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Precigen, Inc.

Q2 and 1H ‘22 Earnings and Business Update Call

August 8th, 2022

Nasdaq: PGEN

Forward-looking Statements

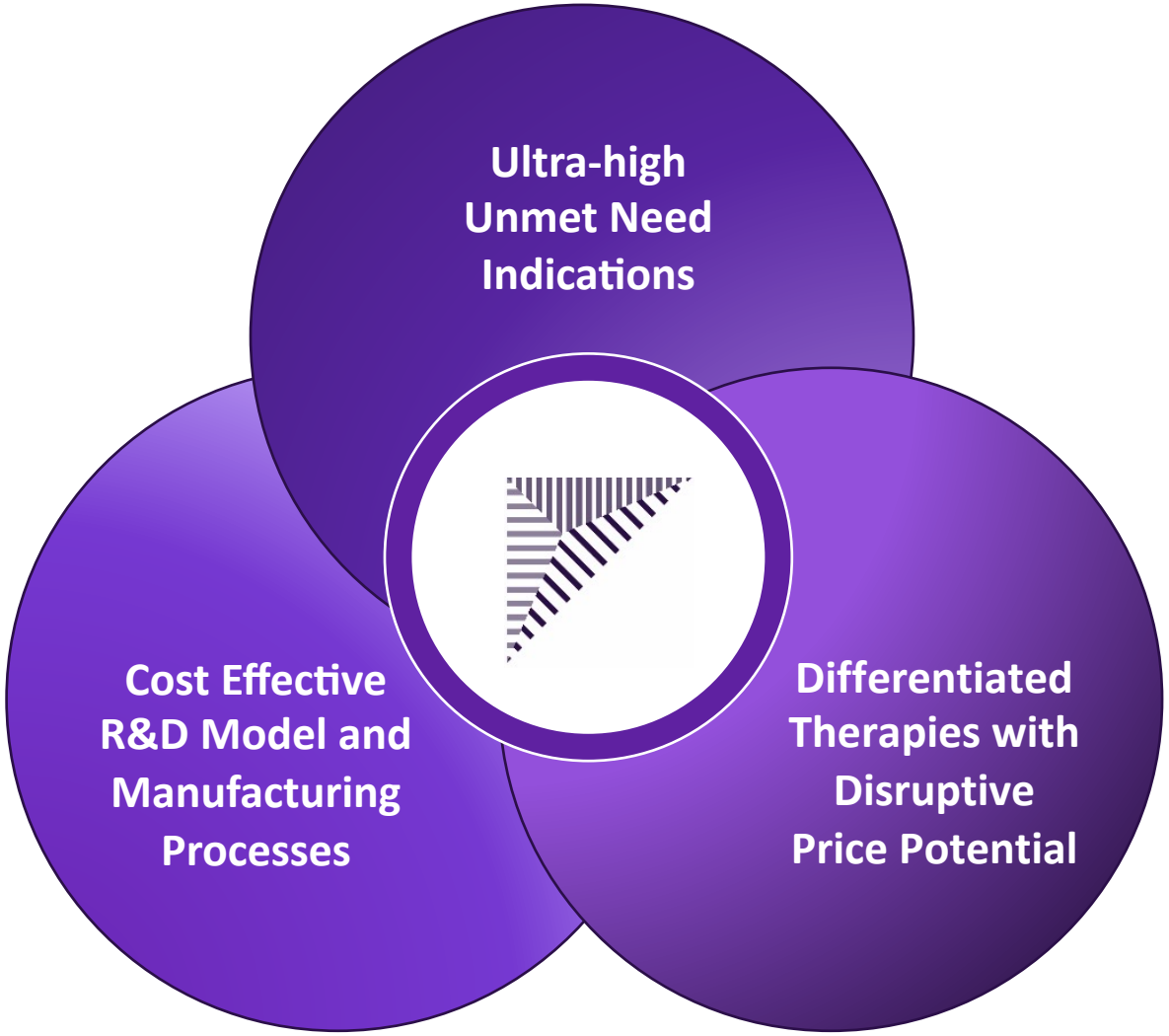
Some of the statements made in this presentation are forward-looking statements. These forward-looking statements are based upon the Company's current expectations and projections about future events and generally relate to plans, objectives, and expectations for the development of the Company's business, including the consummation of the prospective sale of Trans Ova Genetics, the use of capital from that transaction, the timing and progress of preclinical studies, clinical trials, discovery programs and related milestones, the promise of the Company's portfolio of therapies, and in particular its CAR-T and AdenoVerse therapies. Although management believes that the plans and objectives reflected in or suggested by these forward-looking statements are reasonable, all forward-looking statements involve risks and uncertainties, including the possibility that the sale of Trans Ova will not be consummated on the expected timeline or at all (whether due to a failure to receive, or delay in the receipt of, clearance under the Hart-Scott-Rodino Antitrust Improvements Act of 1976 or other third party consents required for the transaction or the failure to satisfy other conditions to the consummation of the transaction), the possibility that the timeline for the Company's clinical trials might be impacted by the COVID-19 pandemic, and actual future results may be materially different from the plans, objectives and expectations expressed in this press release. The Company has no obligation to provide any updates to these forward-looking statements even if its expectations change. All forward-looking statements are expressly qualified in their entirety by this cautionary statement. For further information on potential risks and uncertainties, and other important factors, any of which could cause the Company's actual results to differ from those contained in the forward-looking statements, see the section entitled "Risk Factors" in the Company's most recent Annual Report on Form 10-K and subsequent reports filed with the Securities and Exchange Commission.

This presentation contains market data and industry statistics and forecasts based on studies and clinical trials sponsored by third parties, independent industry publications and other publicly available information. Although Precigen believes these sources are reliable, it does not guarantee the accuracy or completeness of this information and has not verified this data.

All of the pharmaceutical products described in this presentation are investigational new drugs, which are currently undergoing pre-clinical and/or human clinical trial testing. As a result, none of them have had their safety or efficacy established or are approved by the U.S. Food and Drug Administration or any other regulatory agency.

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.

The Precigen Strategy: Drug Development Reimagined



Precigen Clinical Pipeline

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IMMUNO-ONCOLOGY

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					
PRGN-2009 ★	AdenoVerse	HPV⁺ Solid Tumors					

INFECTIOUS DISEASE

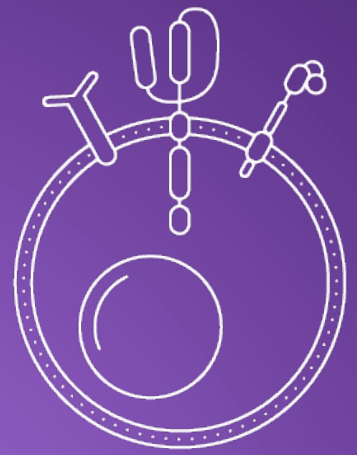
PRODUCT	PLATFORM	INDICATION	DISCOVERY	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3
PRGN-2012 ★	AdenoVerse	Recurrent Respiratory Papillomatosis (RRP)					

AUTOIMMUNE DISORDERS

PRODUCT	PLATFORM	INDICATION	DISCOVERY	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3
AG019	ActoBiotics	Type 1 Diabetes					

★ Prioritized programs

Portfolio Update
UltraCAR-T®



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PRGN-3006 UltraCAR-T Targeting CD33

- Received FDA Fast Track Designation for treatment of r/r AML
- Enrollment ongoing in Phase 1b expansion trial; plan to incorporate redosing as needed
- Successfully activated Mayo Clinic (Minnesota) as expansion site for Phase 1b trial; expect to add multiple major cancer centers across US, strengthening decentralized manufacturing model
- Phase 1 data update expected at major medical conference in Q4 ‘22

PRGN-3005 UltraCAR-T Targeting Unshed MUC16

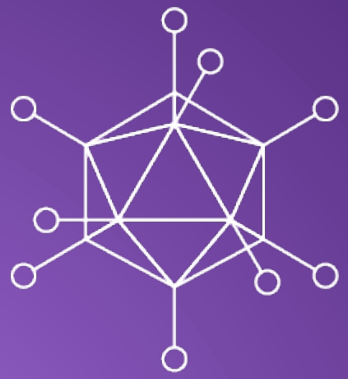
- Completed enrollment in Dose Level 3 with lymphodepletion (IV Arm) and initiated Phase 1b expansion trial; plan to incorporate redosing this year as needed, expansion to major cancer centers across US expected
- Patient follow-up ongoing and Phase 1 data update expected in 1H ‘23

PRGN-3007 Next Gen UltraCAR-T Targeting ROR1 with Intrinsic PD-1 Inhibition

- Phase 1 umbrella trial in ROR1^{+} in up to 5 indications across hematological and solid tumors on track to dose in 2H ‘22

Portfolio Update

AdenoVerse™



PRGN-2012 AdenoVerse Immunotherapy Targeting HPV6/11

- Initiated Phase 2 trial in RRP with 11 patients enrolled to date
- Patient follow-up ongoing and investigator-led Phase 1 data presentation expected in Q4 ‘22

PRGN-2009 AdenoVerse Immunotherapy Targeting HPV16/18

- Enrollment and dosing complete in Phase 1 monotherapy (N=6) and combination therapy (N=11) in HPV-associated cancers
- Enrollment ongoing in Phase 2 monotherapy arm in newly diagnosed oropharyngeal squamous cell carcinoma (OPSCC) with 17 patients (out of estimated 20) enrolled to date
- Patient follow-up ongoing and investigator-led Phase 1 monotherapy and combination therapy data expected in 1H ‘23

Anticipated Sale of Trans Ova Genetics

Transaction Highlights

- $170M upfront cash payment
- Up to $10M in earn-out tied to Trans Ova's performance over the next 2 years
- Transaction anticipated to close in Q3 '22, subject to certain conditions including HSR
- Proceeds expected to provide non-dilutive funds to pay convertible notes

Financial Highlights

Q2 and 1H ’22

- Net cash used in operating activities was $25.8M in half ending June 30th
- SG&A costs decreased for the three and six months ending June 30th compared to prior year
- $132.8M in cash, cash equivalents, short-term and long-term investment as of June 30th
- Cash runway estimated into Q4 ‘23 taking into account cash and investments on hand, cost reduction initiatives and expectations for the convertible notes

Anticipated Milestones for the 2H ‘22

- Close transaction for Trans Ova Genetics (Q3 ‘22)
- PRGN-3006: Activate additional sites for Phase 1b expansion trial and incorporate repeat dosing; present Phase 1 data at a major medical conference (Q4 ’22)
- PRGN-3007: Initiate dosing in Phase 1 umbrella study of ROR1^{+} hematological and solid cancers
- PRGN 2012: Present Phase 1 data (Q4 ‘22) and provide regulatory updates as they become available

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Q&A