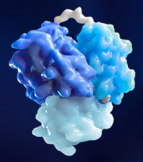
HARPOON Therapeutics

Spearheading Immunotherapies

CORPORATE PRESENTATION
MAY 16, 2023

Nasdaq: HARP

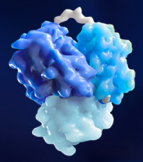
Forward-looking Statements



This presentation and accompanying oral commentary contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “may,” “will,” “expect,” “plan,” “anticipate,” “target,” “estimate” and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements. These forward-looking statements are based on Harpoon's expectations and assumptions as of the date of this presentation. Each of these forward-looking statements involves risks and uncertainties that could cause Harpoon's clinical development programs, future results or performance to differ significantly from those expressed or implied by the forward-looking statements. Forward-looking statements contained in this presentation and accompanying oral commentary include, but are not limited to, statements about the progress, timing, scope, design and anticipated results of clinical trials, the timing of the presentation of data, the association of data with potential treatment outcomes, the development and advancement of platforms and product candidates, and the timing of development milestones for platforms and product candidates, expectations of our cash runway and future business, strategy and financial performance. Many factors may cause differences between current expectations and actual results, including unexpected safety or efficacy data observed during clinical studies, clinical trial site activation or enrollment rates that are lower than expected, unanticipated or greater than anticipated impacts or delays due to the COVID-19 pandemic, changes in expected or existing competition, changes in the regulatory environment, the uncertainties and timing of the regulatory approval process, the risk that initial or interim results from a clinical trial may not be predictive of the final results of the trial or the results of future trials, the risk that trials may be delayed and may not have satisfactory outcomes, and unexpected litigation or other disputes that impede clinical trial progress. Other factors that may cause Harpoon's actual results to differ from those expressed or implied in the forward-looking statements in this presentation and accompanying oral commentary are discussed in Harpoon's filings with the U.S. Securities and Exchange Commission, (SEC) including under “Risk Factors” in Harpoon Therapeutics’ quarterly report on Form 10-Q for the quarter ended March 31, 2023, filed with the SEC on May 11. 2023 and our other filings from time to time. Except as required by law, Harpoon assumes no obligation to update any forward-looking statements contained herein to reflect any change in expectations, even as new information becomes available.

Certain information contained in this presentation and statements made orally during this presentation relate to or are based on studies, publications, surveys and other data obtained from third-party sources and Harpoon’s own internal estimates and research. While Harpoon believes these third-party studies, publications, surveys and other data to be reliable as of the date of this presentation, it has not independently verified, and makes no representations as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. In addition, no independent source has evaluated the reasonableness or accuracy of Harpoon’s internal estimates or research and no reliance should be made on any information or statements made in this presentation relating to or based on such internal estimates and research.

Clinical-Stage Immuno-Oncology Company
Directing T Cells to Kill Tumors



Advancing a Portfolio of Novel T Cell Engagers (TCEs)

Clinical Pipeline

Addressing broad patient populations

- **Clinical-stage T cell engagers across multiple indications**
- **Clinical benefit seen in hematological and solid tumor settings:**
  - **Confirmed responses, tumor lesion reductions deepening over time**
- **Emerging clinical data validate TriTAC platform designed to maximize the therapeutic window**

Novel TCE Platforms

Solid and hematological tumors

- **Platform technologies allowing for "off-the-shelf" T cell therapies**
- **Treating broad patient populations with unmet needs**
- **Addressing solid and hematologic malignancies**
- **Each platform designed to maximize the therapeutic window**

Strong Capabilities

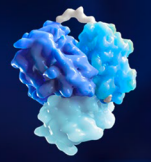
Industry veterans developing novel TCEs

- **Deep expertise in oncology, T cell engagement, and protein engineering**
- **Cash runway expected to fund operations into the second half of 2024**
  - ***$61.4M in cash, cash equivalents & short-term marketable securities,* including:***
    - ***$25M preferred equity financing closed in March 2023***
- **Strong patent protection across platforms and programs**

HARPOON Therapeutics

*As of March 31, 20232

Broad Pipeline of Immuno-Oncology Programs
Advancing Next-Generation T Cell Engagers



Program	Indication(s)	Stage of Development	Partner
HPN217 (BCMA)	Multiple Myeloma	Phase 1	abbvie [1]
HPN328 (DLL3)	Small Cell Lung Cancer / Other Solid Tumors	Phase 1	Roche atezolizumab Supply Agreement [2]
HPN536 (Mesothelin)	Ovarian, Pancreatic / Other Solid Tumors	Phase 1	
HPN601 (EpCAM)	Multiple Solid Tumors	Preclinical	
Preclinical Candidates			
TriTAC (undisclosed)	Oncology	Preclinical	abbvie [3]
ProTriTAC (EGFR, TROP2, Integrin-β6, undisclosed)	Oncology	Preclinical	abbvie [3]
TriTAC-XR (FLT3, B Cell Targeting, undisclosed)	Oncology / Non-Oncology	Preclinical	

TriTAC ProTriTAC TriTAC-XR

HARPOON Therapeutics

(1) AbbVie retains an option to worldwide exclusive rights (HPN217)
(2) Roche supply agreement established for the use of atezolizumab in combination with HPN328
(3) AbbVie entered in a discovery platform collaboration to select a fixed number of targets from these platforms

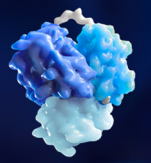
TriTAC®

HPN217

Targeting BCMA

Interim Data Presented at ASH 2022

Multiple Myeloma: High Unmet Need Remains
Multiple Development Opportunities in a Rapidly Evolving Landscape



- 58% overall 5-year survival rate in U.S. increasing over time[1], creating **need for multiple lines of therapy**
- BCMA agents beginning to redefine RRMM treatment, with **opportunities to improve upon tolerability, efficacy, and accessibility**
- BCMA agents with improved tolerability have future potential to be **developed in the early line setting**

Newly Diagnosed Multiple Myeloma

(34k patients in the U.S. in 2022)

50 – 60% → SCT Ineligible (elderly / frail): Doublets/Triplets

40 – 50% → SCT Eligible (young / fit): ASCT + Triplets

Multiple Combinations of PIs, IMIDs, CD38s

Relapsed Refractory MM

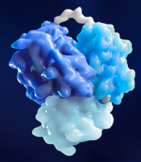
New MOAs
BCMA Agents: T cell engagers; Cellular Therapies, ADCs
NEI, HDAC Inhibitors, Novel Agents

Lines of Therapy: 1L → 2L-3L → 4L+

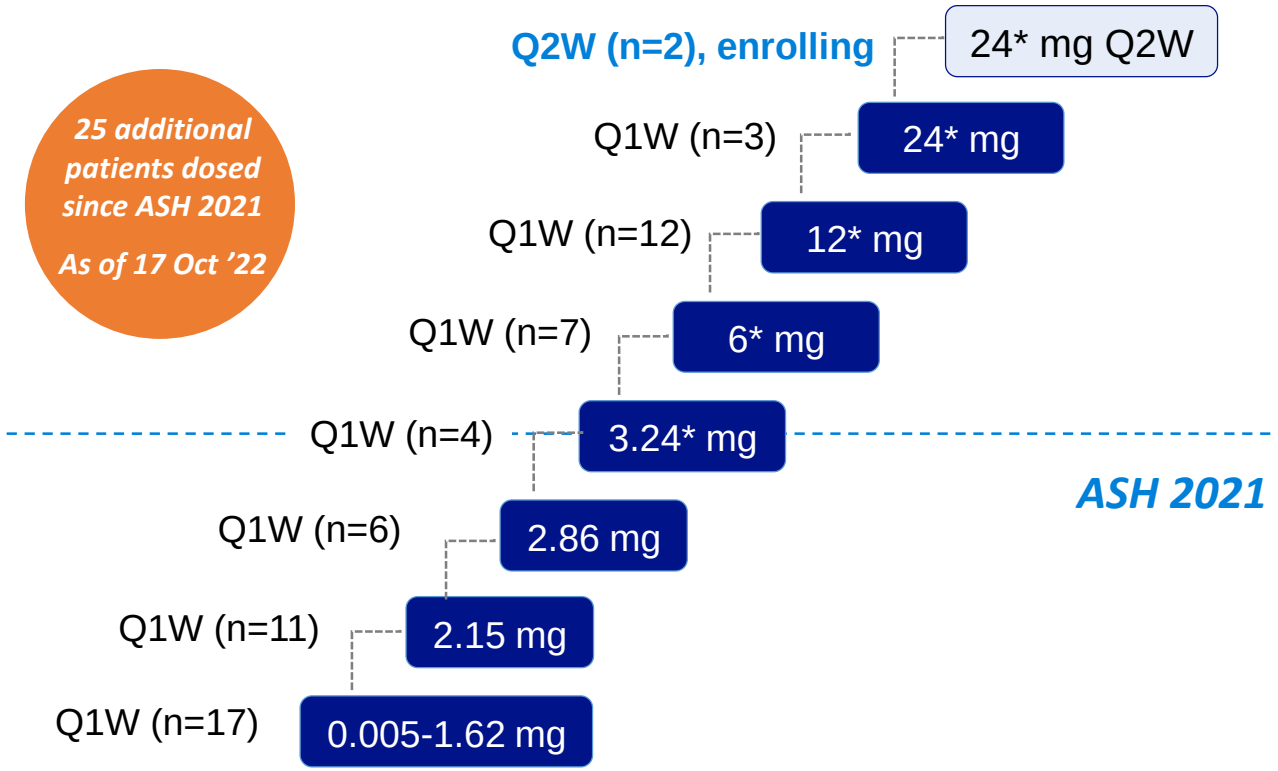
[1] Over time period 2012 and 2018 Cancer stats Facts: Myeloma https://seer.cancer.gov/statfacts/html/mulmy.html
BCMA means B-cell Maturation Antigen; RRMM means Relapsed/Refractory Multiple Myeloma, SCT means Stem Cell Transplant
(Accessed Oct 2022); Global Data, 2019; Strassel L; Schreder, M, 2021; KOL Interviews

HARPOON Therapeutics

HPN217-3001 Phase 1 Trial Design
Relapsed/Refractory Multiple Myeloma



Dose Escalation 3+3 Design



Fixed- and Step-Dose Escalation Cohorts: 3-6 patients per dose level; Backfilling permitted; * Step-Dose Regimen

Key Eligibility Criteria

- Relapsed/refractory multiple myeloma
- ≥3 prior therapies, including PI, IMID, and anti-CD38
- Prior BCMA-targeted therapies allowed

Trial Design

- Primary Objectives: Safety, PK, Establish MTD or RP2D
- Secondary Objectives: Clinical Activity per IMWG Criteria

Dosing & Administration

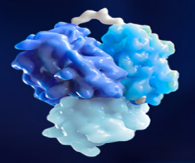
- HPN217 administered by 1-hour IV infusion as flat dose
- Premedication for Cytokine Release Syndrome (CRS) prophylaxis

Next Steps

- Currently enrolling initial bi-weekly dosing cohort
- Dose optimization and backfill ongoing, with final cohort plans to be based upon emerging data

HARPOON Therapeutics

HPN217: Study Patient Population Represents Real-World, Late-Line Population with High-Risk Features



Baseline Characteristics and Demographics

Baseline Characteristics	Total N = 62
Age (yr), Median (range)	70 (38 – 83)
Age ≥ 75 years, n (%)	12 (19%)
Time Since Initial MM Diagnosis (yr), Median (range)	8 (1 – 20)
Baseline sBCMA (ng/mL), Median (range)	240 (27– 2444)
ECOG, n (%)	
0	14 (23%)
1	46 (74%)
Missing	1 (2%)
Revised ISS Stage at Study Entry, n (%)	
I	16 (26%)
II	17 (27%)
III	26 (42%)
Missing	3 (5%)

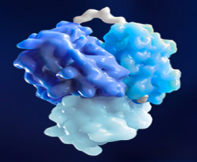
Prior Systemic Therapies

Prior Cancer Therapy	Total N = 62
Prior Systemic Therapies, Median (range)	6 (2-19)
Prior Transplantation, n (%)	46 (74%)
Exposure Status, n (%)	
Triple-class[a] exposed	58 (94%)
Penta-drug[b] exposed	41 (66%)
BCMA exposed	13 (21%)
Relapsed/Refractory Status, n (%)	
Triple-class[a] refractory[c]	47 (76%)
Penta-class[b] refractory[c]	26 (42%)
BCMA refractory[c]	11 (18%)

[a]IMiD, PI, and anti-CD38; [b]At least 2 Pis, at least 2 IMiDs, and at least 1 anti-CD38 antibody; [c] No response to regimen or discontinued regimen due to progression, adapted from Rajkumar et al (Blood 2011)

Note: Unaudited patient data are based on entries provided in open clinical database as of 10/17/2022

HPN217: Safety Summary



Common Treatment-Emergent Adverse Events (Regardless of Relationship), ≥15%

AE Preferred Term	All Grades (N=62)[a]	≥ Grade 3 (N=62)[a]
Anemia	27 (44%)	21 (34%)
Fatigue	20 (32%)	2 (3%)
Cytokine release syndrome[b]	17 (27%)	0 (0%)
Headache	15 (24%)	0 (0%)
Hypokalemia	13 (21%)	2 (3%)
Nausea	13 (21%)	0 (0%)
Back Pain	11 (18%)	1 (2%)
Diarrhea	11 (18%)	1 (2%)
Hypophosphatemia	11 (18%)	4 (7%)
AST increased	11 (18%)	5 (8%)
Cough	11 (18%)	0 (%)
Arthralgia	10 (16%)	1 (2%)
Neutrophil count decreased	10 (16%)	8 (13%)
Dyspnea	10 (16%)	2 (3%)
ALT increased	9 (15%)	4 (7%)
Constipation	9 (15%)	0 (%)
Hypercalcemia	9 (15%)	1 (2%)

- **Dose Limiting Toxicity**
  - Fixed Dose: 2 patients at 2.86 mg/week, reversible transaminitis (Gr 3, n=1; Gr 4, n=1), no clinical sequelae
  - Step Dose: No DLTs; MTD not reached
- **Neurologic/Psych Events[c]**
  - **Treatment related** events reported in 10 patients
    - All events Grade 1 - 2
    - Most common: Headache (n=6) and Confusion (n=2)
- **Infections[d]**
  - Reported in 28 (45%) patients (Gr 3/4, 16%)
  - Most common: Pneumonia (n=6), upper respiratory tract infection (n=5) and urinary tract infection (n=5)

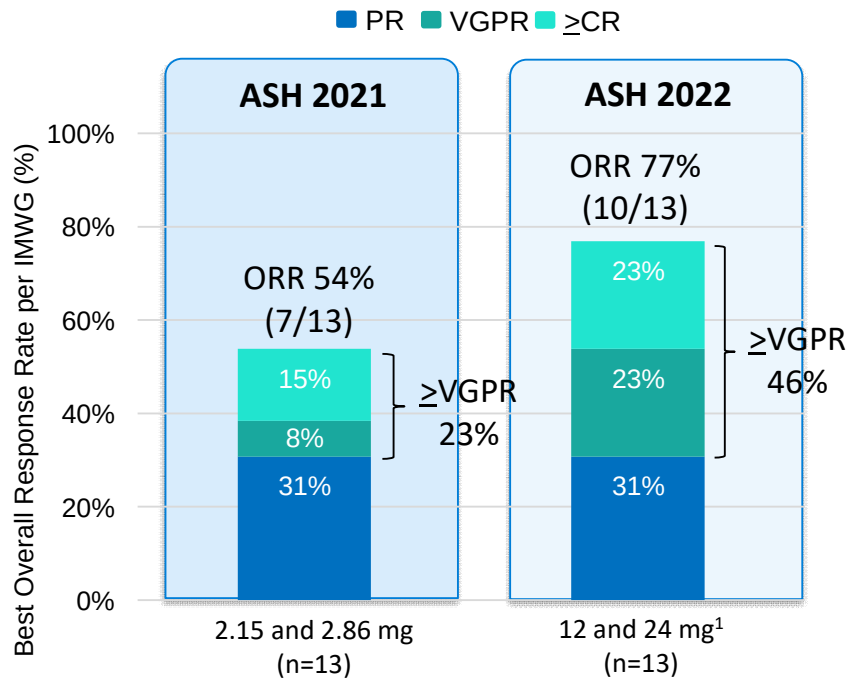
[a] Grading per CTCAE v5.0; [b] Grading per ASTCT 2019 Criteria; [c] SOC nervous system disorders and psychiatric disorders; [d] SOC infections and infestations

Note: Unaudited patient data are based on entries provided in open clinical database as of 10/17/2022

HPN217: ORR and CRS Rates Suggest Potentially Differentiated Profile with Widened Therapeutic Index

ORR

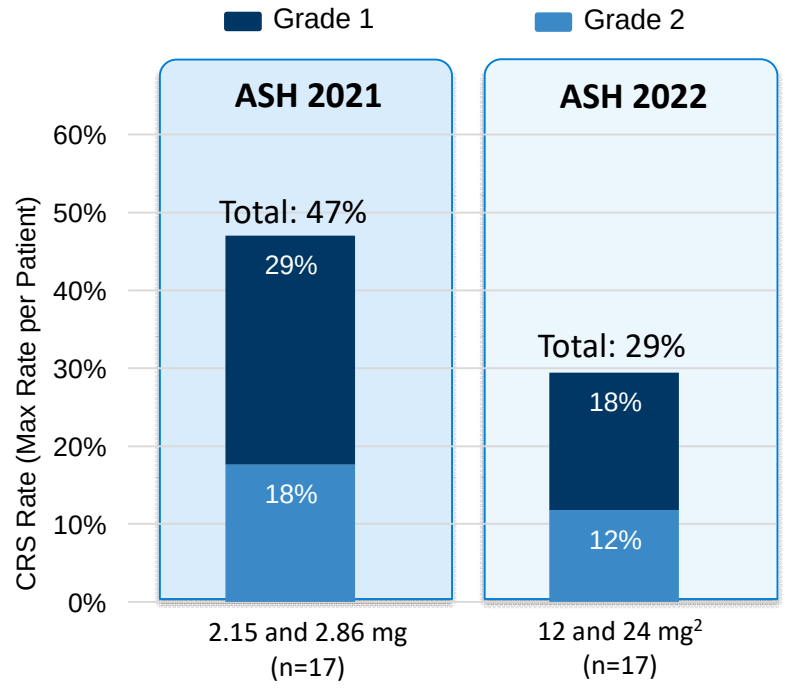
Overall Response Rate
ASH 2021 Compared to ASH 2022*
Highest 2 Target Dose Levels at Each Timepoint



Confirmed and Unconfirmed Responses per Investigator Assessment
Disease-evaluable patients shown with at least 1 post-baseline assessment

CRS

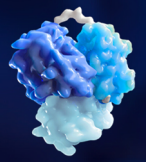
Maximum CRS Grade by Dose Group
ASH 2021 Compared to ASH 2022*
Highest 2 Target Dose Levels at Each Timepoint



Grading per ASTCT 2019 Criteria
All patients shown who received ≥1 dose HPN217

*Note: Unaudited patient data based on entries provided in open clinical database as of 10/17/2022. Responses per Investigator Assessment (subject to change)
[1]Highest 2 dose levels with disease-evaluable patients at each timepoint Q1W; [2]Highest 2 dose levels with patients who received ≥1 dose Q1W or Q2W

HPN217: Time on Treatment at Target Doses ≥ 2.15mg
Deep Early Responses Observed at Highest Exposures



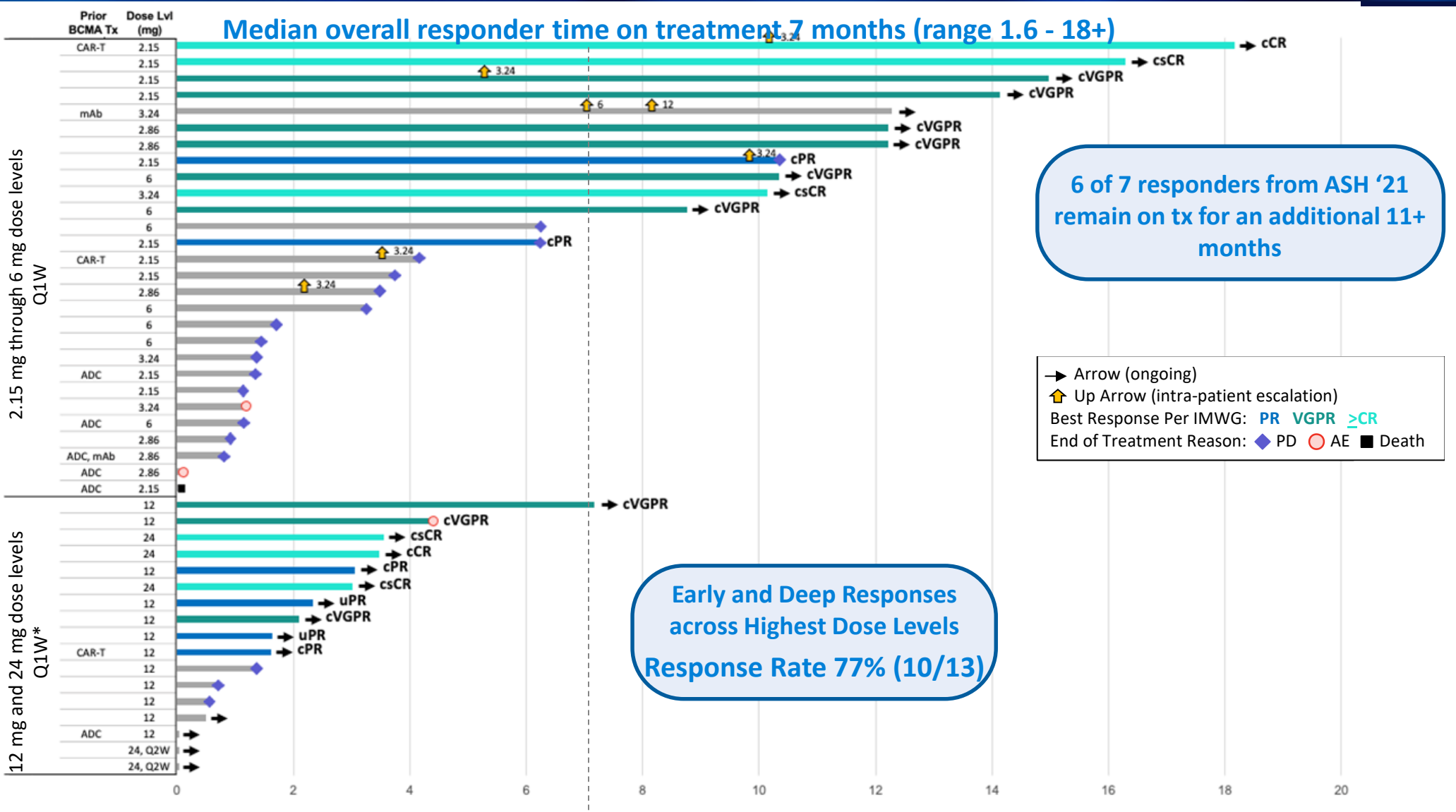
For 2.15 - 6mg Cohorts:

All Patients with at least 9 Months of Follow up

Median Responder Time on Tx: 12 months (6 - 18+)

For 12 & 24 mg Step Cohorts Enrollment Ongoing

Median Responder Time on Tx: 3 months (1.6 - 7+)



6 of 7 responders from ASH '21 remain on tx for an additional 11+ months

Early and Deep Responses across Highest Dose Levels

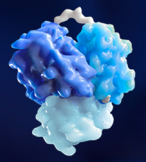
Response Rate 77% (10/13)

HARPOON Therapeutics

* All patients Q1W schedule with exception of patients denoted

Note: Based on available data in unaudited patient database as of 10/17/2022; confirmed and unconfirmed responses per Investigator Assessment (subject to change)

HPN217: Summary



Profile Emerging with Opportunity to be Best-in-Class T Cell Engager Targeting BCMA

Active Agent[1]

- **77% (10/13) ORR** observed across highest step-dose levels (12 and 24 mg)
- **Responses occurred early and were durable**; for patients with at least 9 months follow up, the median responder time on treatment is 12 months
- 18 of 21 responders remain on study treatment with sustained response, **with many responses deepening over time**

Well Tolerated Safety Profile Emerging

- Transient CRS in 29% of patients across highest step-dose levels (12 and 24mg)
- Post ASH 2022, 1 patient experienced Gr3 CRS and Gr1 ICANS at 24 mg target dose followed by post-traumatic Grade 5 subdural hematoma
- **Overall, low incidence of CRS across the patient population studied to date**

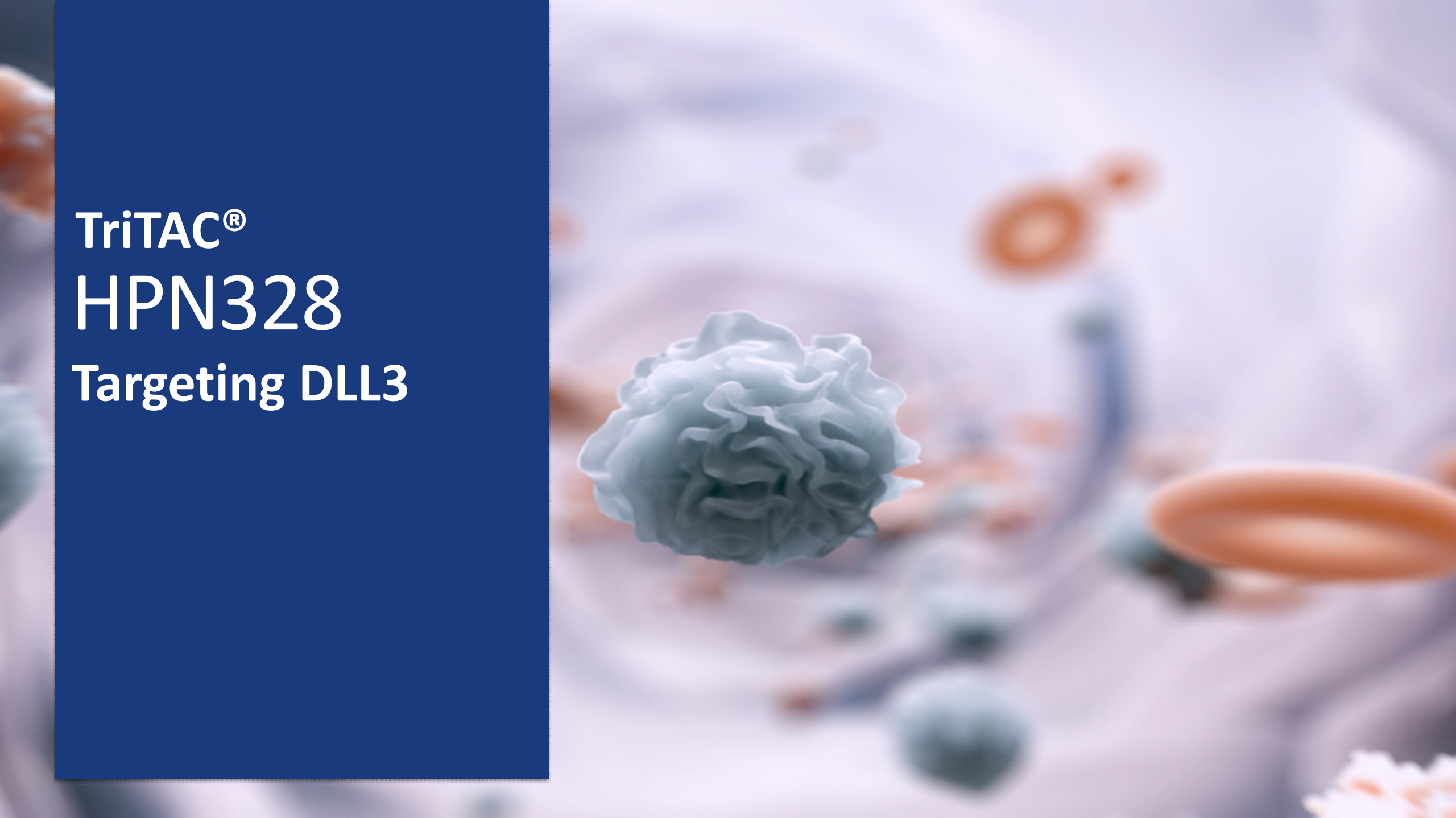
Anticipated Near-Term Milestones

- **Dose expansion and backfill cohorts continue to enroll at target dose of 12mg and 24mg**
- **Phase 1 study enrollment anticipated to complete** in 1H 2023, with up to potentially 94 patients, based on data from dose escalation cohorts
- Anticipate identification of a recommended Phase 2 dose(s) by YE 2023
- **Data update** anticipated in 2H 2023

[1] Relative to other BCMA-targeted TCEs in heavily pretreated patients across the highest step-dose cohorts
[2] ICANS means Immune effector cell-associated neurotoxicity syndrome

Note: Unaudited patient data based on entries provided in open clinical database as of 10/17/2022 (subject to change)

HARPOON Therapeutics



TriTAC®
HPN328
Targeting DLL3

Small Cell Lung Cancer Standard of Care
Limited effective options available in the relapsed/refractory setting

Newly Diagnosed Small Cell Lung Cancer

~65%

Extensive Stage

Platinum + Etoposide + anti-PDL1[1]

anti-PDL1[1]

~35%

Limited Stage

Platinum + Etoposide + Radiotherapy

Relapsed Refractory SCLC

Recurs in ≤ 6 m

Topotecan

Lurbinectedin[2]

Recurs in > 6 m

Platinum + Etoposide Clinical Trial

No approved agents in 3L+

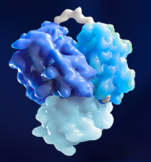
Lines of Therapy 1L 1L-Maintenance 2L 3L+

[1] Atezolizumab and Durvalumab approved for 1L ES-SCLC in combination with platinum-doublet chemo and continued in maintenance for patients with ≥SD;
[2] Lurbinectedin has accelerated approval in the U.S. only.
Source: NCCN Guidance; Physician Interviews 2021

HARPOON Therapeutics

HPN328: Trial Design and Demographics

A Phase 1/2 Open-Label, Multi-Center, Dose Escalation / Expansion, Safety & PK Study



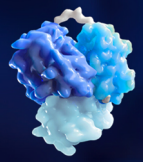
- **Target population**
  - SCLC relapsed after platinum chemotherapy
  - Other high-grade neuroendocrine cancers R/R to standard of care (SOC) or no SOC available
- **Trial objectives**
  - Assess safety and tolerability at increasing dose levels
  - Characterize PK and PD
  - Evaluate preliminary anti-tumor activity
- **Dosing and administration**
  - Weekly IV infusion
- **Status**
  - 29 patients enrolled at the end of 2022
  - Currently enrolling backfill patients in 1mg – 6mg cohort; enrollment continuing in dose escalation 1mg – 12 mg cohort

Baseline Characteristics	Total N = 22
Age (yr), Median (range)	61 (43 – 73)
ECOG performance status 0-1, n (%)	22 (100)
Brain / Liver metastases, n (%)	8 (36) / 11 (50)
Disease	n (%)
Small Cell Lung Cancer	15 (68)
Neuroendocrine Prostate Cancer	2 (9)
Other Neuroendocrine Neoplasm	5 (23)
Prior Lines of Therapy	n (%)
1	5 (23)
2	5 (23)
≥3	12 (54)
Median (range)	3 (1-6)
Prior immune checkpoint inhibitor (αPD-1/αCTLA4, αPD-L1)	18 (82)

HARPOON Therapeutics

Unaudited patient data based on entries provided in open clinical database as of 10/10/2022 (subject to change)

HPN328: Safety Summary



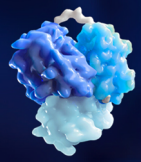
- **Recent priming dose DLTs inform optimization of priming dose to support further escalation of target dose**[1]
- **TriTAC platform designed to minimize CRS risk and allow for greater escalation of target dose, and re-escalation of target dose is underway**
- **No** DLTs at target dose
- Target dose MTD **not yet reached**

[1] as reported in Harpoon press release dated November 14, 2022

Unaudited patient data based on entries provided in open clinical database as of 10/10/2022 (subject to change)

HARPOON Therapeutics

HPN328: Clinical Summary
Anti-tumor Activity Seen in Small Cell Lung Cancer at Higher Doses



- HPN328 was observed to be active [1]
  - 71% (5/7) of SCLC patients at doses ≥1.215mg had target lesion shrinkage
  - 25% (3/12) of SCLC patients across all doses with >30% Target Lesion Shrinkage
  - 1 Confirmed Partial Response, durable beyond 6 months
- Treatment duration ≥ 5 months was observed in 7 of 20 (35%) patients
- Median half-life of 71 hours, with linear pharmacokinetics
- **Update as of February 2023**: 1 additional Confirmed Partial Response was observed in a SCLC patient in the 2-12mg QW cohort who remains on treatment

[1] Unaudited patient data based on entries provided in open clinical database as of 10/10/2022 (subject to change)

HARPOON Therapeutics

HPN328 Patient Case 1: Relapsed ES-SCLC

53% Reduction in Sum of Target Lesion Diameters at Week 10: Confirmed PR

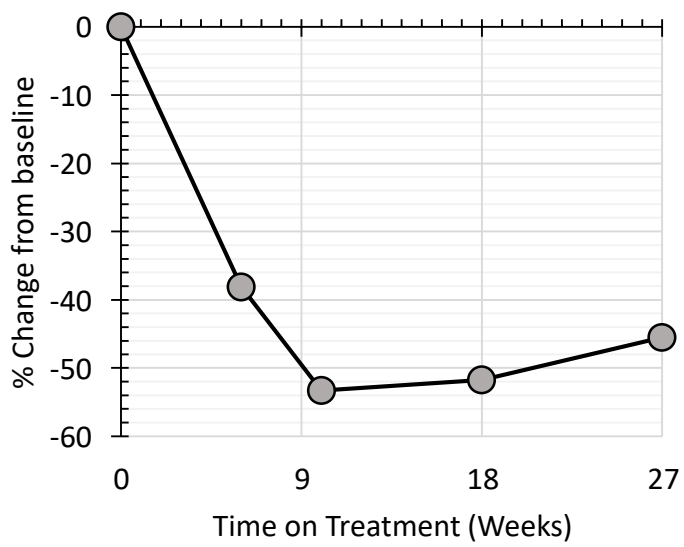
Data as of October 10, 2022

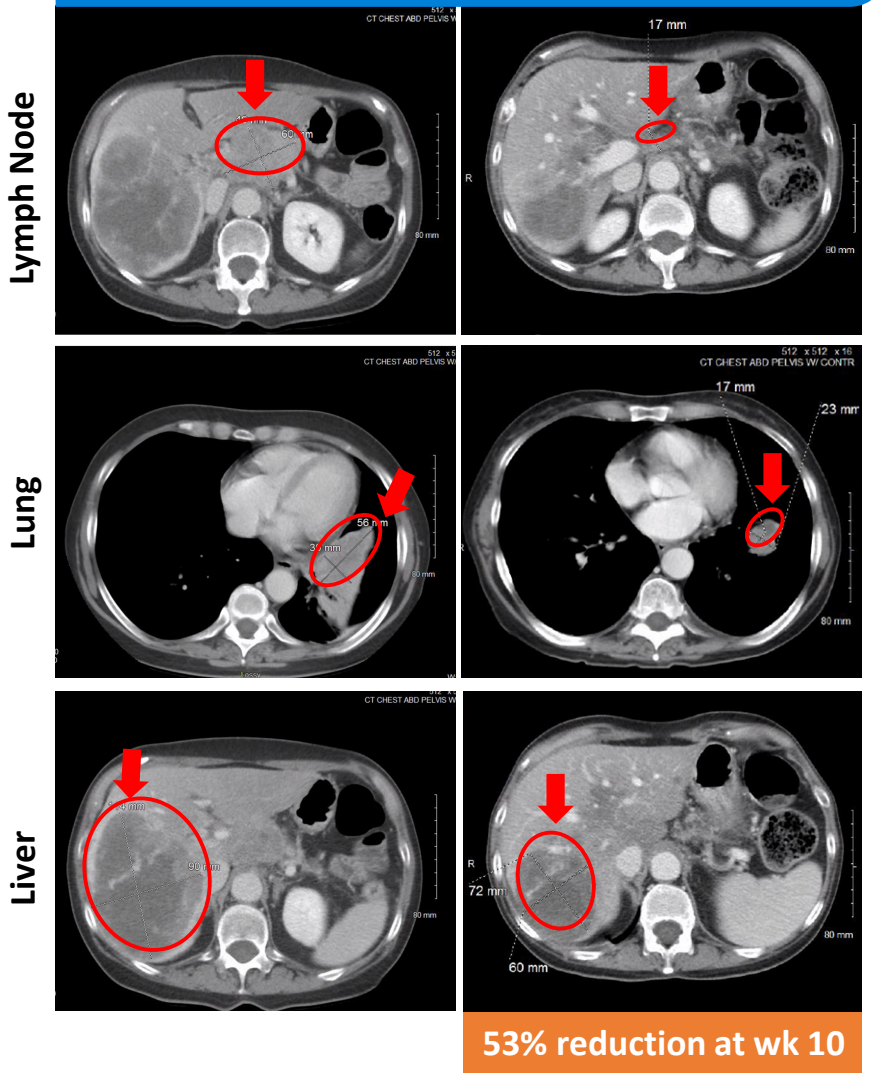
Patient History

- 61-year-old female
- Diagnosed Jan 2021 with extensive-stage SCLC
- Location of metastases:
  - TLs: lung, liver x2, lymph nodes x2
  - Non-TLs: lung x2, liver
- Prior systemic treatment:
  - carboplatin + etoposide + atezolizumab
- Time on most recent prior systemic treatment: 20.1 weeks
- Upon study entry, **stable disease as best response** to most recent prior systemic treatment

Results

- **Initiated HPN328 at 1.215mg/week, later dose escalated**
- **Confirmed PR at week 10**
- **Continued treatment with HPN328 for 33 weeks**





53% reduction at wk 10

Unaudited patient data based on entries provided in open clinical database as of 10/10/2022 (subject to change)

HARPOON Therapeutics

HPN328 Patient Case 2: Relapsed ES-SCLC

72% Reduction in Sum of Target Lesion Diameters

Deepening of response over time continuing beyond ASCO 2022 data

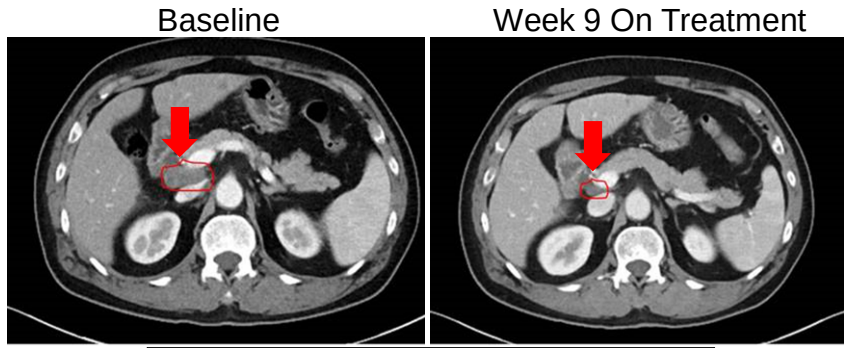
Data as of October 10, 2022

Patient History

- 67-year-old male
- Diagnosed in April 2020 with extensive-stage SCLC
- Location of metastases
  - TLs: liver x2, lymph nodes x2
  - Non-TLs: liver, lymph nodes x2, spleen, bone, brain
- Prior systemic treatment
  - Carboplatin + Etoposide + Toripalimab
  - Cisplatin + Etoposide
  - Lurbinectedin
- Time on most recent prior systemic treatment
  - 10.9 weeks
- Upon study entry, partial response as best response to most recent prior systemic treatment but unable to tolerate further treatment

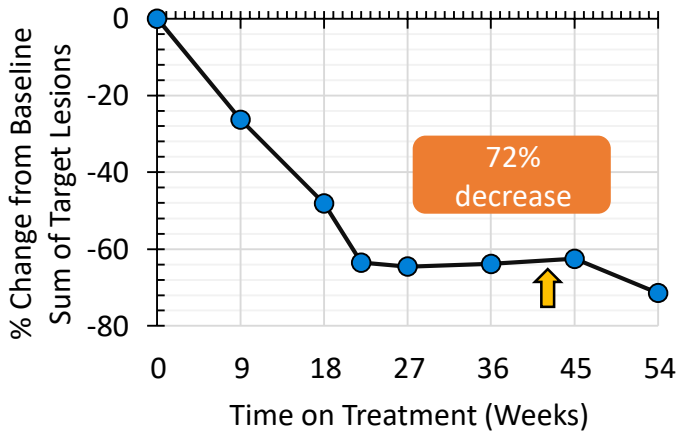
Results

- **HPN328 3.6 → 7.2 mg/week (increased to 12 mg/week)**
  - Well tolerated
- **72% reduction in sum of target lesion diameters**
  - Asymptomatic brain metastasis identified at week 2
  - Systemic disease responding to HPN328
  - RECIST v1.1: Target Lesions: PR; Overall: PD
  - 60% cells positive for DLL3
- **Deepening of radiographic target lesion response over time**
- **Remains on HPN328 treatment beyond 54 weeks**
  - At ASCO 2022 (April 21, 2022 data) was at 27 weeks
  - Current data: **ongoing clinical benefit observed beyond 1 year**

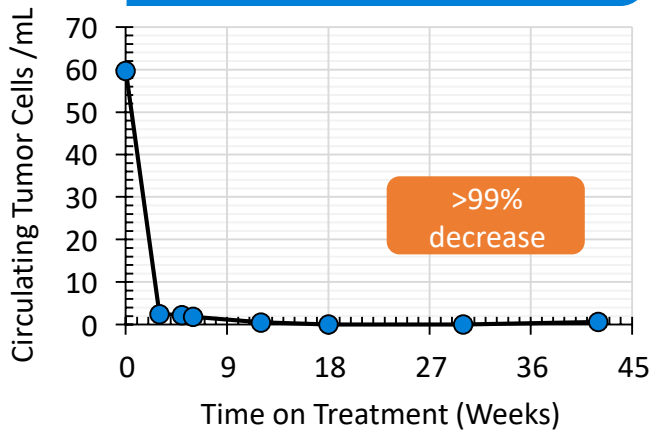


Response in peri-portal lymph node

Deep, durable target lesion shrinkage



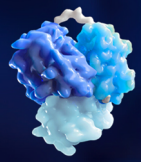
Durable >99% decrease in CTCs



⇧ = Dose Increase

HARPOON Therapeutics

HPN328: Anticipated Next Steps

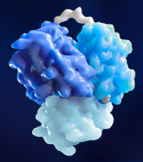


- Continue Phase 1 enrollment in the dose exploration study
  - Monotherapy cohorts:
    - 1 mg – 6 mg step dose cohort enrolled and cleared for escalation
    - 1mg – 12mg step dose cohort enrolled and cleared for escalation
    - 29 patients were enrolled at year end 2022
    - Enrollment started in Q2W dosing cohorts for HPN328 monotherapy planned
  - Combination cohorts:
    - Begin enrollment in 2H2023 of additional cohorts in the Phase 1 dose escalation part of the study to evaluate HPN328 in combination with atezolizumab in SCLC
- Anticipate Phase 1 interim data in 2H 2023 for the highest target doses studied
  - Plan enrollment up to potentially 70 patients with ≥1 on-treatment scan by end of Q2 ’23*
- Plan for enrollment of up to 100 patients in monotherapy (including backfill) by mid-2023*
- Phase 1 dose exploration expected to complete in 2H-2023, including the identifying of a recommended Phase 2 dose(s) in the monotherapy setting by YE 2023

HARPOON Therapeutics

* Enrollment projections dependent on data from ongoing dose escalation cohorts

HPN601 (EpCAM)
First IND from Harpoon's ProTriTAC Platform Targeting EpCAM



- EpCAM is overexpressed in many tumor types, expression is also found on normal tissues
- HPN601 is engineered to preferentially target tumors and spare normal tissues
- Large addressable population with high unmet need
- No actively marketed systemic therapies targeting EpCAM
- Next Steps
  - IND filing timeline to enable a Phase 1 dose exploration study dependent on availability of resources

Tumor	EpCAM Expression[1] (% mod./high expression by IHC)	HPN601 Population[2,3] (est. annual incidence in USA)
Prostate	89	171,000
NSCLC	74	147,000
Breast	46	128,000
Colon	94	99,000
Endometrial	88	58,000
Thyroid	87	46,000
SCLC	75	22,000
Gastric	74	21,000
Ovarian	73	16,000
Esophageal	65	12,000
Neuroendocrine	88	11,000
Gallbladder	66	8,000
Total		**729,000**

[1]Based on Spizzo et al., J Clin Pathol, 2011. [2]Estimated annual incidence in US, rounded to the nearest 1,000, based on the American Cancer Society's (ACS) publication, Cancer Facts & Figures 2020, multiplied by the percentage of moderate and high EpCAM expression. [3] The neuroendocrine tumor annual incidence taken from ASCO Cancer.net. Exemplary IHC figures adapted from proteinatlas.org.

T Cell Engager	Route of Admin.	Clinical Results
Solitomab / AMG110 (Amgen)	Systemic	Program stopped due to on-target tox[1] MTD: 24 µg/day Anti-tumor activity noted at 2 - 4x MTD
Catumaxomab (Fresenius)	Intraperitoneal	Approved in 2009 for malignant ascites in EU[2] Not tolerated as systemic therapy[3]

1. Kebenko, OncoImmunol 2018. 2. Parsons, ASCO 2008. 3. Mau-Sorensen, Cancer Chemother Pharmacol 2015.

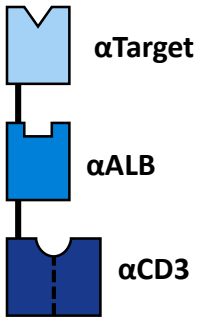
HARPOON Therapeutics

Harpoon's T Cell Engager Platforms Designed to Address Broad Number of Targets and Tumor Types

TriTAC®

Tri-specific T cell activating construct platform

Active

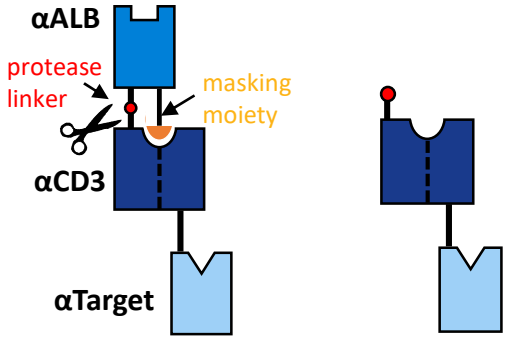


- Designed to minimize off-target toxicities by reducing nonspecific T cell activation
- Best suited for targets with restricted normal tissue expression
- Multiple active clinical-stage programs

ProTriTAC™

Prodrug activation in tumor micro-environment

Prodrug Long-lived → ***Activation in tumor micro-environment*** → **Active** Short-lived

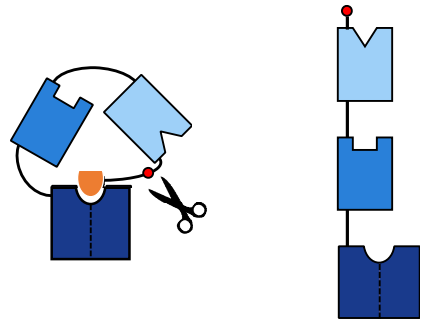


- Designed to minimize toxicities by preferential activation within tumor
- Best suited for targets expressed in both tumor and normal tissue
- Lead program in IND-enabling studies

TriTAC-XR™

Prodrug activation in systemic circulation

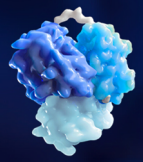
Prodrug → ***Slow activation in circulation*** → **Active**



- Designed to maximize systemic exposure while minimizing CRS
- Heme malignancies and solid tumors with potential expansion to non-oncology
- Finalizing platform validation

HARPOON Therapeutics

Summary and Anticipated Milestones



- Advancing pipeline of next-generation T cell engagers address broad patient populations with high unmet needs
- Strategic prioritization to focus resources on ongoing clinical programs in or nearing the clinic
- Clinically meaningful activity in hematology and solid tumor Phase 1 studies
- Current cash and equivalents of $61.4 million* including $25M preferred equity financing in March 2023 is expected to fund operations into the second half of 2024

1H 2023

HPN217 (BCMA):
- Ongoing patient enrollment in the Phase 1 trial
- Anticipate completion of enrollment in 1H 2023

HPN328 (DLL3):
- Phase 1/2 dose and schedule optimization trial ongoing with monotherapy cohorts enrolling at the 24mg target dose.

HPN601 (EpCAM):
- IND filing timeline to enable a Phase 1 dose exploration study dependent on the allocation of resources

2H 2023

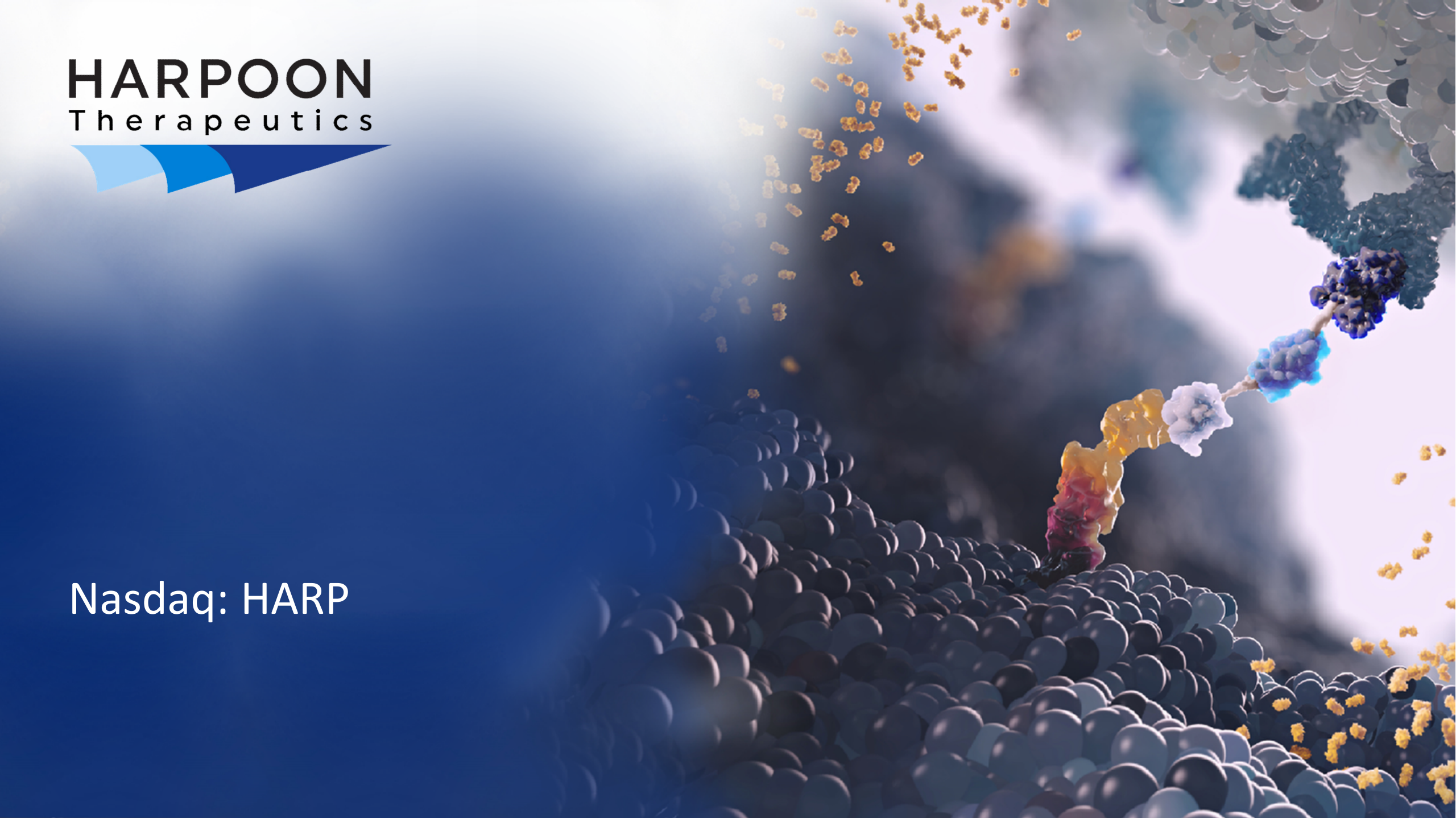
HPN217 (BCMA):
- Patient follow up and data package to be completed by YE 2023
- Anticipate identifying RP2D(s) by YE 2023
- Data presentation anticipated in 2H 2023

HPN328 (DLL3):
- Plan to enroll additional cohorts evaluating HPN328 in combination with atezolizumab in SCLC
- Data update anticipated in 2H 2023
- Identify recommended Phase 2 dose(s) in monotherapy setting by YE

HARPOON Therapeutics

*Cash, cash equivalents and short-term marketable securities as of March 31, 2023

HARPOON
Therapeutics



Nasdaq: HARP