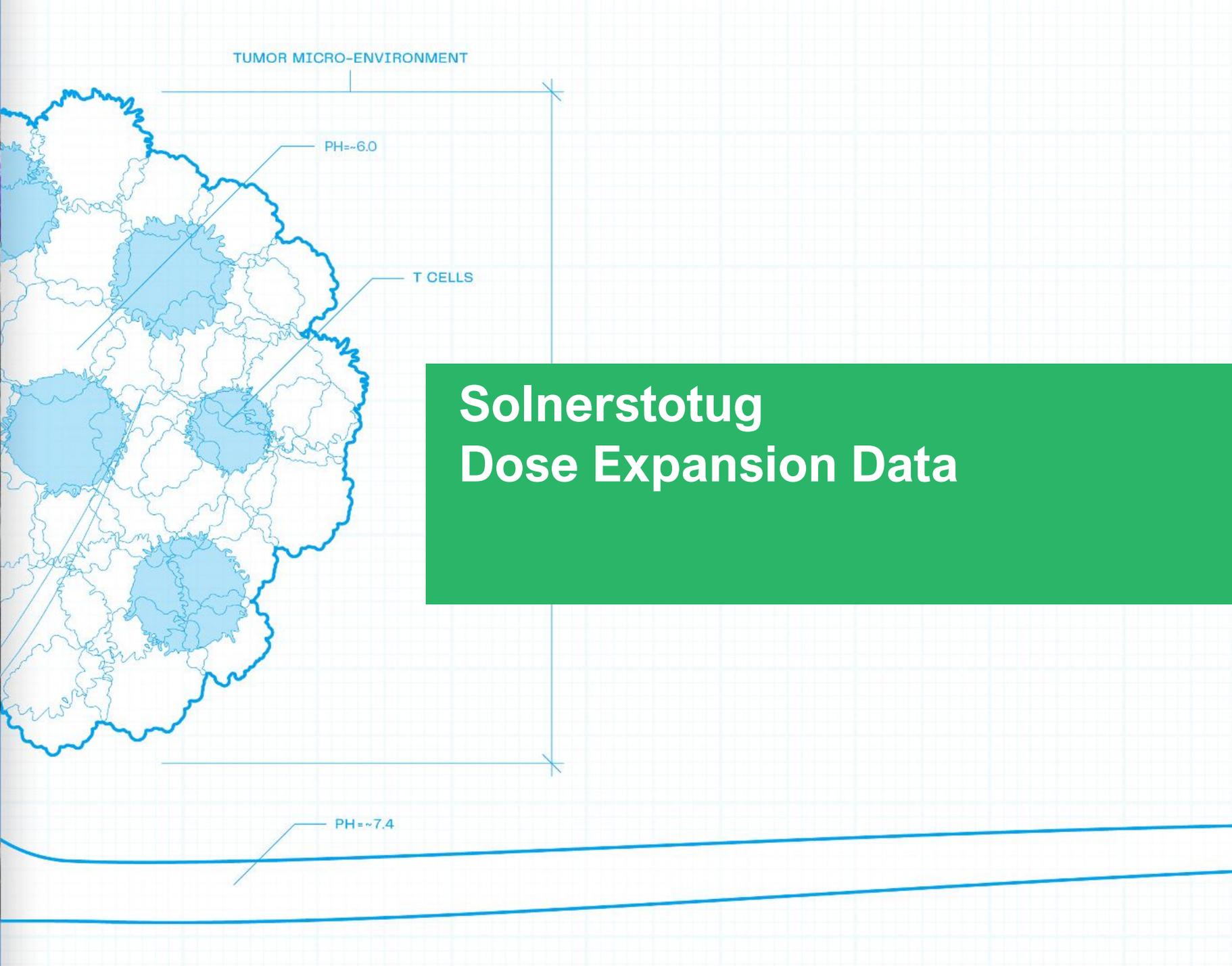
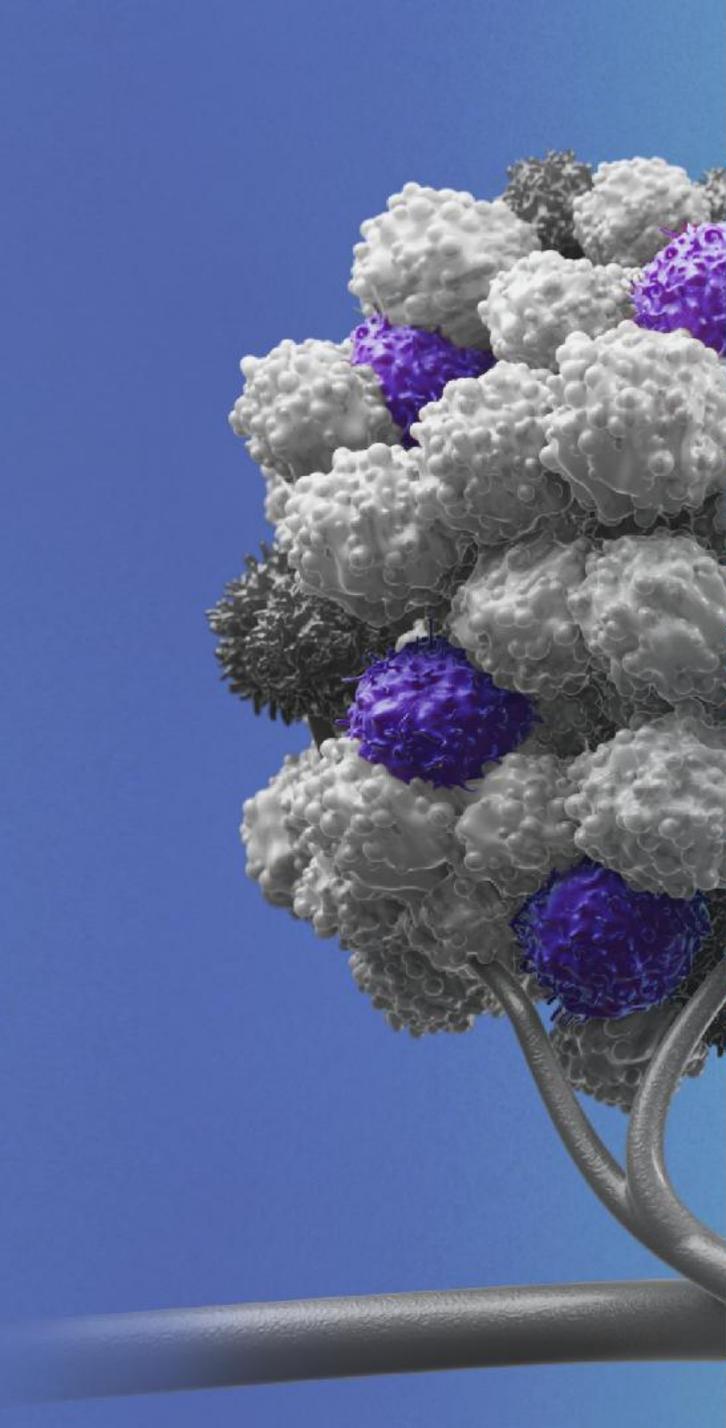
Forward focus on patients with "hot" tumors more likely to respond to immunotherapy

## Safety Profile Summary (Dose Escalation)

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



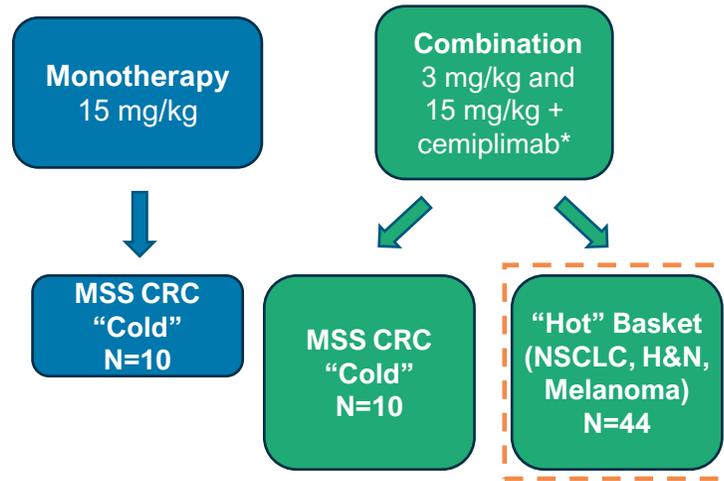
Solnerstotug positioned to be the first VISTA-targeted mAb to test the VISTA IO hypothesis



# Solnerstotug Dose Expansion Data

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

## Phase 1 Dose Expansion N=64



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

- Focused on a basket of "hot" tumors (combination therapy) and one "cold" tumor type (monotherapy and combination therapy)
- Nearly all patients in "hot" tumor cohort:
  - Have received and progressed on a prior anti-PD-1 therapy; or
  - Are PD-L1 negative
  - Historical response rates to PD-1 rechallenge following progression on PD-1 are in the **single digits**<sup>1,2</sup>
- Encouraging activity was observed in patients with "hot" tumors
- No signal of activity was observed in patients with "cold" tumors

# Patient Disposition

## Expansion Cohort – Basket of “Hot” Tumors

|   | Solnerstotug +<br>Cemiplimab<br>N = 44 (%) |
|---|--|
| Enrolled                                    | 44   |
| Dose Received                               |  |
| 3 mg/kg                                     | 18 (41)                                    |
| 15 mg/kg                                    | 26 (59)                                    |
| Treatment Ongoing                           | 11 (25)                                    |
| Discontinued                                | 33 (75)                                    |
| <b>Reason for Discontinuation</b>           |  |
| Progressive Disease                         | 22 (50)                                    |
| Adverse Event                               | 1 (2)                                      |
| Withdrew Consent                            | 2 (5)                                      |
| Death                                       | 2 (5)*                                     |
| Clinical Progression                        | 5 (11)                                     |
| Physician Decision/Lack of Clinical Benefit | 1 (2)                                      |

# Patient Demographics in Dose Expansion

| Patient Characteristic                                    | Solnerstotug + Cemiplimab<br>N, (%) |
|---|-------------------------------------|
| Female, N (%)   | 13 (30)                             |
| Age, median (min, max)                                    | 68 (28, 87)                         |
| Baseline ECOG, N (%)                                      |                                     |
| 0   | 16 (36)                             |
| 1   | 28 (64)                             |
| Prior lines <i>metastatic</i> tx, median (min, max)       | 2 (0, 7)                            |
| Prior PD-1/PD-L1, N (%)*                                  | <b>41 (93)</b>                      |
| Prior PD-1/PD-L1 preceding enrollment in the study, N (%) | 27 (61)                             |

| Cancer Type                  | Solnerstotug + Cemiplimab<br>N, (%) |
|------------------------------|-------------------------------------|
| Head and Neck                | 11 (25)                             |
| NSCLC                        | 10 (23)                             |
| Melanoma                     | 6 (14)                              |
| Renal                        | 5 (11)                              |
| Merkel Cell                  | 3 (7)                               |
| CRC- MSI High                | 3 (7)                               |
| Cholangiocarcinoma- MSI High | 1 (2)                               |
| Endometrial                  | 1 (2)                               |
| Endometrial-MSI High         | 1 (2)                               |
| Esophageal                   | 1 (2)                               |
| Hepatocellular               | 1 (2)                               |
| Pleomorphic Spindle cell     | 1 (2)                               |

93% of patients received and progressed on a prior PD-1/PD-L1 therapy

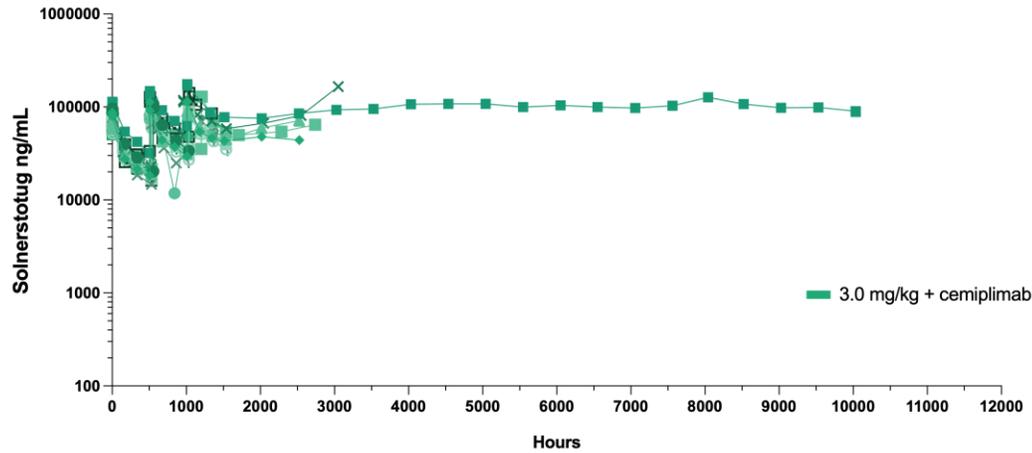
# Most Frequent Treatment-Emergent Adverse Events in Dose Expansion

| Adverse Events With >10% Frequency | Solnerstotug (3 or 15 mg/kg) + Cemiplimab |                    |
|------------------------------------|---|--------------------|
|                                    | All Grades n=44 (%)                       | Grade 3/4 n=44 (%) |
| Fatigue                            | 10 (22.7)                                 | 1 (2.3)            |
| Hypomagnesaemia                    | 10 (22.7)                                 | 0 (0)              |
| Nausea                             | 9 (20.5)                                  | 1 (2.3)            |
| Dehydration                        | 9 (20.5)                                  | 0 (0)              |
| Vomiting                           | 7 (15.9)                                  | 0 (0)              |
| Diarrhea                           | 7 (15.9)                                  | 1 (2.3)            |
| Dyspnoea                           | 6 (13.6)                                  | 0 (0)              |
| Backpain                           | 5 (11.4)                                  | 0 (0)              |
| Cough                              | 5 (11.4)                                  | 0 (0)              |
| Decreased appetite                 | 5 (11.4)                                  | 0 (0)              |
| Hypokalaemia                       | 5 (11.4)                                  | 0 (0)              |

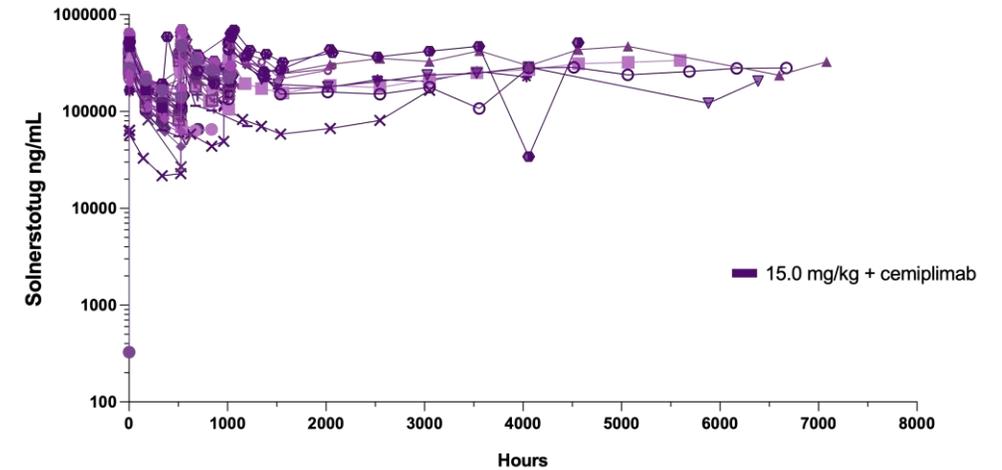
**Only 1 TEAE characterized as CRS (2% of all TEAEs)  
No Grade 3/4 AEs attributed to solnerstotug**

# Pharmacokinetic Data Support Q3W (or Greater) Dosing

## 3 mg/kg Solnerstotug + Cemiplimab



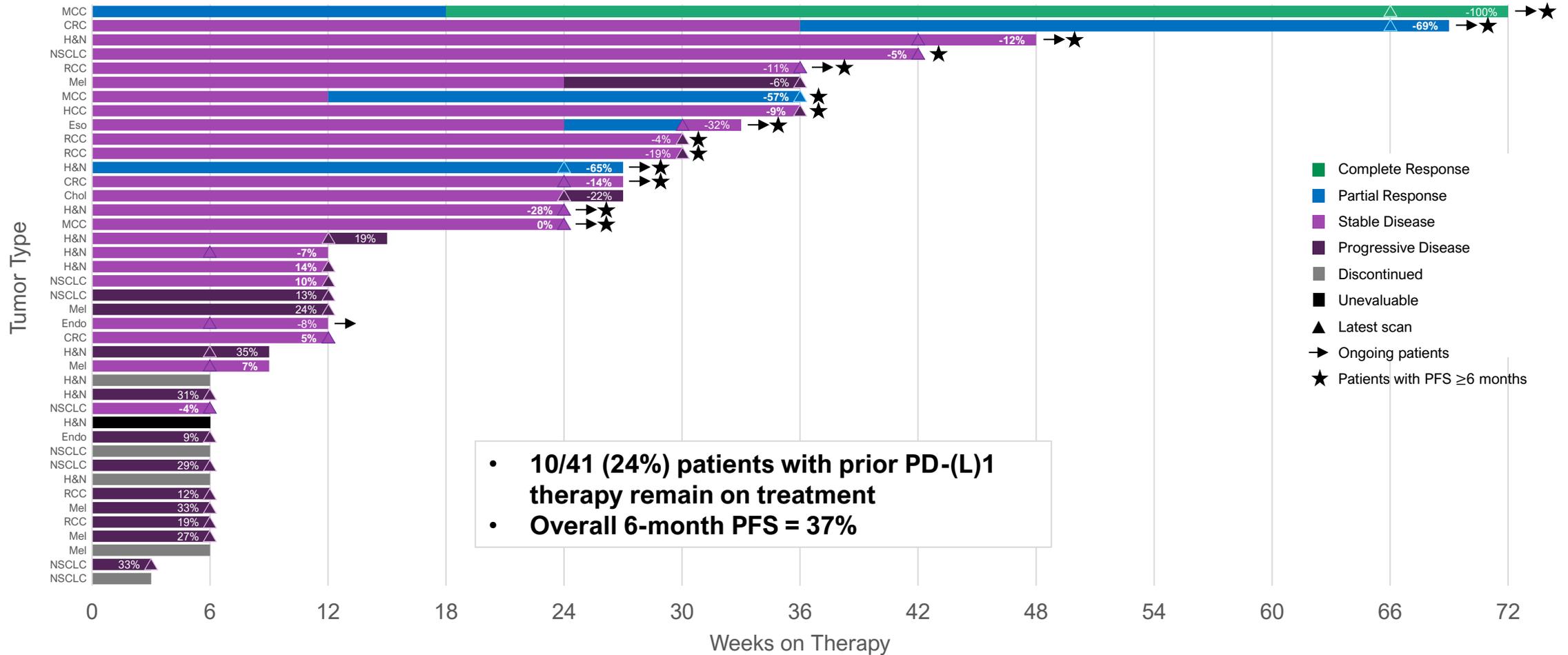
## 15 mg/kg Solnerstotug + Cemiplimab



- Detectable in blood for thousands of hours (e.g., weeks)
- Supports Q3W dosing in humans
- No apparent effect on PK with combination
- Some increase with repeat dosing, but no notable accumulation

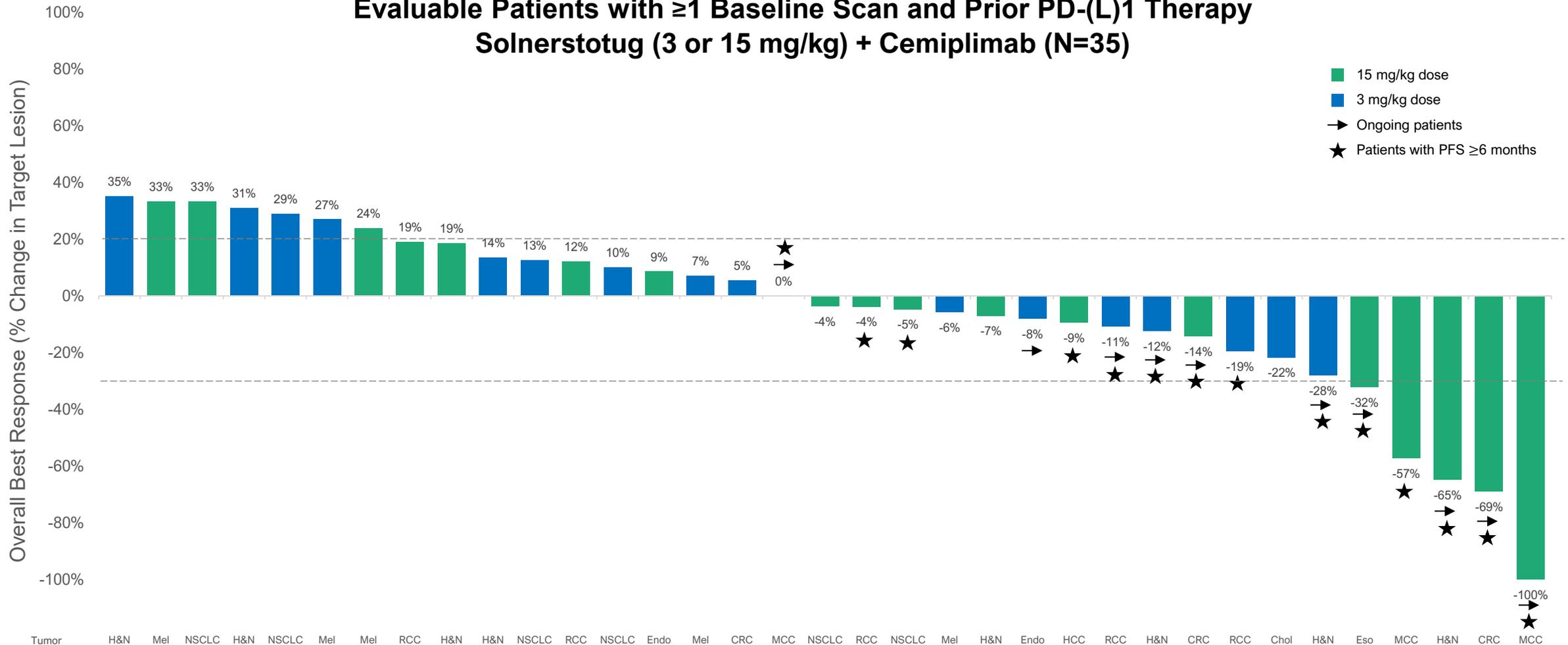
# Swimmers Plot: Durable Disease Control

Solnerstotug (3 or 15 mg/kg) + Cemiplimab (N=41)



# Waterfall: Multiple Responses and Disease Control in a PD-(L)1-Resistant Population

Evaluable Patients with  $\geq 1$  Baseline Scan and Prior PD-(L)1 Therapy  
Solnerstotug (3 or 15 mg/kg) + Cemiplimab (N=35)



Excludes 6 patients who discontinued and were unevaluable prior to first scan  
Data as of September 8, 2025

CRC = microsatellite high colorectal cancer  
NSCLC = non small cell lung cancer  
H&N = head and neck cancer  
MCC = Merkel cell carcinoma

Mel = melanoma  
HCC = hepatocellular carcinoma  
RCC = renal cell carcinoma

Endo = endometrial cancer  
Eso = esophageal cancer  
Chol = cholangiocarcinoma

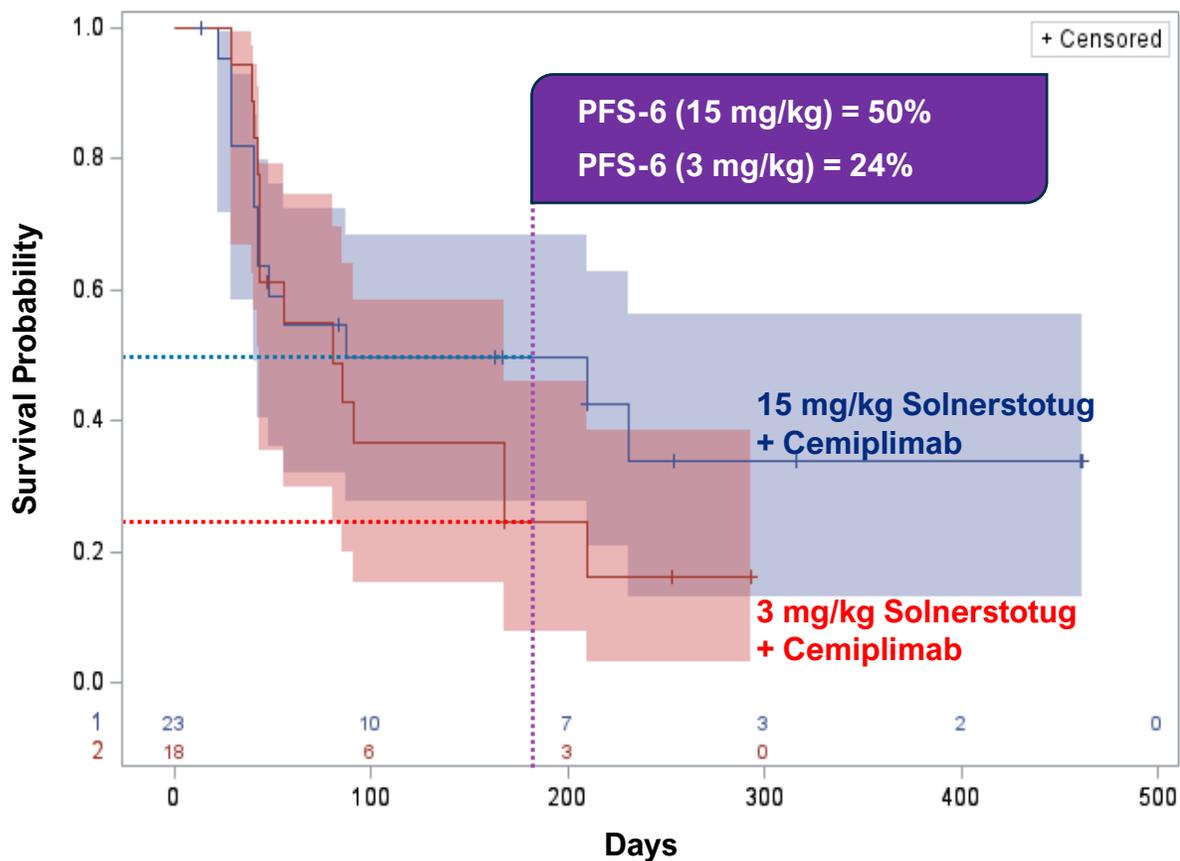
# Responder Detail

|                        | Histology             | Pre-Study              |                            | On Study                   |                        |                      |
|------------------------|-----------------------|------------------------|----------------------------|----------------------------|------------------------|----------------------|
|                        |                       | Most Recent CPI        | Best Response on Prior CPI | Best Response on Study (%) | Onset of Best Response | Duration of Response |
| Received prior PD-(L)1 | Merkel Cell Carcinoma | Avelumab (adjuvant)    | NA                         | CR (-100%)                 | <b>Week 18</b>         | 54 Weeks +           |
|                        | MSI-High CRC          | Pembrolizumab          | Complete Response          | PR (-69.0%)                | <b>Week 36</b>         | 33 Weeks +           |
|                        | Merkel Cell Carcinoma | Ipilimumab + Nivolumab | Stable Disease             | PR (-57.1%)                | Week 12                | 24 Weeks             |
|                        | HNSCC                 | Pembrolizumab          | Partial Response           | PR (-64.7%)                | Week 6                 | 21 Weeks +           |
|                        | Esophageal            | Nivolumab (Adjuvant)   | NA                         | PR (-32.0%)                | <b>Week 24</b>         | 6 Weeks              |
| PD-(L)1 naïve          | NSCLC                 | None (TPS < 5)         | NA                         | PR (-43.8%)                | <b>Week 54</b>         | 15 Weeks +           |

**Benchmark: median TTR for 1L PD-1 naïve patients in NSCLC (TPS≥50%) is 2.2 months**

# 6-month PFS Compares Favorably to Benchmarks and Suggests Potential Phase 2 Dose

**Progression Free Survival**  
95% Confidence Limits



**Solnerstotug Compared with Historical Benchmarks in PD-(L)1 Refractory Settings**

| Regimen  | Patient Population              | 6-Month PFS (%)     | Tolerability  |
|--|---------------------------------|---------------------|---|
| <b>Solnerstotug (15 mg/kg) + Cemiplimab</b>      | PD-(L)1-refractory "hot" tumors | <b>50%</b>          | <b>Well tolerated</b>                                 |
| Solnerstotug (3 mg/kg) + Cemiplimab              | PD-(L)1-refractory "hot" tumors | 24%                 | Well tolerated  |
| Docetaxel  | 2 <sup>nd</sup> Line NSCLC      | 10-20% <sup>4</sup> | Typical of chemotx                                    |
| Ipilimumab (Anti-CTLA-4) + Nivolumab (Anti-PD-1) | PD-1-refractory melanoma        | 34% <sup>1</sup>    | High toxicity <sup>3</sup> (40% discontinuation rate) |
| Relatlimab (Anti-LAG-3) + Nivolumab (Anti-PD-1)  | PD-(L)1-refractory melanoma     | 29% <sup>2</sup>    | Well tolerated  |
| PD-1 Monotherapy Rechallenge (SITC Criteria)     | Various                         | Not reported        | Comparable to initial anti-PD-1                       |

<sup>1</sup> VanderWalde, A. et al., Nat Med. 2023

<sup>2</sup> Ascierto et al, J Clin Onc, 2023 (RELATIVITY-020)

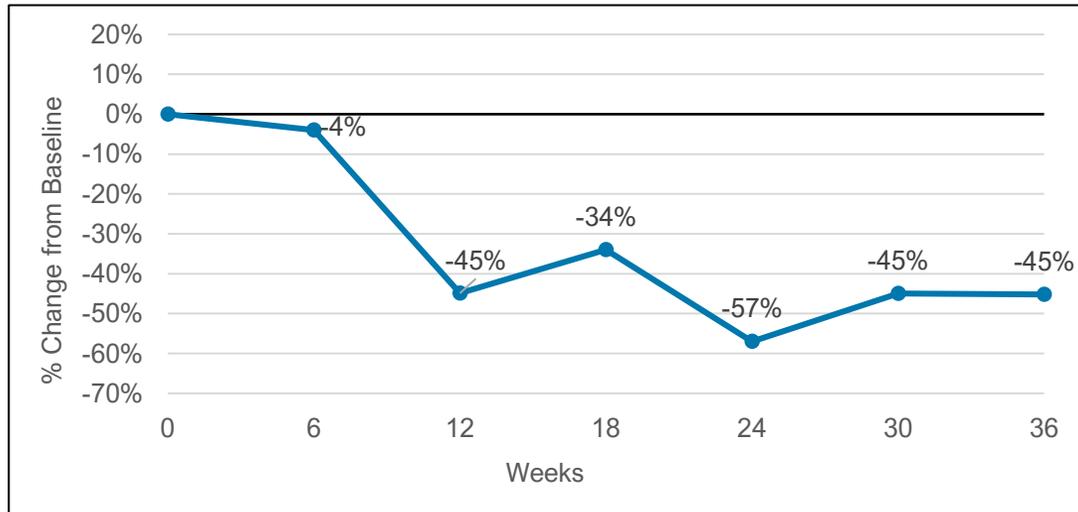
<sup>3</sup> Albrecht et al, Current Oncology Reports 2023

<sup>4</sup> Schandendorf, Walchok et al, J Clin Oncol 35:3807-3814.

# Responder Case Studies

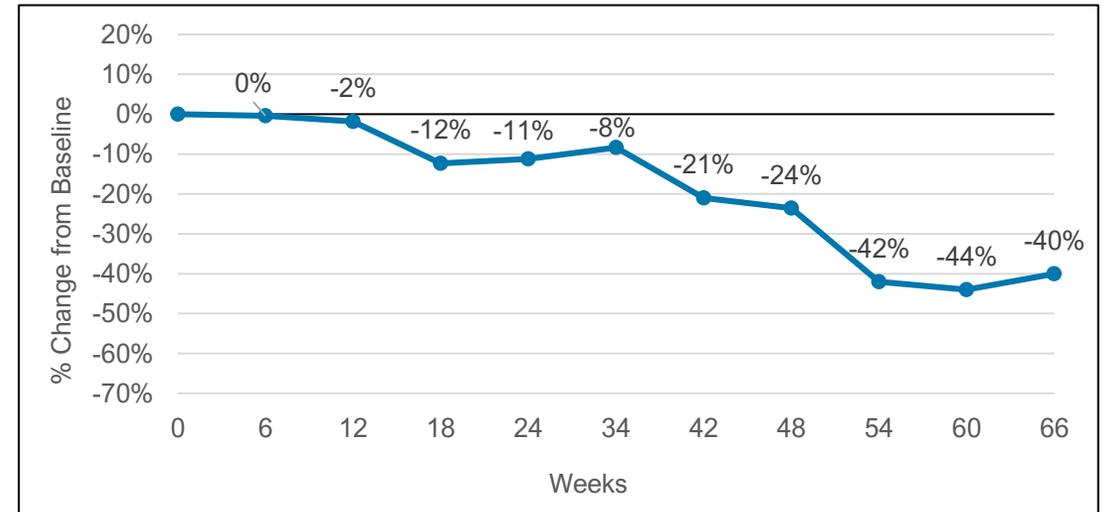
## Metastatic Merkel Cell Carcinoma

- Prior therapies include multiple PD-1 inhibitors (pembrolizumab, nivolumab + ipilimumab, then nivolumab alone), with best response of stable disease
- Achieved **partial response at week 12 (-45%)**, which was sustained through week 36 before disease progression



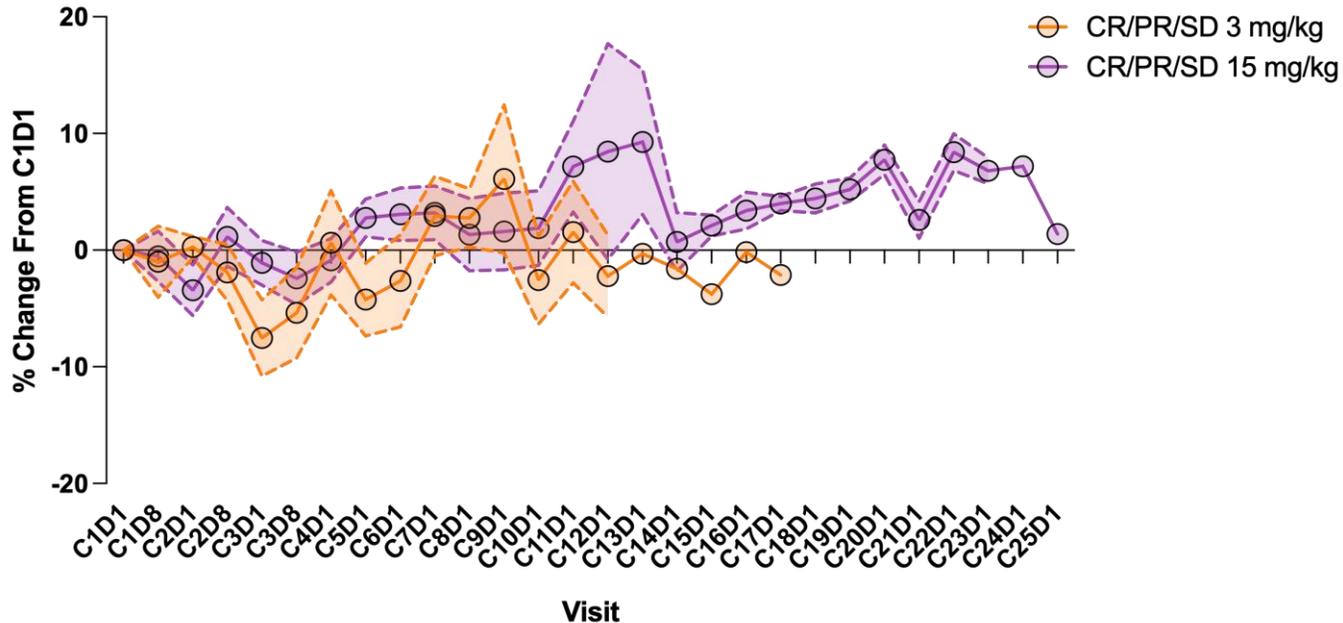
## Non-Small Cell Lung Cancer

- Patient was PD-(L)1 naïve based on TPS (PD-L1) score <5% anti-PD-(L)1 therapy unlikely to provide a benefit
- Experienced stable disease that converted to **partial response at 54 weeks**
- Onset of response was unusually late and atypical



# Higher Dose Solnerstotug + Cemiplimab Associated With More Sustained CD8<sup>+</sup> TEM and TEMRA Modulation in Patients With Disease Control

**CD8<sup>+</sup> TEMRA**  
 “Hot” tumor group, CR/PR/SD  
 3 mg/kg (n=5) vs 15 mg/kg (n=11)



- Flow data tracking CD8<sup>+</sup> memory T-cells in the blood of treated patients changed over time – particularly the TEM and TEMRA subsets:
  - CD8<sup>+</sup> TEM cells are antigen-experienced effector-memory T-cells involved in immune surveillance and tumor recognition
  - TEMRA represent a highly cytotoxic, terminally differentiated subset associated with recent immune activation and tumor-reactive activity
- Patients treated at higher doses of solnerstotug (15 mg/kg) + cemiplimab with clinical responses showed somewhat greater and more sustained increases in TEMRA cells over time
- Findings may indicate more sustained immune activation at the higher dose level

# Phase 1 Conclusions

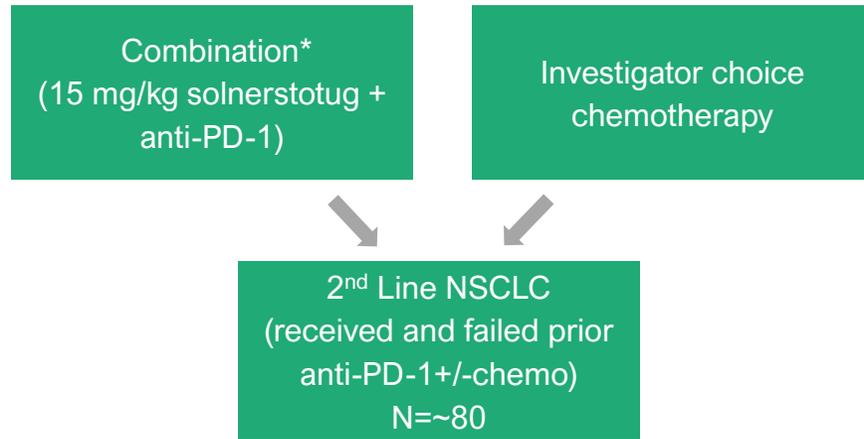
- Solnerstotug/cemiplimab combination therapy demonstrates clinical activity in a PD-(L)1 resistant population of solid tumors:
  - Durable clinical responses observed with a pattern of late onset response seen in 4 out of 5 patients
  - Encouraging overall rate of PFS-6 of 37%
- Data suggests 15 mg/kg may have superior clinical activity
  - All five responders were at this dose
  - PFS-6 of 50% at this dose level
  - All CRS events (Grade 1) occurred at this dose
- Data compares favorably to historical benchmarks in PD-(L)1 refractory settings
- Combination regimen shows acceptable safety and tolerability profile
  - TEAE profile does not appear different than that of single agent cemiplimab
  - CRS events were rare and low grade
- Combination with cemiplimab offers potential for generally well tolerated “all IO” doublet regimen where both agents may be administered until disease progression

# Phase 2 Strategy

- Rooted in key observations made with solnerstotug/cemiplimab combination in PD-(L)1 responsive cohort:
  - Impressive/encouraging rates (PFS-6) of durable disease control over a broad range of solid tumor types
  - Most of the objective responses are observed in the “hottest” of tumor types (Merkel Cell and MSI-High) and also saw durability in less “hot” tumor types
  - Acceptable safety and tolerability profile for solnerstotug in combination with cemiplimab
- Basic assumptions incorporated into Phase 2 planning:
  - Highest level of activity appears to be in the “hottest” tumor settings
  - Level of activity observed with solnerstotug/cemiplimab may approximate the activity seen with ipilimumab/nivolumab doublet WITHOUT the severe toxicity associated with that doublet
  - Late onset responses and durable stable disease suggest progression-free survival and possibly overall survival as appropriate endpoints going forward
  - Indication selection balances a large commercial opportunity (NSCLC) with a fast-to-market opportunity (MCC)

# Potential Phase 2 Study Designs

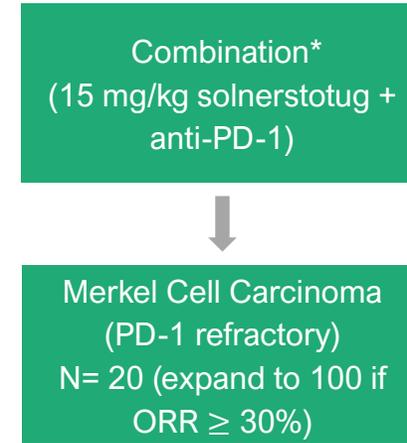
## Randomized Study in Large Indication



| Phase 2 Study Objectives |   |
|--------------------------|---|
| Primary                  | Progression Free Survival   |
| Secondary                | Overall Response Rate, Duration of Response, Overall Survival, Safety |

**Establishes clear signal in commercially attractive indication**

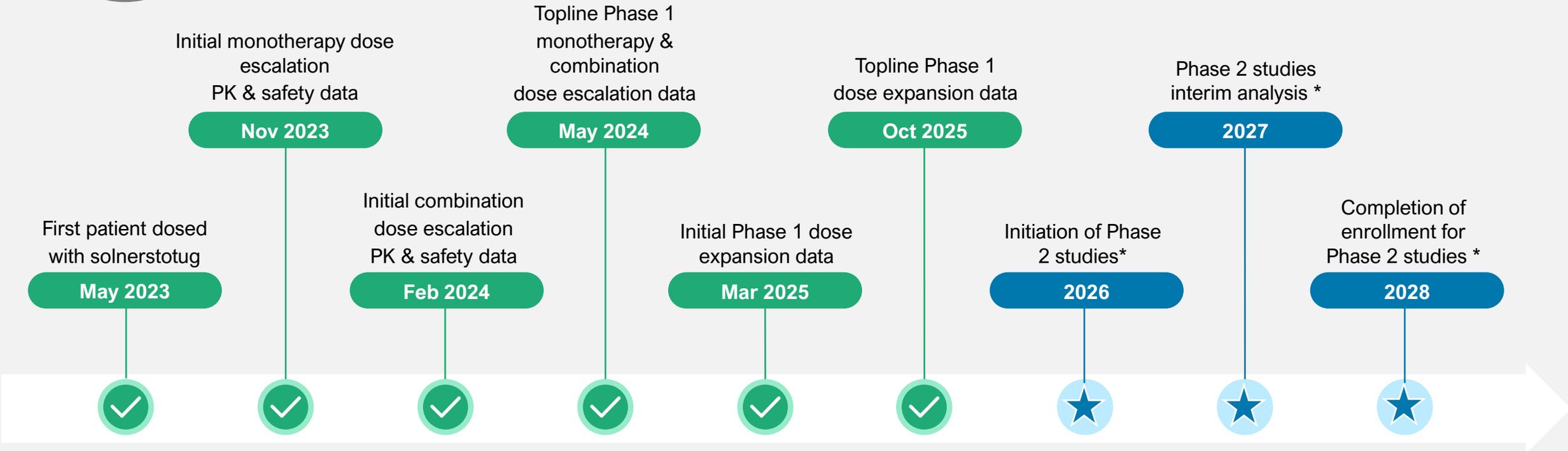
## Single Arm Study in Niche Indication

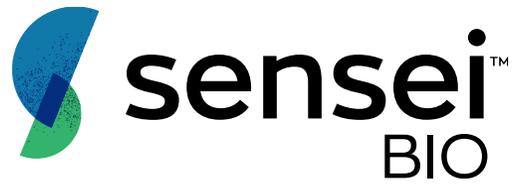


| Phase 2 Study Objectives |   |
|--------------------------|---|
| Primary                  | Overall Response Rate   |
| Secondary                | Progression Free Survival, Duration of Response, Overall Survival, Safety |

**Pursue accelerated approval in PD-1 resistant population; Orphan Drug Designation and Breakthrough Designation potential**

# Solnerstotug Clinical Milestones





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**MD:** 1405 Research Blvd, Suite 125, Rockville, MD 20850 / **MA:** 451 D St, Suite 906, Boston, MA 02210

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