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Precigen R&D Day

November 4, 2021

Forward-looking Statements

Some of the statements made in this presentation are forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based upon Precigen's current expectations and projections about future events and generally relate to plans, objectives and expectations for the development of Precigen's business and can be identified by forward-looking words such as “may,” “will,” “potential,” “seek,” “expect,” “believe,” “anticipate,” “intend,” “continue,” “opportunity,” “groundwork,” “poised,” “future,” “update” and similar expressions. Examples of forward-looking statements in this presentation include statements about the timing, pace and progress of preclinical and clinical trials and discovery programs, the potential benefits of platforms and product candidates including in comparison to competitive platforms and products, and the steps necessary to achieve regulatory approvals and commercial sales. Although management believes that the plans, objectives and results reflected in, or suggested by, these forward-looking statements are reasonable, all forward-looking statements involve risks and uncertainties and actual future results may be materially different from the plans, objectives and expectations expressed in this presentation. These risks and uncertainties include, but are not limited to: (i) the impact of the COVID-19 pandemic on Precigen’s businesses; (ii) Precigen’s strategy and overall approach to its business model; (iii) the uncertain timing and results of investigational studies and preclinical and clinical trials, including any delays or potential delays as a result of the COVID-19 pandemic; (iv) the fact that interim and preliminary results may change as more data becomes available and are subject to procedures that could result in changes to the final data, and results in early-stage clinical trials may not be indicative of results in later-stage clinical trials; (v) the lengthy and expensive clinical development process and the potential difficulty in enrolling patients; (vi) the lengthy and unpredictable nature of the regulatory approval process; (vii) Precigen’s limited experience designing and implementing clinical trials; (viii) the ability of Precigen to successfully enter into optimal strategic relationships with its subsidiaries and operating companies that it may form in the future; (ix) the ability generate significant operating capital, including through partnering, asset sales and operating cost reductions; (x) actual or anticipated variations in operating results; (xi) Precigen’s cash position; (xii) market conditions in Precigen’s industry; (xiii) the volatility of Precigen’s stock price; (xiv) Precigen’s ability, and the ability of its collaborators, to protect Precigen’s intellectual property and other proprietary rights and technologies; (xv) Precigen’s ability, and the ability of its collaborators, to adapt to changes in laws or regulations and policies, including federal, state, and local government responses to the COVID-19 pandemic; (xvi) outcomes of pending and future litigation; (xvii) the ability to retain and recruit key personnel; and (xviii) expectations related to the use of proceeds from public offerings and other financing efforts. For a discussion of other risks and uncertainties, and other important factors, any of which could cause actual results to differ from those contained in the forward-looking statements, see the section entitled "Risk Factors" in Precigen’s Annual Report on Form 10-K, as well as discussions of potential risks, uncertainties, and other important factors in Precigen’s subsequent filings with the Securities and Exchange Commission.

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All information in this presentation is as of the date of its cover page, and Precigen undertakes no duty to update this information unless required by law.

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Today’s Agenda

Today's Participants and Agenda

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AGENDA

UltraCAR-T® Platform

- PRGN-3006 UltraCAR-T® in AML and MDS
- PRGN-3005 UltraCAR-T® in Ovarian Cancer
- PRGN-3007 UltraCAR-T® in Hematological & Solid Cancers

AdenoVerse™ Platform

- PRGN-2012 AdenoVerse™ in RRP
- PRGN-2009 AdenoVerse™ in HPV+ Cancers

Q&A

PARTICIPANTS

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Precigen

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A lead investigator for the PRGN-2012 clinical study

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Welcome & Introduction

Helen Sabzevari, PhD
President and CEO, Precigen

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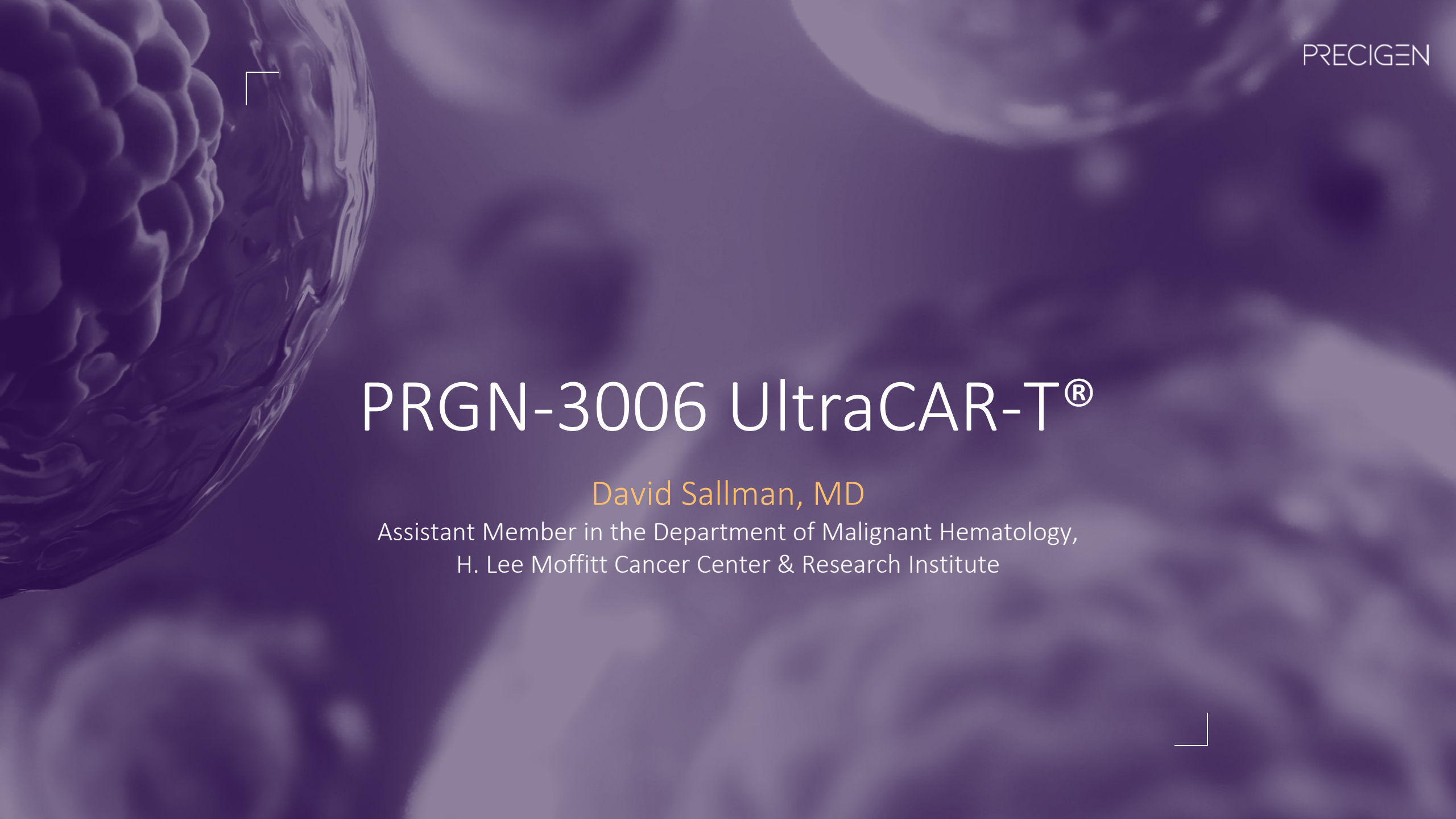
UltraCAR-T® Platform

Helen Sabzevari, PhD
President and CEO, Precigen



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PRGN-3006 UltraCAR-T®

David Sallman, MD

Assistant Member in the Department of Malignant Hematology,
H. Lee Moffitt Cancer Center & Research Institute

PRGN-3006 UltraCAR-T: First-in-class Investigational Therapy in AML and MDS

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ACUTE MYELOID LEUKEMIA (AML)

- AML starts in the bone marrow, but most often moves into the blood
- AML is the most common acute leukemia in adults

MYELODYSPLASTIC SYNDROMES (MDS)

- MDS are cancerous conditions of the bone marrow generally found in adults in their 70s

CURRENT TREATMENT PARADIGM

- Approximately 50% of the AML patients relapse[4,5]
- Prognosis is very poor for relapsed or refractory (r/r) AML patients

DISEASE SNAPSHOT

HIGH UNMET NEED

5-year survival as low as 5% for AML patients over 65[3]

>11K estimated deaths from AML in 2021[1]

>20K US

Newly diagnosed AML patients per year [1]

>10K US

Newly diagnosed MDS patients per year [2]

[1]American Cancer Society. Key Statistics for Acute Myeloid Leukemia (AML).
[2]American Cancer Society. Key Statistics for Myelodysplastic Syndromes.
[3]Thein, M., et al., Outcome of older patients with acute myeloid leukemia: an analysis of SEER data over 3 decades. Cancer, 2013. 119(15): p.2720-7.
[4]Dohner H, et al., Blood (2010);115:453–474.
[5]Burnett A, et al., J Clin Oncol (2011);29:487–494

PRGN-3006 UltraCAR-T: Differentiated Design and Overnight Manufacturing

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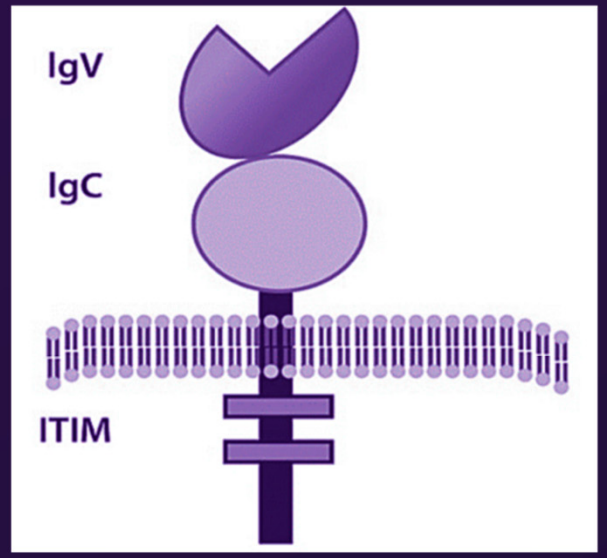
PRGN-3006 TARGETS CD33

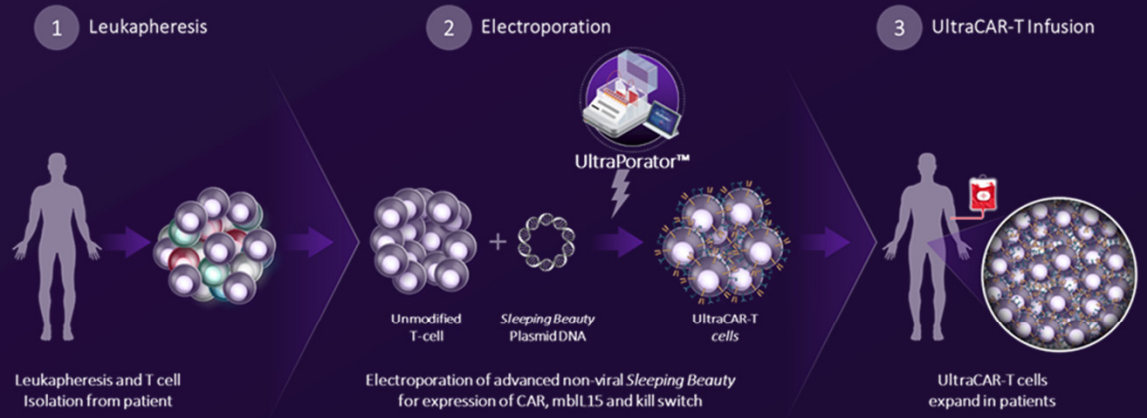
- CD33 is overexpressed on myeloid leukemia and leukemic stem cells
- 85-90% of AML patients show expression of CD33 on blast cells[1]
- Minimal expression outside of hematopoietic system



Modified from: https://www.openaccessgovernment.org/cd33-directed-therapy/47313/

PRGN-3006: MULTIGENIC DESIGN and OVERNIGHT MANUFACTURING

- Non-viral system to simultaneously express CD33 CAR, mbIL15 and kill switch
- Overnight, decentralized manufacturing process



[1]Molica M et al., Cancers 2021

PRGN-3006 UltraCAR-T: Phase 1/1b Clinical Trial Design

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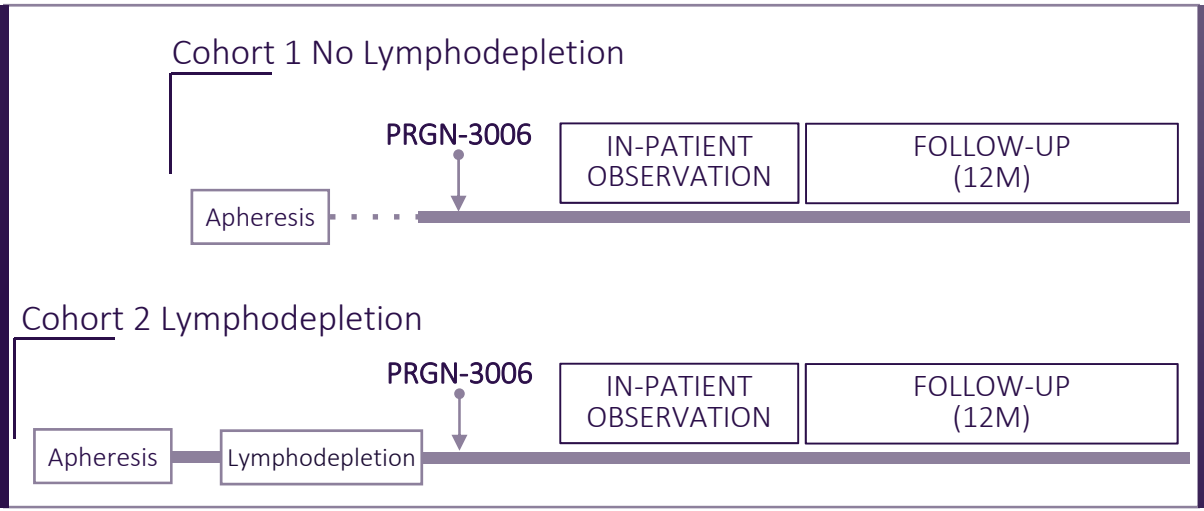
FIRST-IN-HUMAN, TWO-ARM, DOSE ESCALATION STUDY EVALUATING SAFETY AND EFFICACY OF PRGN-3006

ELIGIBILITY

- r/r AML, high risk MDS or CMML with >5% blasts
- ALC > 0.2 k/µL
- Prior HSCT allowed



SAFETY MONITORING

- CRS
- Neurotoxicity (ICANS)
- Management via ASTCT guidelines

DISEASE RESPONSE

- ELN Criteria (AML)
- IWG 2006 criteria (MDS)

CORRELATIVES

- PRGN-3006 persistence/expansion
- Immune phenotype, biomarkers

STUDY OBJECTIVES

Primary

- Evaluate the safety and determine the maximum tolerated dose (MTD) of PRGN-3006 delivered via intravenous (IV) infusion with or without lymphodepletion

Secondary

- To evaluate *in vivo* persistence and anti-tumor activity of PRGN-3006

- Phase 1/1b study in collaboration with the H. Lee Moffitt Cancer Center

ClinicalTrials.gov Identifier: NCT03927261

PRGN-3006 Phase 1 Cohort 1 (No Lymphodepletion): Baseline Patient Characteristics and Safety Summary

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PATIENT CHARACTERISTICS

	N=9
Median age (range), years	63 (33-77)
Male	5 (56%)
Female	4 (44%)
Prior treatments	
▪ Median (range)	4 (1-6)
▪ HMA + venetoclax	6/6 (100%)
▪ Intensive chemo	8/9 (89%)
▪ Prior allo-HSCT	3/9 (33%)
Baseline disease	
▪ AML	9/9 (100%)
▪ Extramedullary sole site	0/9 (0%)
▪ ELN intermediate	3/9 (33%)
▪ ELN adverse	6/9 (67%)

SAFETY SUMMARY

CAR-T Cell Toxicity (N=9)

Dose Limiting Toxicity	CRS (number of subjects, %)	Neurotoxicity (number of subjects, %)
▪ 0 DLTs	▪ CRS, any grade: 4/9 (44%) ▪ CRS, Grade 1-2: 3/9 (33%) ▪ CRS, Grade 3: 1/9 (11%) ▪ Use of tocilizumab: 2/9 (22%) ▪ Use of kill switch: 0/9 (0%)	▪ Neurotoxicity, any grade: **0%** (0/9)

PRGN-3006 UltraCAR-T DOSES ADMINISTERED

Dose Level (DL)	Subjects	Dose Range (UltraCAR-T Cells/kg)	Total UltraCAR-T Dose Administered
DL1	N=3	$>3x10^4$ to $\leq 1x10^5$	1.8 – 7.1 $x10^6$
DL2	N=3	$>1x10^5$ to $\leq 3x10^5$	24 – 29 $x10^6$
DL3	N=3	$>3x10^5$ to $\leq 1x10^6$	34 – 50 $x10^6$

PRGN-3006 treatment was well-tolerated with no incidences of DLTs or neurotoxicity

PRGN-3006 Phase 1 Cohort 1 (No Lymphodepletion): UltraCAR-T Expansion, Persistence and Summary of Responses

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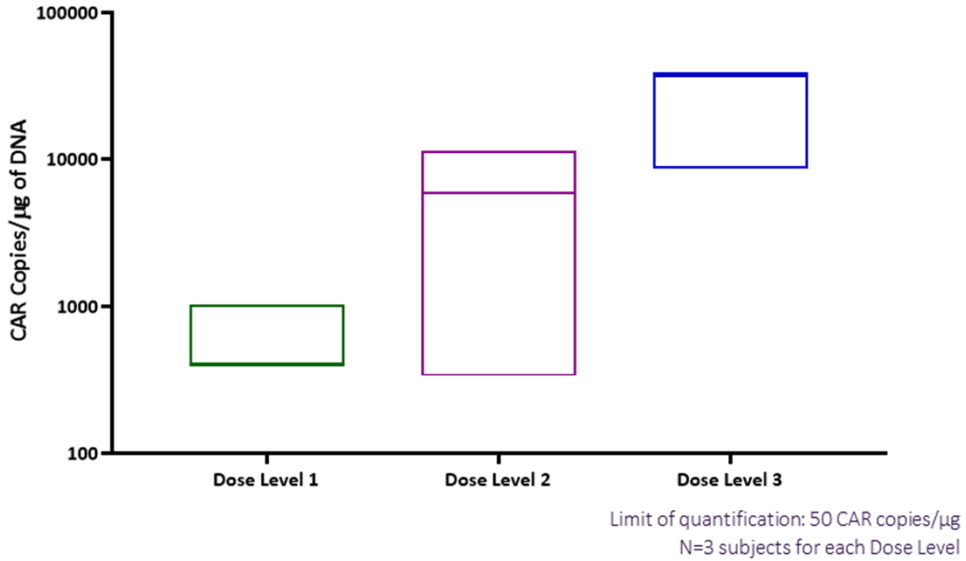
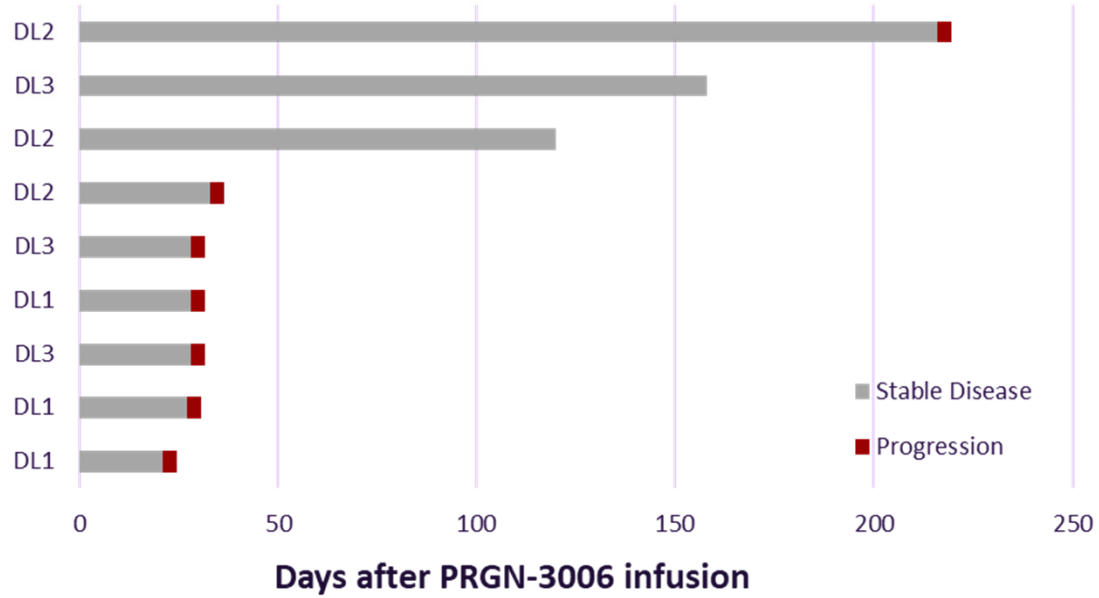
PRGN-3006 PEAK EXPANSION IN BLOOD (NO LYMPHODEPLTION COHORT)



SUMMARY OF RESPONSES



- Dose-dependent expansion of PRGN-3006 observed

PRGN-3006 UltraCAR-T DOSES ADMINISTERED

Dose Level (DL)	Subjects	Dose Range (UltraCAR-T Cells/kg)	Total UltraCAR-T Dose Administered
DL1	N=3	$>3x10^4$ to $\leq 1x10^5$	1.8 – 7.1 $x10^6$
DL2	N=3	$>1x10^5$ to $\leq 3x10^5$	24 – 29 $x10^6$
DL3	N=3	$>3x10^5$ to $\leq 1x10^6$	34 – 50 $x10^6$

Response per European Leukemia Net (ELN) 2017 criteria [Blood (2017) 129 (4): 424–447)]

PRGN-3006 Phase 1 Cohort 2 (Lymphodepletion): Baseline Patient Characteristics and Safety Summary

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PATIENT CHARACTERISTICS

	N=6
Median age (range), years	56 (38-64)
Male	2 (33%)
Female	4 (67%)
Prior treatments	
▪ Median (range)	3 (1-7)
▪ HMA + venetoclax	5/6 (83%)
▪ Intensive chemo	4/6 (67%)
▪ Prior allo-HSCT	3/6 (50%)
Baseline disease	
▪ AML	6/6 (100%)
▪ Extramedullary sole site	1/6 (17%)
▪ ELN intermediate	2/6 (33%)
▪ ELN adverse	3/6 (50%)

SAFETY SUMMARY

CAR-T Cell Toxicity (N=6)

Dose Limiting Toxicity	CRS (number of subjects, %)	Neurotoxicity (number of subjects, %)
▪ 0 DLTs	▪ CRS, any grade: 3/6 (50%) ▪ CRS, Grade 1-2: 3/6 (50%) ▪ CRS, Grade 3: 0/6 (0%) ▪ Use of tocilizumab: 0/6 (0%) ▪ Use of kill switch: 0/6 (0%)	▪ Neurotoxicity, any grade: **0%** (0/6)

PRGN-3006 UltraCAR-T DOSES ADMINISTERED

Dose Level (DL)	Subjects	Dose Range (UltraCAR-T Cells/kg)	Total UltraCAR-T Dose Administered
DL1	N=3	$>3x10^4$ to $\leq 1x10^5$	4.4 - 10 x 10^6
DL2	N=3	$>1x10^5$ to $\leq 3x10^5$	18 - 28 x 10^6

PRGN-3006 treatment was well-tolerated with no incidences of DLTs or neurotoxicity

PRGN-3006 Phase 1 Cohort 2 (Lymphodepletion): Summary of Responses

50% ORR in Patients Treated at the Two Lowest Dose Levels

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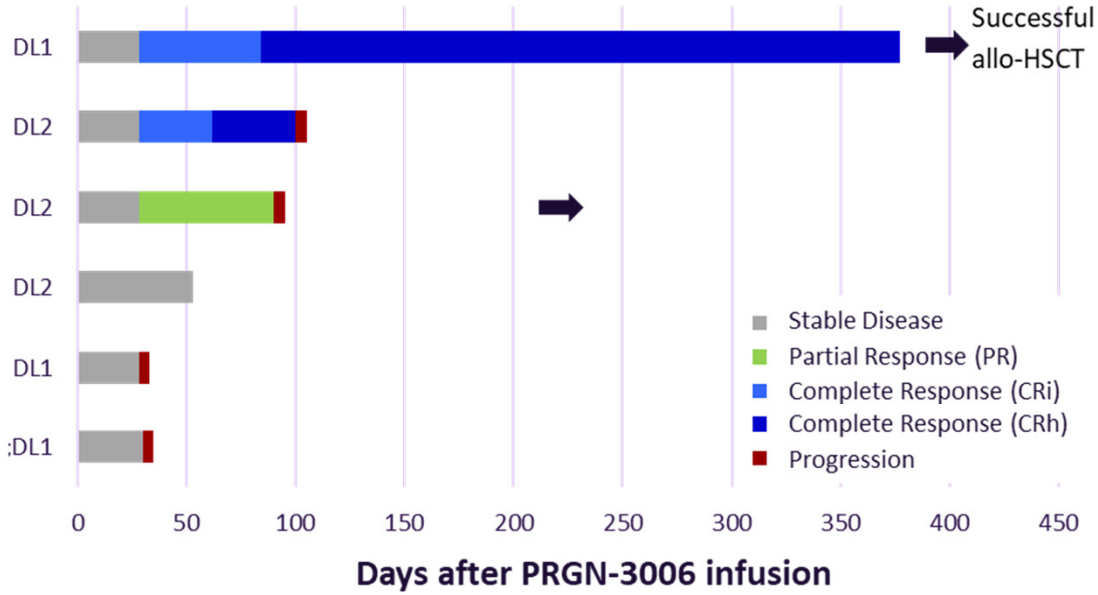
SUMMARY OF RESPONSES

Dose Level (DL)	DL1 (N=3)	DL2 (N=3)
Dose Range	>3x10^4 to ≤1x10^5/kg	>1x10^5 to ≤ 3x10^5/kg
Total UltraCAR-T Dose Administered	4.4 – 10 x 10^6	18 - 28 x 10^6
ORR (%)	**33%**	**67%**

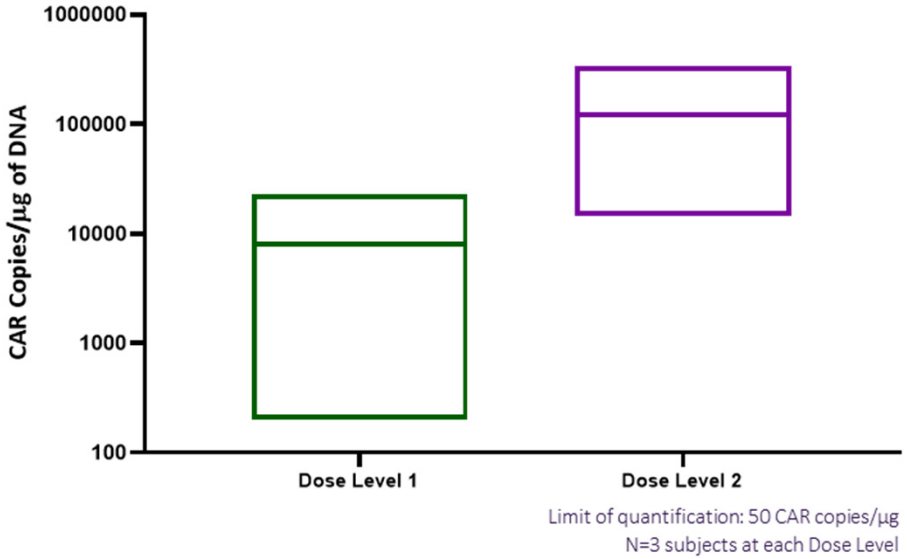


50% (3/6) Objective Response Rate (ORR) in patients treated at the two lowest Dose Levels

Response per European Leukemia Net (ELN) 2017 criteria [Blood (2017) 129 (4): 424–447)] or RECIST v1.1 (single patient with EMD; European Journal of Cancer 45 (2009) 228 – 247)

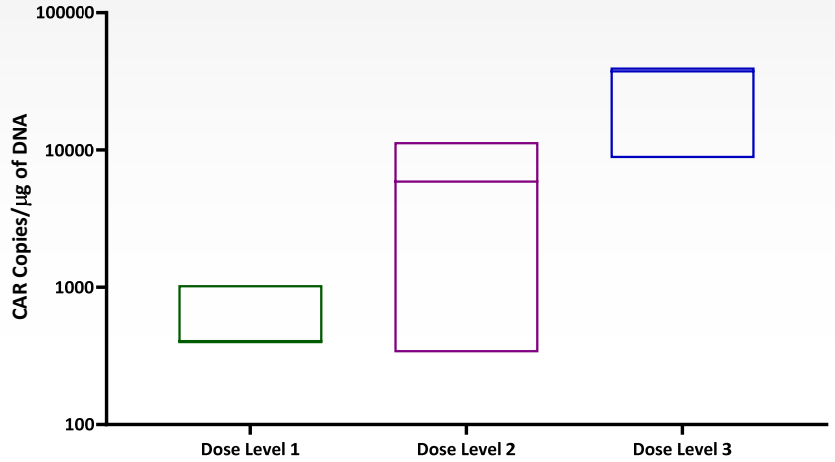
PRGN-3006 Phase 1 Cohort 2 (Lymphodepletion): UltraCAR-T Expansion and Persistence

PRGN-3006 PEAK EXPANSION IN BLOOD (LYMPHODEPLETION COHORT)



Limit of quantification: 50 CAR copies/µg
N=3 subjects at each Dose Level

PEAK EXPANSION IN BLOOD (NO LYMPHODEPLETION COHORT)



PRGN-3006 UltraCAR-T DOSES ADMINISTERED

Dose Level (DL)	Subjects	Dose Range (UltraCAR-T Cells/kg)	Total UltraCAR-T Dose Administered
DL1	N=3	>$3x10^4$ to ≤$1x10^5$	4.4 - 10 x 10^6
DL2	N=3	>$1x10^5$ to ≤ $3x10^5$	18 - 28 x 10^6

- Dose-dependent expansion of PRGN-3006 observed in all treated patients
- Persistence up to 3 months post infusion for the two lowest Dose Levels with Lymphodepletion
- Substantially higher peak expansion in the Lymphodepletion Cohort compared to the No Lymphodepletion Cohort

Case Study: **Partial Response** in Patient with Extramedullary AML after PRGN-3006 Infusion **(Cohort 2: Lymphodepletion, Dose Level 2)**

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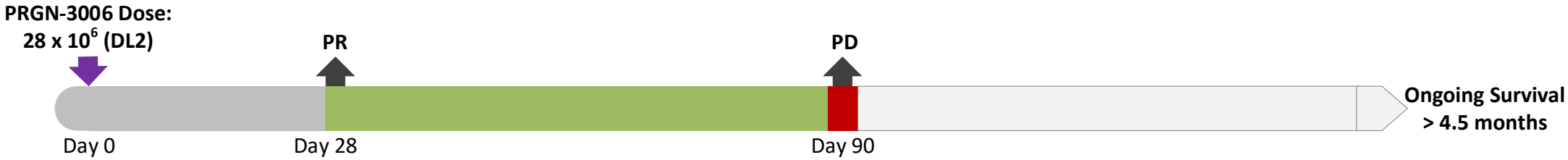
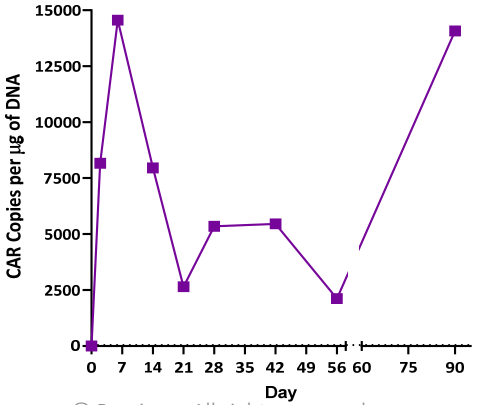


PATIENT BASELINE CHARACTERISTICS

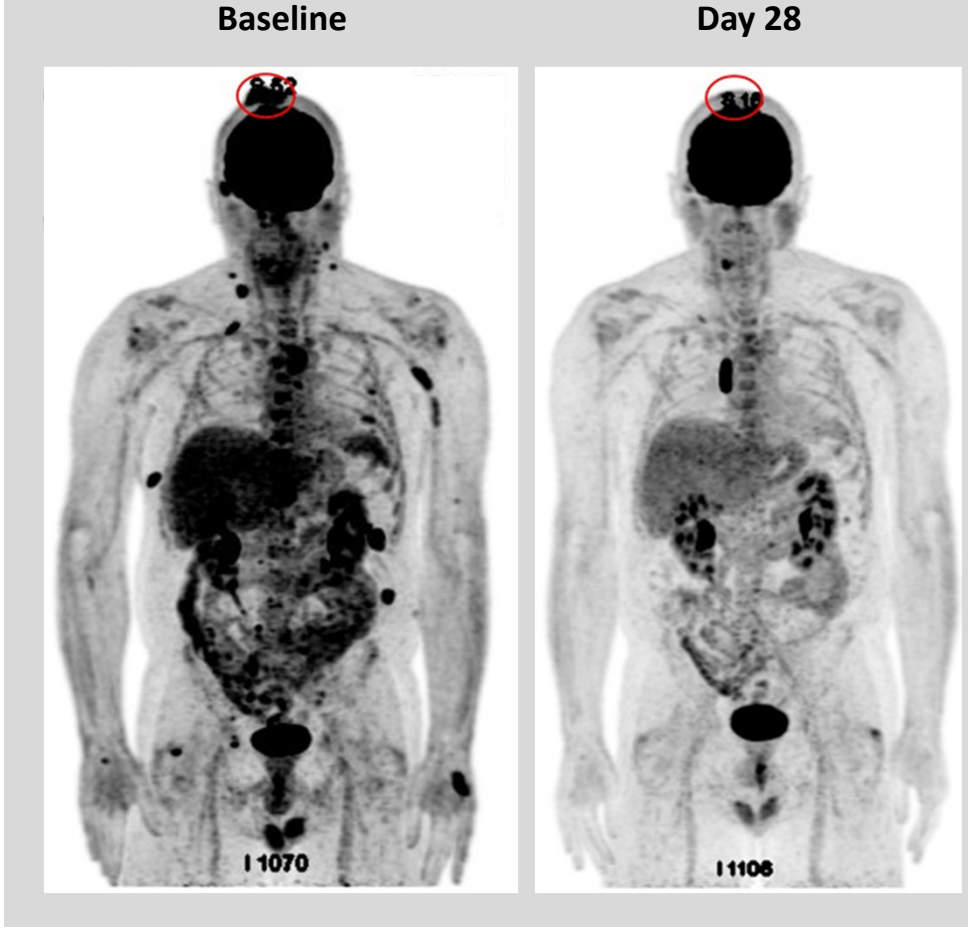
- 53 year old male with extramedullary AML as sole site of disease
- 7 prior lines of therapy including: intensive chemo, vidasia, venetoclax, FLAG, anti-IDH1, and allo-HSCT
- Soft tissue masses in mesentery, retroperitoneum, pelvis, gallbladder, large left pelvic mass involving iliac bone and SI joint, and lower extremities
- Single infusion of **28 x 10^6 PRGN-3006 (Dose Level 2)** after lymphodepletion

EXPANSION IN BLOOD



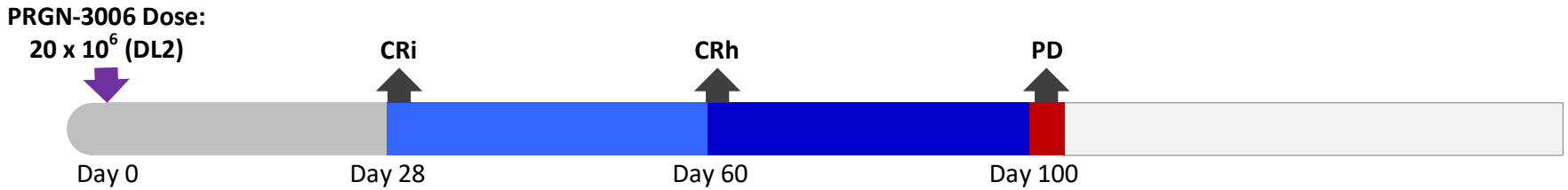
SAFETY AND EFFICACY DATA

- No incidence of CRS, neurotoxicity or DLT
- Achieved PR at Day 28 by RECIST v1.1
  - Clearance of all lesions except a small lesion on the scalp (red circle)
- Day 90 PET/CT demonstrated PD with new soft tissue nodes on head/neck and skull



PR: Partial Response; PD: Progressive Disease

Case Study: **Complete Response** in AML Patient after PRGN-3006 Infusion (Cohort 2: Lymphodepletion Dose Level 2)



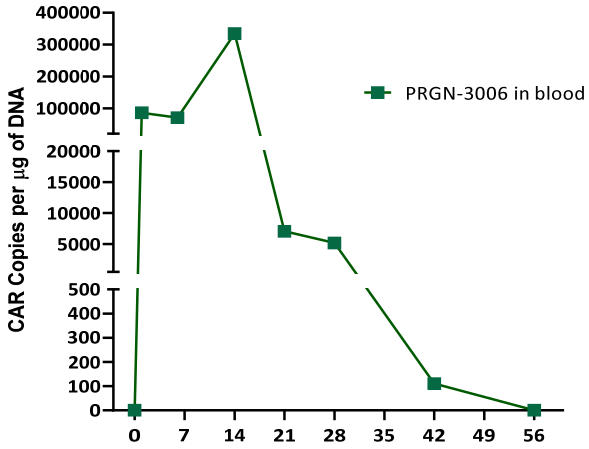
PATIENT BASELINE CHARACTERISTICS

- 61 year old female with AML
  - Cytogenetics : t(1;3)(p36.3q21); NGS Myeloid Panel: KRAS, PHF6
- 4 prior treatments: vyxeos, HMA+venetoclax, allo-HSCT
- Single infusion of **20 x 10^6 PRGN-3006 (Dose Level 2)** after lymphodepletion

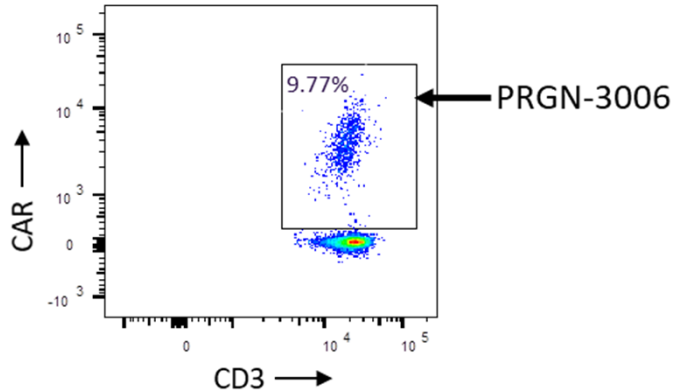
SAFETY AND EFFICACY DATA

- CRS grade 1, with SAE skin rash (possible GVHD)
- **Complete Response with incomplete hematologic recovery (CRi) at Day 28**
- **Complete Response with hematologic recovery (CRh) at Day 60**
- Patient survived > 6 months

EXPANSION IN BLOOD



Flow cytometry (Blood, Day 14)



Case Study: **Complete Response** in AML Patient after PRGN-3006 Infusion (Cohort 2: Lymphodepletion, Dose Level 1)

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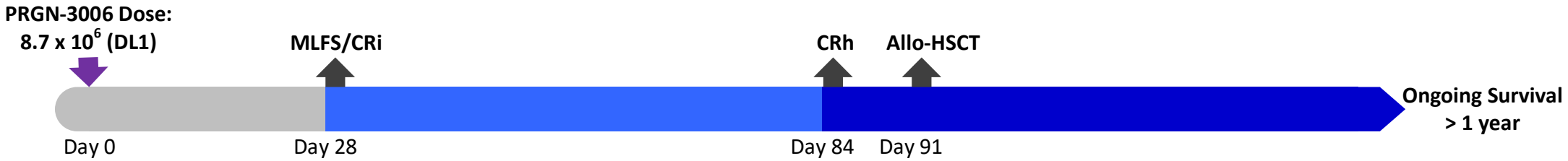


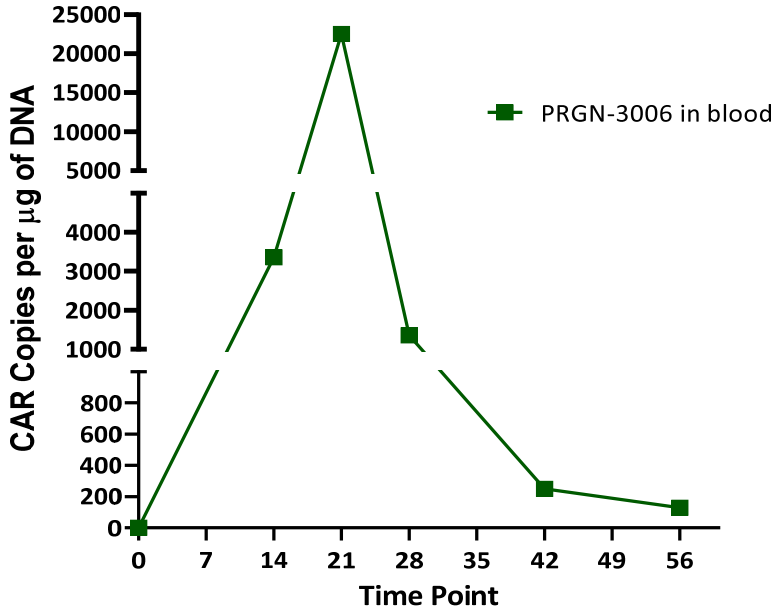
PATIENT BASELINE CHARACTERISTICS

- 60 year old female with persistent AML
  - Cytogenetics: Intermediate risk/normal; NGS Myeloid Panel: +CBL, TET2, U2AF1
- Prior treatments include CLAG and HiDAC
- Patient infused on **8.7 x 10^6 PRGN-3006 cells (Dose Level 1)** after lymphodepletion

SAFETY AND EFFICACY DATA

- No incidence of CRS, neurotoxicity or DLT
- **Complete Response with hematologic recovery (CRh) by Day 84**
- **Subsequently received a successful allo-HSCT**
- **Ongoing survival at > 1 year post-infusion**

EXPANSION IN BLOOD

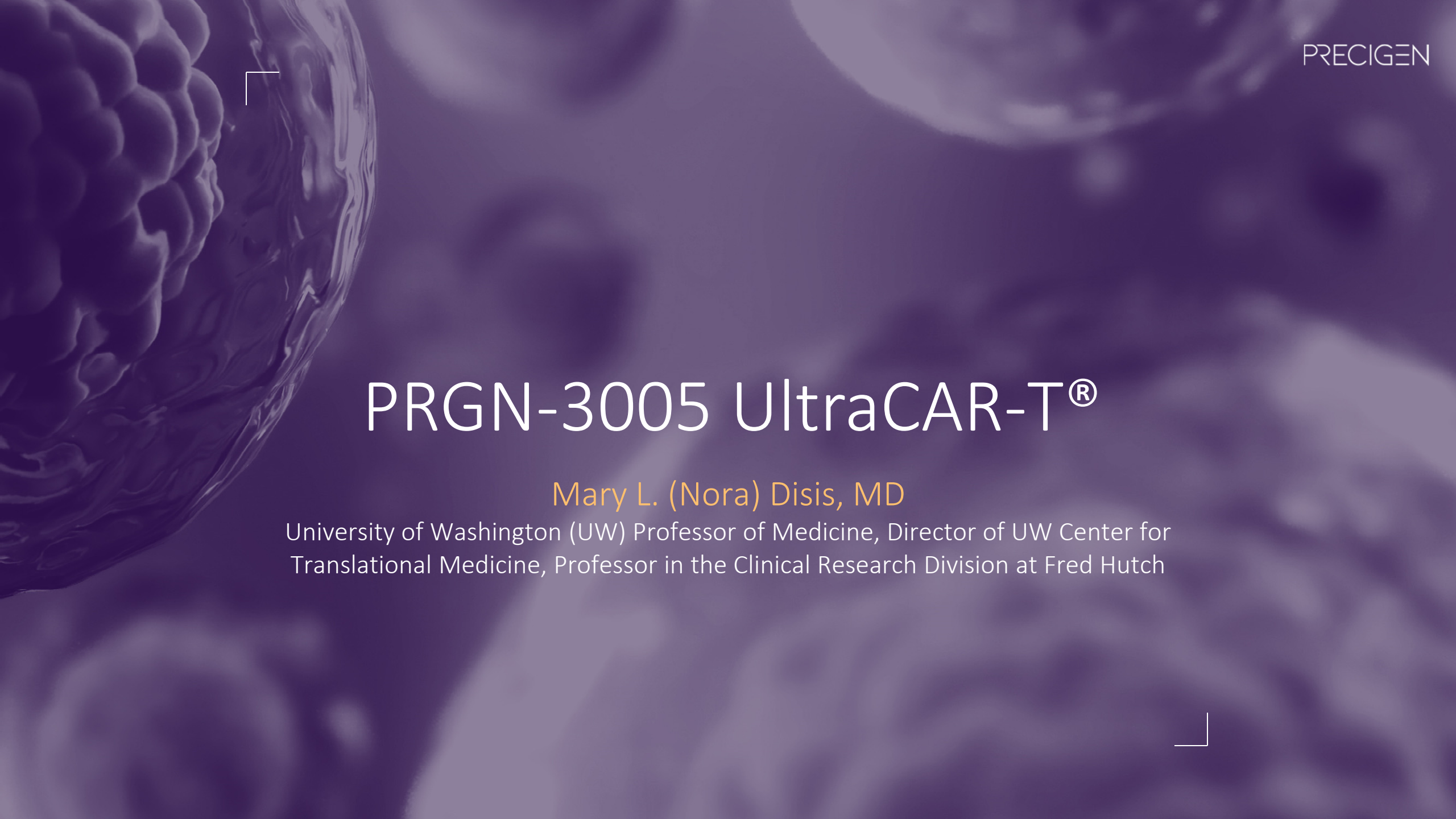


PRGN-3006 UltraCAR-T: Summary

- PRGN-3006 was well-tolerated with or without lymphodepletion. No DLTs or neurotoxicity observed
- Results demonstrate feasibility of overnight, decentralized manufacturing
- Excellent dose-dependent expansion and persistence of over 3 months observed
- Objective Response Rate (ORR) of 50% in patients treated at the two lowest Dose Levels in the Lymphodepletion Cohort

PRGN-3006 UltraCAR-T: The Road Ahead

- Complete dose escalation in Phase 1 No Lymphodepletion Cohort
- Complete dose escalation in Phase 1 Lymphodepletion Cohort
- Opportunity to evaluate repeat dosing, if needed
- Initiate Phase 1b dose expansion trial
- Registration study strategy



PRGN-3005 UltraCAR-T®

Mary L. (Nora) Disis, MD

University of Washington (UW) Professor of Medicine, Director of UW Center for Translational Medicine, Professor in the Clinical Research Division at Fred Hutch

PRGN-3005 UltraCAR-T: First-in-class Investigational Therapy in Ovarian Cancer

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OVARIAN CANCER

- Ovarian cancer is the most lethal of the gynecologic malignancies[6]

HIGH UNMET NEED
Stage IV survival as low as 20%[3]

300K WW/22K US
Newly diagnosed patients per year[1, 2]

CURRENT TREATMENT PARADIGM

- The current standard of care for ovarian cancer is surgery, followed by chemotherapy with a combination of platinum agents and taxanes[4]
- Recurrence of the disease occurs in most patients after initial treatment, resulting in a cycle of repeated surgeries and additional rounds of chemotherapy
- Low overall response rate (< 10%) with anti-PD1 treatment[5]

MUC16 IS OVEREXPRESSED IN VARIOUS SOLID TUMORS

MUC16 expression (% patients)[8]

Ovarian Cancer
Addressable Patient Population:
24,000

Breast Cancer
Addressable Patient Population:
117,000

Pancreatic Cancer
Addressable Patient Population:
33,000

Endometrial Cancer
Addressable Patient Population:
42,000

Lung Cancer
Addressable Patient Population:
144,000

[1]World Health Organization, International Agency for Research on Cancer, Global Cancer Observatory. Cancer Today, Estimated number of new cases in 2018, worldwide, both sexes, all ages.
[2]American Cancer Society Ovarian Cancer Special Section.
[3]American Cancer Society. Survival Rates for Ovarian Cancer, by Stage.
[4]C. Della Pepa et al., Chin. J. Cancer 34, (2015).
[5]Bartl, T. et al. Current state and perspectives of checkpoint inhibitors in ovarian cancer treatment. memo 13 (2020).
[6]Giannone G. et al., AnnTransl Med (2019).
[7]WHO International Agency for Research on Cancer dataset
[8]Human Protein Atlas MUC16 Protein Expression Summary

PRGN-3005 UltraCAR-T: Differentiated Design and Overnight Manufacturing

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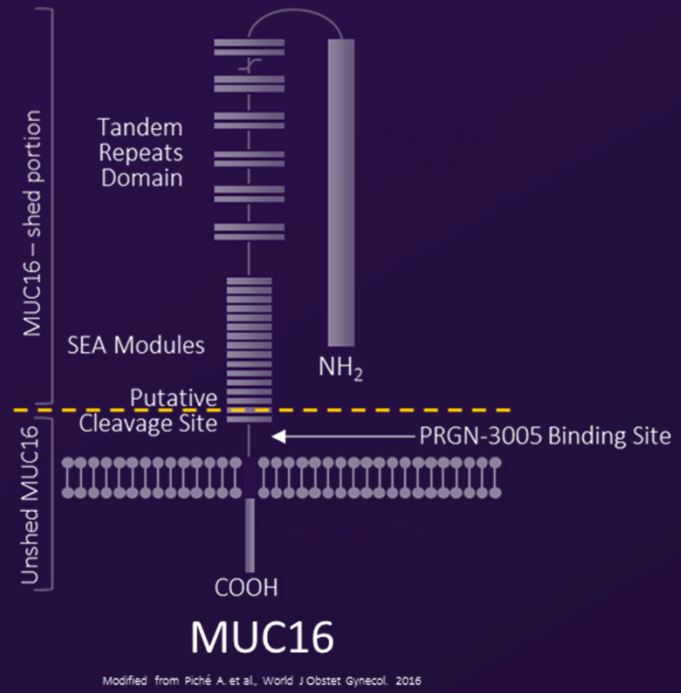
PRGN-3005 TARGETS UNSHED PORTION OF MUC16

- MUC16 is overexpressed on >80% of ovarian tumors[1]
- Limited expression found on healthy tissues
- Initial target is advanced stage platinum resistant ovarian cancer

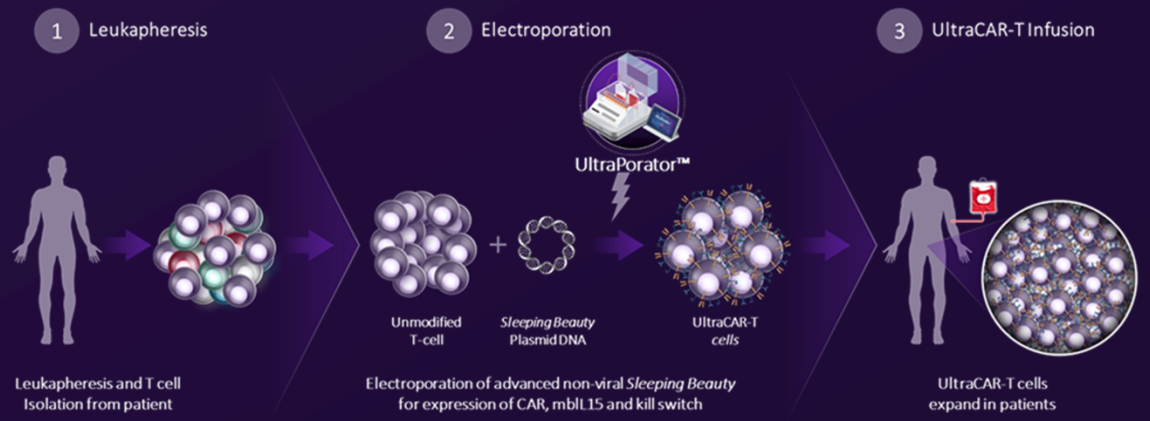


Modified from Piché A. et al., World J Obstet Gynecol. 2016

[1]Suh H, et al., Chemo Open Access (2017)

PRGN-3005: MULTIGENIC DESIGN & OVERNIGHT MANUFACTURING

- Non-viral system to simultaneously express MUC16 CAR, mbIL15 and kill switch
- Overnight, decentralized manufacturing process



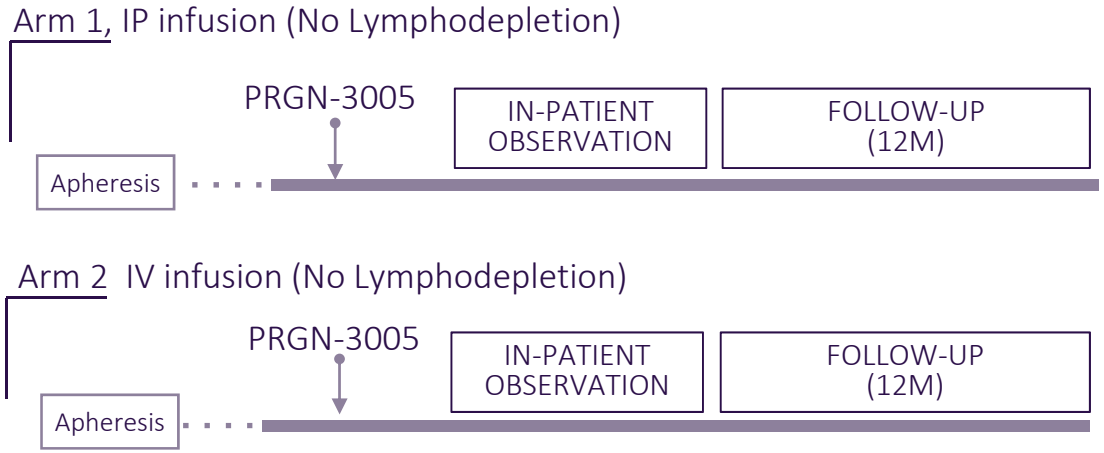
PRGN-3005 UltraCAR-T: Phase 1/1b Trial Design

PRECIGEN

FIRST-IN-HUMAN, TWO-ARM, DOSE ESCALATION STUDY EVALUATING SAFETY AND EFFICACY OF PRGN-3005

ELIGIBILITY

- Advanced stage ovarian, fallopian or primary peritoneal cancer
- Measurable by RECISTv1.1
- CA125>ULN
- No stratification based on biomarker (MUC16) expression



SAFETY MONITORING

- Standard battery for adverse events
- CRS, Neurotoxicity

DISEASE RESPONSE

- RECIST and irRECIST

CORRELATIVES

- PRGN-3005 persistence/expansion
- Immune phenotype
- Expression of biomarkers, including MUC16

STUDY OBJECTIVES

Primary

- Evaluate the safety and determine the maximum tolerated dose (MTD) of PRGN-3005 delivered via intraperitoneal (IP) or intravenous (IV) infusion

Secondary

- To evaluate *in vivo* persistence and anti-tumor activity of PRGN-3005

ClinicalTrials.gov Identifier: NCT03907527

PRGN-3005 Phase 1 IP Cohort: Baseline Patient Characteristics and Safety Profile

PRECIGEN

PATIENT CHARACTERISTICS

	N=10
Median age, years	60
Disease	
▪ Ovarian high grade serous carcinoma	10 (100%)
▪ Ascites	3 (30%)
▪ Locally advanced	6 (60%)
▪ Distant metastases	4 (40%)
Prior lines of chemotherapy	
▪ 2-3	1 (9%)
▪ 4-5	2 (18%)
▪ 6-9	7 (64%)

- Advanced, platinum resistant ovarian cancer patients
- Heavily pretreated patients with aggressive disease
- High target tumor burden

SAFETY

CAR-T Cell Toxicity (N=10)

CRS (ASTCT guidelines)	Neurotoxicity (CARTOX-10)
▪ CRS, any grade: **0%** (0/10) ▪ Use of tocilizumab: **0%** (0/10)	▪ Neurotoxicity, any grade: **0%** (0/10)

- Excellent safety profile across the Dose Levels tested in IP Arm
- No incidences of CRS
- No neurotoxicity

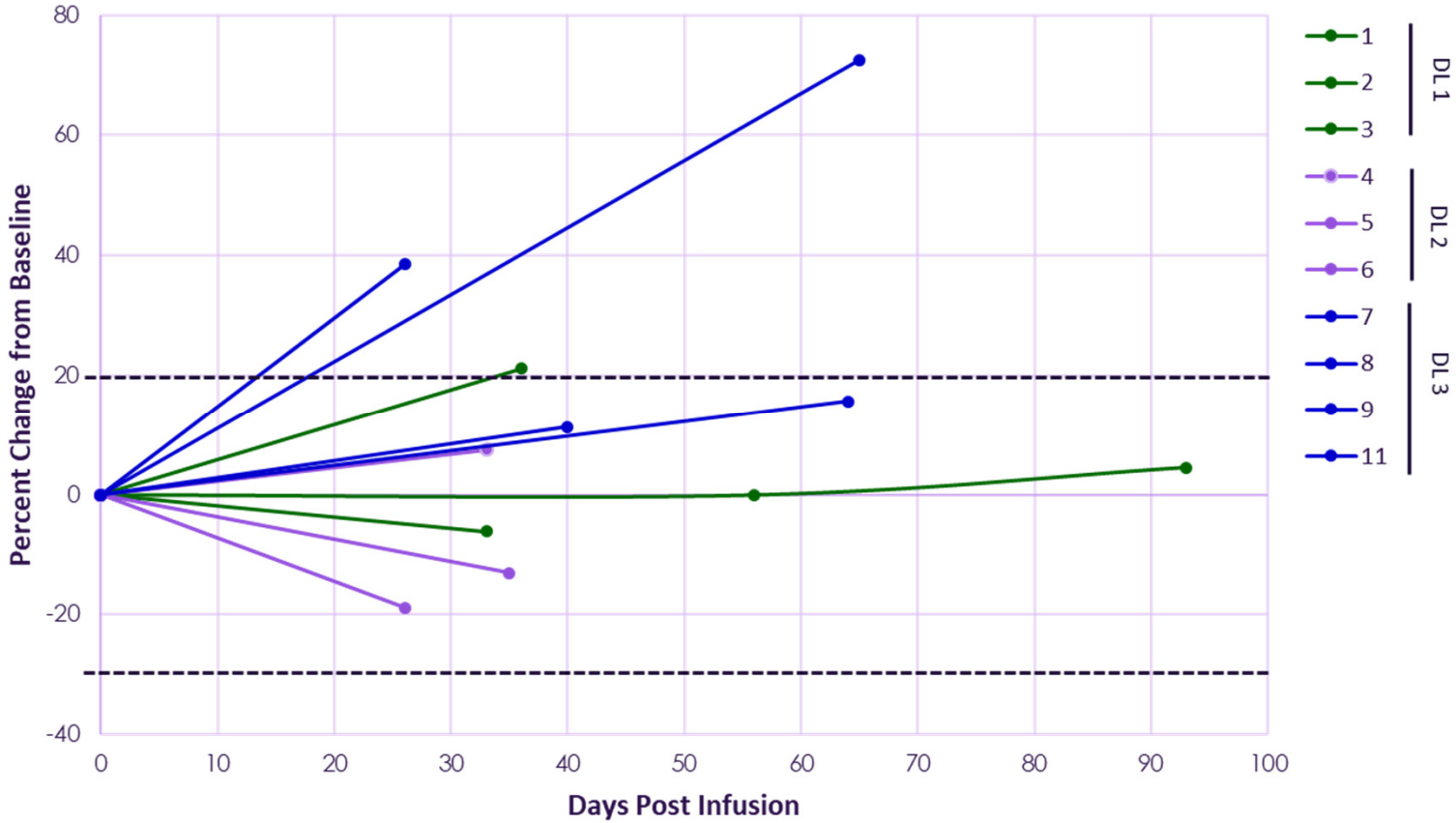
UltraCAR-T DOSES ADMINISTERED

Dose Level (DL)	Subjects	Dose Range (UltraCAR-T Cells/kg)	Total UltraCAR-T Dose Administered
DL1	N=3	$>3x10^4$ to $\leq 1x10^5$	6 – 7.6 $x10^6$ cells
DL2	N=3	$>1x10^5$ to $\leq 3x10^5$	12 – 21 $x10^6$ cells
DL3	N=4	$>3x10^5$ to $\leq 5x10^6$	33 – 321 $x10^6$ cells

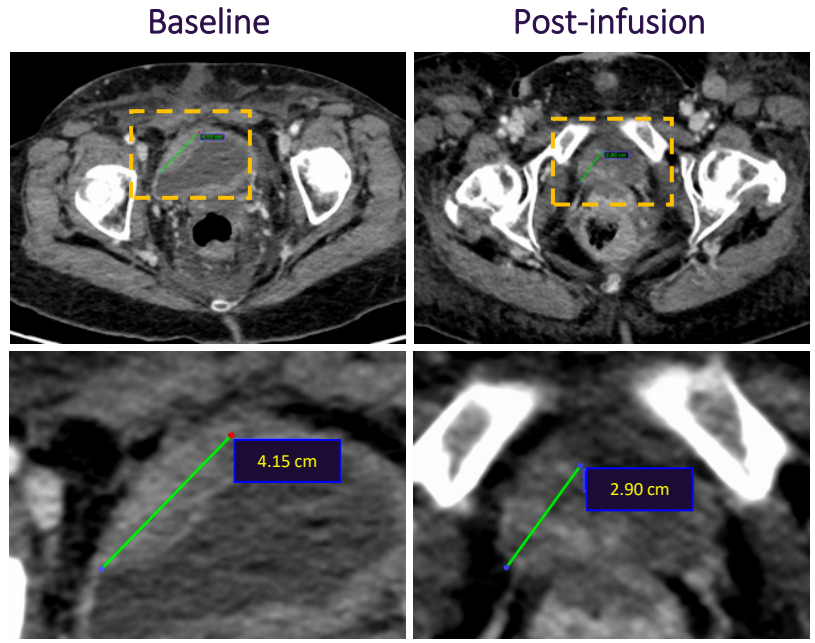
PRGN-3005 Phase 1 IP Cohort: Observed Changes in Lesion Size Following UltraCAR-T Infusion

PRECIGEN

CHANGE IN SUM OF DIAMETERS OF TARGET LESIONS



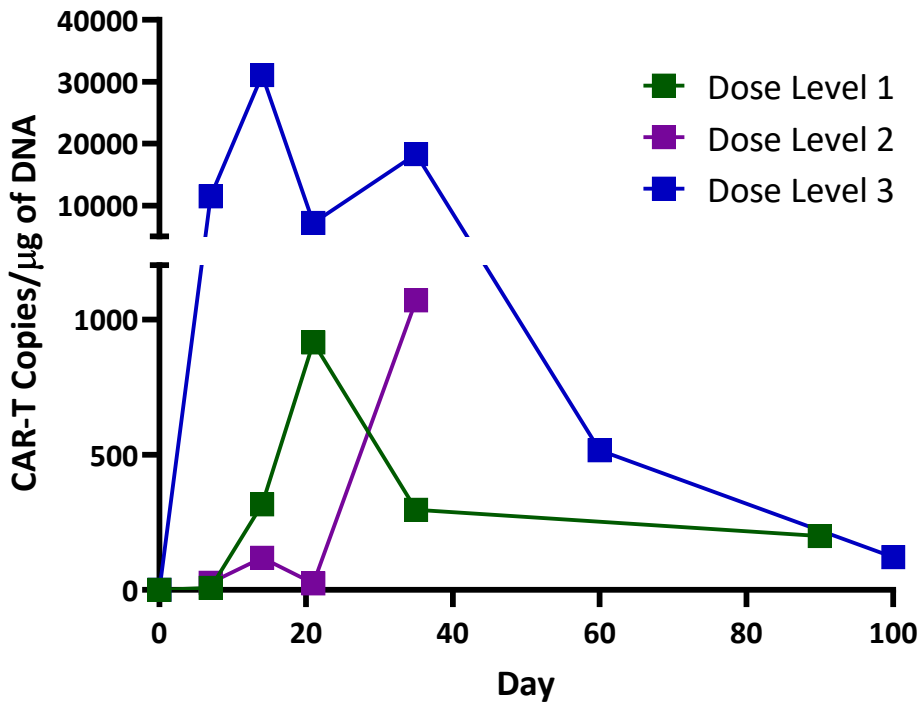
RESPONSES IN INDIVIDUAL TARGET LESIONS



- Patient administered low dose (Dose Level 2) PRGN-3005 via IP administration without lymphodepletion
- Example of observed decrease in size of target lesions, including solid lesions such as the bladder (above)

PRGN-3005 Phase 1 IP Cohort: Excellent Dose-dependent UltraCAR-T Expansion and Persistence

PRGN-3005 EXPANSION IN BLOOD



Limit of quantification: 50 CAR-T copies/µg
N=1-4 subjects at each time point

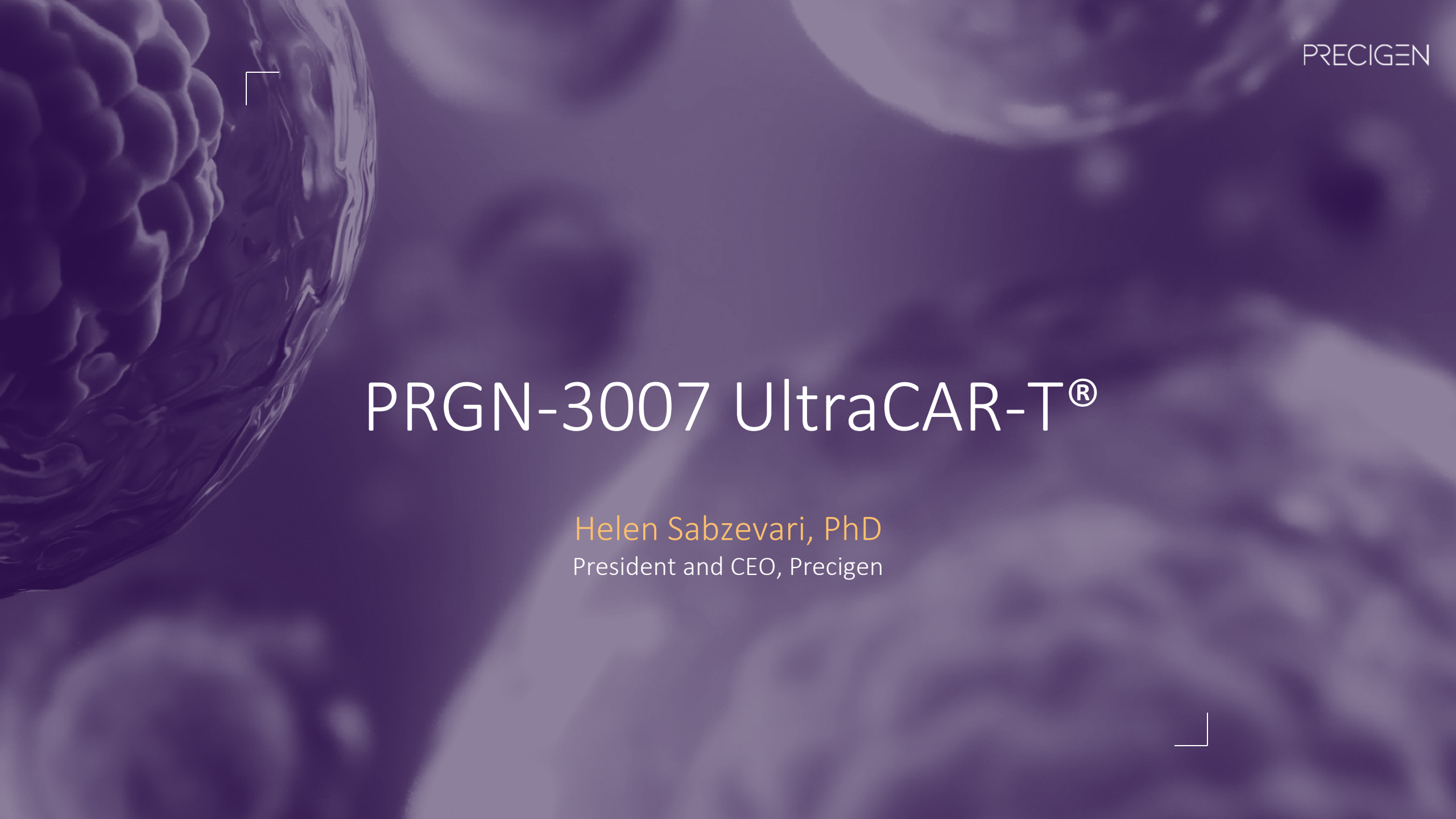
UltraCAR-T DOSES ADMINISTERED

Dose Level (DL)	Subjects	Dose Range (UltraCAR-T Cells/kg)	Total UltraCAR-T Dose Administered
DL1	N=3	$>3x10^4$ to $\leq 1x10^5$	6 – 7.6 $x10^6$ cells
DL2	N=3	$>1x10^5$ to $\leq 3x10^5$	12 – 21 $x10^6$ cells
DL3	N=4	$>3x10^5$ to $\leq 5x10^6$	33 – 321 $x10^6$ cells

- IP administration of UltraCAR-T resulted in expansion in the peripheral blood
- Dose-dependent expansion observed

PRGN-3005 UltraCAR-T: The Road Ahead

- Complete dose escalation in Phase 1 Intraperitoneal (IP) Arm
- Complete dose escalation in Phase 1 Intravenous (IV) Arm
- Incorporate lymphodepletion prior to PRGN-3005 infusion (FDA clearance received)
- Opportunity to evaluate repeat dosing based on the excellent safety profile of PRGN-3005



PRGN-3007 UltraCAR-T®

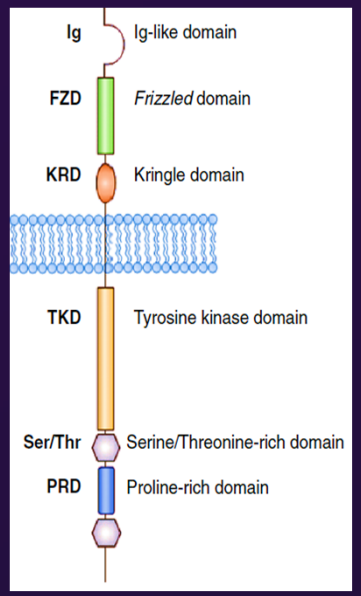
Helen Sabzevari, PhD
President and CEO, Precigen

PRGN-3007 UltraCAR-T: ROR1 CAR-T Cells Expressing mbIL15 and Kill Switch with Intrinsic PD-1 Blockade

PRECIGEN

ROR1: AN ATTRACTIVE TARGET FOR HEMATOLOGICAL & SOLID TUMORS

- ROR1 expression contributes to tumor cell growth and survival
- ROR1 is overexpressed in chronic lymphocytic leukemia (CLL), mantle cell lymphoma (MCL), and acute lymphoblastic leukemia (ALL)[1,2]
- ROR1 is overexpressed in triple negative breast cancer (TNBC), pancreatic cancer, ovarian cancer, and lung adenocarcinomas[1,2]
- Minimal expression detected on normal adult tissues

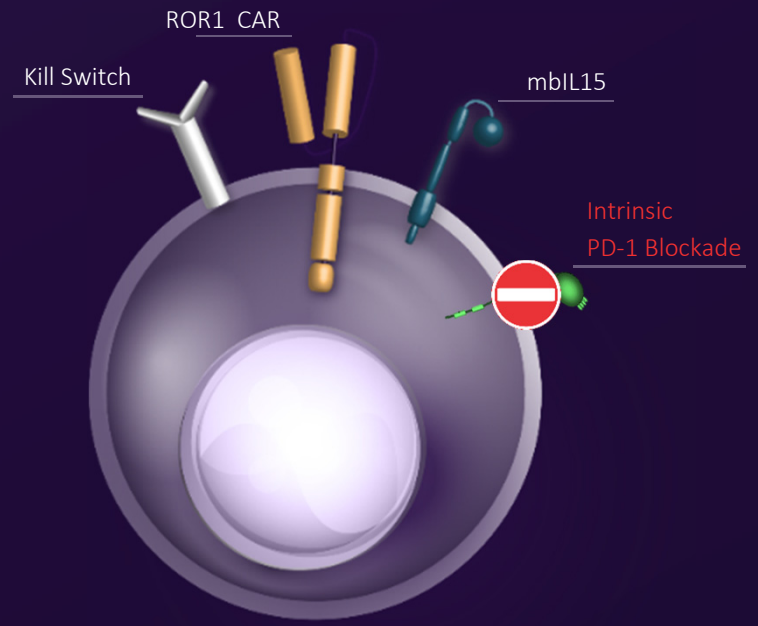


ROR1

Borcherding N, et al, 2014. *Protein & cell* 5:496-502

PRGN-3007: ROR1 CAR-T WITH INTRINSIC PD-1 INHIBITION

- ROR1 CAR to target various hematologic and solid tumors
- mbIL15 to improve *in vivo* expansion and persistence
- Kill switch to improve safety profile
- Intrinsic downregulation of PD-1 on UltraCAR-T cells to avoid systemic PD-1 blockade

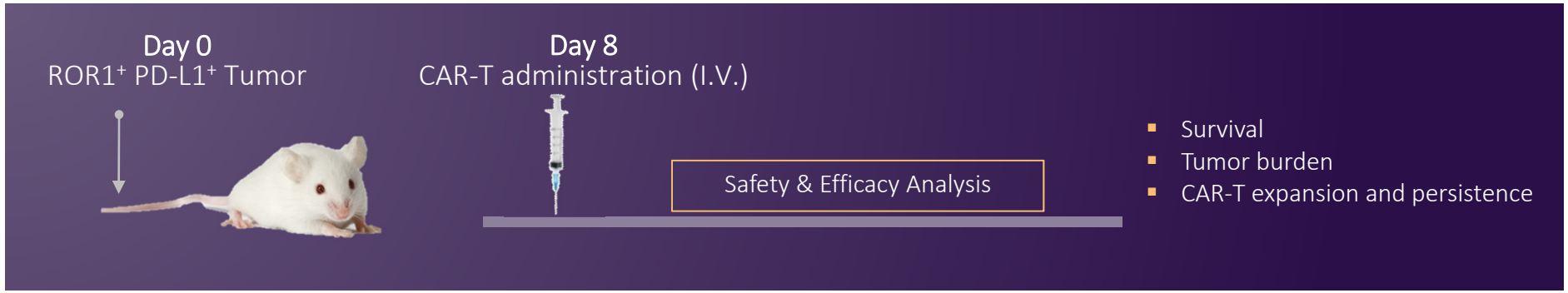


PRGN-3007 UltraCAR-T

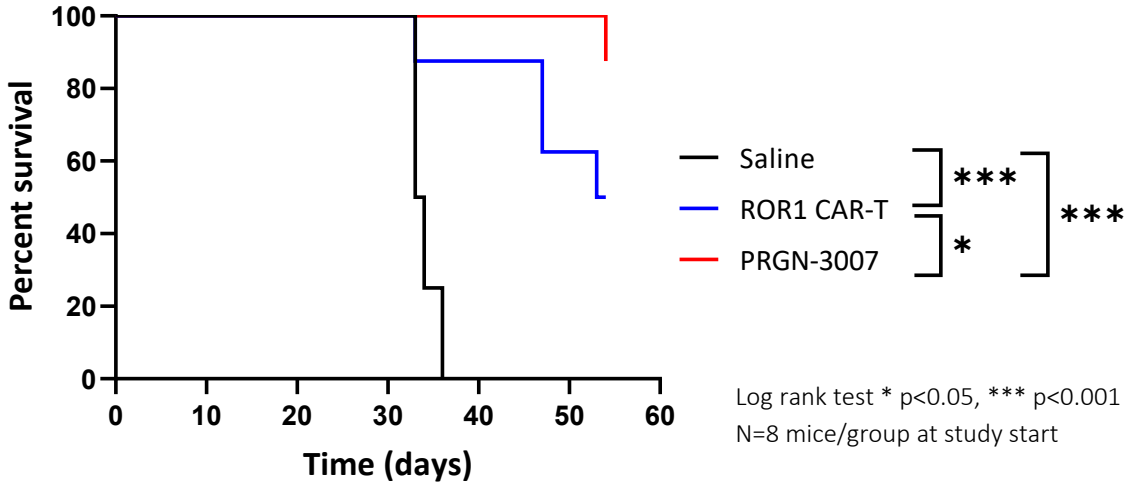
[1]Balakrishnan et al. Clin Cancer Res 2017;23:3061-3071

[2]Zhang et al, 2012. http://dx.doi.org/10.1016/j.ajpath.2012.08.024

PRGN-3007 Showed Significant Downregulation of PD-1, Durable Persistence and Significant Improvement in Survival in ROR1^{+} PD-L1^{+} *In Vivo* Xenograft Model

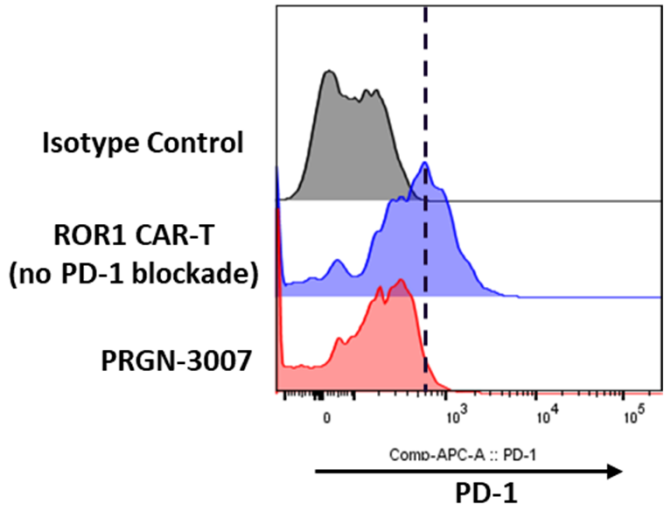


SIGNIFICANT IMPROVEMENT IN SURVIVAL *IN VIVO*



Log rank test * p<0.05, *** p<0.001
N=8 mice/group at study start

SIGNIFICANT DOWNREGULATION OF PD-1 ON PRGN-3007 UltraCAR-T CELLS *IN VIVO*



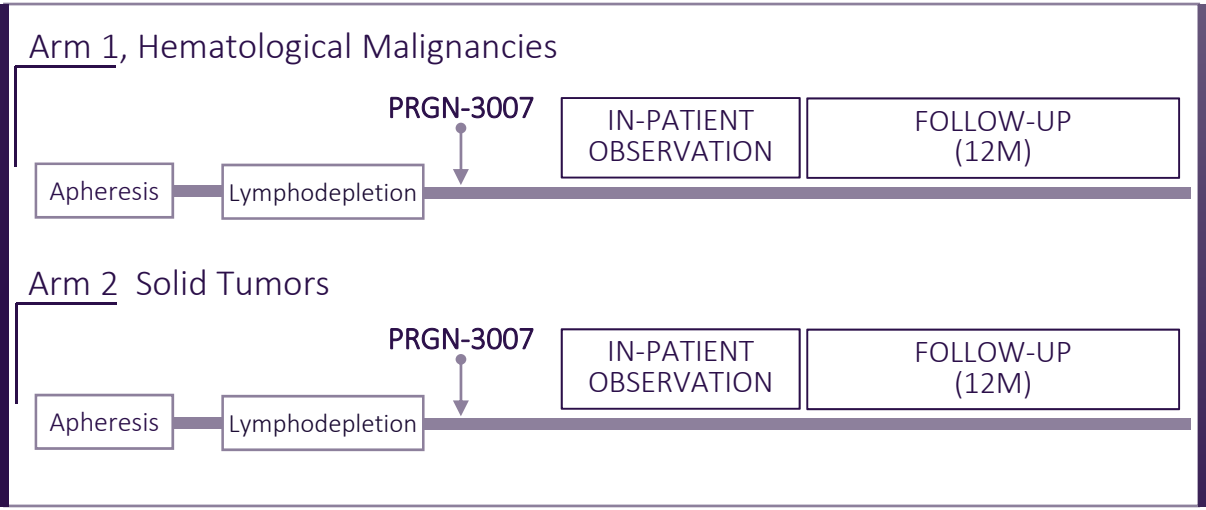
IND Application Approved to Initiate Phase 1/1b Study of PRGN-3007 in ROR1+ Hematological and Solid Tumors

PRECIGEN

FIRST-IN-HUMAN DOSE ESCALATION STUDY EVALUATING SAFETY AND EFFICACY OF PRGN-3007

ELIGIBILITY

- Hematologic malignancies:
  - CLL
  - MCL
  - ALL
- Solid tumors:
  - TNBC
  - ROR1 expression confirmed



- SAFETY MONITORING
  - Incidence of AE, SAE, DLT
  - CRS, Neurotoxicity
- DISEASE RESPONSE
- CORRELATIVES
  - PRGN-3007 persistence/expansion
  - Immune phenotype
  - Expression of biomarkers

STUDY OBJECTIVES

Primary

- Phase 1: Dose escalation to determine the maximum tolerated dose (MTD) of PRGN-3007 in patients with advanced hematologic malignancies and solid tumors
- Phase 1b: To evaluate the safety of PRGN-3007 administered at the MTD in patients with advanced hematologic malignancies and solid tumors

Secondary

- To evaluate disease response of PRGN-3007 infusion
- To evaluate expansion and persistence of PRGN-3007

- Phase 1/1b study in collaboration with the H. Lee Moffitt Cancer Center

UltraCAR-T Library : Precigen's Vision is to Transform the Personalized Cell Therapy Landscape for Cancer Patients

PRECIGEN

Non-viral UltraCAR Library

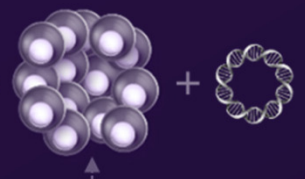
Indication	Antigen 1	2	3
Pancreatic	●	●	
Ovarian	●	●	
Lung	●	●	
Bladder	●	●	
Others	●	●	●

Indication	Antigen 1	2	3
AML	●	●	
CLL	●	●	
ALL	●	●	●
MM	●	●	
Others	●	●	●

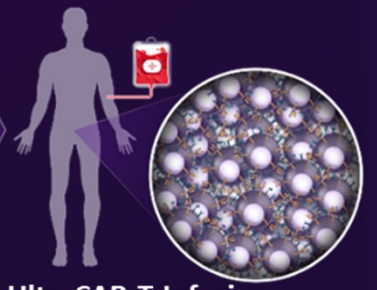
- **Select one or more UltraCAR vectors from the off-the-shelf library based on a patient's tumor**
- **Repeat dosing if needed**

UltraPorator™

Leukapheresis



Electroporation



UltraCAR-T Infusion

Immune Monitoring After UltraCAR-T Administration

Repeat dosing if needed

PRECIGEN

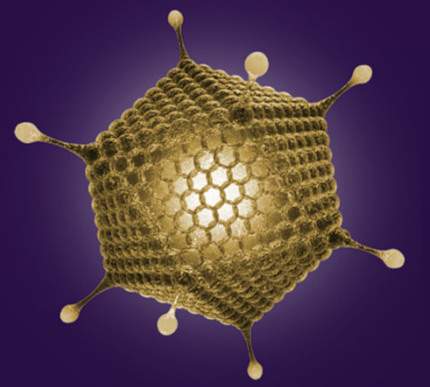
AdenoVerse™ Immunotherapy Platform

Helen Sabzevari, PhD
President and CEO, Precigen

AdenoVerse: Industry-leading Adenovector Platform

PRECIGEN

PRECIGEN'S GORILLA ADENOVECTORS SHOW SUPERIOR PERFORMANCE CHARACTERISTICS



- Large genetic payload capacity
- Off-the-shelf availability
- Ability for repeat administration
- Durable antigen-specific immune response
- Non-replicating adenoviruses
- Highly productive manufacturing process

LIMITATIONS OF COMPETING APPROACHES

VACCINES

- Limited antigen coverage
- DNA vaccines may have relatively poor immunogenicity
- Pre-existing immunity to human Ad5 may limit efficacy[1]

TCR-T CELLS

- Applicable in only a small subset of patients due to HLA polymorphism
- Target only a single antigen epitope
- Long and expensive manufacturing process
- Potential for the mispairing of endogenous and exogenous TCR chains

[1]Geisbert TW, J Virol. 2011

PRECIGEN

PRGN-2012
AdenoVerse™ Immunotherapy

Clint T. Allen, MD

Principal Investigator with the Section on Translational Tumor Immunology at the NIH

Recurrent Respiratory Papillomatosis (RRP)

PRECIGEN

RRP IS CAUSED BY HPV6 OR HPV11 INFECTION

- A rare disease in which benign tumors called papillomas grow in the respiratory tract
- Symptoms include hoarse voice, difficulty sleeping and swallowing, chronic coughing, or breathing problems
- Affects both children and adults

DISEASE SNAPSHOT

HIGH UNMET NEED

No current therapeutic treatment

20K Active Cases in US[6]

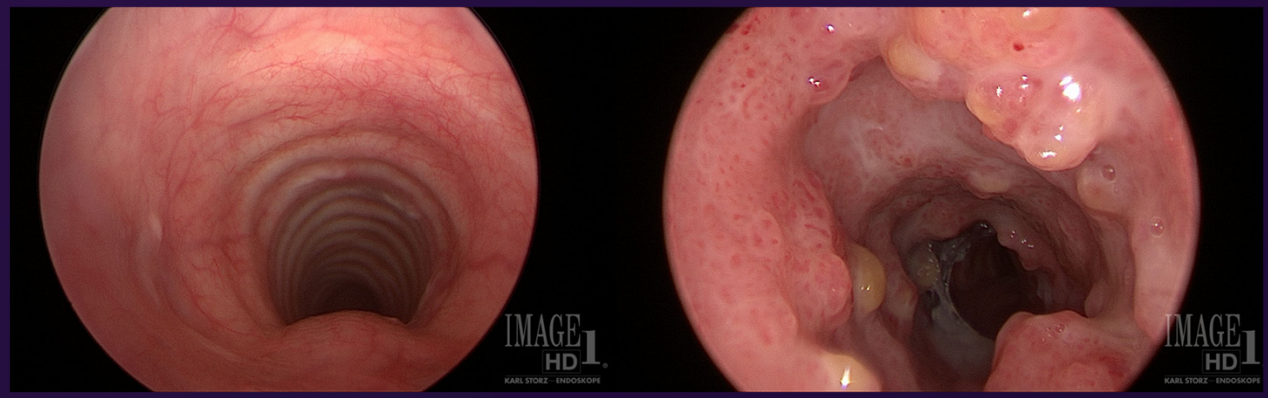
4 PER 100K

Incidence of RRP in children[1-4]

2-3 PER 100K

Incidence of RRP in adults[5]

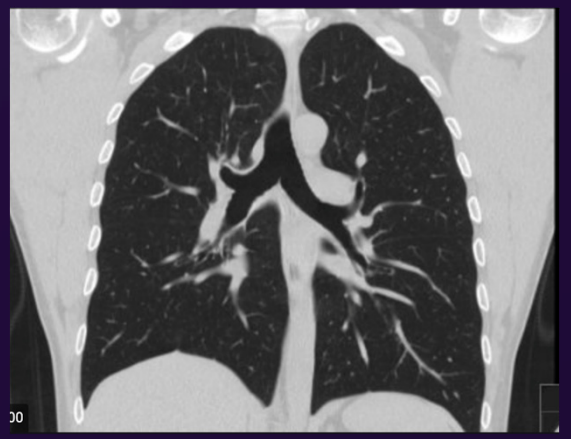
- Tracheal involvement and airway obstruction occurs in ~25% of cases



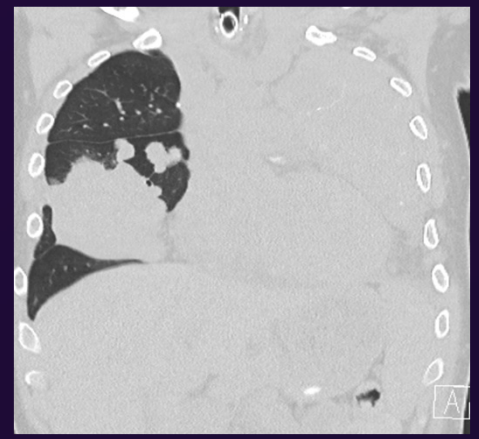
Normal trachea

RRP Patient

- RRP can lead to pulmonary papillomatosis in ~5% of cases



Normal lungs



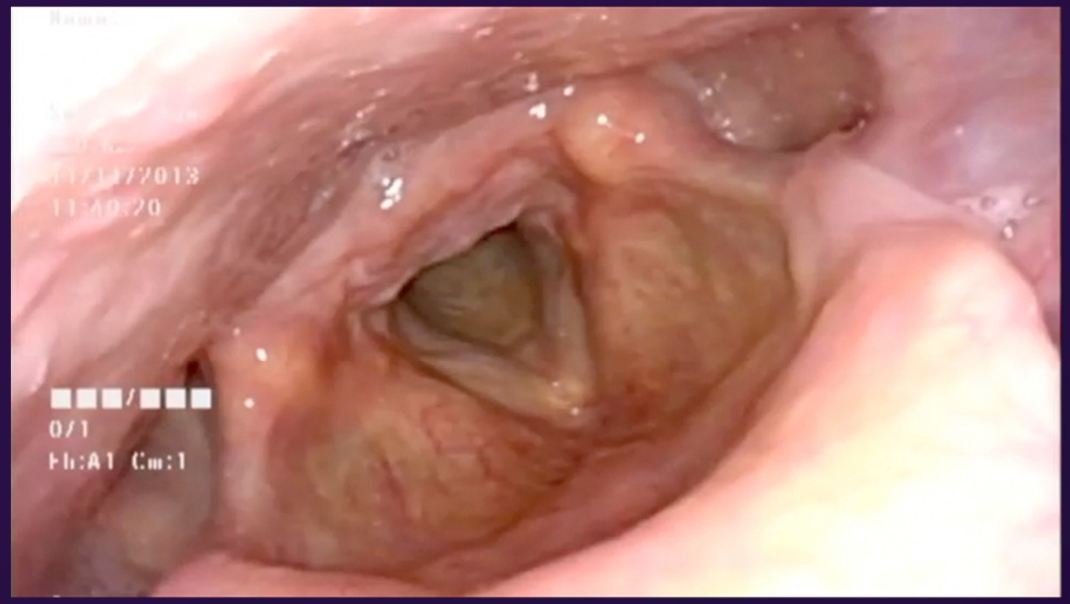
RRP Patient

[1]Derkay and Wiatrak 2008, National Organization for Rare Disorders 2019
[2]Armstrong, Derkay et al. 1999
[3]Hermann, Pontes et al. 2012
[4]Seedat 2020
[5]National Organization for Rare Disorders 2019
[6]RRP Foundation: http://www.rrpf.org/whatisRRP.html
[7]Rodriguez-Garcia A. et al., Front. Immunol., 2020

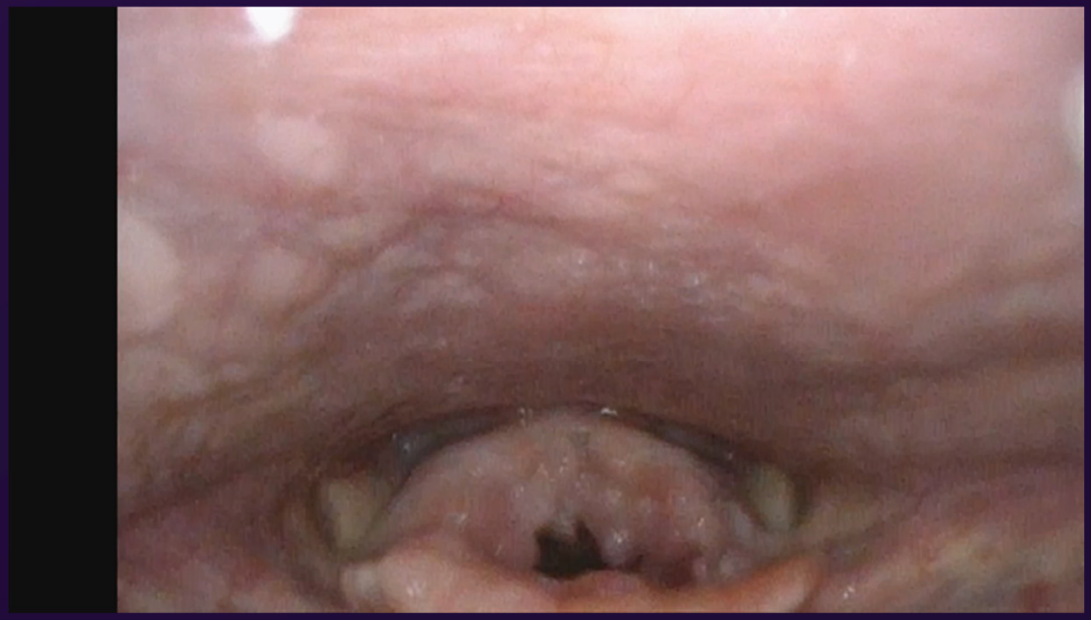
Recurrent Respiratory Papillomatosis (RRP)

PRECIGEN

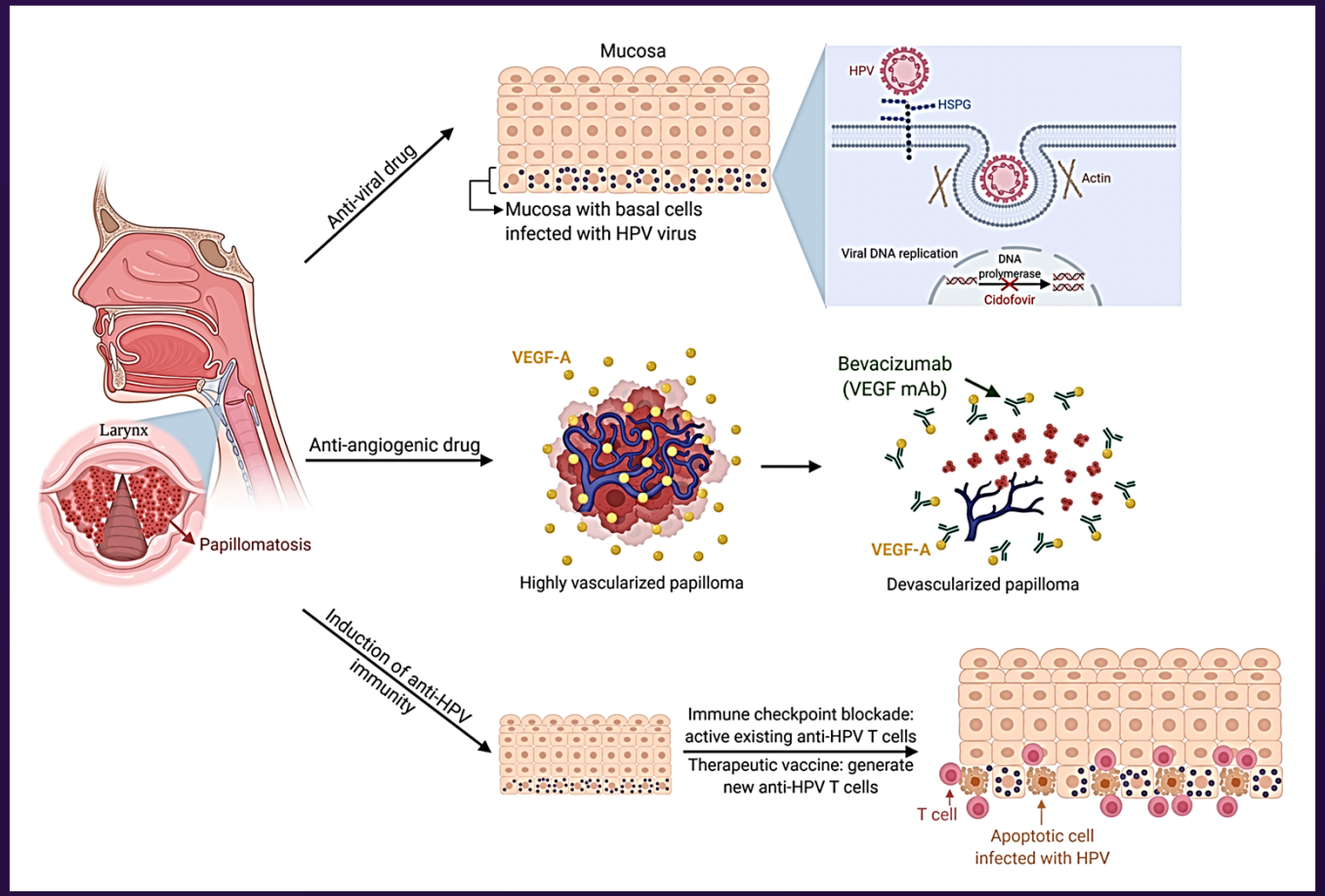
Healthy Individual



RRP Patient



Need for Safe and Effective Therapeutic Option for RRP



CURRENT TREATMENT PARADIGM

- Repeat surgery is the only standard-of-care treatment for RRP
- Patients can require hundreds of lifetime surgeries

BEVACIZUMAB

- Used off-label in the US
- Renal toxicity
- RRP rebounds after withdrawal

CHECKPOINT BLOCKADE

- Immune checkpoint blockade can activate immunity, but it does not seem to be unleashing the activity of HPV-specific T cells in most patients

PREVENTATIVE VACCINE

- Cannot cure RRP

PRGN-2012: Investigational Off-the-shelf AdenoVerse Immunotherapy for RRP

PRECIGEN

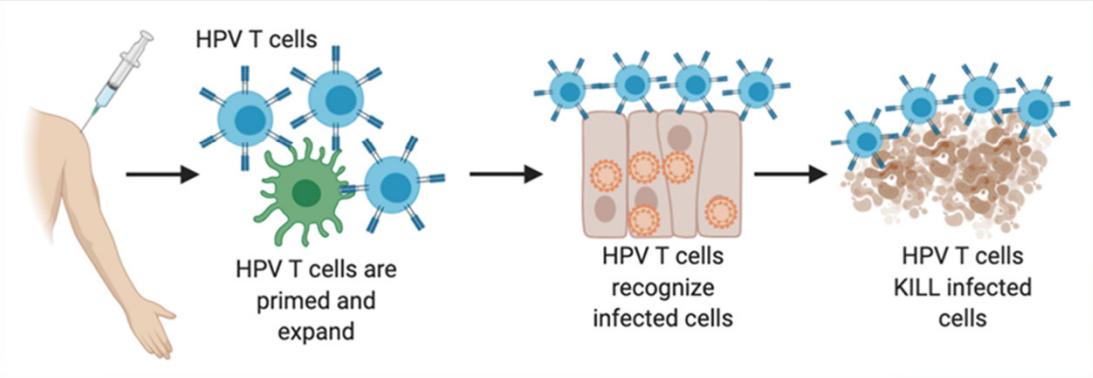
RATIONALE FOR HPV6/11 THERAPEUTIC VACCINE

- Immune-mediated clearance of HPV is the only way to potentially cure RRP
- T cells are the only immune cell that can specifically detect and kill HPV infected cells
- Lack of HPV-specific T cells in RRP patients

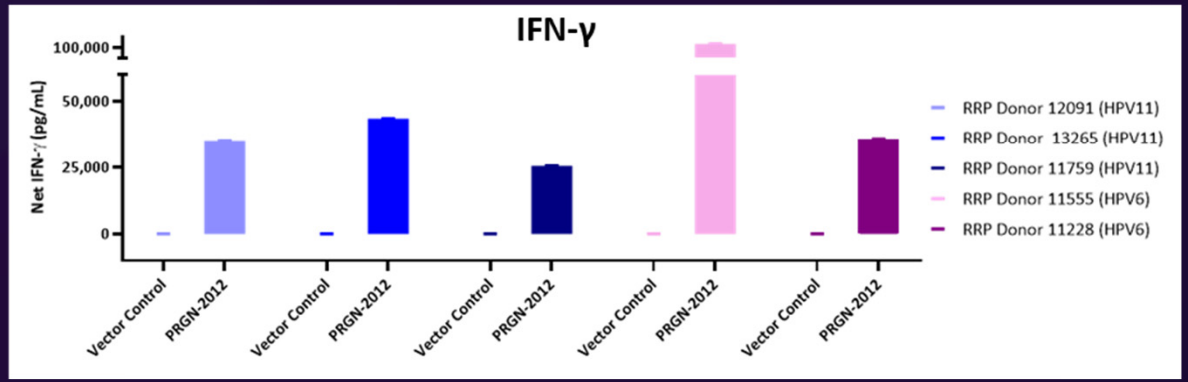
PRGN-2012 ANTIGEN DESIGN TO TARGET HPV6/11

- Gorilla adenoviral vector with ability for repeat injections
- Antigen designed to induce a robust T cell mediated immune response against HPV6/11
- Orphan Drug Designation (ODD) granted by the FDA

A THERAPEUTIC VACCINE DESIGNED TO INDUCE HPV-SPECIFIC T CELLS MAY CURE RRP



PRGN-2012 INDUCES ROBUST HPV6 AND HPV11-SPECIFIC T CELL RESPONSE IN RRP PATIENT SAMPLES *IN VITRO*

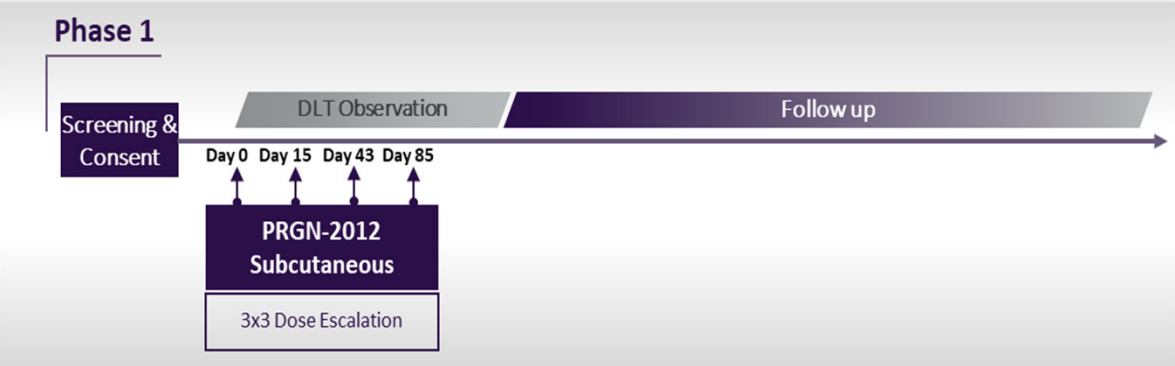


PRGN-2012: Phase I Clinical Trial Design

FIRST-IN-HUMAN STUDY EVALUATING SAFETY AND EFFICACY OF PRGN-2012

ELIGIBILITY

- Age ≥18 years
- Clinical diagnosis of RRP
- ECOG of 0-1



SAFETY MONITORING

- Physical exam, vitals, clinical labs

DISEASE ASSESSMENT

- Disease assessment (Derkay staging, airway evaluation)
- VHI-10 – vocal handicap index

CORRELATIVES

- HPV-specific T cell immune response
- Anti-PRGN-2012 neutralizing Abs

STUDY OBJECTIVES

Primary

- Determine the safety and tolerability and recommended Phase II adjuvant dosing (RP2D) of PRGN-2012

Secondary

- Recurrence free interval after treatment
- Frequency of clinically indicated surgery for RRP pre- and post-treatment

- Phase I study in collaboration with the National Cancer Institute

ClinicalTrials.gov Identifier: NCT04724980

PRGN-2012 Phase I Study: Patient Characteristics and Neutralizing Antibody Response

PRECIGEN

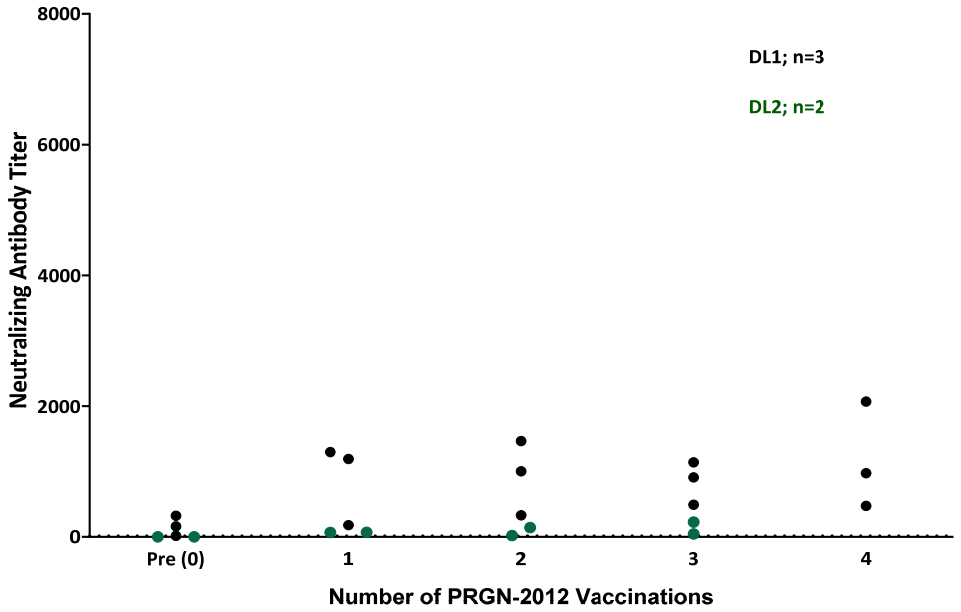
PATIENT CHARACTERISTICS

	N=14
Median age (range), years	50 (30-73)
Male	9 (64%)
Female	5 (36%)
Age at diagnosis (years)	
▪ Range	1-68
▪ Juvenile onset	2 (14%)
▪ Adult onset	12 (86%)
▪ Years since initial diagnosis	Mean 15 (range 1-43)
Baseline disease	
▪ **Lifetime surgeries**	**Mean 51 (range 9 - 800+)**
▪ Surgeries in last 2 months	Mean 5.5 (range 2-9)
▪ Tracheal disease	6 (43%)
▪ Pulmonary disease	2 (14%)

PRGN-2012 DOSING SCHEDULE

Dose Level (DL)	Subjects	Dose
DL1	N=3	$1x10^{11}$ viral particles (vp)
DL2	N=11	$5x10^{11}$ viral particles (vp)

NEUTRALIZING ANTIBODY RESPONSE



DL1: Dose Level 1; DL2: Dose Level 2

PRGN-2012 Phase I Study: Safety Summary

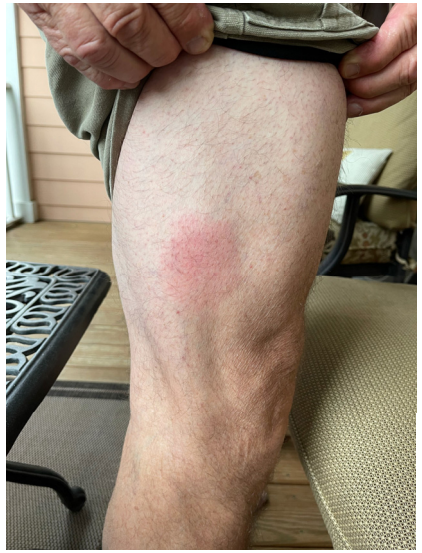
PRECIGEN

SAFETY SUMMARY

PRGN-2012 Treatment-Related Adverse Events (N=13)		
Event (CTCAE v5.0)	Grade 1	Grade 2
Injection site reaction	11/13 (85%)	-
Chills	8/13 (62%)	-
Fatigue	8/13 (62%)	2/13 (15%)
Fever	8/13 (62%)	-
Pain (at injection site)	4/13 (31%)	-
Myalgia	3/13 (23%)	2/13 (15%)
Nausea	2/13 (15%)	-
Sinus tachycardia	1/13 (8%)	-
Vomiting	1/13 (8%)	-
Malaise	1/13 (8%)	-
Lethargy	1/13 (8%)	-
Diarrhea	1/13 (8%)	-
Dyspnea	1/13 (8%)	-
Pruritis	1/13 (8%)	-
Night sweats	1/13 (8%)	-

Data indicates the number and percent of subjects experiencing the event for the 13 subjects receiving at least one dose prior to the data cut-off.

- PRGN-2012 administrations were well-tolerated
- Most intense local and systemic side effects typically occurred with first vaccination
- Subsequent vaccinations had less intense side effects



Case Study: Subject 1 Treated at Dose Level 1

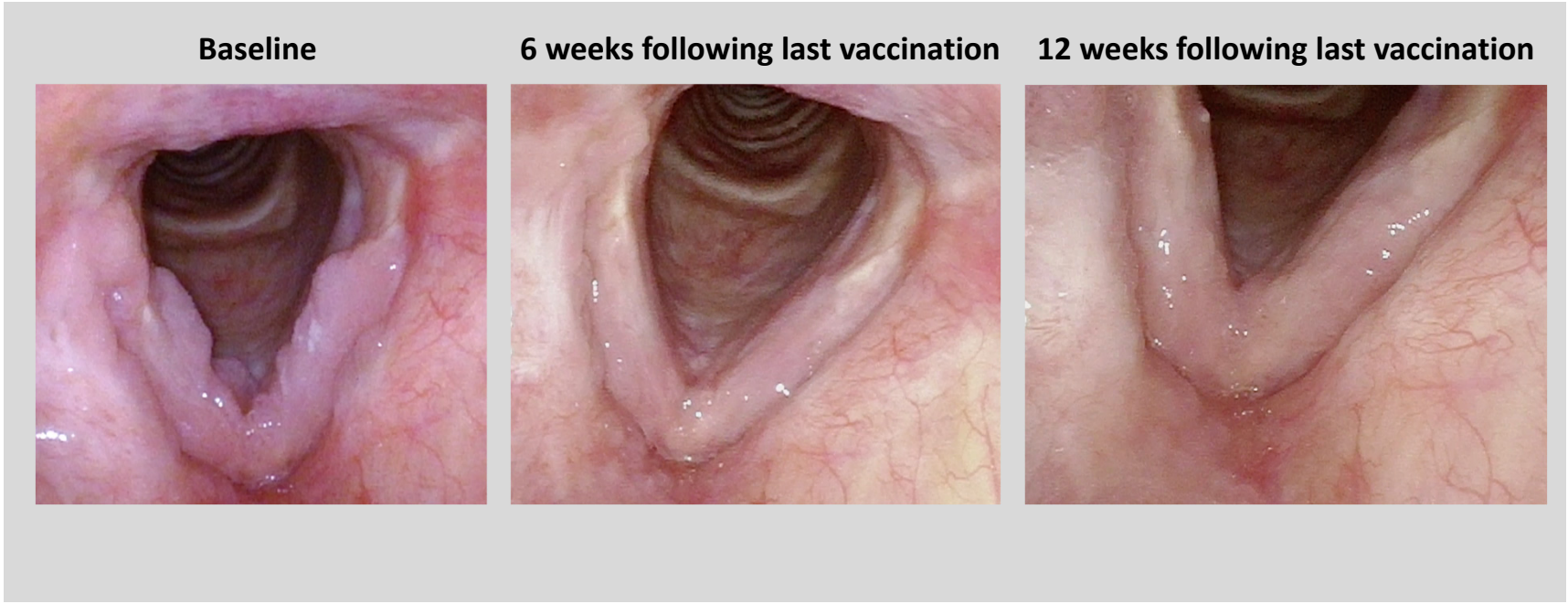
PRECIGEN

PATIENT BASELINE CHARACTERISTICS

- ~60 year old male
- **Required surgery every 6 weeks for 3 years before enrollment**
- Patient received 4 vaccinations of PRGN-2012 at $1x10^{11}$ vp/dose (Dose Level 1)

RESPONSE

- Patient did not require surgery at initial follow-up visit at 6 weeks
- A surgery was performed at the 12-week follow-up



Case Study: Subject 5 Treated at Dose Level 2

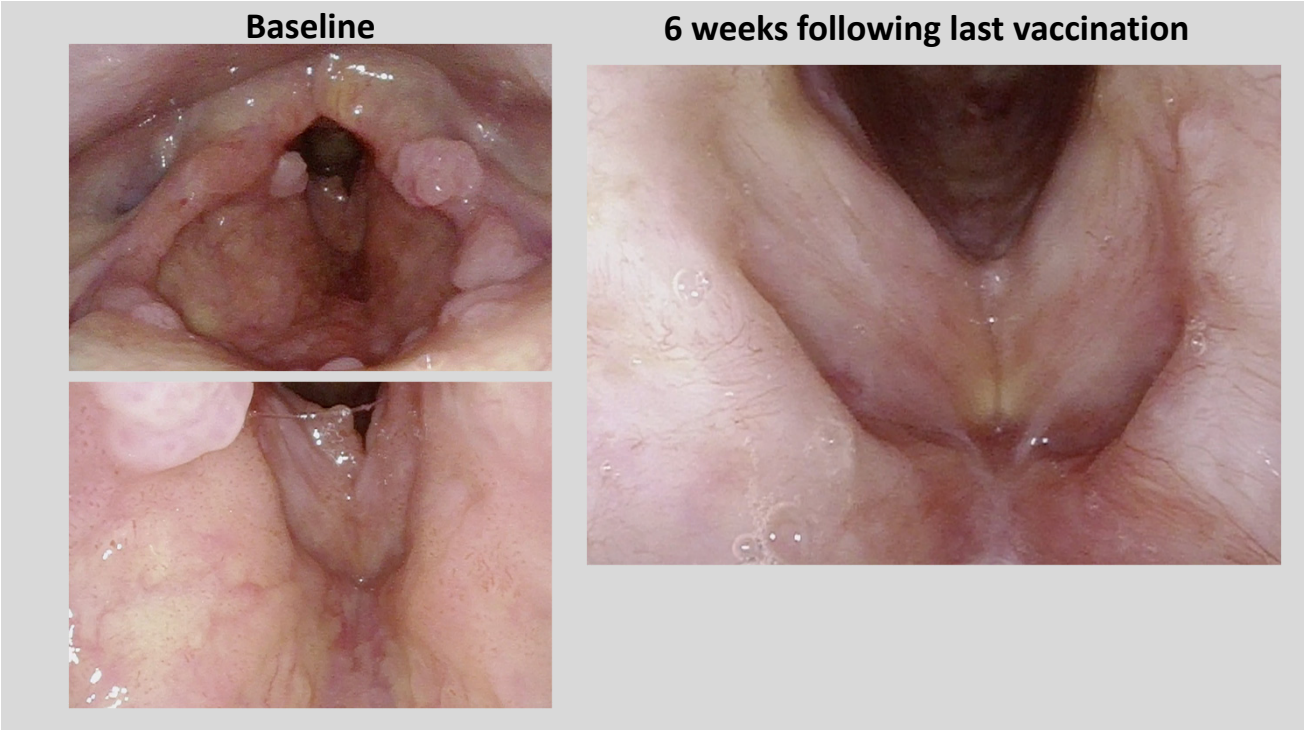
PRECIGEN

PATIENT BASELINE CHARACTERISTICS

- ~30 year old male
- Required surgery once every 6 weeks for 2.5 years prior to enrollment
- Patient received 4 vaccinations of PRGN-2012 at $5x10^{11}$ vp/dose (Dose Level 2)

RESPONSE

- Patient did not require surgery at initial follow-up visit at 6 weeks after treatment completion
- 12 weeks since the last surgery (6 weeks after treatment completion)



Case Study: Subject 7 Treated at Dose Level 2

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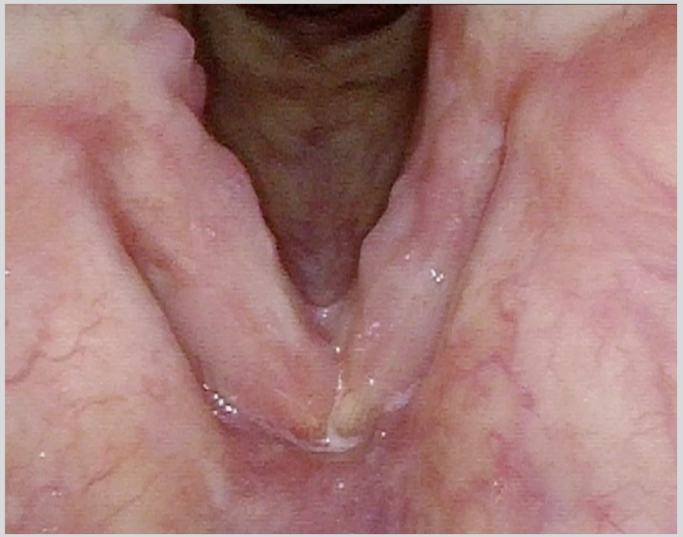
PATIENT BASELINE CHARACTERISTICS

- ~60 year old male
- **Required surgery once every 2-3 months** prior to enrollment
- Patient has received 3 vaccinations of PRGN-2012 at $5x10^{11}$ vp/dose (Dose Level 2)

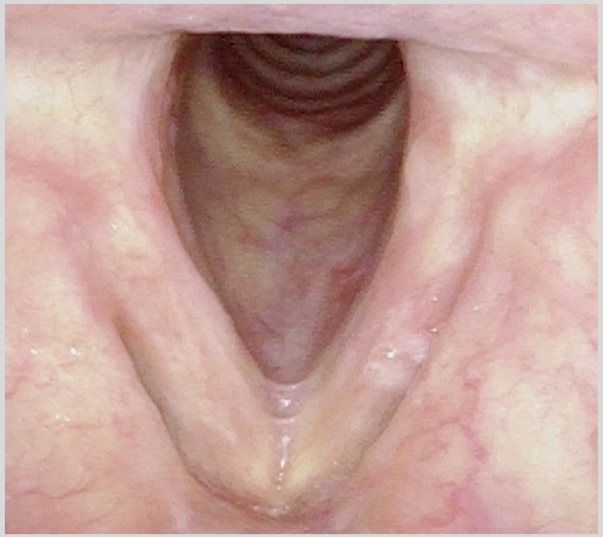
RESPONSE

- Patient is disease-free
- Patient has not required any surgery for 4 months (16 weeks)

Baseline



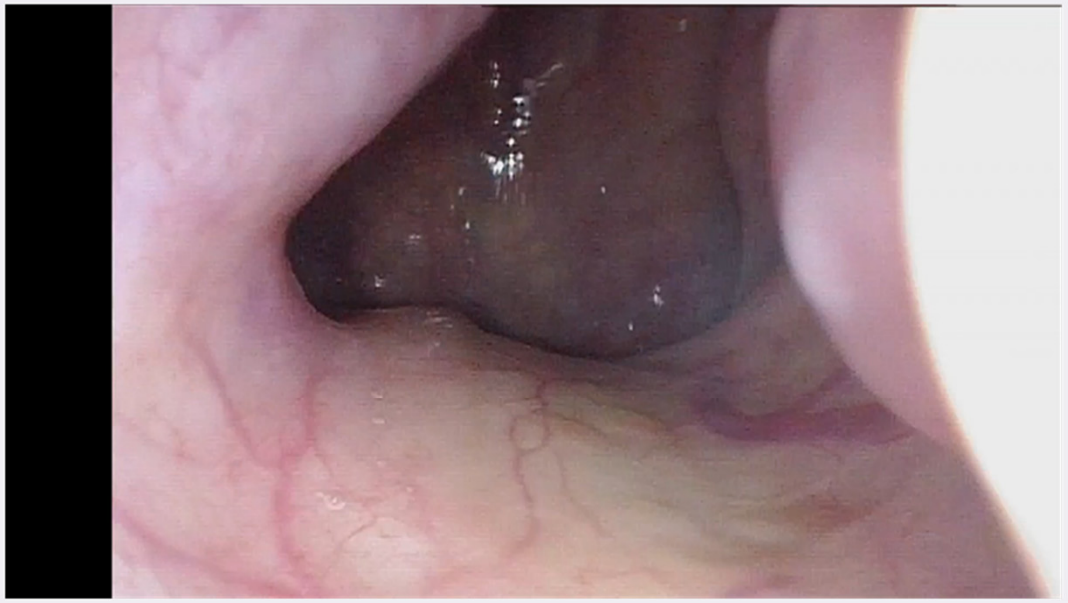
16 weeks following last surgery



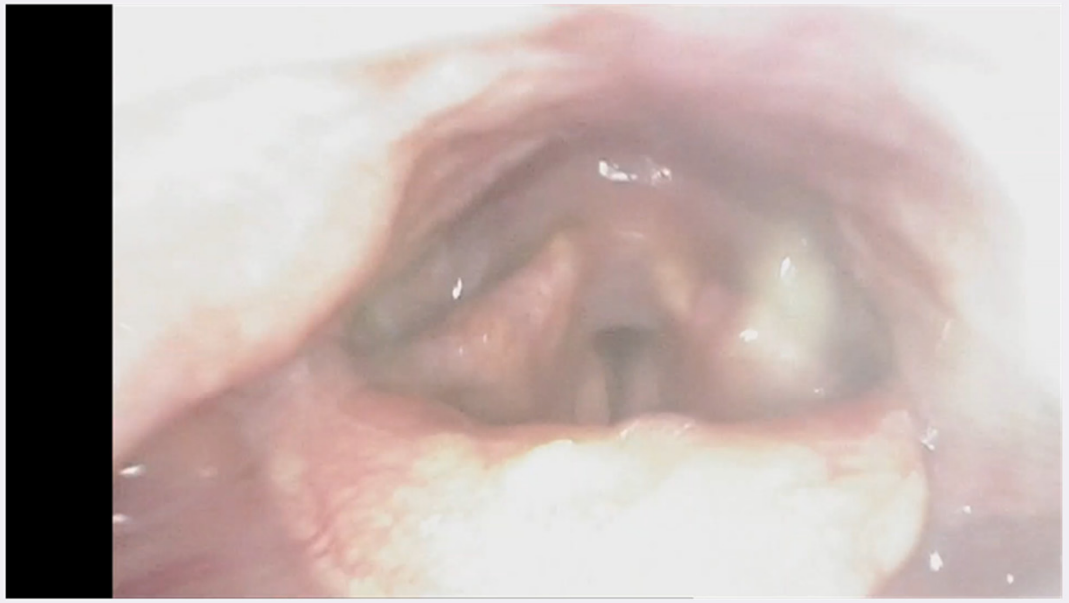
Case Study: Subject 7 Treated at Dose Level 2

PRECIGEN

BASELINE



16 WEEKS FOLLOWING LAST SURGERY



PRGN-2012: Summary

- Repeated administrations of PRGN-2012 were well-tolerated with no DLTs or serious adverse events
- Neutralizing antibody data support repeated administrations of gorilla adenovirus-based AdenoVerse therapies
- Preliminary data shows very encouraging response in RRP patients, including fewer surgical interventions following PRGN-2012 treatment
- Phase I correlative analyses will provide mechanistic data to support safety and efficacy analyses
- Phase Ib expansion cohort is enrolling patients

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PRGN-2009
AdenoVerse™ Immunotherapy

NCI Clinical Data

James L. Gulley, MD, PhD, FACP
Head, Immunotherapy Section, GMB, CCR, NCI, NIH

PRGN-2009: First-in-class Investigational Therapy for HPV-associated Cancers

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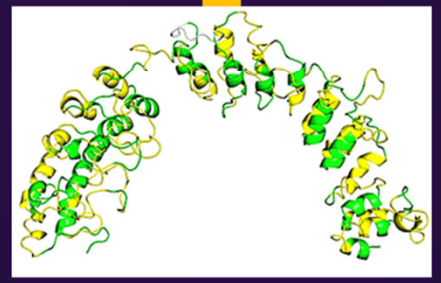
PRGN-2009: MULTI-EPITOPE ANTIGEN DESIGN TO TARGET HPV16/18

- Gorilla adenoviral vector with ability for repeat injections
- Multi-epitope antigen design to induce a robust immune response against HPV16/18



Multi-epitope antigen design

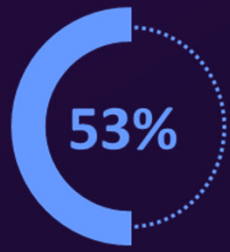
HPV-ASSOCIATED CANCERS

- HPV infections account for 5% of all cancers[1]
- Globally 690,000 new cancer cases attributable to HPV infections per year[2]

Cervical Cancer
Addressable New Cases Per Year:
570,000

Anal Cancer
Addressable New Cases Per Year:
29,000

Vaginal Cancer
Addressable Patient Population:
14,000



Penile Cancer
Addressable New Cases Per Year:
18,000

Oropharyngeal Cancer
Addressable New Cases Per Year:
42,000

Vulvar Cancer
Addressable New Cases Per Year:
11,000

[1]Miles et al. Gynecologic Oncology Research and Practice (2017) 4:10
[2] de Martel C, et al. Volume 8, ISSUE 2, e180-e190, February 01, 2020

PRGN-2009: Phase I Clinical Trial Design

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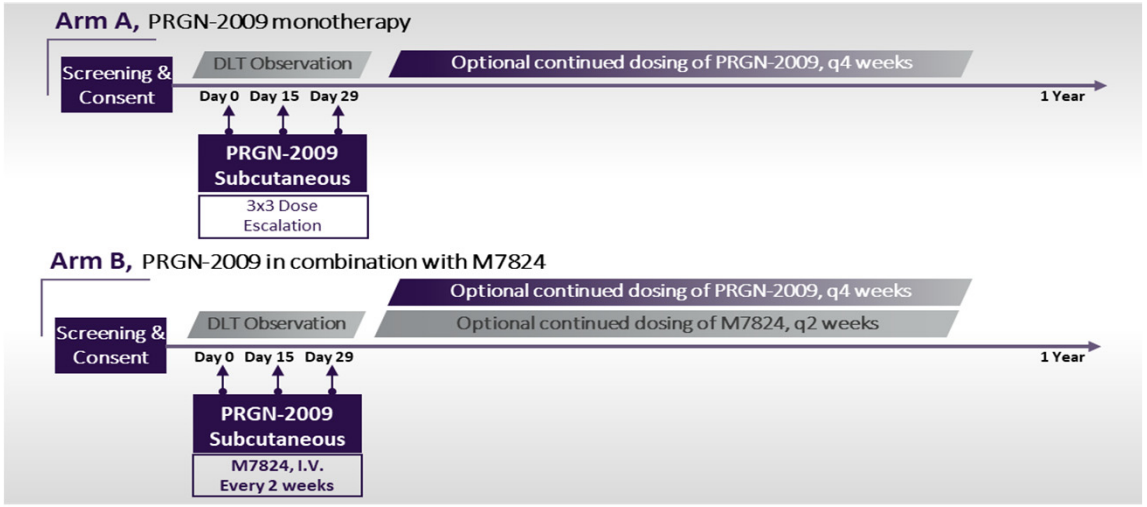
FIRST-IN-HUMAN, STUDY EVALUATING SAFETY AND EFFICACY OF PRGN-2009 AS MONOTHERAPY & COMBINATION THERAPY

ELIGIBILITY

- Age ≥18 years
- R/M HPV-associated cancers; disease progression following SOC
- ≥1 measurable (RECIST 1.1) lesion



SAFETY MONITORING

- Physical exam, vitals, clinical labs
- ECG

DISEASE RESPONSE

- RECIST v1.1

CORRELATIVES

- HPV-specific T-cell immune response
- Anti-PRGN-2009 neutralizing Abs

STUDY OBJECTIVES

Primary

- Evaluate safety and recommended Phase II dose of PRGN-2009

Secondary

- Objective Response Rate (ORR) (RECIST 1.1), Duration of Response (DOR), Progression Free Survival (PFS), and Overall Survival (OS)

- Phase I/II study in collaboration with the National Cancer Institute; PI C. “Harris” Floudas MD, DMSc, MS

ClinicalTrials.gov Identifier: NCT04432597

PRGN-2009 Phase I Monotherapy Arm: Patient Characteristics, Safety Summary and Neutralizing Antibody Response

PATIENT CHARACTERISTICS

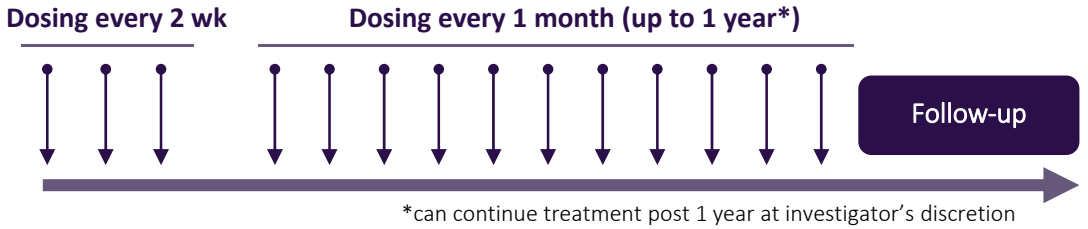
Patient Information	Arm 1A (n=6)
Median age (range)	61 (43-70)
Female, n (%)	6 (100)
Tumor Types, n (%)	
Cervical	3 (50)
Anal	2 (33)
Vaginal	1 (17)
Prior systemic therapies (median, range)	2.5 (1-3)
Prior anti-PD-(L)1	6 (100)
PRGN-2009 doses (median, range)	5 (3-16)

SAFETY SUMMARY

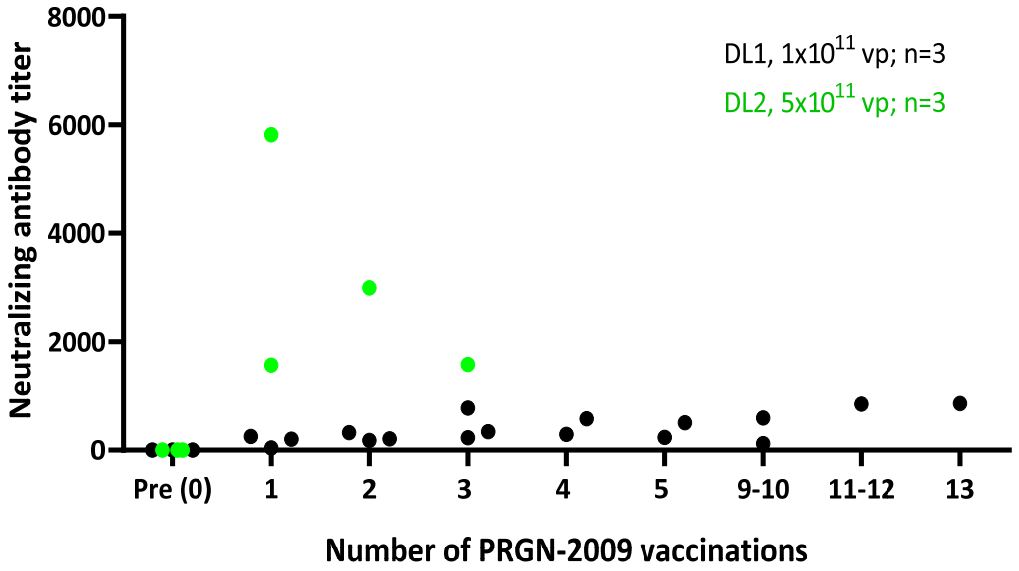
Treatment-related AEs	Arm 1A n (%)
Flu-like symptoms, G1-2	2 (33)
Injection site reactions, G1-2	5 (83)
Fatigue, G1-2	2 (33)
Rash, maculopapular, G1-2	1 (17)

G1-2: Grade 1-2

PRGN-2009 DOSING SCHEDULE



NEUTRALIZING ANTIBODY RESPONSE



DL1: Dose Level 1; DL2: Dose Level 2

PRGN-2009 Phase I Monotherapy Arm: Change in Tumor Burden Following PRGN-2009 Treatments

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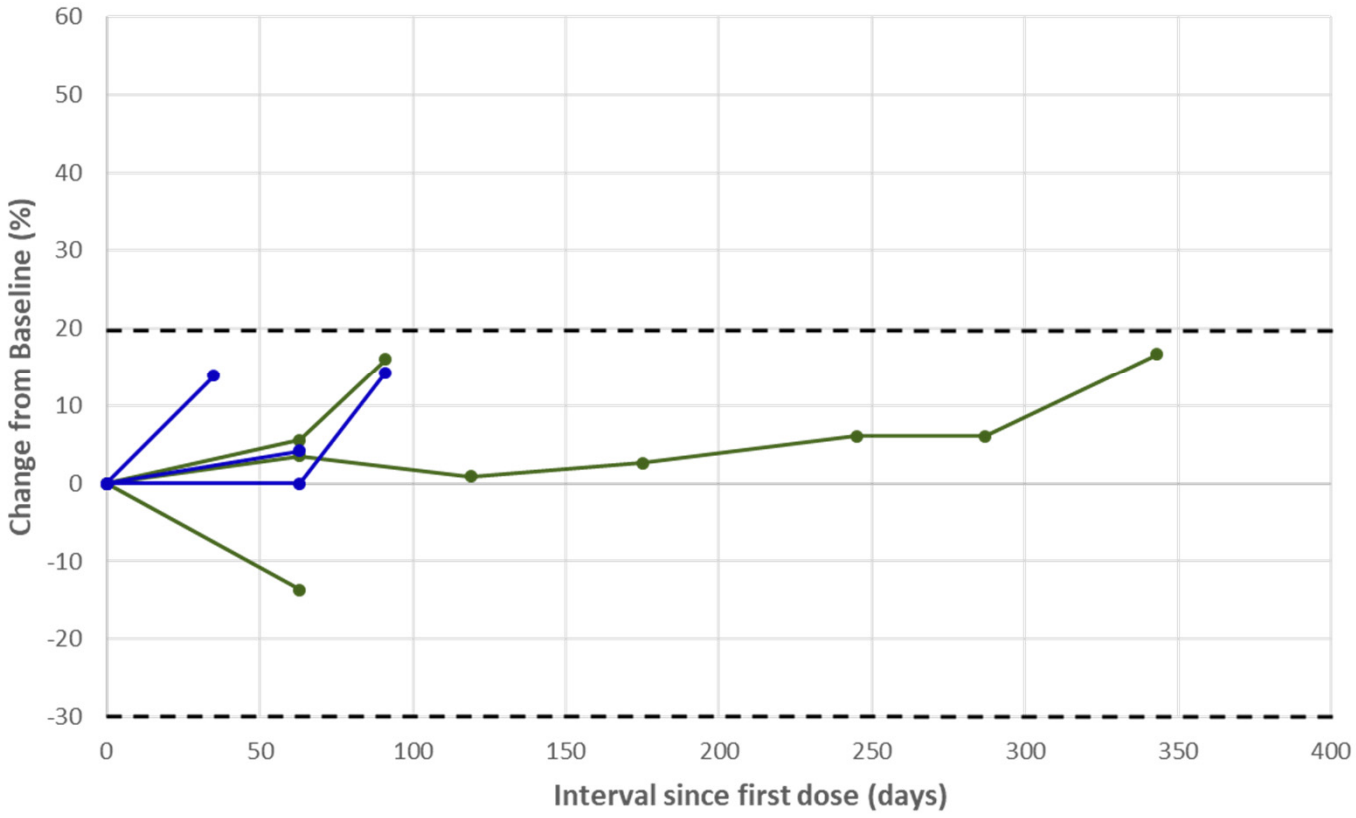
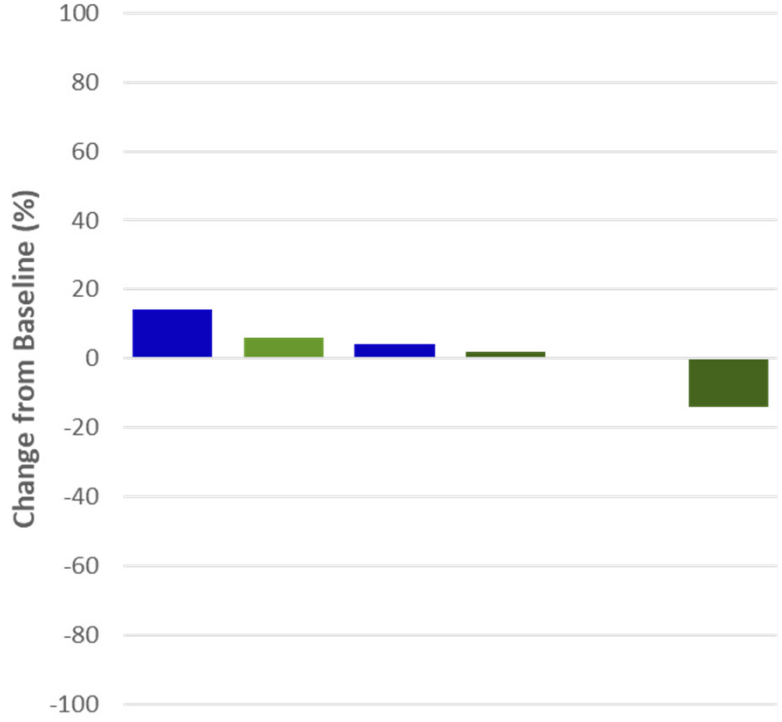
LONGITUDINAL CHANGE IN SUM OF LONGEST DIAMETER OF TARGET LESIONS



MAXIMUM CHANGE IN SUM OF LONGEST DIAMETER OF TARGET LESIONS



PRGN-2009 1x10^{11} vp, n=3
PRGN-2009 5x10^{11} vp, n=3

Case Study Phase I Monotherapy Arm: Subject with Durable Stable Disease (> 1 Year) has Received 16 PRGN-2009 Vaccinations

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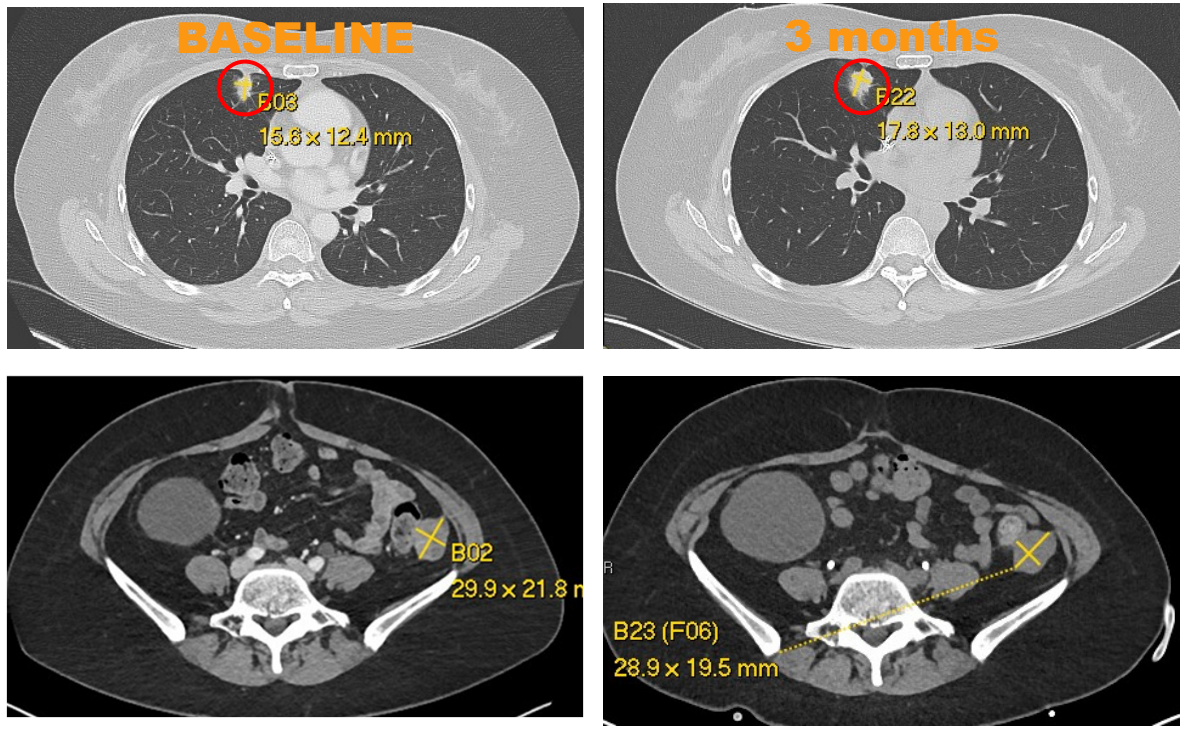
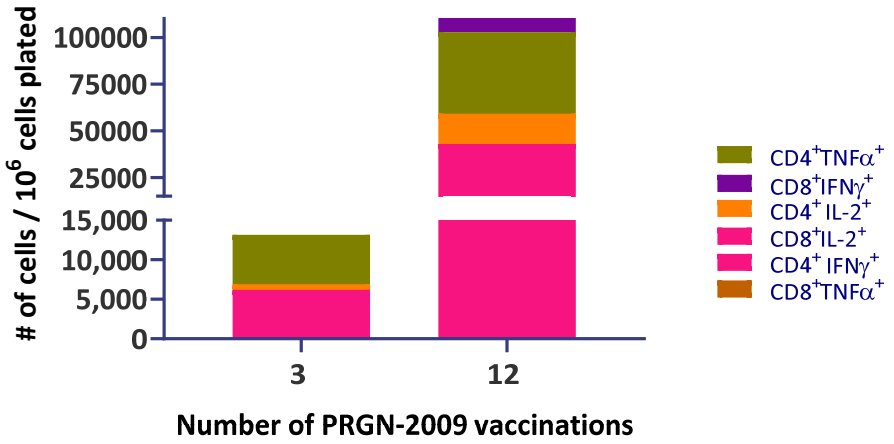
TUMOR LESION RESPONSE



PATIENT BASELINE CHARACTERISTICS

- Cervical cancer patient
- PRGN-2009 monotherapy at Dose Level 1 ($1x10^{11}$ vp)
- **Has received 16 PRGN-2009 vaccinations**
- Continues to receive monthly PRGN-2009 vaccination
- Durable Stable Disease (SD) since the initial re-staging

HPV-SPECIFIC T CELL RESPONSE

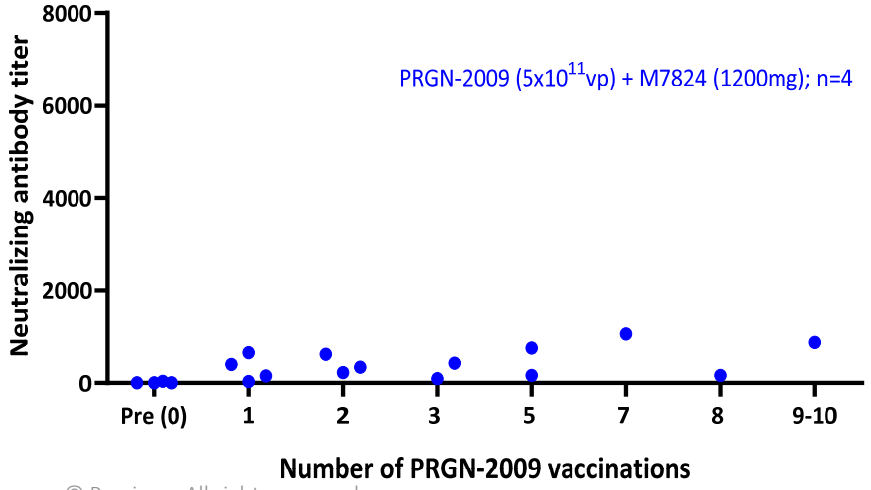


PRGN-2009 Phase I Combination Arm: Patient Characteristics, Safety Summary and Neutralizing Antibody Response

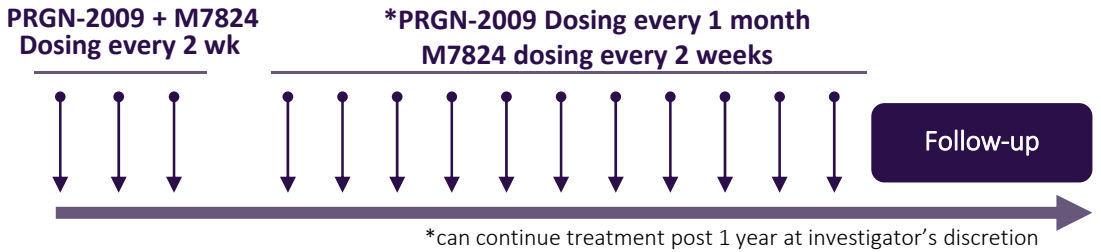
PATIENT CHARACTERISTICS

Patient Information	Arm 1B (n=6)
Median age (range)	61 (64-80)
Female, n (%)	2 (33)
Tumor Types, n (%)	
▪ OPSCC	4 (67)
▪ Cervical	2 (33)
Prior systemic therapies (median, range)	3 (1-4)
Prior anti-PD-(L)1	6 (100)
PRGN-2009 doses (median, range)	5 (1-10)

NEUTRALIZING ANTIBODY RESPONSE



PRGN-2009 DOSING SCHEDULE



*can continue treatment post 1 year at investigator's discretion

SAFETY SUMMARY

Treatment-related AEs	Arm 1B n (%)
Flu-like symptoms, G1-2	3 (50)
Injection site reactions, G1-2	4 (67)
Fatigue, G1-2	1 (17)
Rash, maculopapular, G1-2	1 (17)
Keratoacanthoma, G1-2	2 (33) *M7824-related
Anemia, G3-4	1 (17) *M7824-related
Duodenal Hemorrhage, G3-4	2 (33) *M7824-related

Additional AEs : In one patient(all Grade 1-2): diarrhea, headache, hemoglobinuria, hyperglycemia, fever, anorexia, epistaxis, dysgeusia, lymphocyte count decreased.

One patient died due to a duodenal hemorrhage (related to M7824) following refusal of core standard medical management (blood transfusion).

G1-2: Grade 1-2; G3-4: Grade 3-4

PRGN-2009 Phase I Combination Arm: Change in Tumor Burden Following Combination Treatments

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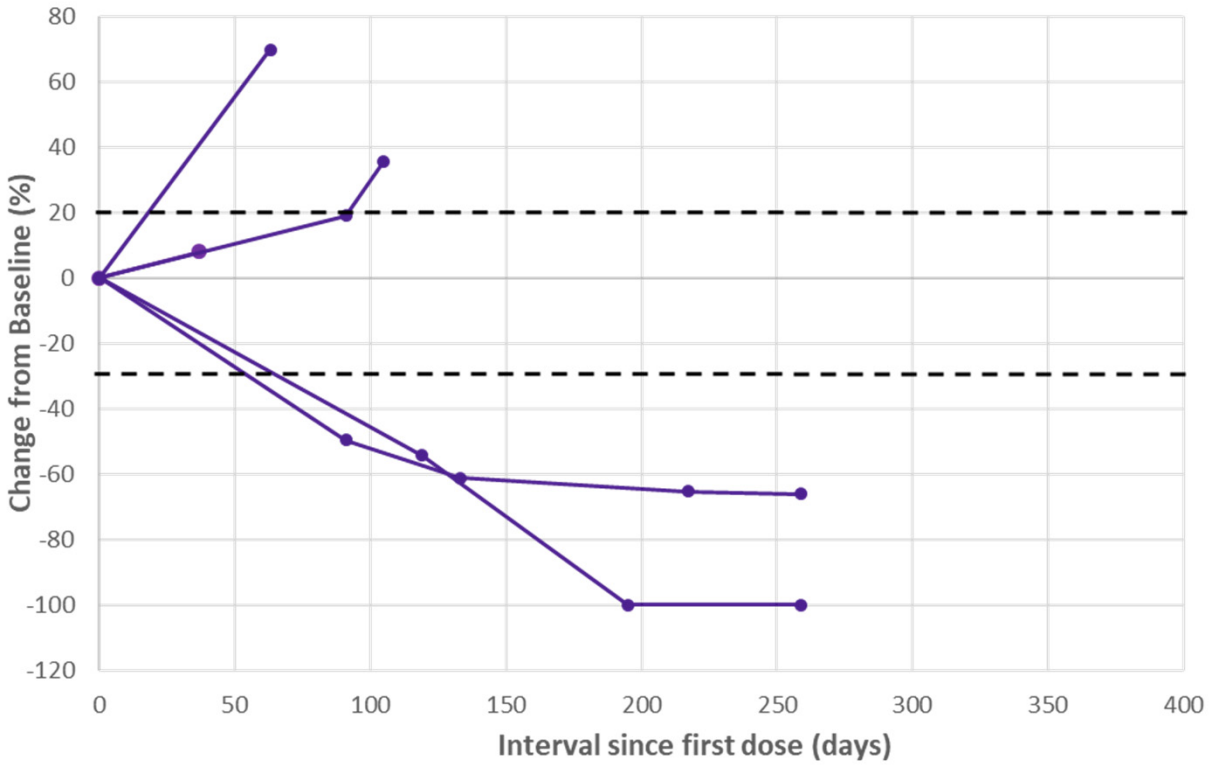
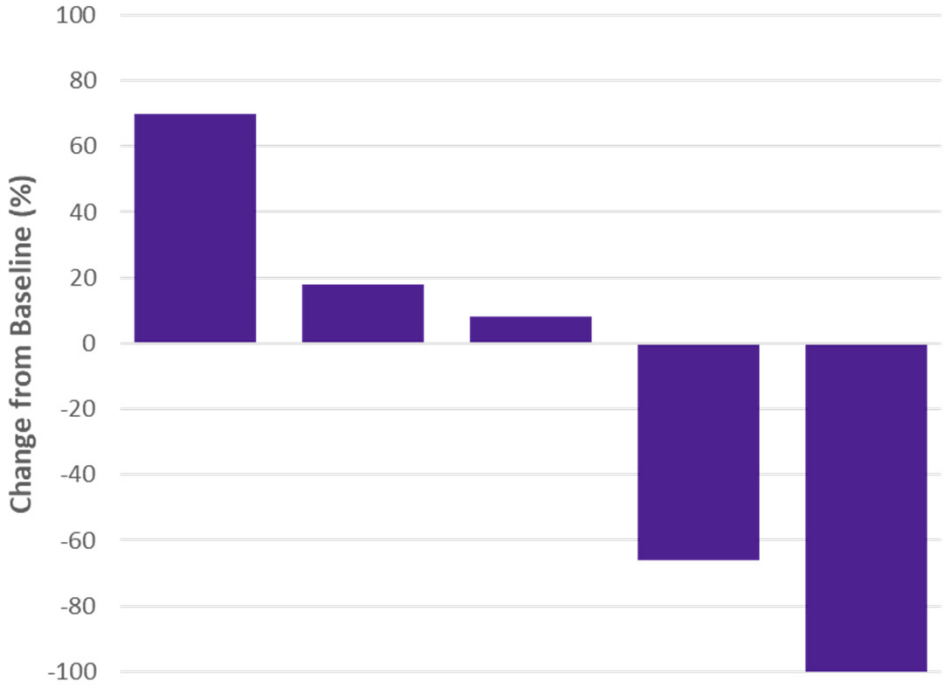
LONGITUDINAL CHANGE IN SUM OF LONGEST DIAMETER OF TARGET LESIONS



MAXIMUM CHANGE IN SUM OF LONGEST DIAMETER OF TARGET LESIONS



PRGN-2009 $5x10^{11}$ vp + M7824, n=5

PRGN-2009 Phase I Study: Summary of Disease Responses

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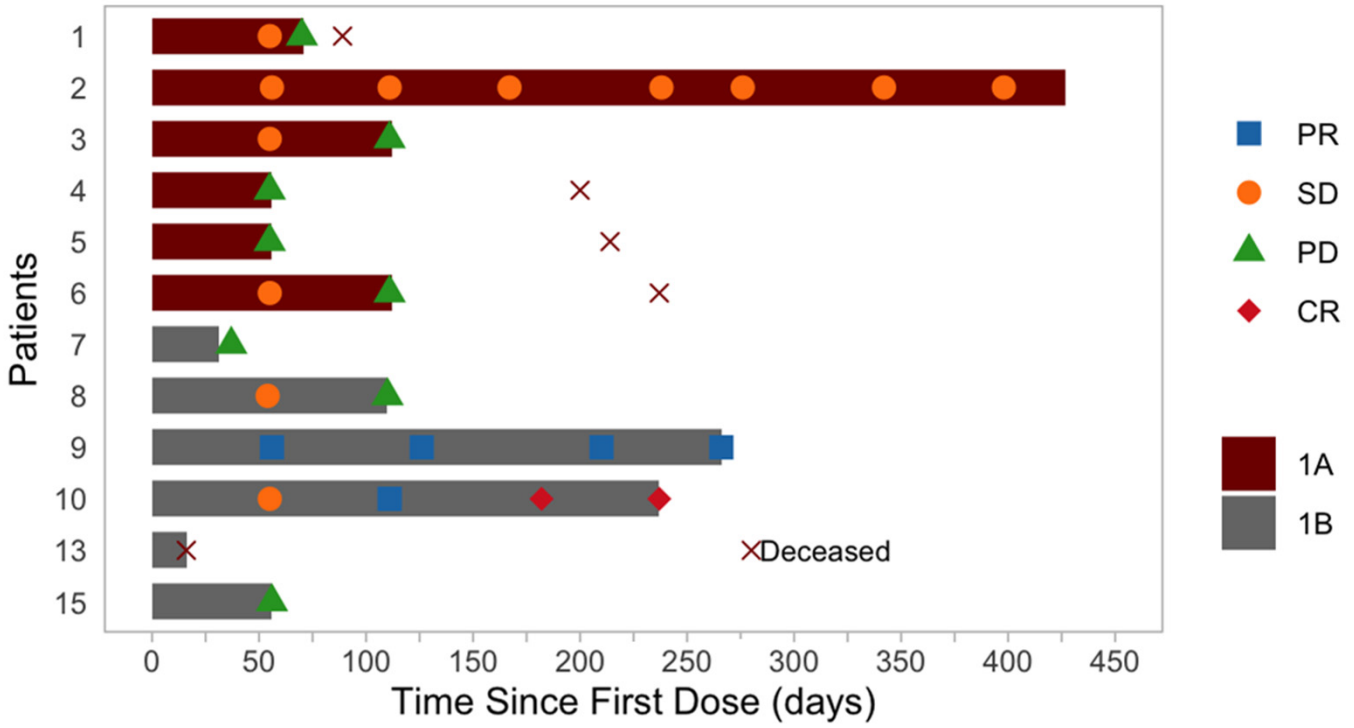
SUMMARY OF RESPONSES



Arm 1A: PRGN-2009 Monotherapy
Arm 1B: PRGN-2009 in Combination with M7824

CR: Complete Response
PR: Partial Response
SD: Stable Disease
PD: Progressive Disease

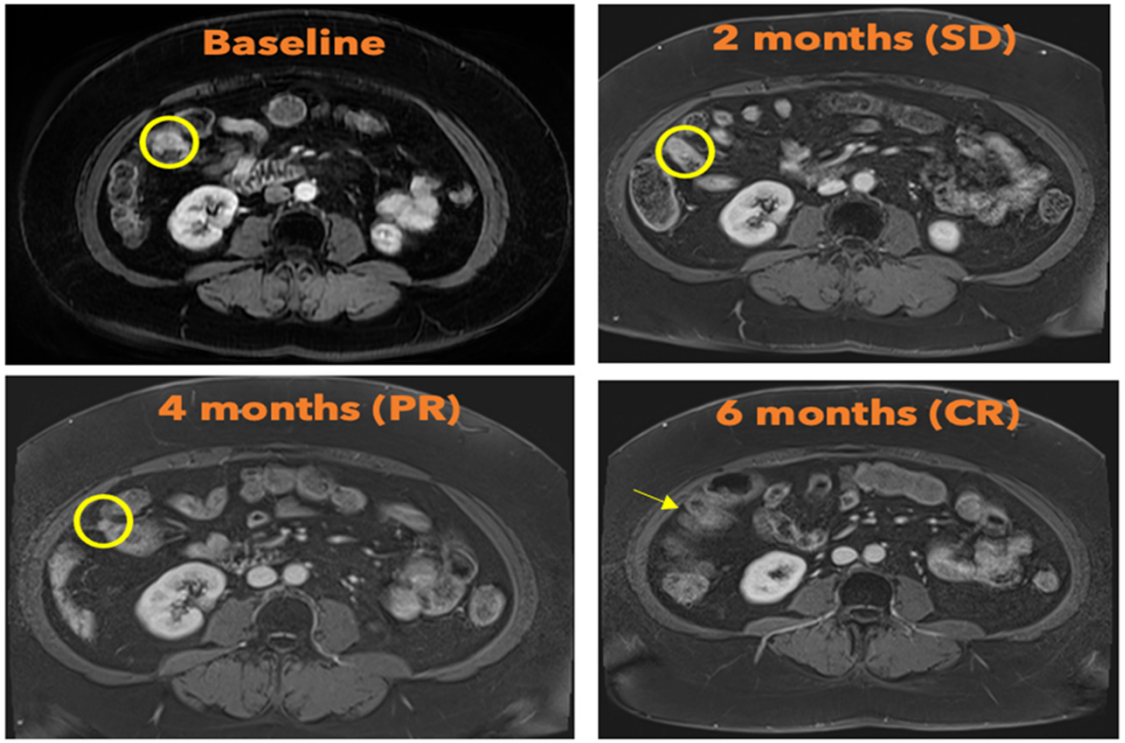
BEST OVERALL RESPONSE (RECIST v1.1 CRITERIA)

	PRGN-2009 Monotherapy (Arm 1A)	PRGN-2009 Combination (Arm 1B)
Disease Control Rate (DCR) at first restaging	50% (3/6)	60% (3/5)
Objective Response Rate (ORR)	0% (0/6)	40% (2/5)

40% Objective Response Rate (ORR) in patients treated in the PRGN-2009 Combination Arm 1B

Case Study Phase I Combination Arm: Subject with Ongoing Complete Response (CR)

TUMOR LESION RESPONSE

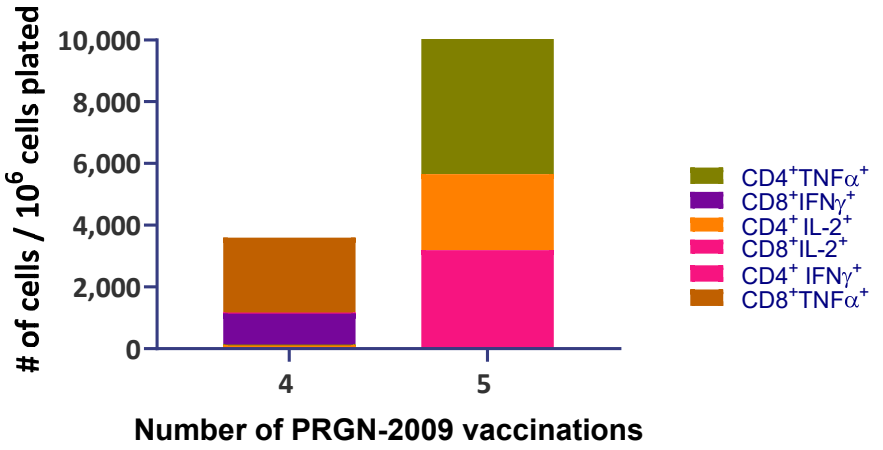


CR: Complete Response
PR: Partial Response
SD: Stable Disease

PATIENT BASELINE CHARACTERISTICS

- Cervical cancer patient
- PRGN-2009 at $5x10^{11}$ vp in combination with M7824
- Off-study due to toxicity related to M7824
- PR at initial re-staging
- CR at approx. 6 months following treatment start

HPV-SPECIFIC T CELL RESPONSE



PRGN-2009: Summary

- Repeated administrations of PRGN-2009 were well-tolerated as monotherapy and combination therapy (No DLTs)
- Increase in HPV16 and/or HPV18 specific immune response with administrations of PRGN-2009
- Neutralizing antibody data support repeated administrations of gorilla adenovirus based AdenoVerse therapies
- Objective Response Rate (ORR) of 40% and Disease Control Rate (DCR) of 60% observed in the Combination Arm
- Phase II study in newly diagnosed OPSCC patients is ongoing

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Summary & Road Ahead

Helen Sabzevari, PhD
President and CEO, Precigen

UltraCAR-T Platform is Designed to Address Major Limitations of Current T Cell Therapies

UltraCAR-T

PRODUCT	PLATFORM	INDICATION	DISCOVERY	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3
PRGN-3005	UltraCAR-T	Ovarian Cancer					
PRGN-3006	UltraCAR-T	AML, MDS					
PRGN-3007	UltraCAR-T	ROR1⁺ Hematological & Solid Tumors					

UltraCAR-T OVERNIGHT, DECENTRALIZED MANUFACTURING PROCESS PROMISES A MORE EFFECTIVE WAY TO TREAT PATIENTS

SUMMARY

- Excellent **safety profile** in both hematological and solid malignancies
- **Validation of overnight, decentralized manufacturing**
- Excellent *in vivo* **expansion** and long-term **persistence** of UltraCAR-T in both hematological and solid malignancies
- Encouraging **objective responses** with PRGN-3006 in Lymphodepletion Cohort in r/r AML
- Incorporation of intrinsic checkpoint inhibition in the **next generation UltraCAR-T**

ROAD AHEAD

- **Expansion** of clinical trials
- Potential to pursue **rapid regulatory development** path for PRGN-3006
- Opportunity to evaluate **repeat dosing**
- Initiate dosing in **PRGN-3007 trial** for hematological and solid malignancies
- Continue to **innovate UltraCAR-T platform** to build non-viral library to transform the personalized cell therapy landscape for cancer patients

AdenoVerse Platform is Well Differentiated from Competition

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ADENOVERSE

PRODUCT	PLATFORM	INDICATION	DISCOVERY	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3
PRGN-2009	AdenoVerse	HPV+ Solid Tumors					
PRGN-2012	AdenoVerse	Recurrent Respiratory Papillomatosis (RRP)					

ABILITY FOR REPEAT ADMINISTRATION TO GENERATE STRONG IMMUNE RESPONSES REPRESENTS AN ATTRACTIVE OPPORTUNITY FOR AdenoVerse IMMUNOTHERAPY PLATFORM

SUMMARY

- Excellent **safety profile** in both cancer and infectious disease settings
- Patient data strongly support **repeat administrations**
- Increase in **antigen-specific immune response** with repeat administrations
- Robust **clinical activity** with PRGN-2009 in combination with checkpoint inhibitor
- Very encouraging preliminary **clinical responses in RRP,** including **reduction/elimination in surgical interventions** following PRGN-2012 treatment

ROAD AHEAD

- **Completion** of ongoing clinical trials
- Potential to pursue **rapid regulatory development** path for PRGN-2012
- **Attractive opportunity** for combination of PRGN-2009 with checkpoint inhibitors in multiple HPV-associated cancers
- Continue to **innovate AdenoVerse platform** to advance additional therapies for cancer and infectious disease patients

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Q&A

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