CORPORATE OVERVIEW

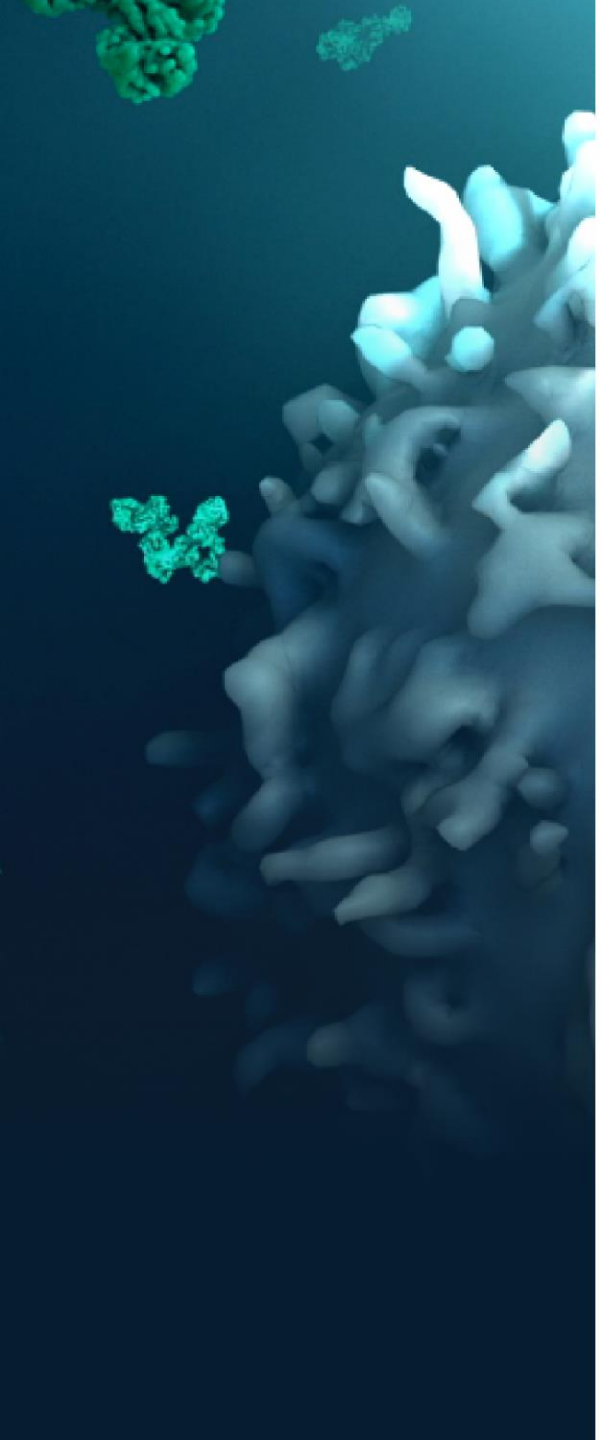
JANUARY 2021

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 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.

The most significant barrier to effective immunotherapy has been their **inability to promote adequate CD8+ killer T-cell responses** in-vivo resulting in **diminished efficacy**

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

Versamune®-based therapies also:

Generate a strong CD8+ T-cell memory response resulting in long-lasting efficacy

Generate potency without systemic side effects

Are versatile and shown to be effective on their own or in combination with other drugs to improve their efficacy

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

CORPORATE OVERVIEW

- Biopharma developing novel treatments for cancer and T-cell activating infectious disease vaccines
- **Three** phase 2 oncology clinical trials in progress
- Publicly listed on **NASDAQ: PDSB**
- ~15 employees with headquarters in Florham Park and Princeton, NJ
- Debt free with approximately **$33.5M in cash** as of 9/30/20

VERSAMUNE® PLATFORM

- Versatile, potent T-cell-activating platform demonstrating efficacy without dose limiting toxicity in clinical trials
- Clinically supported *in-vivo* induction of antigen-specific killer and helper T-cells
- Demonstrated to work with a wide array of oncogenes and viral antigens
- Multiple composition and application patents valid through mid-2030s
- Clinical partnerships with Merck, MD Anderson and National Cancer Inst.

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

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	M7824 NHS-IL12						NIH NATIONAL CANCER INSTITUTE
PDS0101 (HPV16)	Stage IIb-IVa Cervical cancer	Chemo-radiation						THE UNIVERSITY OF TEXAS MD Anderson Cancer Center
PDS0102 (TARP)	Prostate and Breast Cancer	TBD						NIH NATIONAL CANCER INSTITUTE
PDS0103 (MUC-1)	Breast, Colorectal, Ovarian and NSCLC Cancer	TBD						NIH NATIONAL CANCER INSTITUTE
PDS0104 (TRP2)	Melanoma	TBD						
Infectious Disease								
PDS0201 (M-tuberculosis)	Prevention of tuberculosis							Farma core
PDS0202 (influenza)	Universal prevention of influenza							NIH National Institute of Allergy and Infectious Diseases
PDS0203 (SARS-CoV-2)	Prevention of COVID-19							Farma core

PDS Biotech Funded Partner Co-Funded

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

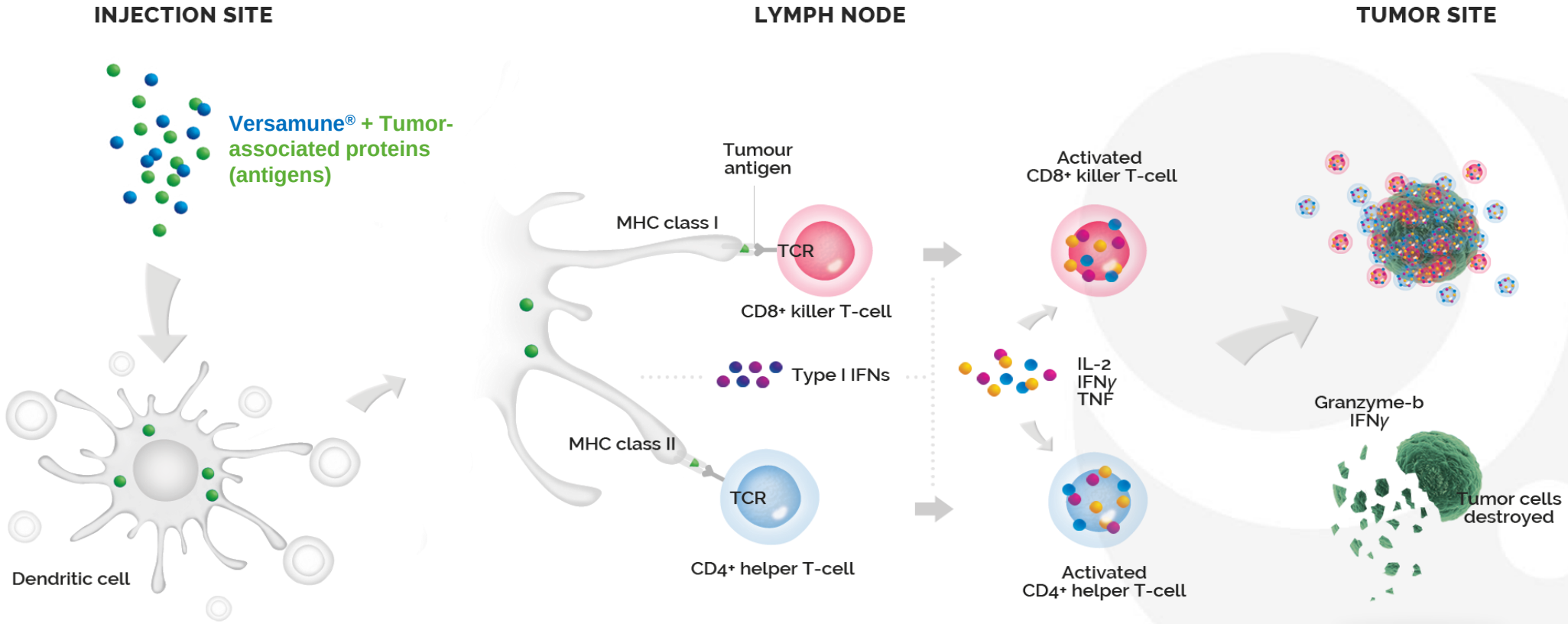
- >30 years of translational clinical research experience
- Former Director of Clinical Research at National Cancer Institute Center for Cancer Research (Cancer Vaccine Branch)

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

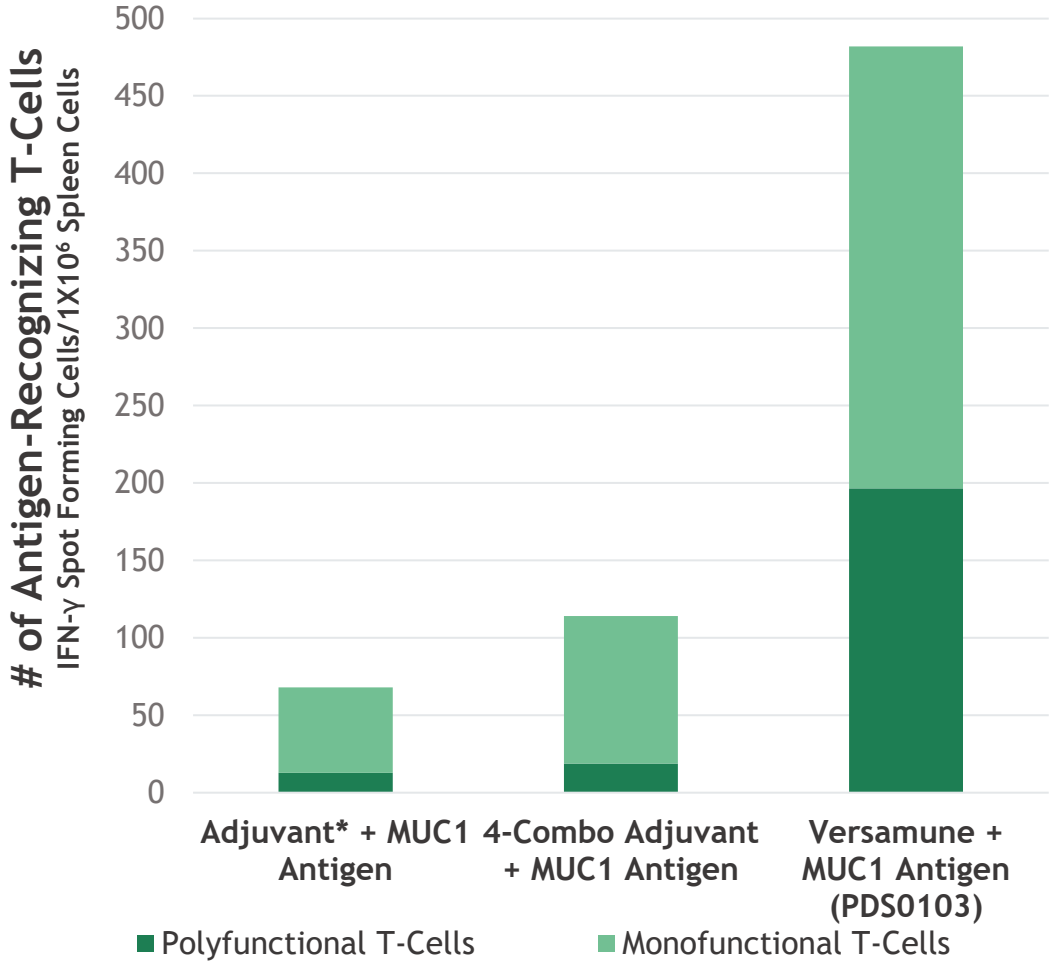
Promotes antigen processing and presentation to T-cells via MHC I and II pathways

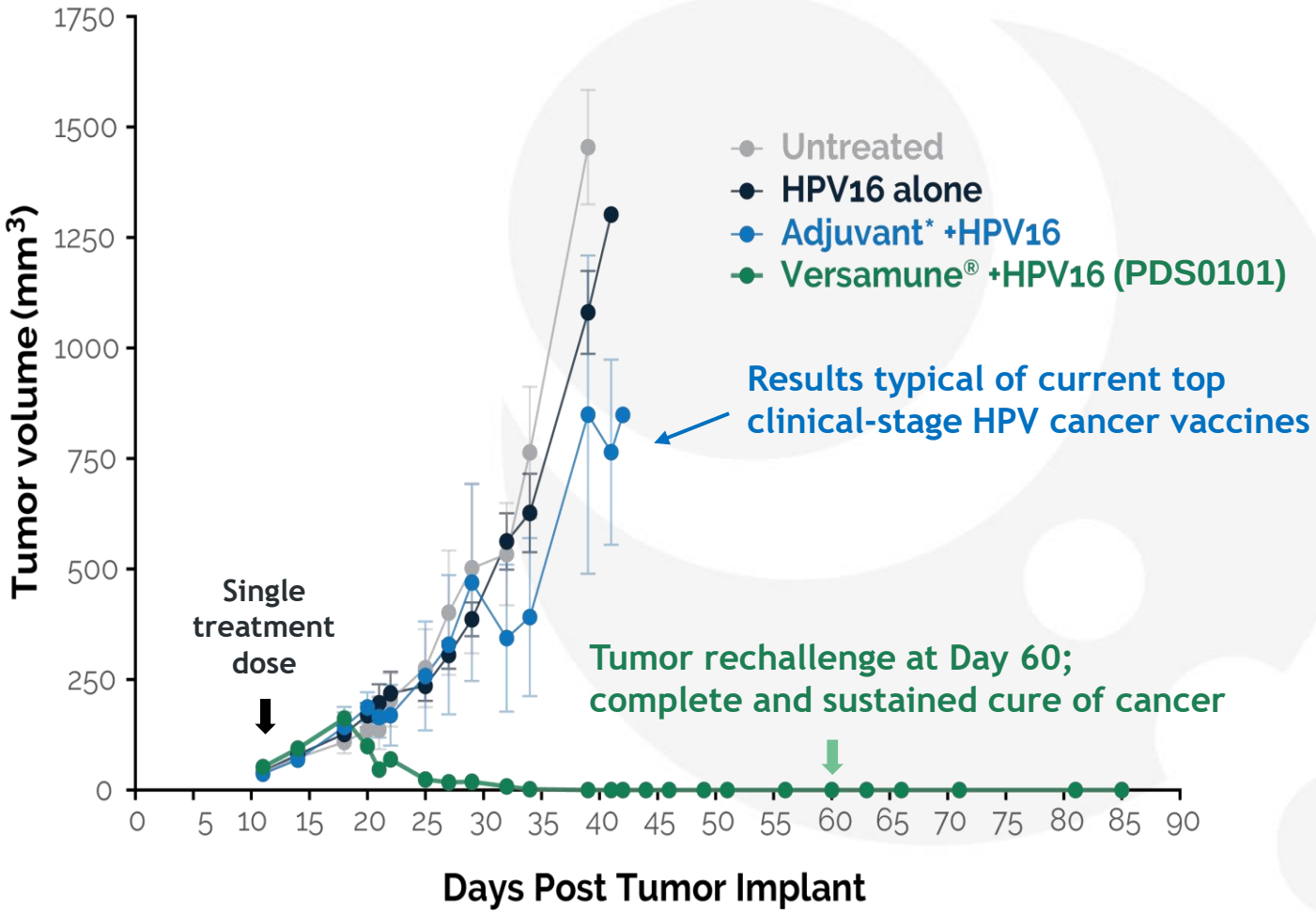
Activates Type I Interferon pathway, enabling a powerful anti-tumor killer CD8+ T-cell response

Reference: 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



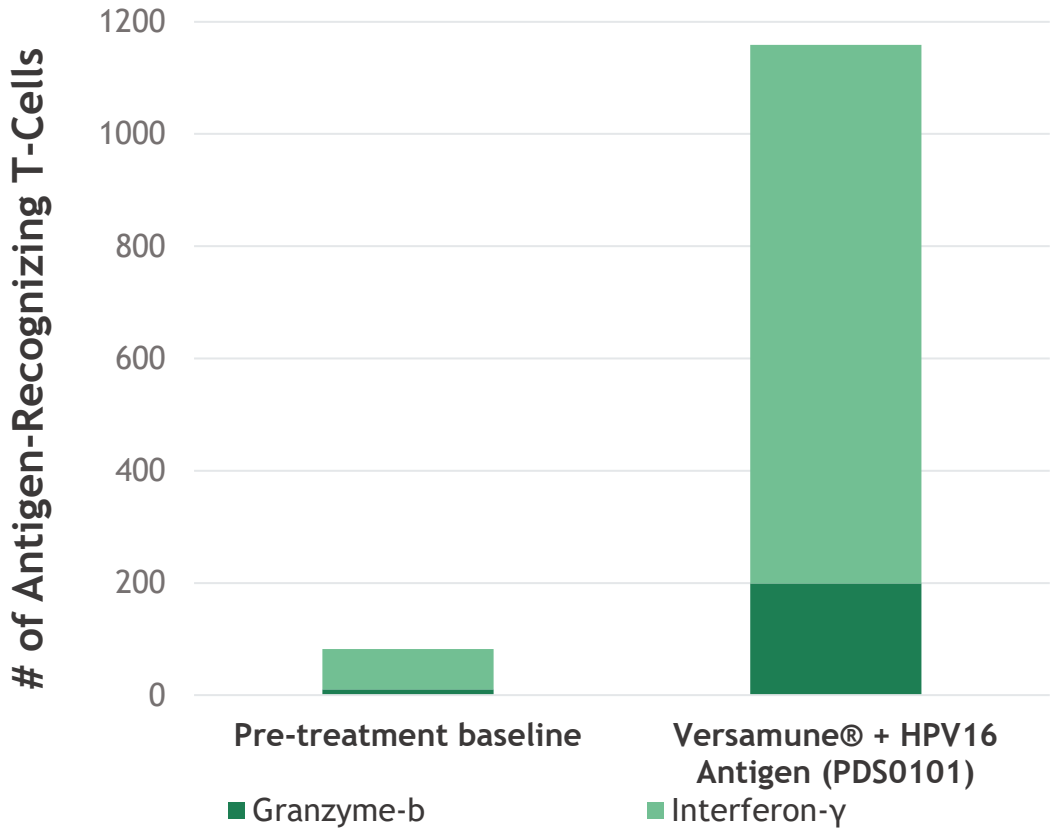


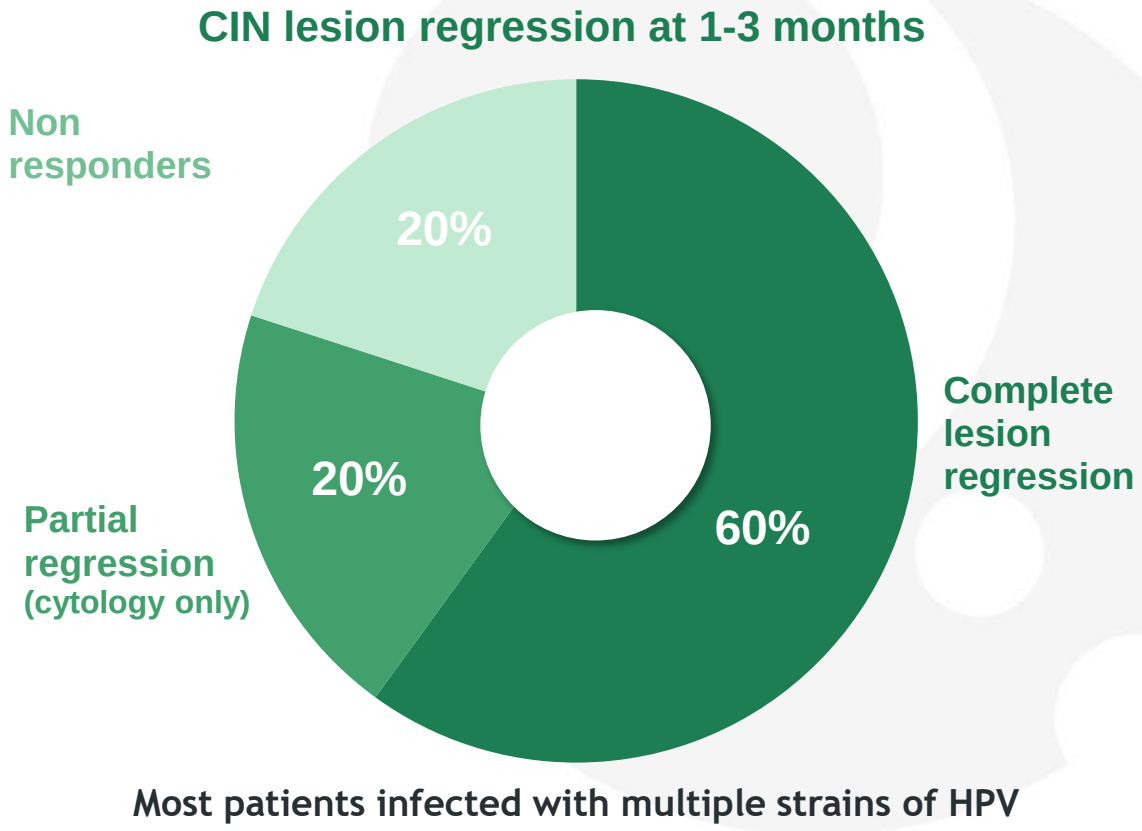
*Adjuvant = cytokine GMCSF

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.

Phase 1 clinical trial: Powerful *in-vivo* CD8+ T-cell response results in regression of CIN cervical lesions – supports preclinical studies

Overcomes 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*





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

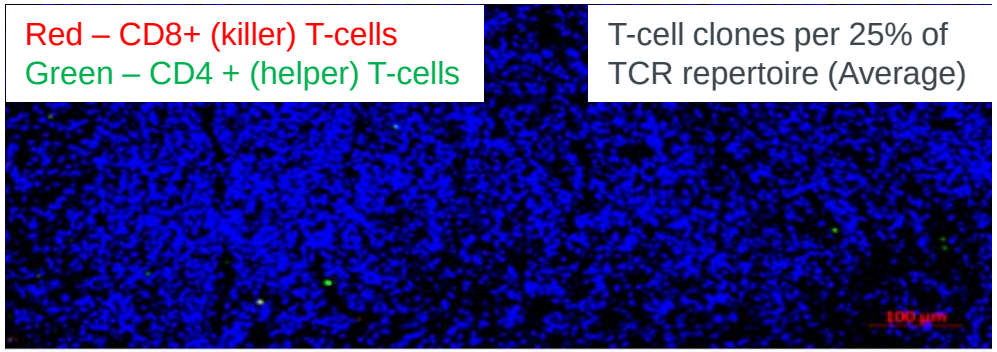
* When treated with selected human clinical trial dosage (1mg and 3mg Versamune®)

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 enhanced treatment by training tumor-specific T-cells (fewer T-cell clones) effective in infiltrating and killing tumors

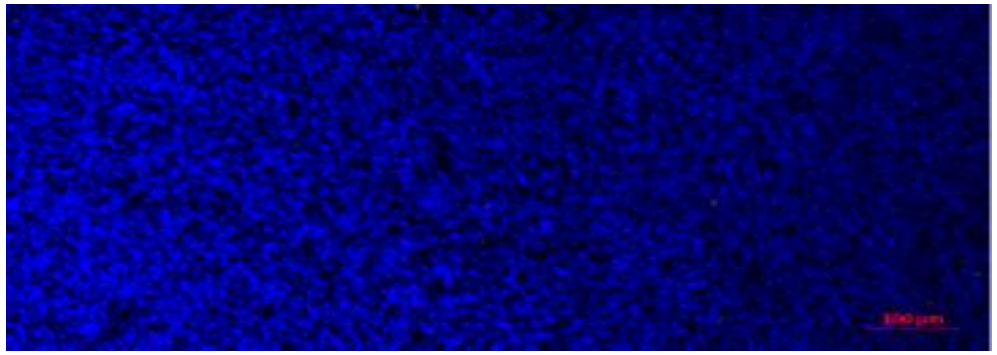
Red – CD8+ (killer) T-cells
Green – CD4 + (helper) T-cells

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



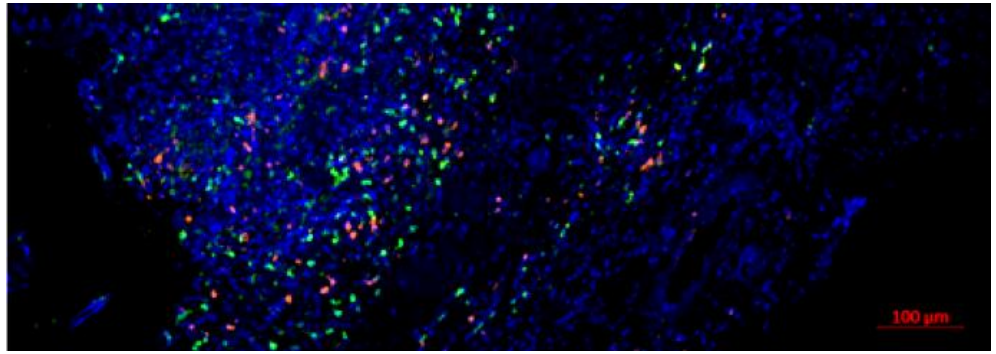
Saline

Tumor Regression: **0/16 (0%)**
T-cell Clones: **18**



M7824 (bi-functional checkpoint inhibitor) + NHS-IL12 (immuno-cytokine)

Tumor Regression: **8/16 (50%)**
T-cell Clones: **18**



PDS0101 + M7824 + NHS-IL12

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

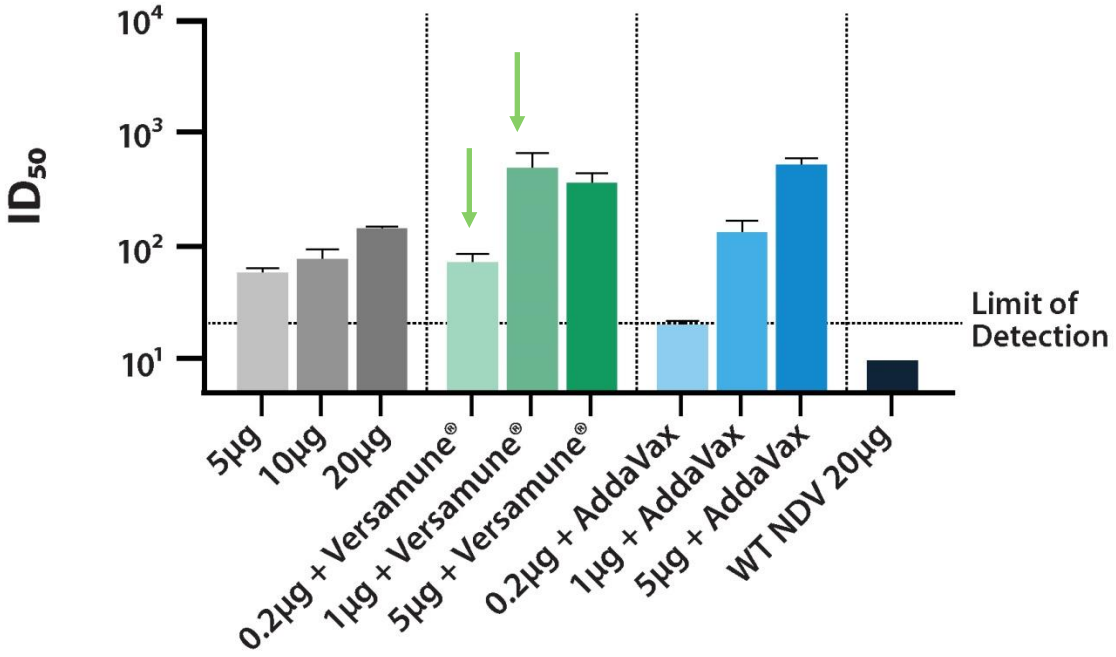
Versamune® possesses the key characteristics of a safe and effective immunotherapeutic treatment

	Versamune®-based Immunotherapies*	Checkpoint Inhibitors	Traditional Cancer Vaccines	CAR-T	Chemotherapy
Induction of high levels of active CD8+ (killer) T-cells	✓			✓	
Induction of high levels of CD4+ (helper) T-cells	✓		✓	✓	
Ability to overcome tumor immune suppression	✓	✓			
Induction of long-term memory CD8+ T-cells	✓				
Cytotoxicity (tumor cell death)					✓
Systemic & other toxicity risk		✗		✗	✗

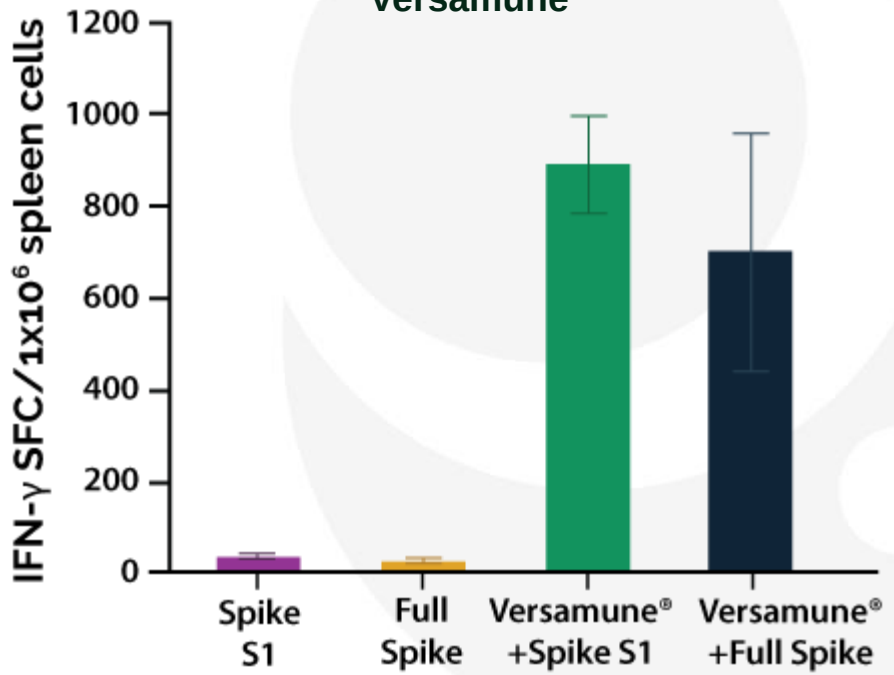
*Reference: J. Immunology, 2019 (202), 1215; PDS0101 clinical trial report (CSR U10-02-11-001)

Development of PDS0203 - A second generation COVID-19 vaccine that promotes powerful T-cell responses and neutralizing antibodies

Mt. Sinai data shows Versamune® promotes induction of neutralizing antibodies with lowest doses of SARS-CoV-2 antigen[1]



PDS generated data shows induction of SARS-CoV-2 specific CD8+ T-cells with Versamune®[2]



Preclinical studies show powerful induction of long-lasting polyfunctional CD8+ and CD4+ anti-SARS-CoV-2 T-cells

[1]Reference: Sun et al. 2020. Vaccines Volume 8, Issue 4
[2]Reference: Data on file

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

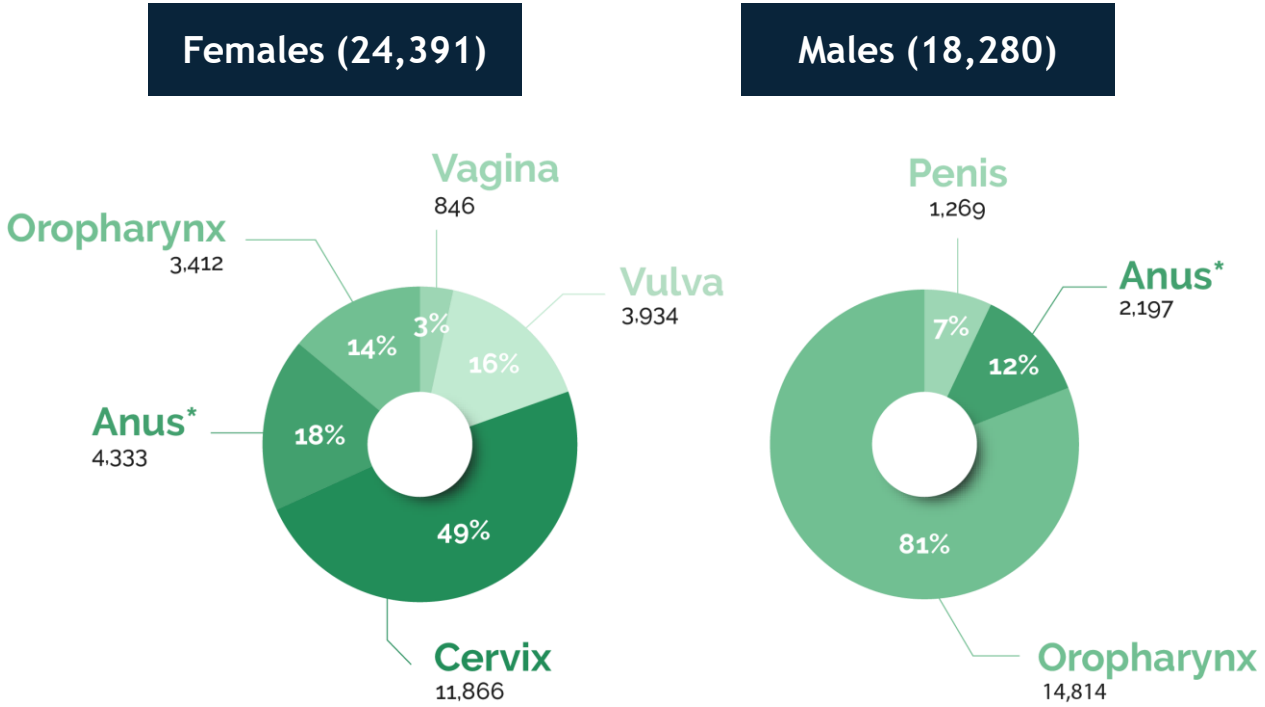
- Today, **4 tumor antigens** are being utilized with the Versamune® platform, more than **75 tumor antigens** have been identified
- We are currently progressing two Versamune®-based infectious disease vaccines, one for SARS-COVID-19, and one for universal influenza
- Versamune®'s unique flexibility means it may work well with a wide range of identified tumor and pathogenic antigens
- Potential to continuously expand development of 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

PDS0101 Phase 2 Clinical Development

PDS0101 is designed to treat cancers caused by human papillomavirus (HPV)

US annual HPV-associated cancer incidence[1]



- Approximately **43,000 patients** are diagnosed with HPV-associated cancers annually in the US
- **Incidence rate is growing** despite increased use of HPV preventative vaccines
- **Significant unmet medical need** across the spectrum of HPV-associated cancer
- Existing immunotherapies cost **$120,000+ annually** per patient[2]

[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

Clinical strategy to evaluate improved therapy: Combine PDS0101 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 advanced localized cervical cancer***
  - Combination with chemoradiotherapy

Novel combinations of PDS0101 with promising 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 NHS-IL12 (antibody conjugated immuno-cytokine)

Phase 2 investigator-initiated clinical trial evaluating the combination of PDS0101, M7824 and NHS-IL12 in advanced HPV-associated cancer

Indication	Patients with advanced HPV-associated cancer who have failed prior treatment
Clinical Agents	**M7824:** Bifunctional fusion protein - checkpoint inhibitor + TGF-b "TRAP" (ORR ~30%) **NHS-IL12:** Antibody-conjugated immuno-cytokine **PDS0101:** Versamune®-based immunotherapy generating HPV-specific CD8+ T-cells
Study goals	Objective response rate (ORR) in checkpoint inhibitor naïve patients who have failed prior therapy Objective response rate in patients who have failed prior checkpoint inhibitor therapy
Timing	Preliminary data - Q1 2021 – Objective response in at least 3 out of 8 in checkpoint inhibitor naïve patients required to continue enrollment of remaining 32 patients
Trial Sponsor	NIH NATIONAL CANCER INSTITUTE

Confirmation that PDS0101 enhances the therapeutic benefit of M7824 & NHS IL-12 may lead to expanded evaluation in several cancers with PDS0102-0104

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

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	Objective response rate (ORR) and overall survival (OS)
Timing	Preliminary data – Q4 2021/Q1 2022, ORR in first 20 patients (efficacy in 7 of 38 required to enroll all 96 patients)
Trial Partner	MERCK

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 advanced cervical cancer

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	Rate of regression in patients with primary tumor ≥5cm
Timing	Preliminary data – Q4 2021/Q1 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

Safety and enhanced efficacy could lead to broad applications 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 all types of HPV-associated cancers.

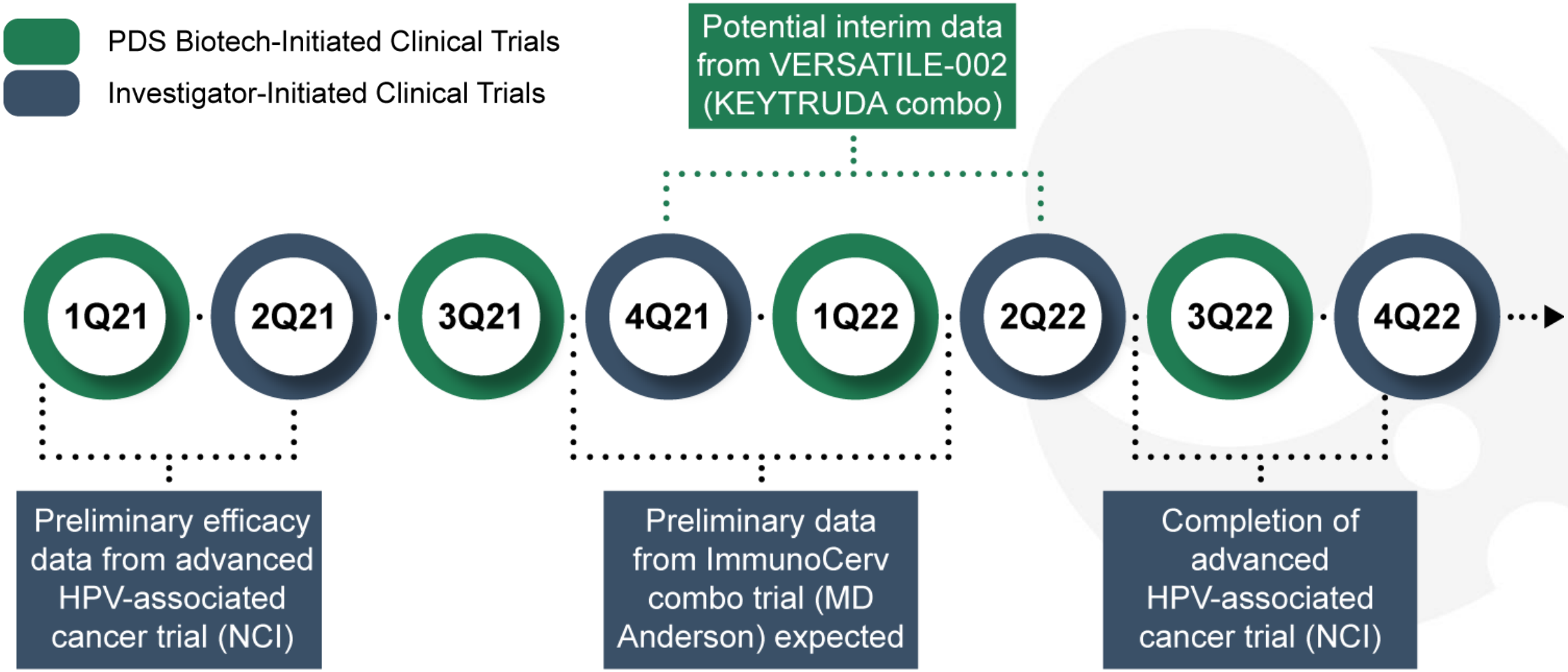
Enhance anti-cancer efficacy of various cancer treatments: Combinations with checkpoint inhibitors, chemotherapy and novel therapies may demonstrate Versamune®'s versatility.

Applications beyond oncology: PDS0203 COVID-19 phase 1/2 trials may demonstrate powerful preventive ability and induce durable T-cell responses against conserved regions of mutating viruses.

Broad partnerships: Successful phase 2 studies with PDS0101 and PDS0203 could enable development of a broad pipeline of Versamune®-based products containing various antigens.

Looking Forward

Financial position to support PDS0101 projected milestones through mid-2022*

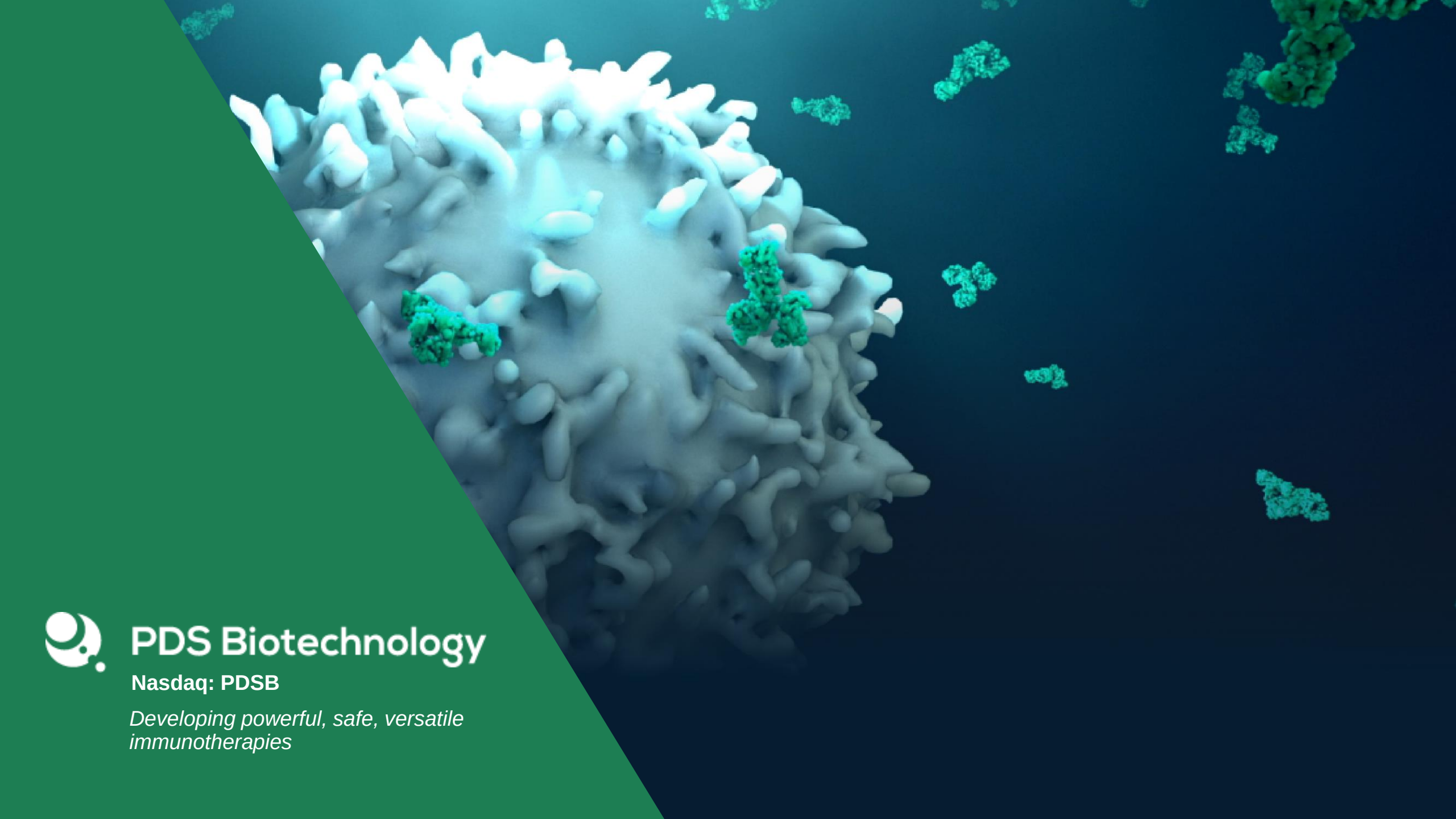


*Based on current enrollment and forecast modeling as of November 2020. Subject to change.

Positioned for accelerated development

Key Advantages and Differentiators

- ***Enhanced anti-cancer efficacy:*** Early clinical data and preclinical data suggest potentially superior efficacy, safety and versatility of the platform
- ***Near-term milestone:*** PDS0101 preliminary data Q1-Q2 2021
- ***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 evaluating the potential to safely enhance the clinical efficacy of FDA-approved anti-cancer products presents a potentially rapid path to commercialization
- ***Rapid adoption strategy:*** Evaluation of PDS0101 in combination with standard of care in multiple HPV-associated cancers



PDS Biotechnology

Nasdaq: PDSB

Developing powerful, safe, versatile immunotherapies