CORPORATE OVERVIEW

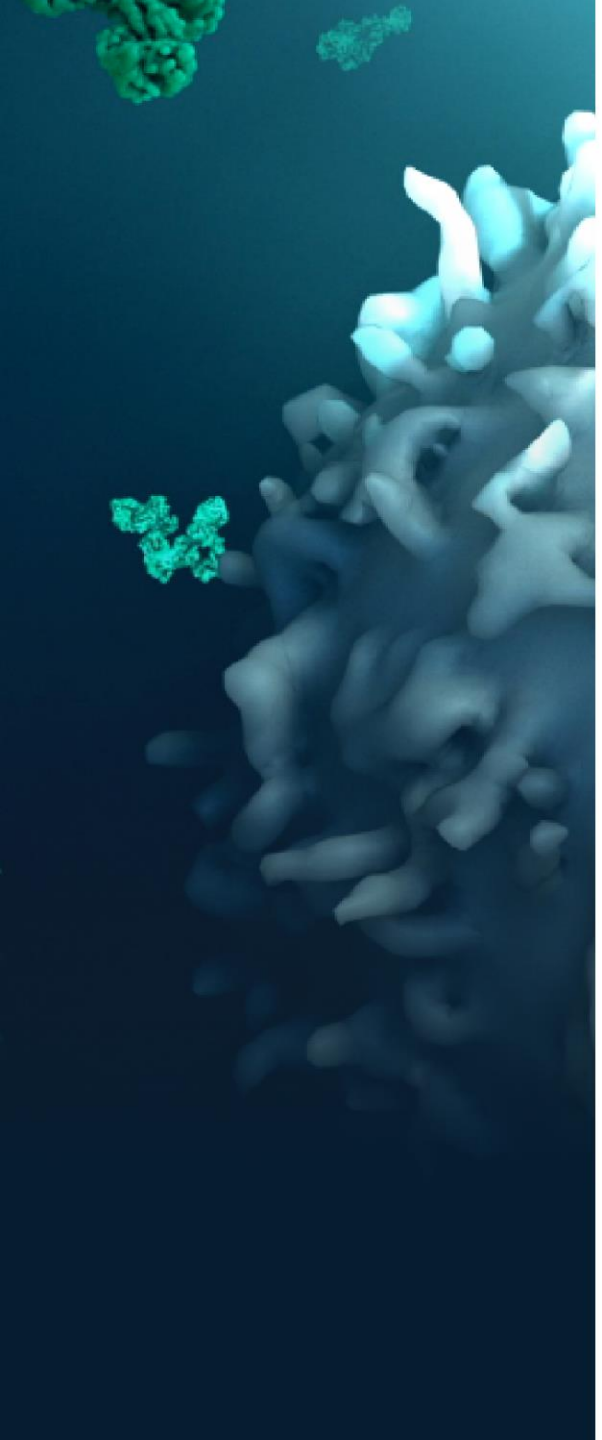
JUNE 2021

Frank Bedu-Addo Ph.D. President & CEO

PDS Biotechnology

Nasdaq: PDSB

Developing powerful, safe, versatile immunotherapies



Forward-Looking Statements

This presentation contains forward-looking statements about PDS Biotechnology Corporation (“PDSB”), and its businesses, business prospects, strategies and plans, including but not limited to statements regarding anticipated pre-clinical and clinical drug development activities and timelines and market opportunities. All statements other than statements of historical facts included in this presentation are forward-looking statements. The words “anticipates,” “may,” “can,” “plans,” “believes,” “estimates,” “expects,” “projects,” “intends,” “likely,” “will,” “should,” “to be,” and any similar expressions or other words of similar meaning are intended to identify those assertions as forward-looking statements. These forward-looking statements involve substantial risks and uncertainties that could cause actual results to differ materially from those anticipated.

Factors that may cause actual results to differ materially from such forward-looking statements include those identified under the caption “Risk Factors” in the documents filed with the Securities and Exchange Commission (“SEC”) from time to time, including its Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this presentation. Except to the extent required by applicable law or regulation, PDSB undertakes no obligation to update the forward-looking statements included in this presentation to reflect subsequent events or circumstances.

A significant barrier to effective immunotherapy has been the **inability to promote adequate CD8+ killer T-cell responses** *in vivo* resulting in **diminished efficacy; 70-90%** of cancer patients **fail check point inhibitor therapy**

PDS Biotech's Versamune® -based immunotherapies are designed to promote a powerful *in vivo* tumor-specific **CD8+ killer T-cell response**

Versamune® -based therapies also show promising potential to:

Generate the right type and quantity of effective CD8+ killer T-cells

Generate memory T-cells, to enhance durability of response

Generate potency without systemic side effects

PDS Biotech is a clinical stage biotechnology company developing a pipeline of immunotherapies based on the proprietary Versamune® platform

CORPORATE OVERVIEW

- Biopharma developing novel T-cell activating cancer treatment candidates
- **Three** phase 2 oncology clinical trials in progress anticipated to release data in 2021
- Clinical partnerships with Merck, MD Anderson Cancer Center and National Cancer Institute
- ~15 employees with headquarters in Florham Park, NJ
- Debt free with approximately **$29.5M in cash***

VERSAMUNE® PLATFORM

- NCI-initiated phase 2 combination trial of PDS0101 in advanced HPV-cancer reported strong potential clinical benefit
- No new or elevated toxicities observed from the addition of PDS0101 to combination therapy
- Pre-clinical studies demonstrated potential to work with a wide array of oncogenes and viral antigens
- Multiple composition and application patents valid through mid-2030s

*The Company received $4.5M from the sale of NJ Net Operating Loss Tax Benefits in May 2021 which has been added to the cash balance reported on our Form 10-Q as of 3/31/2021.

PDS Biotech's robust Versamune® -based pipeline is being developed in partnership with leaders in immuno-oncology and infectious disease

PRODUCT	INDICATION	COMBINATION	PC	P1	P2	P3	R	PARTNER(S)
Oncology								
PDS0101 (HPV16)	First line treatment of recurrent / metastatic head and neck cancer	KEYTRUDA®						MERCK
PDS0101 (HPV16)	Advanced HPV-associated malignancies	Bintrafusp alfa M9241						NIH NATIONAL CANCER INSTITUTE
PDS0101 (HPV16)	Stage IIb-IVa cervical cancer	Chemo-radiation						MD Anderson Cancer Center
PDS0102 (TARP)	Acute myeloid leukemia (AML), prostate and breast cancer	TBD						NIH NATIONAL CANCER INSTITUTE
PDS0103 (MUC1)	Non-small cell lung cancer (NSCLC), breast, colorectal and ovarian cancer	TBD						NIH NATIONAL CANCER INSTITUTE
PDS0104 (TRP2)	Melanoma	TBD						
Infectious Disease								
PDS0203 (SARS-CoV-2)	Prevention of COVID-19							Farma core, BLANVER
PDS0201 (M-tuberculosis)	Prevention of tuberculosis							Farma core
PDS0202 (influenza)	Universal prevention of influenza							NIH National Institute of Allergy and Infectious Diseases

PDS Biotech Funded Partner Co-Funded

*Consortium of PDS Biotech, Farmacore Biotechnology and Blanver Farmoquimica. Funding provided by The Ministry of Science, Technology and Innovation of Brazil ("MCTI")

Reference: Data on file.

PDS Biotech executive team has demonstrated success in the development and commercialization of leading pharmaceutical products

Frank Bedu-Addo, PhD
Chief Executive Officer

- Senior executive experience with management of strategy and execution at both large pharma and biotechs
- Notable drug development:
  Abelcet® (Liposome Company/ Elan)
  PEG-Intron® (Schering-Plough/ Merck)

Seth Van Voorhees, PhD
Chief Financial Officer

- Senior executive experience with over 20 years of experience in high tech companies
- In-depth experience with M&A transactions, capital markets, business development and investor relations

Lauren V. Wood, MD
Chief Medical Officer

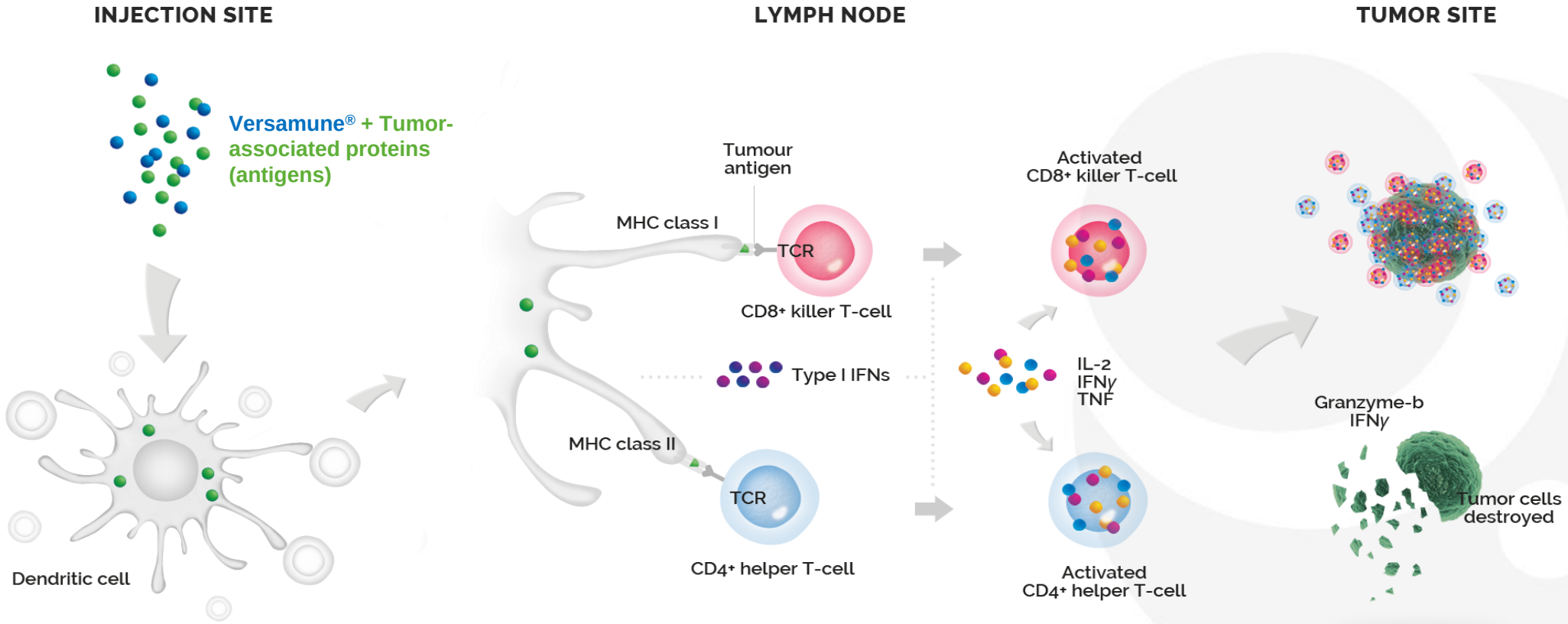
- >30 years of translational clinical research experience
- Former Director of Clinical Research at National Cancer Institute Center for Cancer Research (Cancer Vaccine Branch)

Gregory Conn, PhD
Chief Scientific Officer

- Co-founder
- >35 years of drug development experience
- In-depth experience with biotech drug discovery, product development and manufacturing

Introduction to the Versamune® Platform

Versamune® is designed to induce a robust and targeted anti-tumor response *in vivo* when administered with a tumor-associated antigen



Promotes uptake of vaccine or immunotherapy and entry into lymph nodes

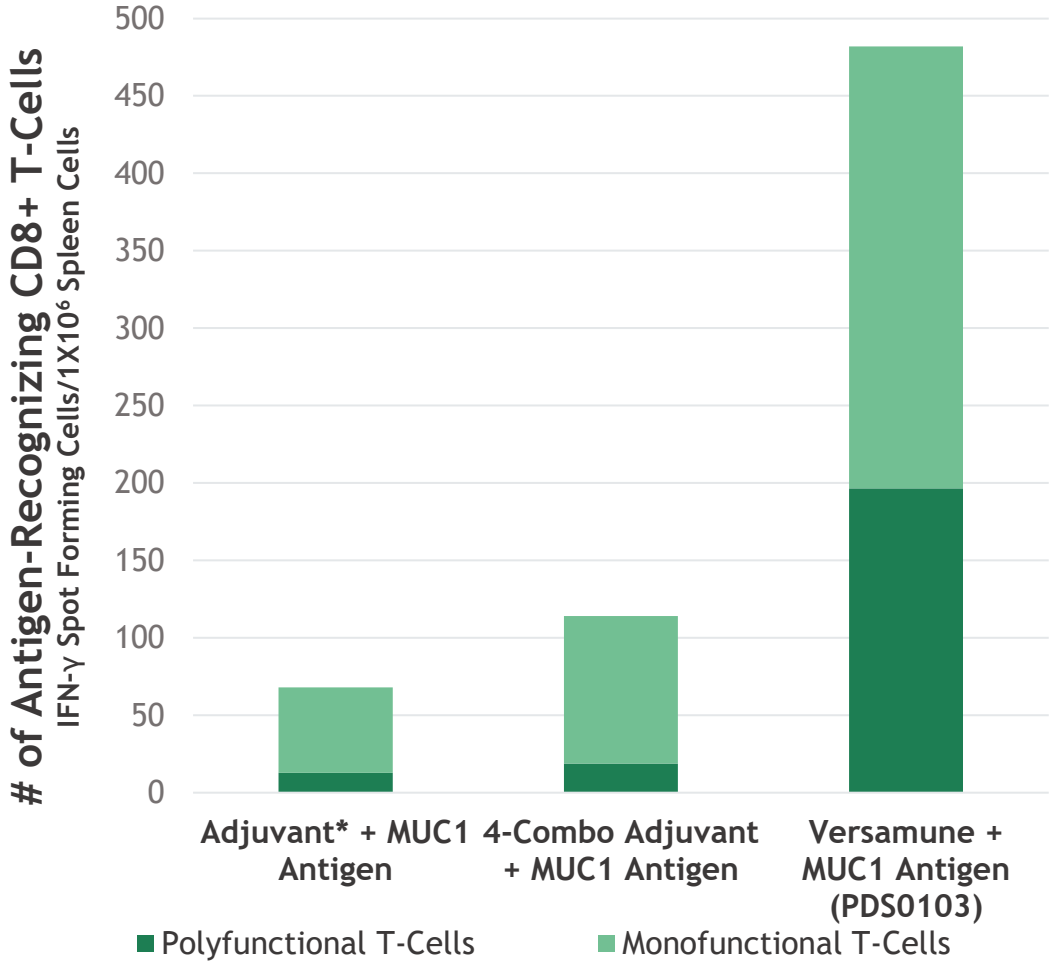
Promotes antigen processing and presentation to T-cells via MHC I and II pathways

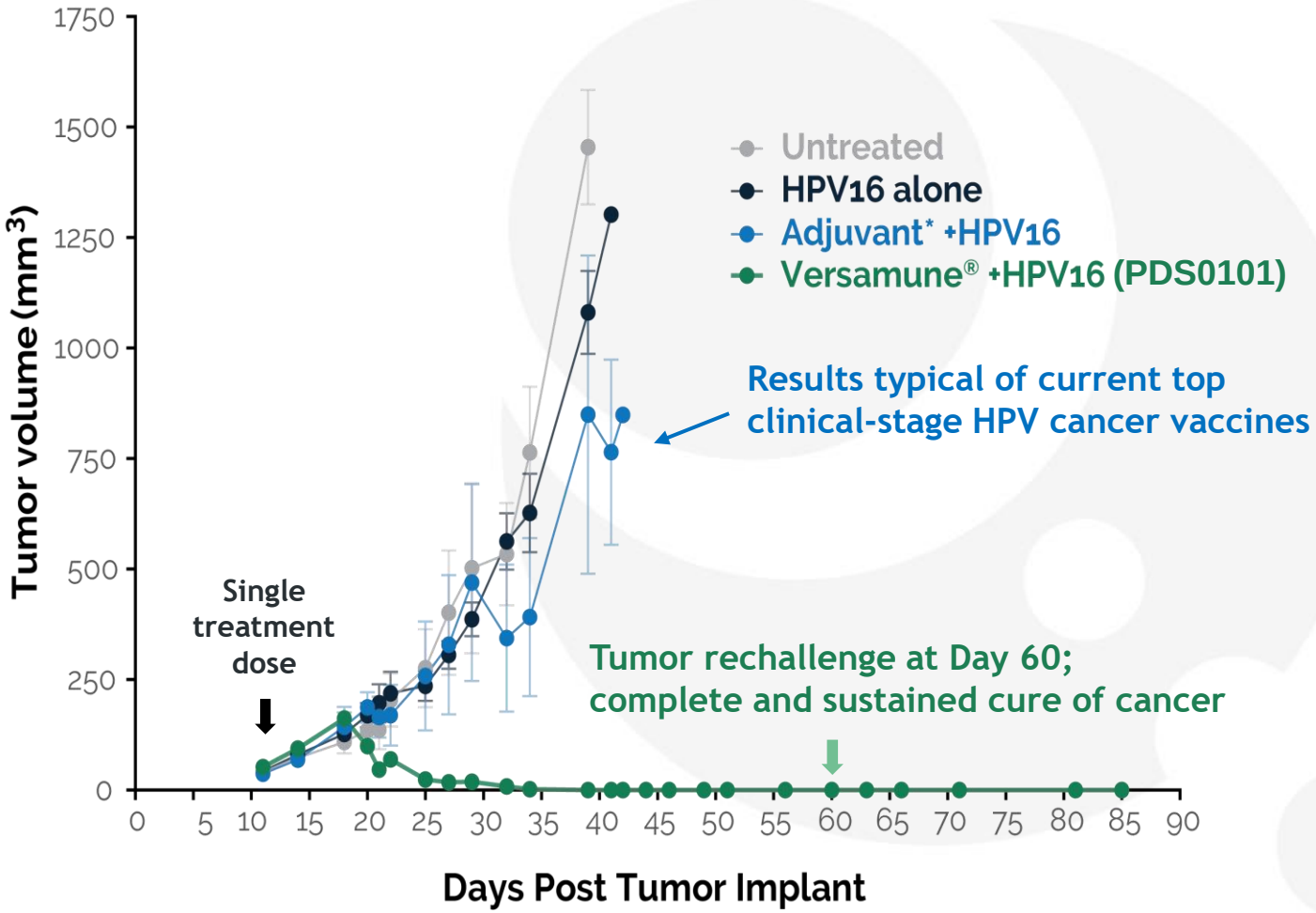
Activates Type I Interferon pathway, enabling a powerful anti-tumor killer CD8+ T-cell response

References: Gandhapudi SK, et al. 2019. Antigen priming with enantiospecific cationic lipid nanoparticles induces potent antitumor CTL responses through novel induction of a Type I IFN response. J Immunol. 202 (12): 3524-3536. Smalley Rumfield C et al. 2020. Immunomodulation to enhance the efficacy of an HPV therapeutic vaccine. J. for ImmunoTherapy of Cancer 8:e000612.

Greater quantity and quality of Versamune®-induced killer T-cells may result in unique ability to eradicate HPV-positive tumors after a single dose

Induced a >10-fold number of highly potent T-cells and eradication of HPV-positive tumors after a single dose in preclinical studies





*Adjuvant = cytokine GM-CSF

References: J. Immunology, 2019 (202), 1215; Studies in TC-1 tumor model with other immunotherapies reported in: Vaccine 2009, January 14, 27 (3): 431; Science Translational Medicine 2016, 13 April, Vol 8 Issue 334; Vaccine 2009, September 25, 27 (42): 5906.

PDS0101 Phase 2 Clinical Development

Clinical strategy: Develop PDS0101 in combination with established therapies for rapid proof-of-concept and risk mitigation

Combinations of PDS0101 with FDA-approved standard of care

- ***First line treatment of recurrent/metastatic HPV-positive head and neck cancer***
  - Combination with KEYTRUDA®
- ***Treatment of locally advanced cervical cancer***
  - Combination with chemoradiotherapy

Novel combinations of PDS0101 with promising, investigational immunotherapeutic agents

- ***Treatment of advanced HPV-associated cancers*** *(anal, cervical, vaginal, head and neck etc.)*
  - Triple combination with Bintrafusp alpha (bi-functional checkpoint inhibitor - M7824) and M9241 (NHS-IL12 an antibody conjugated immuno-cytokine)

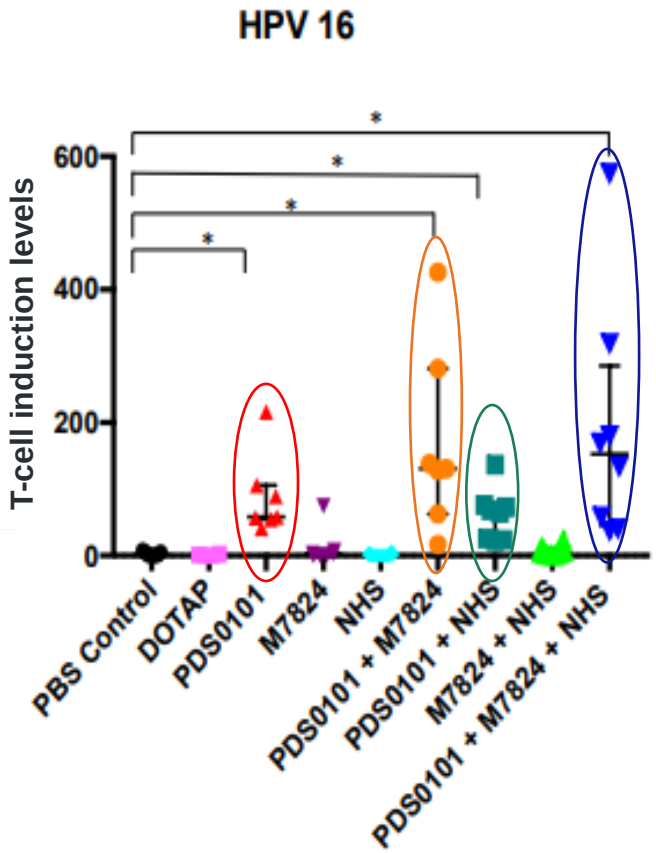
Phase 2 NCI-led clinical trial evaluating the triple combination of PDS0101, Bintrafusp alfa and M9241 in advanced HPV-associated cancer

Indication	Patients with advanced HPV-associated cancer who have failed prior treatment
Clinical Agents	**Bintrafusp alfa:** Bifunctional “trap” fusion protein **M9241:** Antibody-conjugated immuno-cytokine **PDS0101:** Versamune®-based immunotherapy generating HPV-specific CD8+ T-cells
Study goals	Group 1: Objective response rate (ORR) in checkpoint inhibitor (CPI) naïve patients Group 2: ORR in patients who have failed checkpoint inhibitor therapy (CPI refractory)
Timing	**Full enrollment of 56 patients** **Complete enrollment expected by Q4 2021/Q1 2022**
Trial Sponsor	NIH NATIONAL CANCER INSTITUTE

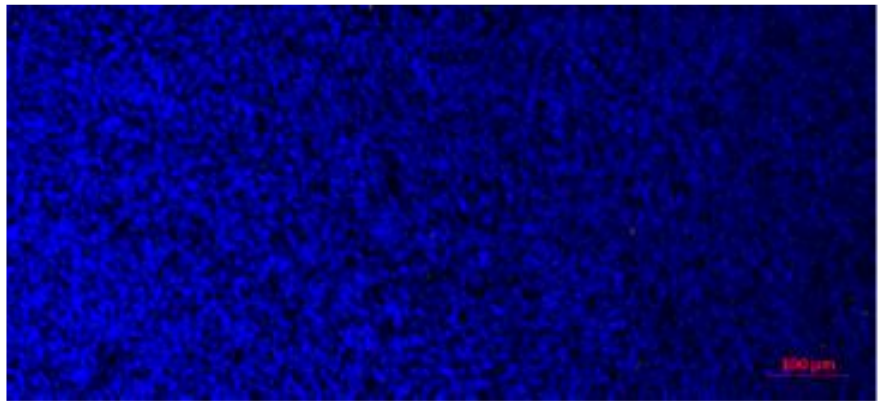
The objective of this trial is to confirm that PDS0101 enhances the therapeutic benefit of Bintrafusp alfa and M9241 and may lead to expanded evaluation in several pipeline products

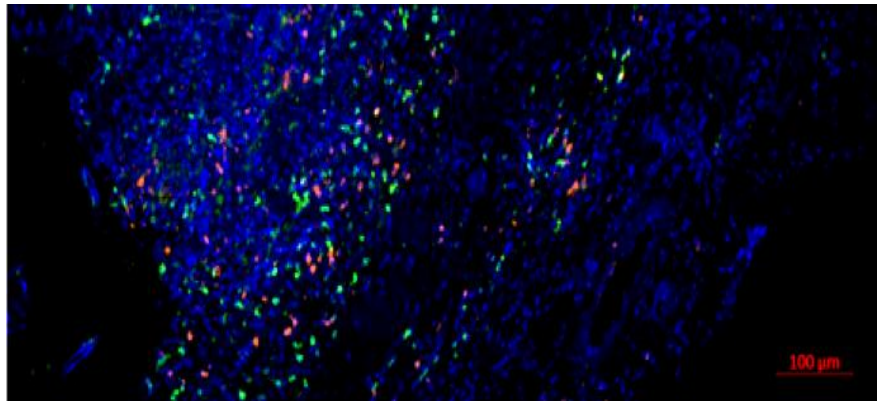
Preclinical study: Triple combination of PDS0101, Bintrafusp alfa (M7824) and M9241 (NHS-IL12) demonstrated higher targeted T-cell response

Combination of PDS0101 with M9241 or Bintrafusp alfa generated superior targeted T-cell response; triple combination demonstrated superior efficacy



T-cell clones per 25% of TCR repertoire (Average)





Red – CD8+ (killer) T-cells
Green – CD4 + (helper) T-cells

Bintrafusp alfa (M7824 - bi-functional checkpoint inhibitor)

Tumor Regression: **0/16 (0%)**
T-cell Clones: **22**

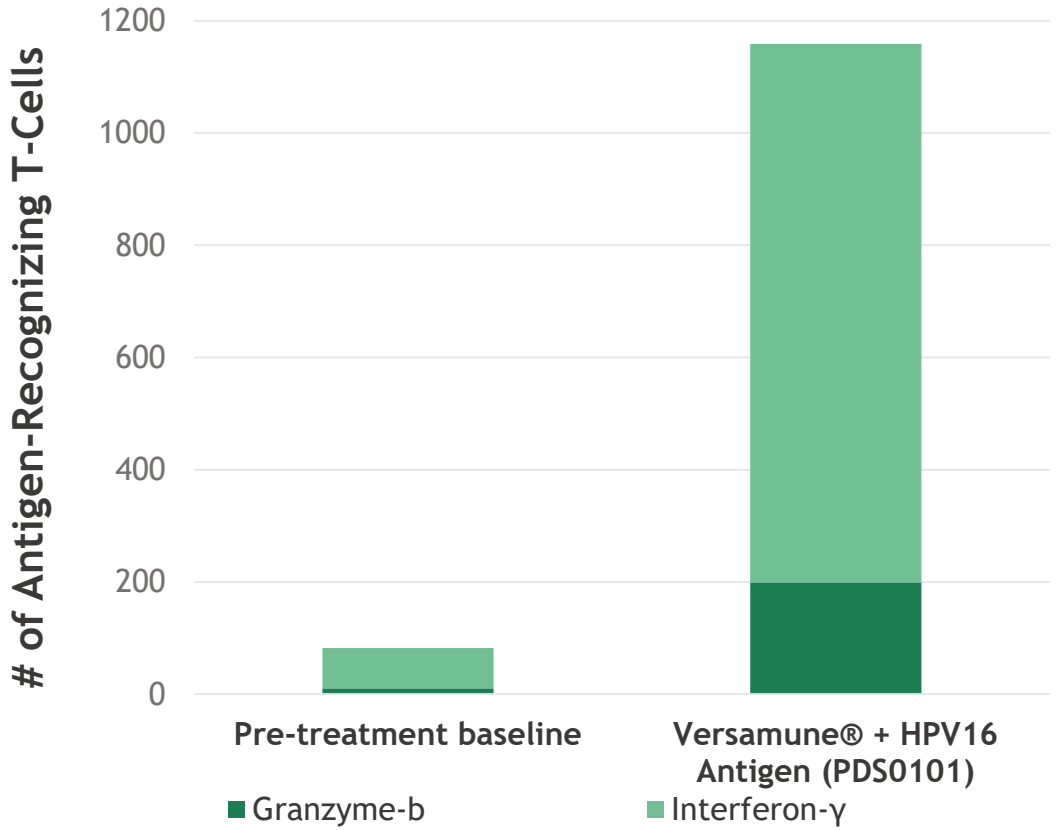
PDS0101 + Bintrafusp alfa + M9241 (NHS IL-12)

Tumor Regression: **13/17 (76%)**
T-cell Clones: **3**

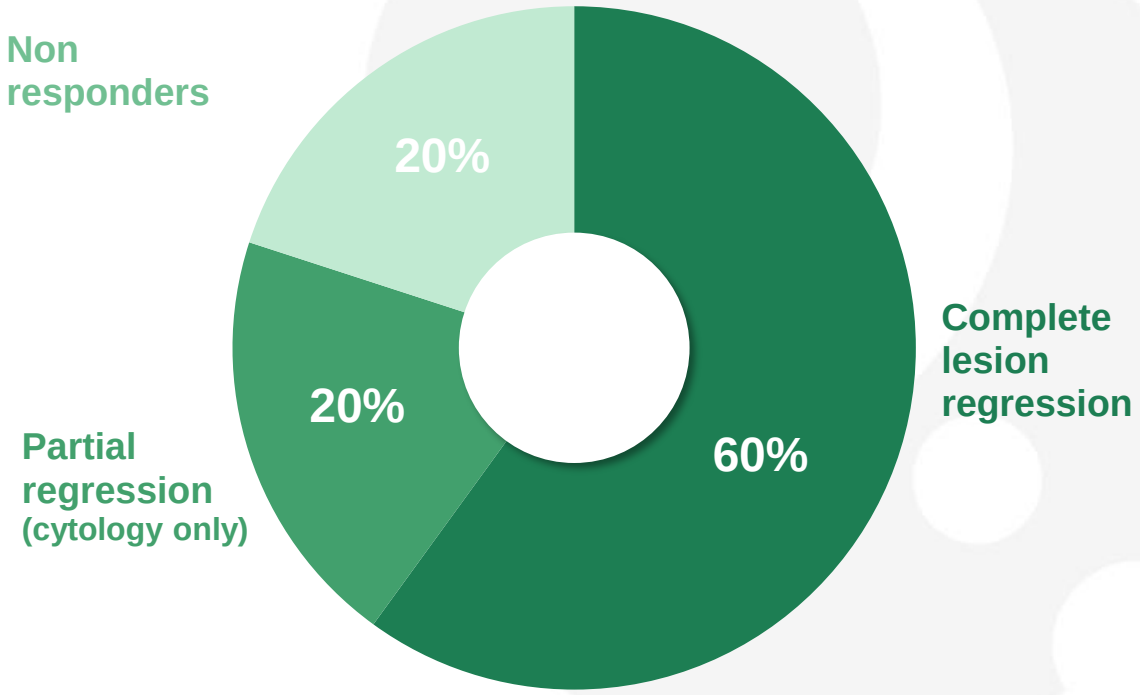
*Reference: Smalley Rumfield C, Pellom ST, Morillon II YM, et al; Journal for ImmunoTherapy of Cancer 2020; 8:e000612. doi: 10.1136/jitc-2020-000612

PDS0101 Phase 1 clinical trial: Powerful CD8+ T-cell response resulted in regression of CIN cervical lesions & supported continued clinical studies

Monotherapy distinguished from key limitation of immuno-oncology: > 20-fold increase in circulating dual INF-γ & Granzyme-b inducing killer T-cells vs. pre-treatment at day 14 led to rapid clearance of lesions*



CIN lesion regression as early as 1-3 months



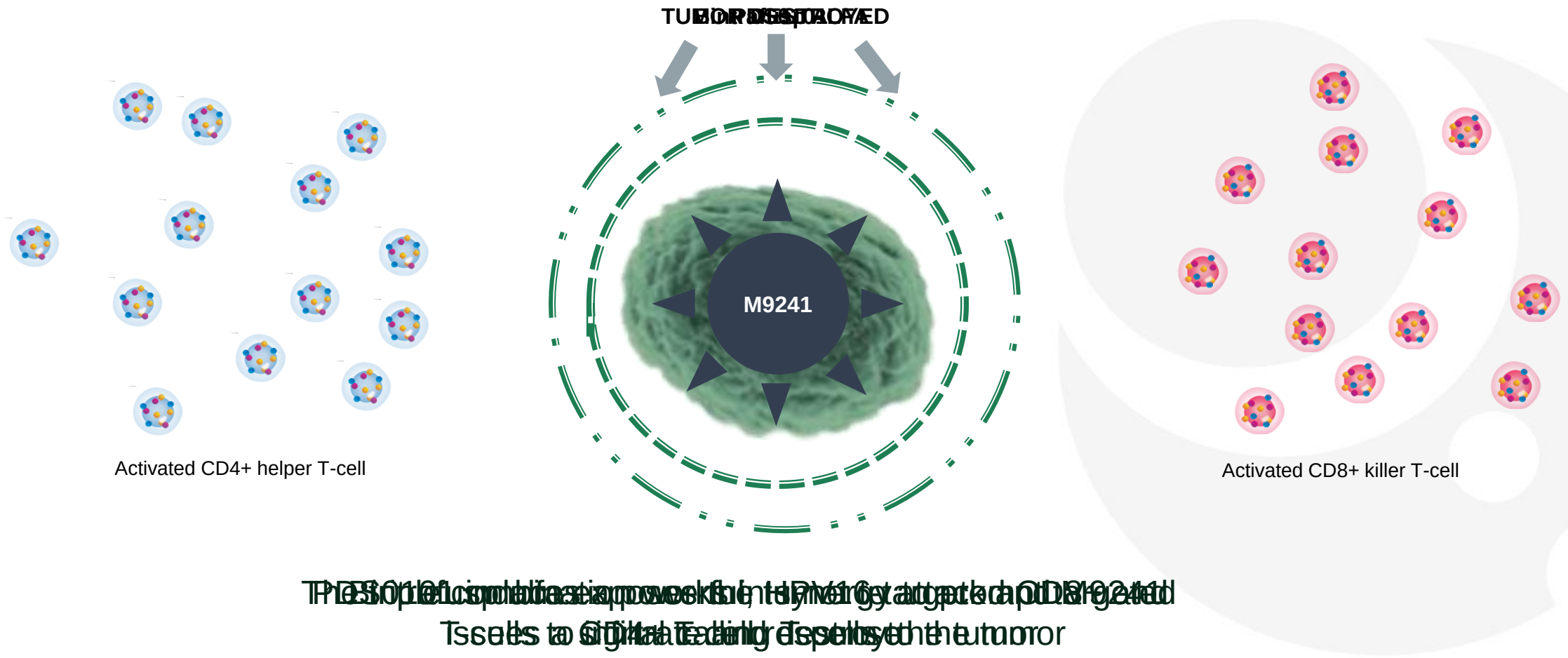
Most patients infected with multiple strains of HPV

Phase 1 trial results showed no serious or dose-limiting toxicities of PDS0101 monotherapy

* When treated with selected human clinical trial dosage (1mg and 3mg Versamune®)

References: L. Wood et al. A Novel Enantio-Specific Cationic Lipid R-DOTAP + HPV16 E6 & E7 Antigens Induces Potent Antigen-Specific CD8+ T Cell Responses In-Vivo in Subjects with CIN and High-Risk Human Papillomavirus Infection. Nov 8, 2019. SITC. Presentation O17.

PDS0101 is used in combination with other immunotherapies resulting in a multifunctional therapy



Reference: Smalley Rumfield C, Pellom ST, Morillon II YM, et al; Journal for ImmunoTherapy of Cancer 2020; 8:e000612. doi: 10.1136/jitc-2020-000612

PDS0101 phase 2 triple combination trial: Evaluated potential for superior preclinical tumor regression in advanced HPV-related cancer

- Objective response rate is measured by RECIST 1.1 and represents at least a 30% reduction in tumor size

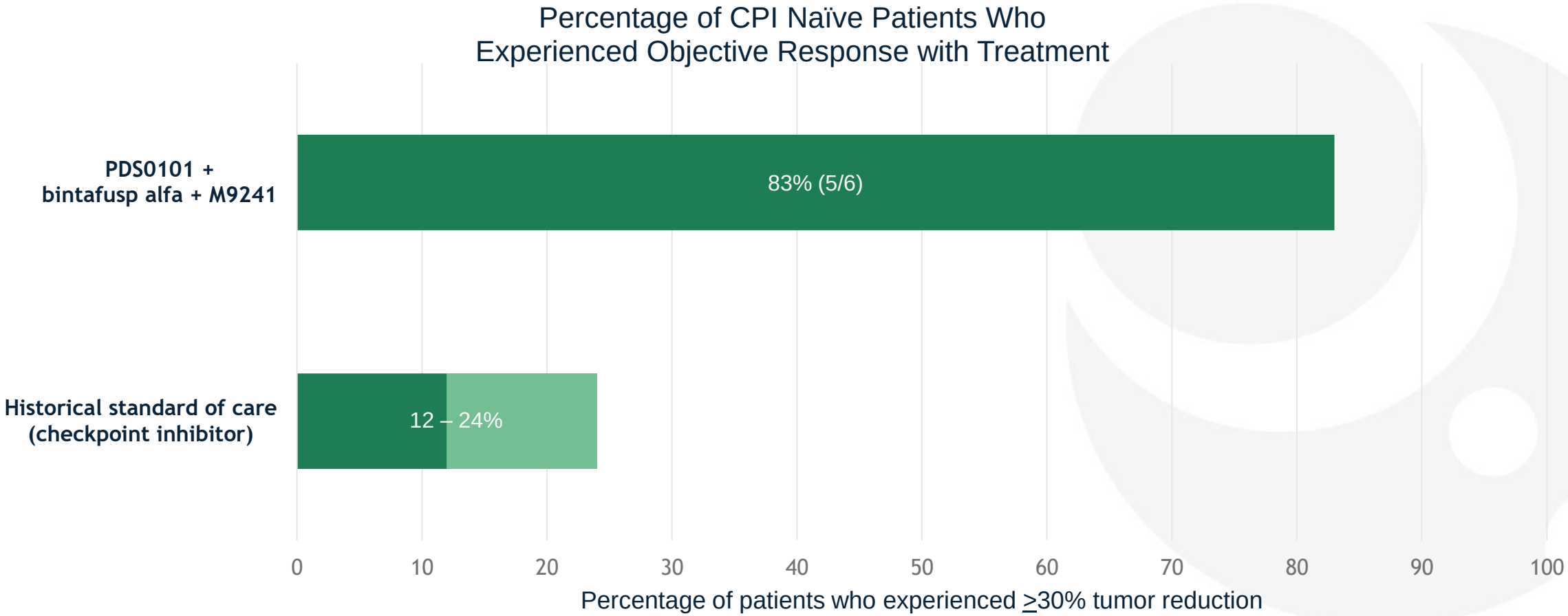
- Advanced HPV-related cancer that is checkpoint inhibitor *naïve*:
  - Patients who fail chemotherapy and/or radiation progress to checkpoint inhibitor therapy
  - 12-24% ORR with standard of care checkpoint inhibitors
  - 30% ORR reported with experimental monotherapy Bintrafusp alfa is the highest reported to date

- Advanced HPV-related cancer that is checkpoint inhibitor *refractory*:
  - Few treatment options exist for these patients
  - 5-12% ORR reported with checkpoint inhibitors

A critical limitation of immunotherapy is the inability to induce large numbers of powerful tumor-attacking CD8+ (killer) T-cells within the body, that can result in tumor reduction or elimination in a significant number of advanced cancer patients

Reference: Strauss J, et al. J Immunother Cancer. 2020 Dec;8(2):e001395

Triple combination achieved 83% objective response among 6 HPV16-positive checkpoint inhibitor naive patients, suggesting potential efficacy



* These numbers reflect data as of evaluation of 25 patients at a median of 8 months; numbers will change as more patients undergo evaluation

Reference: Strauss J. et al. Phase II evaluation of the triple combination of PDS0101, M9241, and Bintrafusp alfa in patients with HPV 16 positive malignancies. Presented at: American Society of Clinical Oncology 2021 Annual Meeting; June 4-8, 2021; Virtual. Abstract: 2501.

Triple combination shows promising durability in HPV16-positive checkpoint inhibitor naïve patients, suggesting potential efficacy

	PDS0101 + Bintrafusp alfa + M9241 HPV16-positive	Standard of Care (Checkpoint Inhibitors)
Number of subjects	6	
Ongoing responses at median of 8 months	***80% (4/5)*** ***1 patient came off combination halting response***	
Survival at median of 8 months	***100% (6/6)***	Historical is 7-11 months

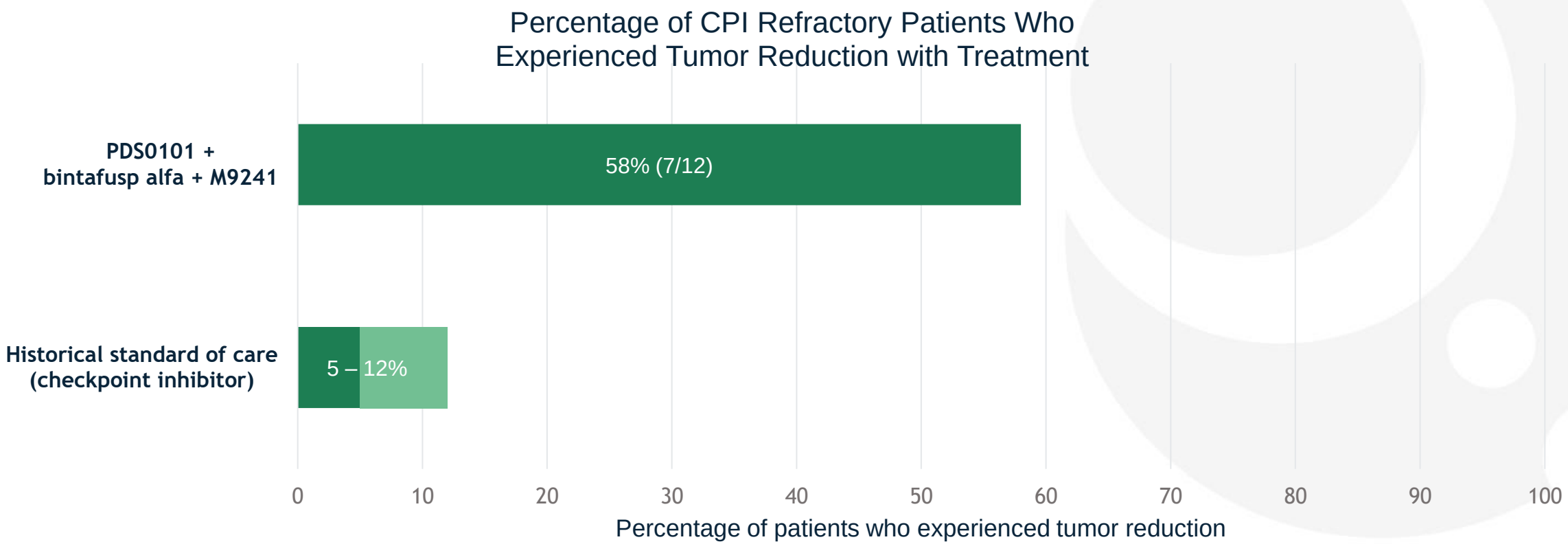
Preliminary results suggest PDS0101 induction of *in vivo* highly active tumor-attacking HPV16 killer (CD8+) T-cells that have the potential for effective disease reduction and ongoing responses

* These numbers reflect data as of evaluation of 25 patients; numbers will change as more patients undergo evaluation

Reference: Strauss J. et al. Phase II evaluation of the triple combination of PDS0101, M9241, and Bintrafusp alfa in patients with HPV 16 positive malignancies. Presented at: American Society of Clinical Oncology 2021 Annual Meeting; June 4-8, 2021; Virtual. Abstract: 2501.

Triple combination achieved 58% tumor reduction among 12 HPV16 checkpoint inhibitor refractory patients

- ***50% (2/4) recently added patients already have ongoing tumor reduction but have not yet attained ORR***
  - ***Tumor reduction is consistent with first 8 patients showing tumor reduction in 5/8***



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Triple combination shows promising durability in HPV16-positive checkpoint refractory patients

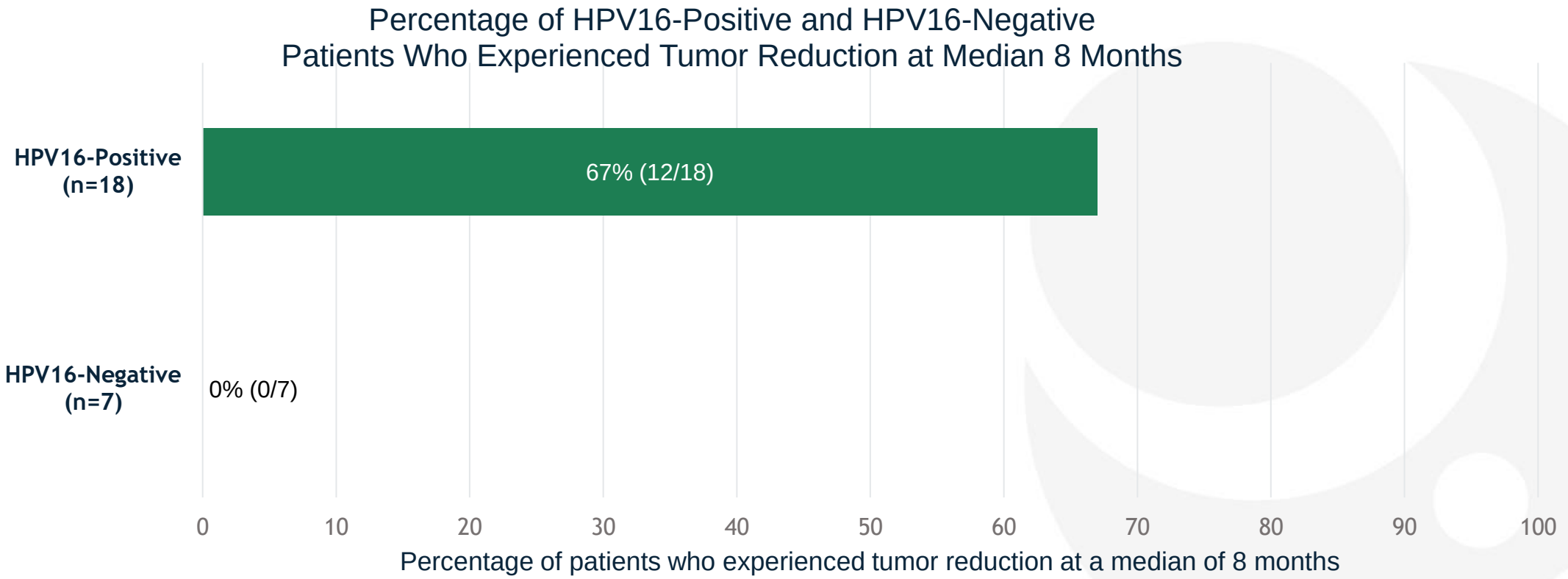
	PDS0101 + Bintrafusp alfa + M9241 HPV16 positive	Standard of Care (Checkpoint Inhibitors)
Number of patients	12	
Number of patients with ongoing tumor reduction at a median of 8 months	***86% (6/7)***	
Number of patients with ongoing objective response at a median of 8 months	***80% (4/5)*** ***1 patient came off combination halting response***	
Survival at median of 8 months	***83% (10/12)***	Historical is 3-4 months

Preliminary results suggest PDS0101 induction of *in vivo* highly active tumor-attacking HPV16 killer (CD8+) T-cells even in extensively treated and immunologically limited patients have the potential for effective disease reduction and ongoing responses

* These numbers reflect data as of evaluation of 25 patients; numbers will change as more patients undergo evaluation

Reference: Strauss J. et al. Phase II evaluation of the triple combination of PDS0101, M9241, and Bintrafusp alfa in patients with HPV 16 positive malignancies. Presented at: American Society of Clinical Oncology 2021 Annual Meeting; June 4-8, 2021; Virtual. Abstract: 2501.

Results in seven (7) HPV16-negative patients suggests critical role of PDS0101-induced HPV16-specific CD8+ T-cells in promoting tumor reduction



Preliminary results suggest that HPV16-specific CD8+ and CD4+ T-cell induction by PDS0101 as predicted by preclinical studies may promote enhanced clinical benefit of the triple combination

* These numbers reflect data as of evaluation of 25 patients; numbers will change as more patients undergo evaluation

Reference: Strauss J. et al. Phase II evaluation of the triple combination of PDS0101, M9241, and Bintrafusp alfa in patients with HPV 16 positive malignancies. Presented at: American Society of Clinical Oncology 2021 Annual Meeting; June 4-8, 2021; Virtual. Abstract: 2501.

PDS Biotech-sponsored phase 2 trial evaluating the combination of PDS0101 and KEYTRUDA for first-line treatment of HPV-associated metastatic/recurrent head and neck cancer (VERSATILE-002)

Indication	First line treatment of patients with HPV-associated head and neck cancer whose cancer has spread or returned
Clinical Agents	**KEYTRUDA (Standard of Care):** Anti-PD1 checkpoint inhibitor (ORR ~20%) **PDS0101:** Versamune®-based immunotherapy generating HPV-specific CD8+ and CD4+ T-cells
Study goals	Group 1: Objective response rate (ORR) in checkpoint inhibitor (CPI) naïve patients Group 2: ORR in patients who have failed checkpoint inhibitor therapy (CPI refractory)
Timing	Preliminary data anticipated Q4 2021/Q1 2022: ORR minimum of 4 of 17 in CPI naïve and 2 of 21 in CPI refractory required for subsequent stage 2 enrollment (n=95 patients)
Trial Partner	MERCK

If achieved, confirmation that PDS0101 enhances the therapeutic benefit of checkpoint inhibitors could expand evaluation of Versamune®-based therapies in multiple cancer indications

A Phase 2, investigator-initiated clinical trial evaluating PDS0101 in combination with chemoradiation therapy in patients with locally advanced cervical cancer (IMMUNOCERV)

Indication	Treatment of patients with locally advanced cervical cancer – Stages IB3-IVA
Clinical Agents	**Chemoradiotherapy (CRT – Standard of Care):** Cisplatin & radiation therapy **PDS0101:** Versamune®-based immunotherapy generating HPV-specific CD8+ and CD4+ T-cells
Study goals	Safety, rate of regression and local control in patients with primary tumor ≥5cm (n=35 patients)
Timing	Preliminary data anticipated Q4 2021/1H 2022 – Rate of complete response by PET-CT at 6 months and rate of tumor volume reduction by MRI at 30-40 days from start of treatment
Trial Sponsor	THE UNIVERSITY OF TEXAS MD Anderson Cancer Center

If successful, this study could support further investigation of Versamune®-based immunotherapies in combination with chemotherapy or CRT to treat multiple cancers

Studies are designed to demonstrate efficacy and broad applicability of PDS0101 and the Versamune® T-cell activating platform

Potential to treat all types of HPV-cancer: PDS0101 Phase 2 clinical studies address multiple types of HPV-associated cancers.

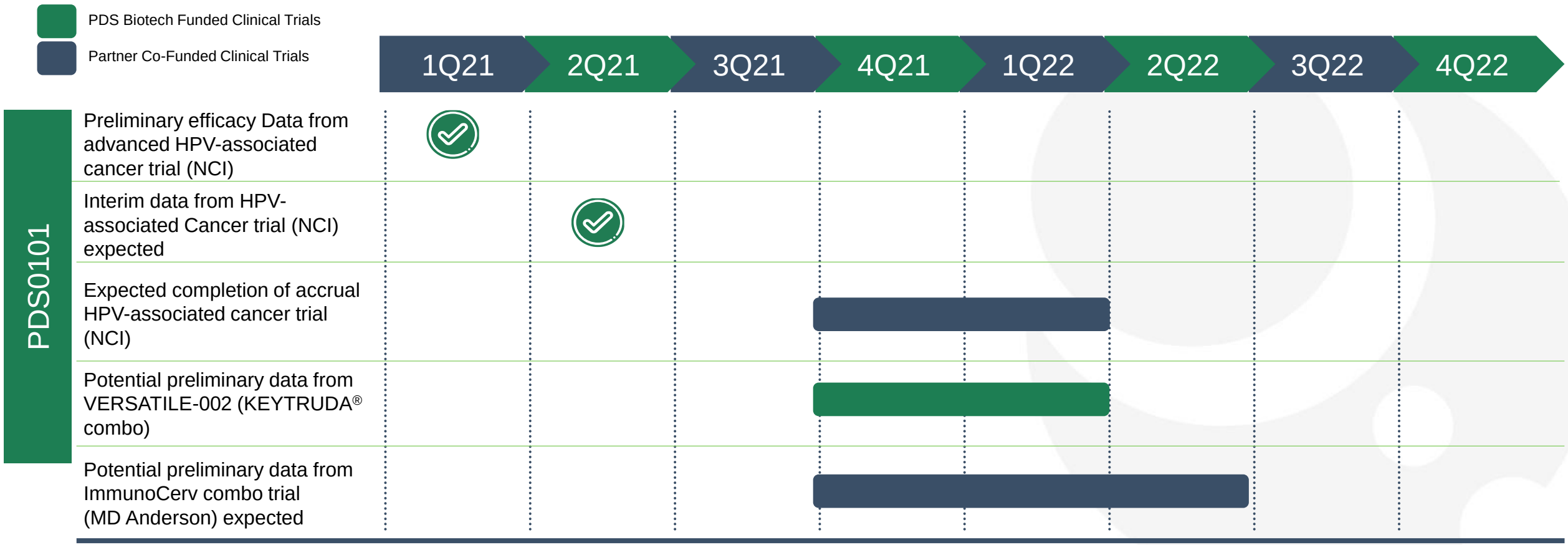
Potential to enhance anti-cancer efficacy of various cancer treatments: Combinations with checkpoint inhibitors, chemoradiotherapy and novel therapies may further demonstrate Versamune®'s versatility.

Potential applications beyond oncology: PDS0203 COVID-19 phase 1/2 trials may demonstrate protection and may induce durable T-cell responses against conserved regions of mutating viruses.

Broad potential for additional partnerships: Successful phase 2 studies with PDS0101 could enable a broad pipeline of Versamune®-based oncology products containing various antigens.

PDS0101 Near-Term Milestones and Market Opportunities

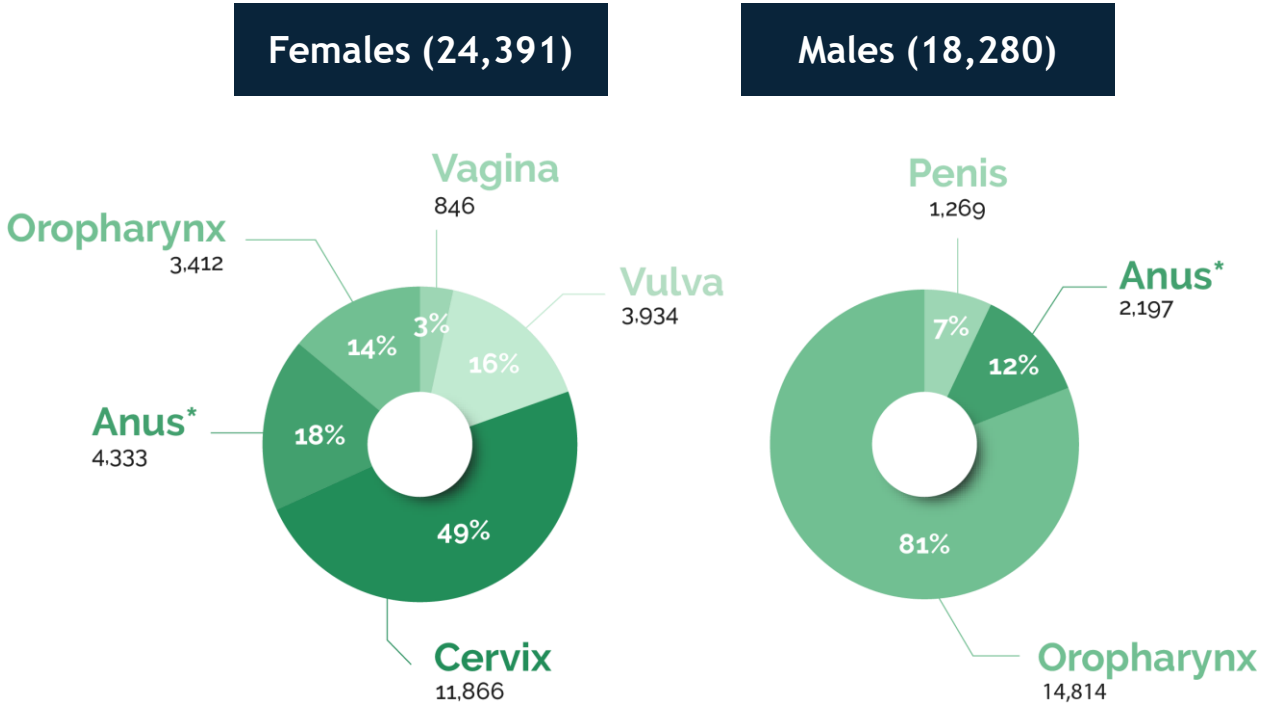
Projected PDS0101 milestones through 2022*



*Based on current enrollment and forecast modeling as of June 2021. Subject to change.

PDS0101 is designed to treat cancers caused by human papillomavirus (HPV)-16, which represents 70-80% of the HPV-associated cancer market

US annual HPV-associated cancer incidence[1]



- Approximately 43,000 patients are diagnosed with HPV-associated cancers annually in the US[1]
- Existing immunotherapies cost $120,000+ annually per patient[2]
- Incidence rate of HPV-related anal and head and neck cancer is growing and remains a significant unmet medical need

[1]Markowitz et al. 2016. Centers for Disease Control and Prevention. 2018.
[2]Hernandez et al. 2018. American Journal of Managed Care Volume 24, Issue 2; Company Research

Versamune® has demonstrated the potential for immunological compatibility with a wide array of tumor and pathogenic antigens

- Versamune®'s unique flexibility means it may work well with a wide range of identified tumor and infectious disease antigens
  - **3 tumor antigens** are currently being utilized with the Versamune® platform beyond HPV
    - PDS0102 (TARP) for the treatment of AML, prostate and breast cancer
    - PDS0103 (MUC1) for the treatment of breast, colorectal, ovarian and NSCLC
    - PDS0104 (TRP2) for the treatment of melanoma
  - More than **70 tumor antigens** have been identified to date
- Proof-of-concept data from ongoing clinical trials could trigger development activities for Versamune®-based products through partnerships and licensing

Reference: Clin Cancer Res. 2009 Sep 1;15(17):5323-37. doi: 10.1158/1078-0432.CCR-09-0737

PDS Biotech's robust Versamune® -based oncology pipeline is being developed in partnership with the leaders in immuno-oncology

PRODUCT	INDICATION	COMBINATION	PC	P1	P2	P3	R	PARTNER(S)
Oncology								
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PDS0101 (HPV16)	Stage IIb-IVa cervical cancer	Chemo-radiation						THE UNIVERSITY OF TEXAS MD Anderson Cancer Center
PDS0102 (TARP)	Acute myeloid leukemia (AML), prostate and breast cancer	TBD						NIH NATIONAL CANCER INSTITUTE
PDS0103 (MUC1)	Non-small cell lung cancer (NSCLC), breast, colorectal and ovarian cancer	TBD						NIH NATIONAL CANCER INSTITUTE
PDS0104 (TRP2)	Melanoma	TBD						

PDS Biotech Funded

Partner Co-Funded

Reference: Data on file.

Farmacore License Agreement for Versamune® -Based COVID Vaccine

Development of PDS0203, if successful, may offer potential advantages as a second generation COVID-19 vaccine

May be effective against multiple COVID-19 variants

Demonstrated induction of killer CD8+ and helper CD4+ T cells that can target **less variable regions** of the SARS-CoV-19 virus and may be effective against currently circulating variants.

May induce long-lasting immunity

Demonstrated induction of **long-lasting, virus-specific memory T-cells** necessary for longer term protection.

High potential for safety

PDS0203 is a subunit vaccine, and does not require the use of attenuated viruses, traditional adjuvants, DNA or RNA. Versamune®-based vaccines have shown **no serious or dose limiting reactions**.

PDS0203, if development is successful, could offer another option to address the COVID-19 global health crisis

- Consortium has received a commitment of up to ~US$60 million from MCTI, Brazil to support phase 1-3 clinical development and manufacturing scale-up
  - PDS Biotech has licensed Versamune® technology to Farmacore to develop a COVID-19 vaccine candidate
  - Farmacore is responsible for antigen manufacturing and clinical development
- Phase 1/2 study anticipated to start following Farmacore's submission of a full data package to and subsequent approval from Anvisa (Brazilian regulatory agency)
- PDS Biotech is closely monitoring the evolving political situation in Brazil ~~as~~ which may result in potential challenges to developing a Versamune®-based COVID-19 vaccine
  - Intellectual property protections for a Versamune-based COVID-19 vaccine potentially at risk
    - Brazil's senate has voted for compulsory licensing for COVID-19 vaccine technology
    - Legislative process is ongoing
  - Funding release is subject to negotiations among Farmacore, MCTI, and Brazilian authorities

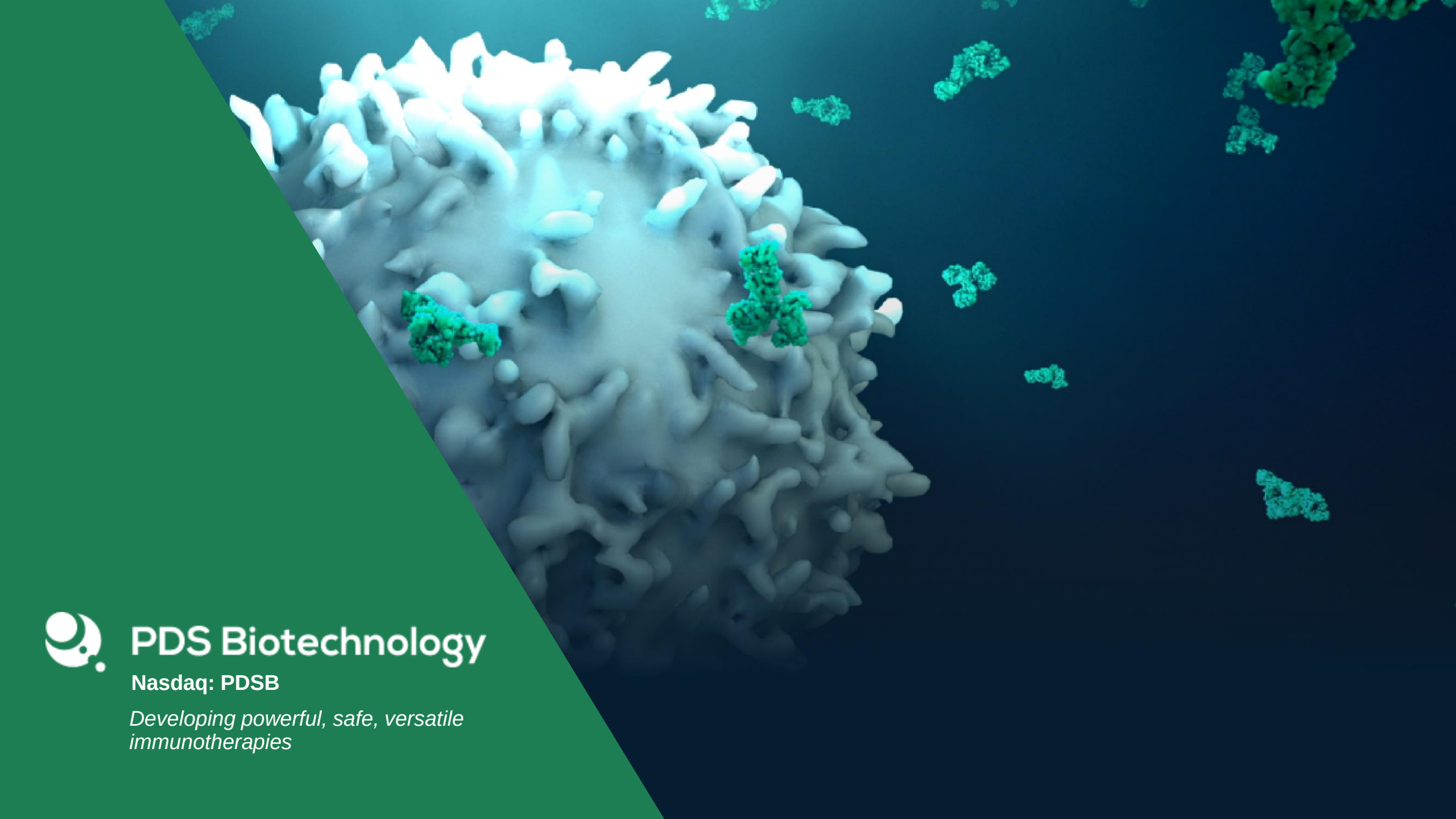
Final Comments

Investment Highlights

Potential Advantages and Differentiators

- ***Promising early* data in both oncology and infectious disease:** Early clinical data and preclinical data suggest potential efficacy, safety and versatility of the Versamune® platform
- ***Near-term milestones:*** Preliminary data from MD Anderson-led study and PDS Biotech-led VERSATILE-002 as well as additional data from NCI-led Phase 2 anticipated Q4 2021 - Q2 2022
- ***Validation of approach***: All three on-going phase 2 clinical trials supported and partnered with leading and top-tier institutions in the field of cancer and immuno-oncology
- ***Commercialization path:*** Clinical studies demonstrating enhancement of FDA-approved anti-cancer therapies may offer potential for expedited programs
- ***Rapid adoption strategy:*** Evaluation of PDS0101 in combination with standard of care in multiple HPV-associated cancers

*Based on current enrollment and forecast modeling as of May 2021. Subject to change.



PDS Biotechnology

Nasdaq: PDSB

Developing powerful, safe, versatile immunotherapies