

A 3D molecular model of a cell, likely a cancer cell, shown in a light blue/white color. The cell surface is covered with numerous receptors and ligands, some of which are highlighted in a darker blue color. The background is a dark blue gradient with scattered molecular structures.

INVESTOR PRESENTATION

January 2022

Frank Bedu-Addo Ph.D. President & CEO



PDS Biotechnology

Nasdaq: PDSB

Precision Designed Science to Treat Cancer

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.

Corporate Overview

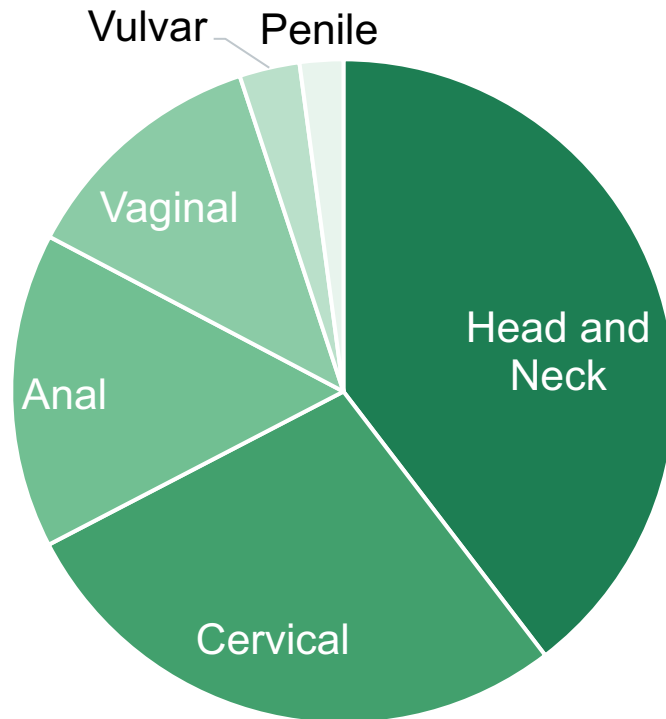
- **Clinical-stage Company developing broad-based immunotherapies to treat cancer and infectious disease**
- **Versamune[®]** and **Infectimune[™]** platforms leverage the body's own defense systems to prime antigen-specific killer T-cells and antibodies to combat cancer and infectious disease
- **Three Phase 2** oncology clinical trials in progress with readouts anticipated Q1/Q2
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- Composition patent for lead candidate PDS0101 – protection through October 2037
- Debt free with approximately **\$69.7M** in cash as of September 30, 2021

A 3D scientific illustration of a cell, likely a T cell, shown in a light blue color. The cell's surface is covered with numerous small, protruding structures representing receptors. Several Y-shaped molecules, representing antibodies or antigen-antibody complexes, are shown in a darker blue color. Some of these Y-shaped molecules are bound to the receptors on the cell's surface, while others are floating in the surrounding space. The background is a dark, gradient blue.

Versamune[®] Oncology Platform

Lead Asset PDS0101: Designed to treat human papillomavirus (HPV16)-associated cancers, representing a \$6B opportunity in the US

US HPV-associated cancer incidence^{1, 2}



- More than 40,500 patients were estimated to have been diagnosed last year with HPV16-associated cancers in the US^{1, 2}
- HPV vaccination is not expected to impact the rate of HPV-related cancer incidence for decades
- Existing immunotherapies cost \$150,000+ annually per patient³

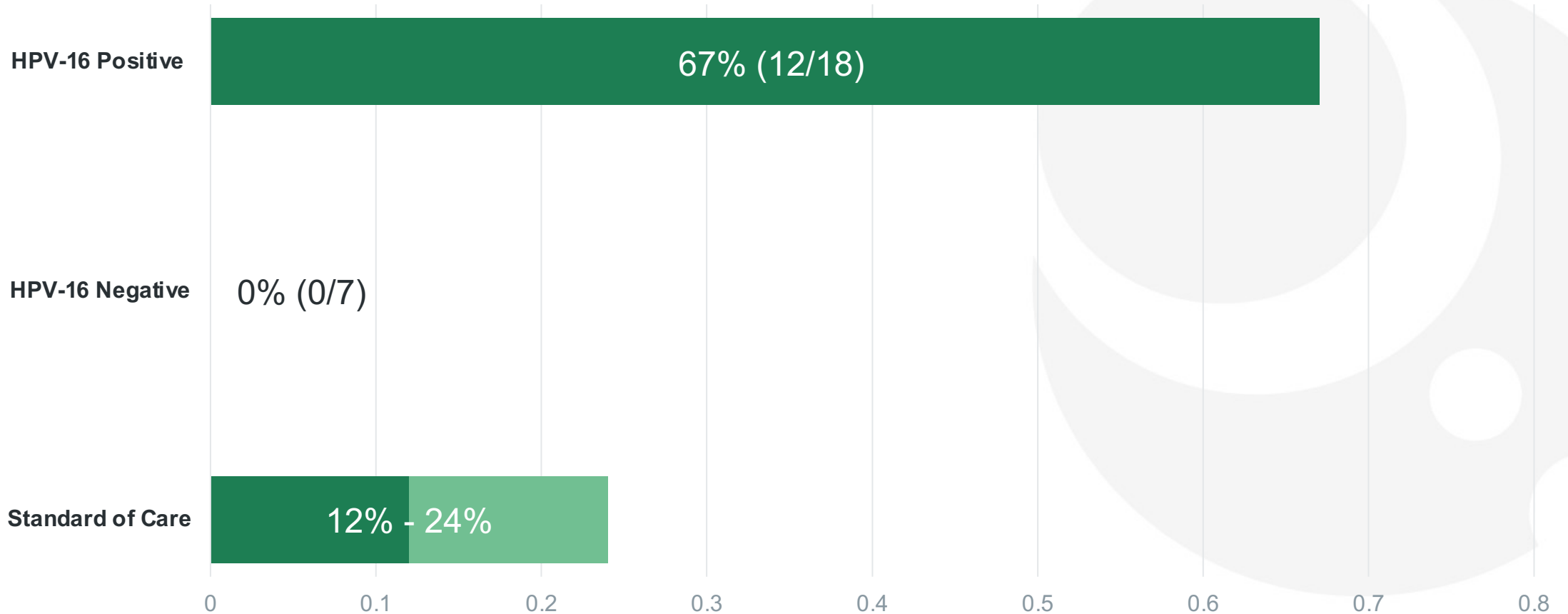
ASCO 2021: Triple combination shows promising durability of potential for anti-cancer efficacy in HPV16-positive patients

	PDS0101 + Bintrafusp alfa + M9241	Standard of Care (Checkpoint Inhibitors)
	HPV16-positive	
Number of checkpoint inhibitor naïve patients	6	
<i>Survival at median of 8 months</i>	100% (6/6)	Historical is 7-11 months
Number of checkpoint inhibitor refractory patients	12	
<i>Survival at median of 8 months</i>	83% (10/12)	Historical is 3-4 months

Update: As of December 31, 2021, 37 patients (30 HPV16 positive) have been evaluated with a median survival exceeding 12 months in this population. The study is still progressing and recruiting. Updates will be provided in the future.

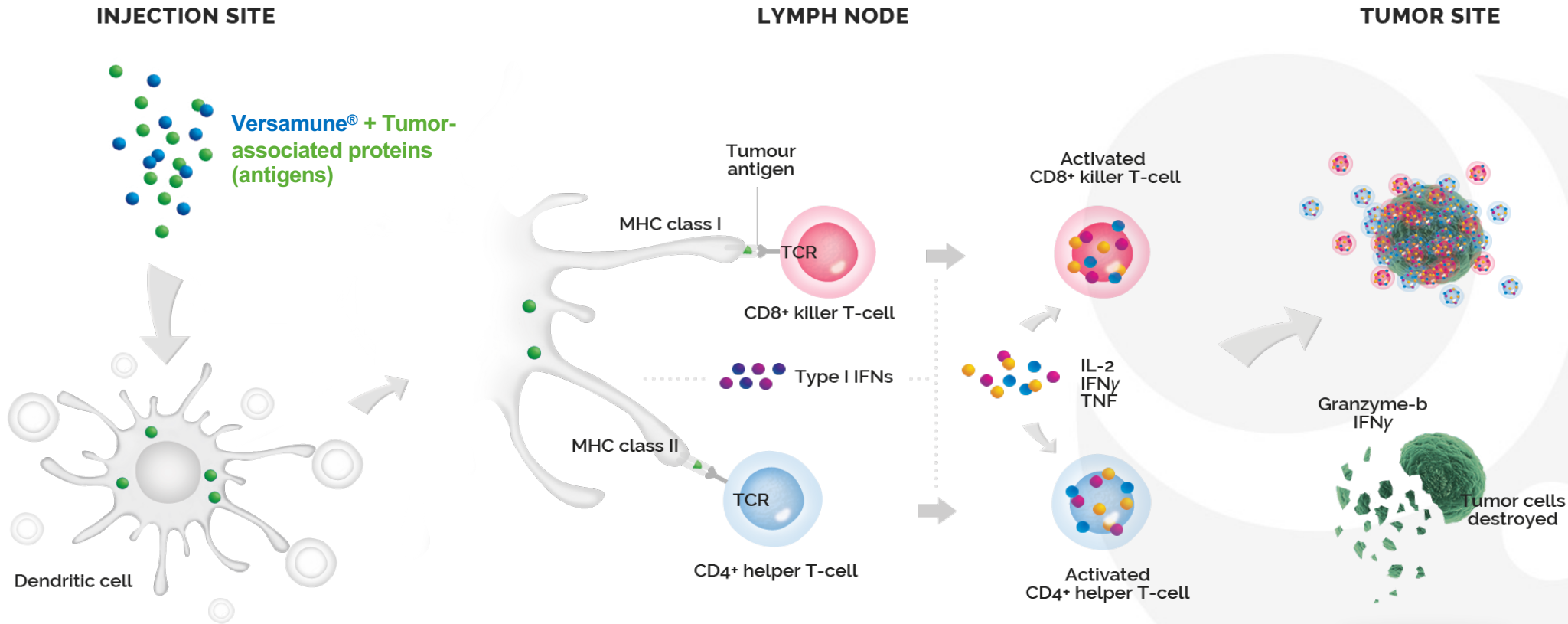
ASCO 2021: Interim proof-of-concept data suggests targeted CD8+ killer T-cell response induced by Versamune[®] results in tumor shrinkage

Triple Combo: PDS0101 + bintrafusp alfa + M9241
Advanced cancer patients with tumor shrinkage who had failed prior therapy



* These numbers reflect data as of evaluation of 25 patients; numbers will change as more patients undergo evaluation, includes both CPI refractory and naïve patients.

Versamune® is designed to Recruit, Train and Arm T-cells in the body



1. Recruits T-cells to lymph nodes

2. Trains T-cells to target tumors

3. Arms T-cells to kill tumor cells

Competitive Barrier to Entry:

Versamune[®] is designed to promote powerful, CD8+ killer T-cell responses *in vivo*

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 serious systemic side effects

70-90%
of cancer patients fail check point inhibitor therapy

Strong Pipeline with Industry-Leading Partnerships

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								
PDS0101 (HPV16)	Recurrent/metastatic HPV16-positive head and neck cancer	KEYTRUDA [®] (standard of care)						
	Arm 1: Checkpoint inhibitor naïve 1st line treatment							
	Arm 2: Checkpoint inhibitor refractory 2nd or 3rd line treatment							
PDS0101 (HPV16)	HPV-positive anal, cervical, head and neck, penile, vaginal, vulvar cancers	Bintrafusp alfa and M9241						
	Arm 1: Checkpoint inhibitor naïve 2nd line treatment							
	Arm 2: Checkpoint inhibitor refractory 3rd line treatment							
PDS0101 (HPV16)	1st line treatment of locally advanced (IB3-IVA) cervical cancer	Chemo-radiation (standard of care)						
PDS0102 (TARP)	TARP-associated AML, prostate and breast cancers	TBD						
PDS0103 (MUC1)	MUC1-associated breast, colon, lung, ovarian and other cancers	TBD						
PDS0104 (TRP2)	Melanoma	TBD						

PDS Biotech Funded

Partner Co-Funded

Phase 2: PDS0101 + KEYTRUDA®

Company-sponsored trial for the treatment of HPV16-positive metastatic/recurrent head and neck cancer (VERSATILE-002)

Indication	Treatment of patients with HPV16-positive 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) as <u>first-line treatment</u> in checkpoint inhibitor (CPI) naïve patients Group 2: ORR in patients who have failed checkpoint inhibitor therapy (CPI refractory)
Timing	Safety data confirmed and released Q4 2021 Preliminary efficacy data anticipated Q1 2022
Trial Partner	

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

Phase 2: PDS0101 + Chemoradiotherapy

Investigator-led trial evaluating the combination in patients with locally advanced cervical cancer (IMMUNOCERV)

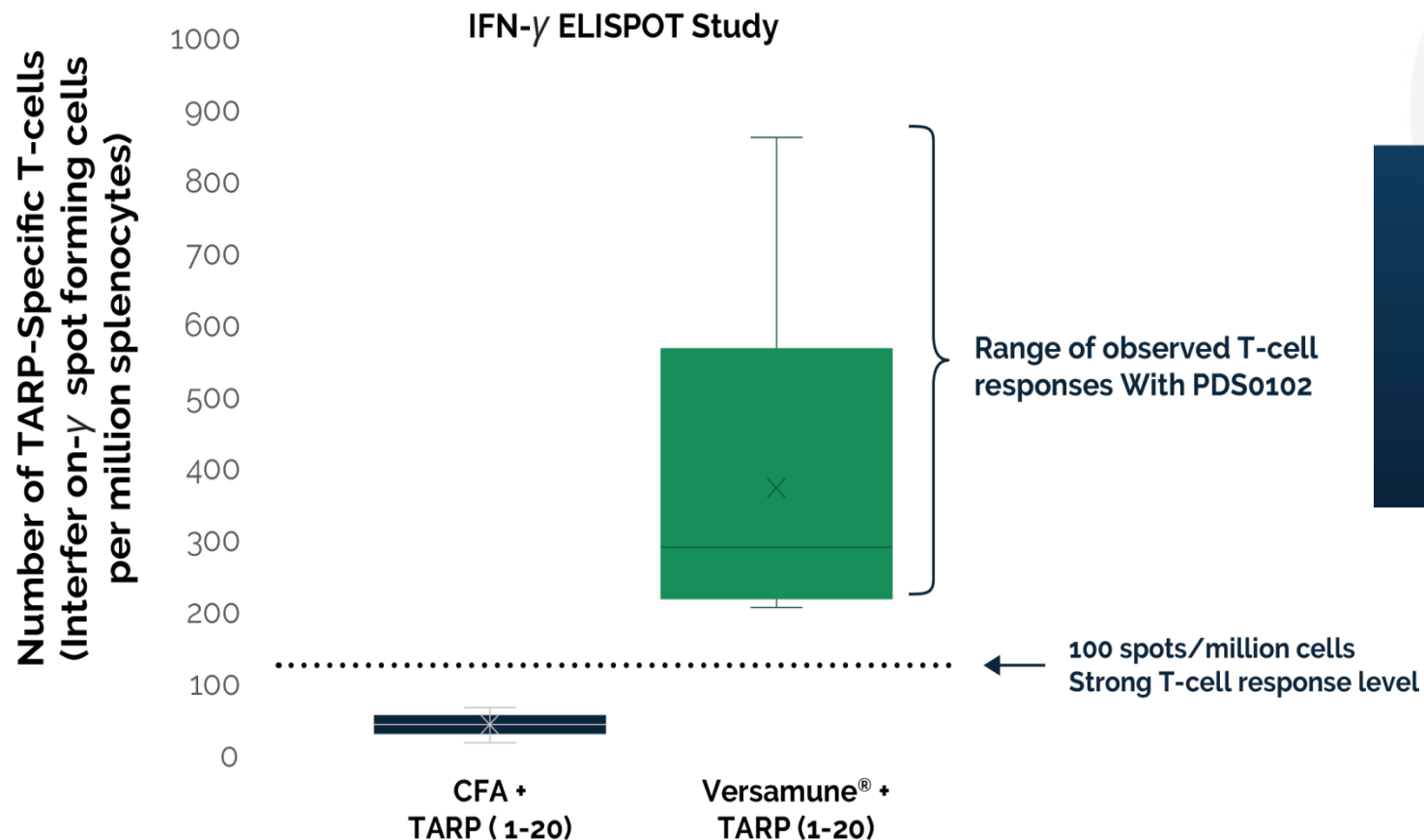
Indication	Treatment of patients with locally advanced cervical cancer – Stages IB3-IVA
Clinical Agents	Chemoradiotherapy (CRT – Standard of Care): Cisplatin and radiation therapy PDS0101: Versamune [®] -based immunotherapy generating HPV-specific CD8+ and CD4+ T-cells
Study goals	Safety, rate of regression and local control in patients with primary tumor $\geq 5\text{cm}$ (n=35 patients)
Timing	Preliminary data anticipated Q2 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	<small>THE UNIVERSITY OF TEXAS</small> 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

PDS0102: TARP Antigen

Greater quantity and quality of Versamune[®]-induced CD8+ killer T-cells may result in ability to treat TARP positive prostate and breast cancers

PRE-CLINICAL OPTIMIZATION STUDIES1: TARP-Specific T-cell Induction after 2 injections of PDS0102

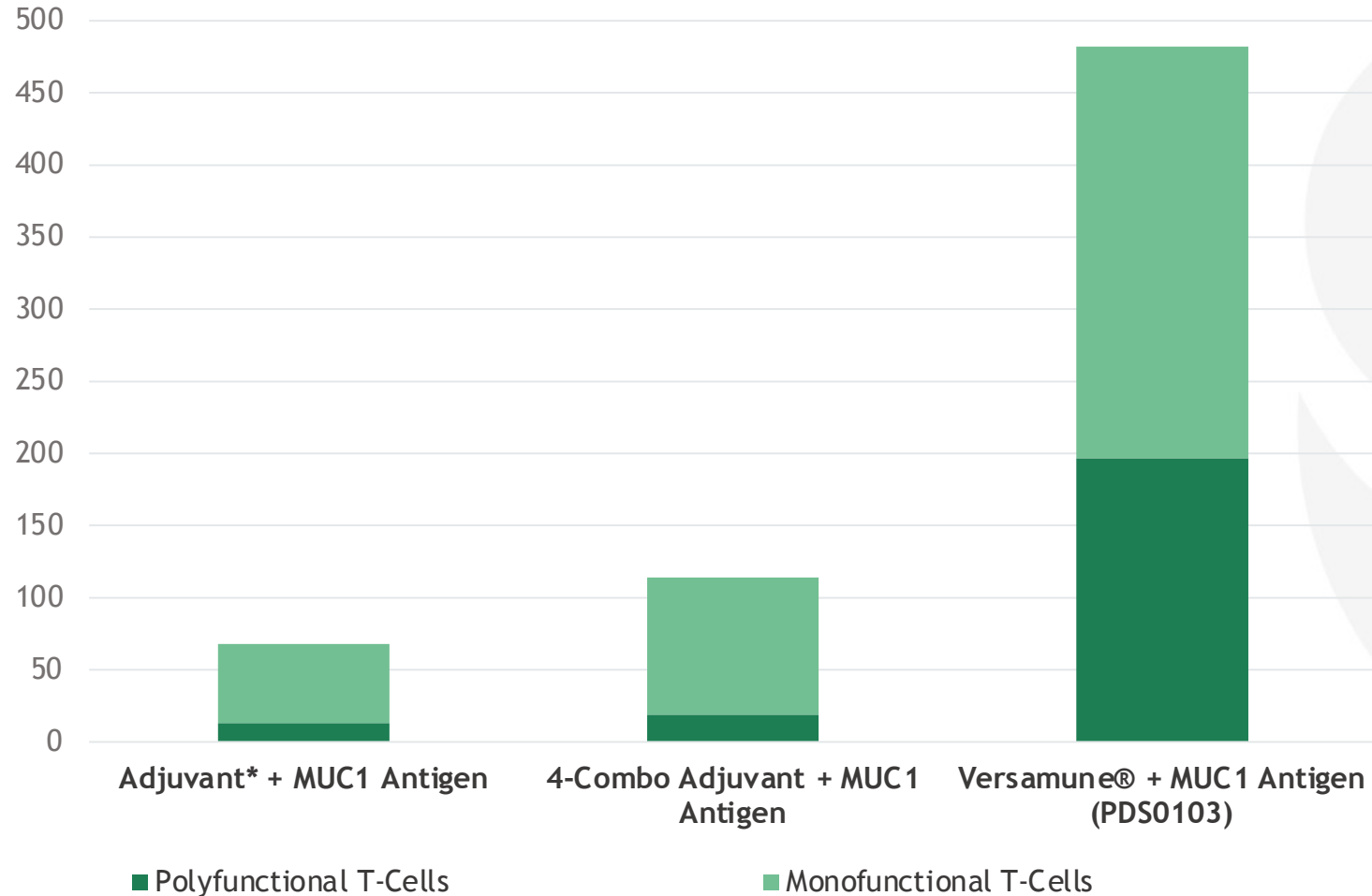


\$40B TARP Total Market Opportunity*
Announced license with NCI TARP antigens

PDS0103: MUC1 Antigen

Greater quantity and quality of Versamune®-induced CD8+ killer T-cells may result in ability to treat MUC1-positive cancers

of Antigen-Recognizing CD8+ T-Cells
IFN-γ Spot Forming Cells/1X10⁶ Spleen Cells



\$100B MUC1 Total Market Opportunity*

Induced a >10-fold number of polyfunctional (highly potent) MUC1 specific CD8+ T-cells

*Reference: Surveillance Research Program, National Cancer Institute SEER

Assumes \$150K for annual course of therapy; in line with current immunotherapy treatment












Assessments have not been adjusted to reflect MUC1-expression, which is currently unknown by tumor type





Infectimune™
Infectious Disease Platform

PDS Biotech's Infectimune™ Pipeline

Developed in partnership with leaders in infectious disease

PRODUCT	INDICATION	COMBINATION	PC	P1	P2	P3	R	PARTNER(S)
Infectious Disease								
<u>PDS0201 (M-tuberculosis)</u>	Prevention of tuberculosis							 
<u>PDS0202 (influenza)</u>	Universal prevention of influenza							  
<u>PDS0203 (SARS-CoV-2)</u>	Prevention of COVID-19							  

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").

Infectimune™ Pipeline

Update on infectious disease

Universal Flu

- Announced Option Agreement for license with University of Georgia for universal flu antigens
- Preclinical work complete

COVID

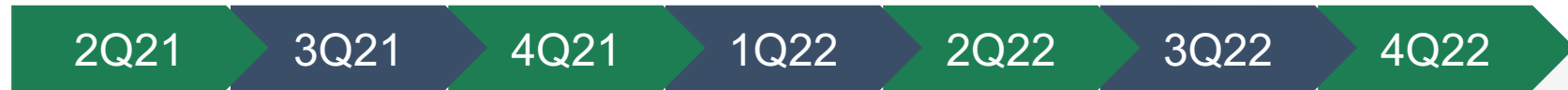
- Agreement with Farmacore extended through May 2022
- Scale up and manufacturing currently in process



Near-Term Milestones

Projected milestones through 2022*

- PDS Biotech Funded Clinical Trials
- Partner Co-Funded Clinical Trials



PDS0101

PDS0102

PDS0103

Preliminary efficacy data from advanced HPV-associated cancer trial (NCI)



Interim data from HPV-associated cancer trial (NCI)



Expected completion of HPV-associated cancer trial (NCI)



Preliminary data from VERSATILE-002 (KEYTRUDA® combo) expected



Preliminary data from ImmunoCerv (MD Anderson) expected



Planned initiation of Phase 1/2 clinical trial in TARP-related cancers



Planned initiation of Phase 1/2 clinical trial in MUC1-related cancers



PDS Biotech Management

Historical 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)



Matthew Hill Chief Financial Officer

- >20 years of financial and operational leadership roles for life sciences companies
- Former Chief Financial Officer of several publicly traded companies



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)



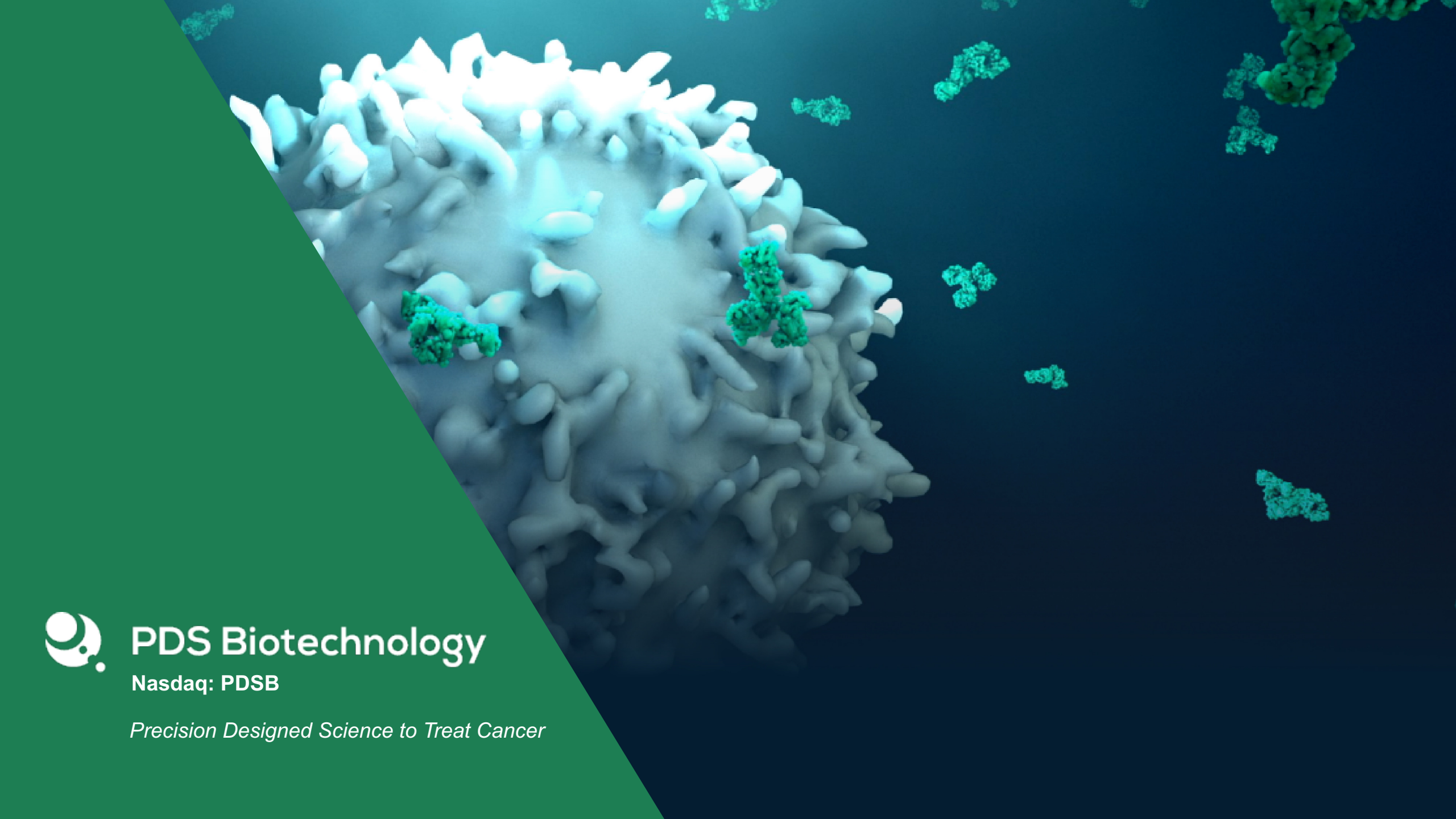
Gregory Conn, PhD Chief Scientific Officer

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



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