UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): January 14, 2020

INTREXON CORPORATION

(Exact name of registrant as specified in its charter)

Virginia (State or other jurisdiction of incorporation) 001-36042 (Commission File Number) 26-0084895 (I.R.S. Employer Identification No.)

20374 Seneca Meadows Parkway, Germantown, Maryland 20876 (Address of principal executive offices) (Zip Code)

(301) 556-9900 (Registrant's telephone number, including area code)

	(Former n	$N\!/\!A$ name or former address, if changed since last v	report)					
	ck the appropriate box below if the Form 8-K filing is wing provisions:	intended to simultaneously satisfy the	filing obligation of the registrant under any of the					
	Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)							
	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)							
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))							
	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))							
Seci	urities registered pursuant to 12(b) of the Act:							
	Title of each class Common Stock, No Par Value	Trading Symbol(s) XON	Name of each exchange on which registered Nasdaq Global Select Market					
Seci	cate by check mark whether the registrant is an emergi rrities Exchange Act of 1934 (§240.12b-2 of this chapt rrsing growth company		405 of the Securities Act of 1933 or Rule 12b-2 of the					

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box

Item 7.01 Regulation FD Disclosure.

On January 14, 2020, Helen Sabzevari, PhD, President and CEO of Intrexon Corporation, delivered the presentation attached to this current report as Exhibit 99.1 at the 2020 J.P. Morgan Healthcare Conference.

As provided in General Instruction B.2 of Form 8-K, the information in this Item 7.01 and the exhibit furnished hereunder will not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, nor will they be deemed to be incorporated by reference in any filing under the Securities Act of 1933, as amended, except as will be expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No. Description

99.1 <u>Presentation dated January 14, 2020</u>

104 Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Intrexon Corporation

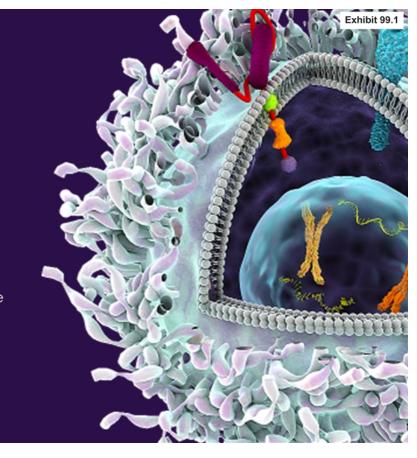
By: /s/ Donald P. Lehr
Donald P. Lehr
Chief Legal Officer

Dated: January 14, 2020

Precigen, Inc.

Helen Sabzevari, PhD President & CEO

38th Annual J.P. Morgan Healthcare Conference 14 January 2020



Forward-looking statements

Precigen, Inc. is a subsidiary of Intrexon Corporation (Nasdaq; XON). Some of the statements made in this presentation are forward-looking statements and projections of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based upon Intrexon's and 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," "expect," "believe," "anticipate," "intend," "continue," "opportunity," "groundwork," "poised," "future," "update" and similar expressions. Examples of forward-looking statements in his presentation, include statements about the timing, pace and progress of preclinical and clinical trials and discovery programs, potential benefits of platforms and product candidates including in comparison to competitive platforms and products, and the expected closing date of transactions with Third Security, the renaming of Interxon Corporation to Precigen, Inc., and future plans for the company's remaining non-healthcare assets. 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 fulfillment of closing conditions, (ii) the distraction of management from business operations, (iii) the risks associated with separating businesses out from ongoing operations, (iv) Intrexon's strategy and overall approach to its business model, its efforts to realign its business, and its ability to exercise more control and ownership over the development process and commercialization path; (v) the ability to successfully enter new markets or develop additional produ

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.

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PRECIGEN

Intrexon: Becoming dedicated healthcare company operating as Precigen

Announced January 2, 2020

Increased Focus on Healthcare

- Name to be Precigen with expected stock symbol of 'PGEN'
- Assets to encompass wholly-owned subsidiaries Precigen, ActoBio Therapeutics, Exemplar Genetics and majority ownership interest in Triple-Gene

Leadership

- Dr. Helen Sabzevari appointed President and CEO of new Precigen
- Randal J. Kirk appointed Executive Chairman

Divestment of Non-Healthcare Assets

- Certain non-healthcare assets* to be sold to Third Security (expected to close late Jan 2020)
- Interest in EnviroFlight, LLC sold to Darling Ingredients, Inc.

Financial Strength

- Previous cash position and expected proceeds from divestments and stock purchase approximate \$175M at year end
- Significant runway with increased focus and reduced cash burn for efficient use of capital

*Ag Biotech Division (AgBio), Intrexon Laboratories Hungary (ILH), Intrexon Produce Holdings, Inc. (owner of Okanagan Specialty Fruits), Intrexon UK Holdings, Inc. (owner of Oxitec, Ltd.), Intrexon's nominal equity interests in Oragenics and Parallel (formerly Surterra), and the internet domain name DNA.com.

PRECIGEN

Precigen: Maximizing platform technology utilization



- Next generation gene and cellular therapies using precision technology
- Multiple clinical and preclinical candidates
- Initial Phase 1 data readout in 2H20



- THERAPEUTICS~
- Microbe-based agents that deliver diseasemodifying therapeutics
- Multiple clinical and preclinical candidates
- Key interim data in 2020



- Multigenic gene therapies focused on cardiovascular disease
- Key asset in Phase 1
- Additional Phase
 1 data in 2020



- Market leader in genetically engineered MiniSwine models of human disease
 - Potential for regenerative medicine applications

Shared focus on immuno-oncology, infectious disease, cardiovascular disease, and autoimmune disorders

PRECIGEN

[‡]Wholly owned subsidiary Precigen, Inc. will be renamed in connection with parent company name change.

Precigen's strategic objectives allow us to deliver on our vision for patients

PRECIGEN'S VISION FOR PATIENTS

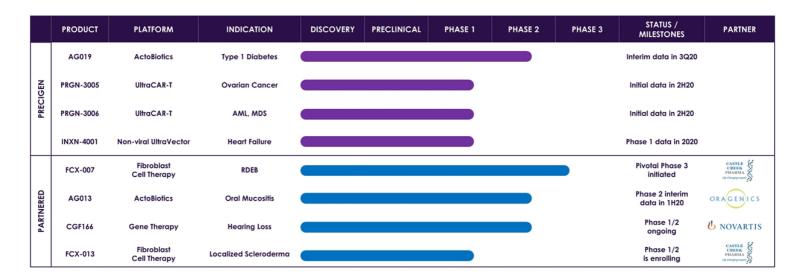
Develop life-saving and cost-conscious therapies utilizing our cutting-edge platform technologies for patients with unmet need



Precigen's technology platforms provide a strong foundation to realize core promise of precision medicine



Precigen has robust clinical pipeline of internal and partnered programs with important data readouts in 2020



Precigen has robust preclinical pipeline to drive long-term value creation

TA	PRODUCT	PLATFORM	INDICATION	DISCOVERY	PRECLINICAL	PHASE 1	MILESTONES
	PRGN-2009	OTS AdenoVerse Immunotherapy	HPV ⁺ Cancers				Phase 1 initiation 2020
	PRGN-2011	AdenoVerse Cytokine Therapy	Solid Tumors				
colog	PRGN-5001	Multifunctional Therapeutic	Solid Tumors				IND-enabling studies 2020
0-0UC	PRGN-3007	UltraCAR-T	Undisclosed				IND-enabling studies 2020
Immuno-oncology	PRGN-3008	UltraCAR-T	Undisclosed				
-	PRGN-5002	Multifunctional Therapeutic	Solid Tumors				
	PRGN-2010	OTS AdenoVerse Immunotherapy	Solid Tumors				
une	AG017	ActoBiotics	Celiac Disease				IND approved
Autoimmune Disorders	PRGN-3009	Undisclosed	Undisclosed				
Auto	PRGN-3010	Undisclosed	Undisclosed				
Infectious Disease	PRGN-2012	OTS AdenoVerse Immunotherapy	Undisclosed				IND-enabling studies 2020
Infectious	PRGN-2013	OTS AdenoVerse Immunotherapy	Undisclosed				

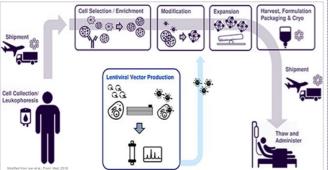
OTS: Off-the-shelf

Agile portfolio management with continuous evaluation of preclinical portfolio based on data to make $\begin{array}{ccc} \text{PRECIGEN} & \text{rapid go/no go decisions} \end{array}$

Disrupting the market: Precigen's UltraCAR-T[™] treatment is delivered to patients one day after non-viral gene transfer

Conventional CAR-T

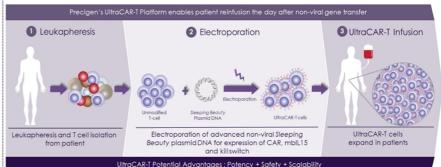
Viral vectors and ex vivo expansion result in long delays for patient treatment and high cost



- · Reliance on viral vectors
 - · Complexity of manufacturing viral vectors
- Long and complex CAR-T cell manufacturing process
 - Long delays for patients
 - · High cost of manufacturing
- Exhausted T cell phenotype
- · Major challenges in solid tumor treatment

UltraCAR-T™

Overnight non-viral gene transfer eliminates long delays for patient treatment and lower manufacturing cost

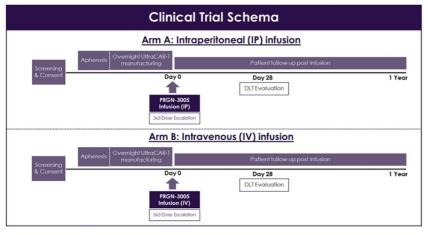


- Non-viral gene delivery
 - · Simplified manufacturing of Plasmid DNA
- Overnight UltraCAR-T manufacturing process
 - · No ex vivo expansion necessary
 - · Reduced manufacturing cost
- Stem-like memory T cell phenotype
- Enhanced potential for expansion and persistence

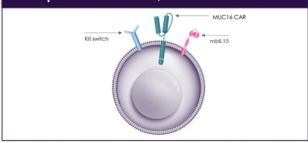
PRGN-3005 UltraCAR-T™, a first-in-class therapy in ovarian cancer

Phase 1 Clinical Trial Ongoing

- Second cohort for IP arm enrolling patients
- 100% manufacturing success to date
- Initial data readout from IP arm expected in 2H20
- Encouraging preliminary findings of UltraCAR-T kinetics



Advanced non-viral Sleeping Beauty system to co-express MUC16 CAR, mblL15 and kill switch



Target & Patient Population

- Preferentially targets MUC16+ cancer cells
 - MUC16 overexpressed on >80% of ovarian tumors
 - Limited expression found in healthy tissues
- Initial target is advanced stage platinum resistant ovarian cancer
 - 300k diagnosed annually¹/22k in US²

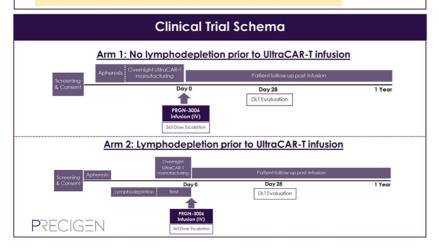
"World Health Organization, International Agency for Research on Cancer, Global Cancer Observatory, Cancer Today, Estimated number of new cases in 2018, worldwide, both sexes, all ages. Accessed December 2018 via WHO IARC SCO website.
"American Cancer Society Ovarian Cancer Special Section, Access December 2018 via ACS website.

PRECIGEN

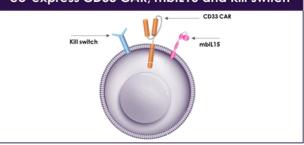
PRGN-3006 UltraCAR-T™, a first-in-class therapy in AML

Phase 1/1b Clinical Trial Ongoing

- Second cohort of no lymphodepletion arm and first cohort of lymphodepletion arm are enrolling patients
- 100% manufacturing success to date
- Initial data readout expected in 2H20
- · Orphan Drug Designation recently granted by FDA
- Encouraging preliminary findings of UltraCAR-T kinetics



Advanced non-viral Sleeping Beauty system to co-express CD33 CAR, mblL15 and kill switch



Target & Patient Population

- CD33 is overexpressed on myeloid leukemia cells and leukemic stem cells
 - 85-90% of AML patients show expression of CD33 on blasts
- 20k diagnosed in US in 2018¹ with relapsed or refractory AML
- Higher risk myelodysplastic syndrome (MDS) has US incidence >10k per year²

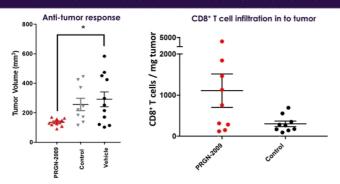
¹American Cancer Society. Key Statistics for Acute Myeloid Leukemia (AML), Accessed December 2018 via ACS website ²American Cancer Society. Key Statistics for Myelodysplastic Syndromes. Accessed December 2018 via ACS website.

PRGN-2009 off-the-shelf AdenoVerse™ immunotherapy for HPV+ cancers

Phase 1 Clinical Trial Initiation Upcoming

- Currently under development through CRADA with Dr. Jeffrey Schlom at NCI
- Phase 1 clinical trial initiation expected in 2020

PRGN-2009 immunotherapy effectively controls tumor in murine model of HPV+ head & neck cancer



Gorilla adenovector with novel HPV antigen design



Target & Patient Population

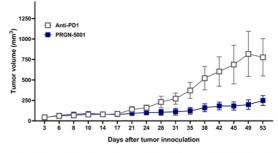
- Designed to activate immune system to recognize and target HPV⁺ solid tumors
 - HPV+ cancers represent significant health burden in head and neck, cervical, vaginal and anal cancer
- Gorilla adenoviral vector with large payload capacity and ability for repeat injections
- Optimized HPV antigen design for improved immune response differentiates from competition

Multifunctional therapeutics overcome tumor microenvironment immunosuppression and improve T cell function compared to anti-PD1 in preclinical mouse models

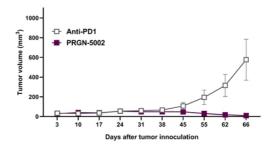
Multifunctional Therapeutic Platform

- Simultaneously targets multiple pathways to address senescence and trafficking of T lymphocytes in tumor microenvironment
- Exhibited superior anti-tumor effects compared to anti-PD1 mAbs
- Data supports potential for expansion to multiple targets
- Initiate IND enabling studies for PRGN-5001 in 2020
- Evaluating the optimal path forward for Multifunctional Therapeutic Platform including ongoing partnership discussions with multiple companies

PRGN-5001 exhibits superior anti-tumor effect compared to anti-PD1 in humanized mouse model of lung cancer



PRGN-5002 exhibits superior anti-tumor effect compared to anti-PD1 in humanized mouse model of cervical cancer



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AG013 for oral mucositis (OM)

Target & Patient Population

OM is a side effect of chemo/radiation therapy in patients treated for head & neck cancer and other solid tumors



- No drug is approved to prevent OM in the broad cancer population
- 2019 addressable population: approximately 850k[†]

Patient swishes for 30 seconds after every meal The activity delivers trefoil factor, which genetically modified L. lactis

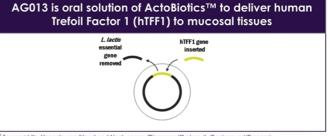
Ease of administration

4

Phase 2 Clinical Trial Ongoing in Head & Neck Cancer Patients

- Enrollment completed in 4Q19
- Interim data from Phase 2 expected in 1H20
- Orphan Drug status in European Union
- FDA Fast Track designation
- Development under partnership with Oragenics ORAGENICS





[†] Sources: http://oncolex.org/Head-and-Neck-cancer/Diagnoses/Oral-cavity/Background/Prognosis https://www.uptodate.com/contents/epidemiology-and-risk-factors-for-head-and-neck-cance https://www.uproduisess.sea.comeer.org/research/cancer-facts-and-statistics/cancer-treatmen and-survivoship-facts-and-figures/cancer-freatment-and-survivoship-facts-and-figures-2014-2015, and http://www.onclive.com/publications/oncology-live/2014/http://o2014/study-finds-mouth-insea-alleviates-oral-mucositis-symptoms-in-head-and-neck-cancers https://www.ncbl.nlm.nih.gov/pmc/articles/PMC3662500/

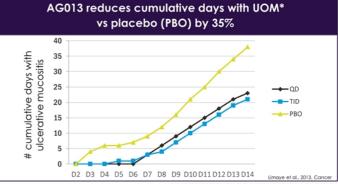
AG013 Phase 1b data: Demonstrated efficacy vs placebo

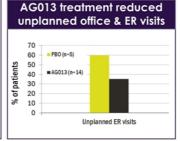
Clinical Trial Design

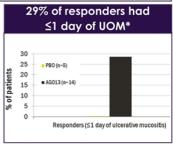
- Phase 1b single blind, placebo-controlled study; 6 centers in the US
- Study measured safety and tolerability of locally-applied AG013 in head and neck cancer patients receiving induction chemotherapy

Clinical Trial Data Summary

- Safe and well tolerated
- Consistent effect of active versus placebo across all dose frequencies without a dose frequency-dependent effect
- 29% of responders reported fewer than 2 days of UOM while all placebo-treated patients experienced more than two days of UOM
- 40% reduction in unscheduled office and emergency room visits compared to placebo
- 35% reduction in percentage of days with UOM compared to placebo







* Ulcerative Oral Mucositis (UOM) : WHO score ≥ 2

AG019, a first-in-class therapy for type 1 diabetes (T1D)

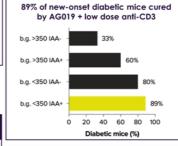
Target & Patient Population

- First-in-class disease modifying antigen-specific immunotherapy to prevent, delay or reverse T1D
- Recent-onset T1D patients (children and adults) with residual functional Beta-cell mass

Phase 1b/2a Clinical Trial Ongoing

- Phase 1b/2a study to assess the safety and tolerability of different doses of AG019 administered alone (Phase 1b) or in combination with teplizumab (anti-CD3 mAb) (Phase 2a)
- Enrollment and treatment completed in Phase 1b (monotherapy); No discontinuation in treatment to date
- Enrollment ongoing in Phase 2a (combination) cohorts; No safety issues to date
- Interim data readout expected in 3Q20

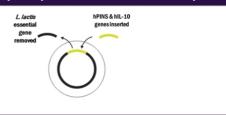
AG019 + anti-CD3 treatment is highly effective in diabetic mice



PINS-specific FoxP3+ Treg cells accumulate and proliferate in the pancreas & peripheral lymph nodes

pression of KIAZ and ExvP3 reveal

AG019 is a capsule formulation of ActoBiotics™ to express human Proinsulin (hPINS) and human Interleukin-10 (hIL-10)



INXN-4001, novel gene therapy product for heart failure (HF)

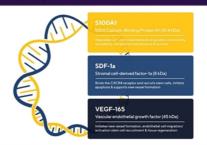
Target & Patient Population

- Heart failure is a complex, multi-modal and progressive disease that requires targeting multiple pathways for successful outcome
- Therapeutic options for end-stage HF are limited
- Three effector genes in INXN-4001 designed to address multiple malfunctions of cardiomyocytes in patients with heart failure
- · Approximately 6M adults in US have heart failure

Phase 1 Clinical Trial Ongoing

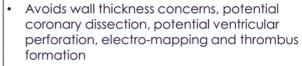
- Phase 1 enrollment complete
- Initial data shows improvement in cardiac function and no product related adverse events
- · Phase 1 data completion in 2020

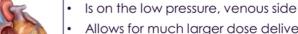
Non-viral triple effector plasmid based on UltraVector® platform to simultaneously express human \$100A1, \$DF-1a, and VEGF-165

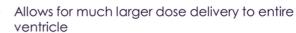


Retrograde Coronary Sinus Infusion (RCSI)











INXN-4001 Phase 1 trial: Initial data shows improvement in cardiac function and no product related adverse events

Study Design

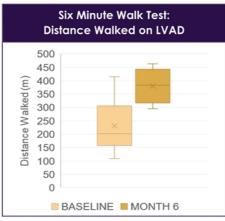
 First-in-human, phase I, open label, safety study of INXN-4001 delivered via RCSI¹ in stable patients with implanted, outpatient LVAD³ for mechanical support of end stage HF



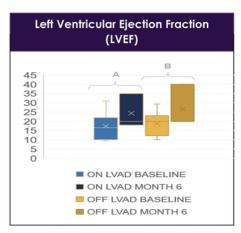
Assessments

- Safety: clinical labs, physical exams, ECG and medical history during clinic visits at: pretreatment, day 3, then 1, 3, 6, 9, and 12 months after dosing
- Function: KCCQ² questionnaire, 6-min walk test (6MWT) prior to and during an LVAD wean interval; Daily activity data collected throughout the study using a wearable biosensor (Actigraph)

¹RCS1: Retrograde Coronary Sinus Infusion ²KCCQ: The Kansas City Cardiomyopathy Questionnaire ³LVAD: Left Ventricular Assist Device



Distance walked by patients ON LVAD support during 6MWT at baseline (n=9) and after 6 months from RCSI procedure (n=4)

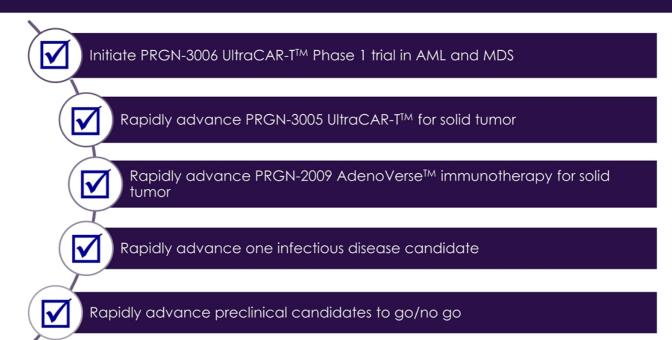


LVEF for patients (A) ON LVAD support at baseline (n=11) vs. 6 months post RCSI (n=3) and (B) for patients OFF LVAD support after 6MWT at baseline (n=10) and after 6 months from RCSI (n=3)

No product-related adverse events observed to date

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Precigen[‡] in 2019: Demonstrated achievement of milestones



PRECIGEN

[‡]Wholly owned subsidiary Precigen, Inc. will be renamed in connection with parent company name change.



Precigen in 2020: Multiple upcoming clinical milestones for value creation

Initial data from IP arm of PRGN-3005 UltraCAR-TTM Phase 1 trial in Ovarian Cancer

Initial data from PRGN-3006 UltraCAR-TTM Phase 1 trial in AML and MDS

Interim data from Phase 2 trial of AG013 in Oral Mucositis

Interim data from Phase 1b/2a trial of AG019 in Type 1 Diabetes

Phase 1 data completion of INXN-4001 in Heart Failure patients with LVAD

Initiate Phase 1 trial of PRGN-2009 off-the-shelf AdenoVerse™ immunotherapy in HPV+ cancers

Precigen in 2020: Upcoming preclinical milestones to drive value creation in long-term

Rapidly advance PRGN-2011 AdenoVerse™ cytokine therapy towards Phase 1 study

Advance next generation UltraCAR-T™ candidate in IND-enabling studies

Advance autoimmune disease candidate in IND-enabling studies

Advance infectious disease candidate in IND-enabling studies

Advance PRGN-5001 Multifunctional Therapeutic in IND-enabling studies

Precigen: World-class platform of innovative technologies and focused pipeline of precision medicines



