Investor Presentation

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Forward-Looking Statements

This presentation contains forward-looking statements. These forward-looking statements are subject to risks and uncertainties, including the factors described under the Risk Factors section of our most recent Annual Report on Form 10-K or Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission and made available on our website at www.agenusbio.com. When evaluating Agenus' business and prospects, careful consideration should be given to these risks and uncertainties. These statements speak only as of the date of this presentation, and Agenus undertakes no obligation to update or revise these statements. This presentation and the information contained herein do not constitute an offer or solicitation of an offer for sale of any securities.

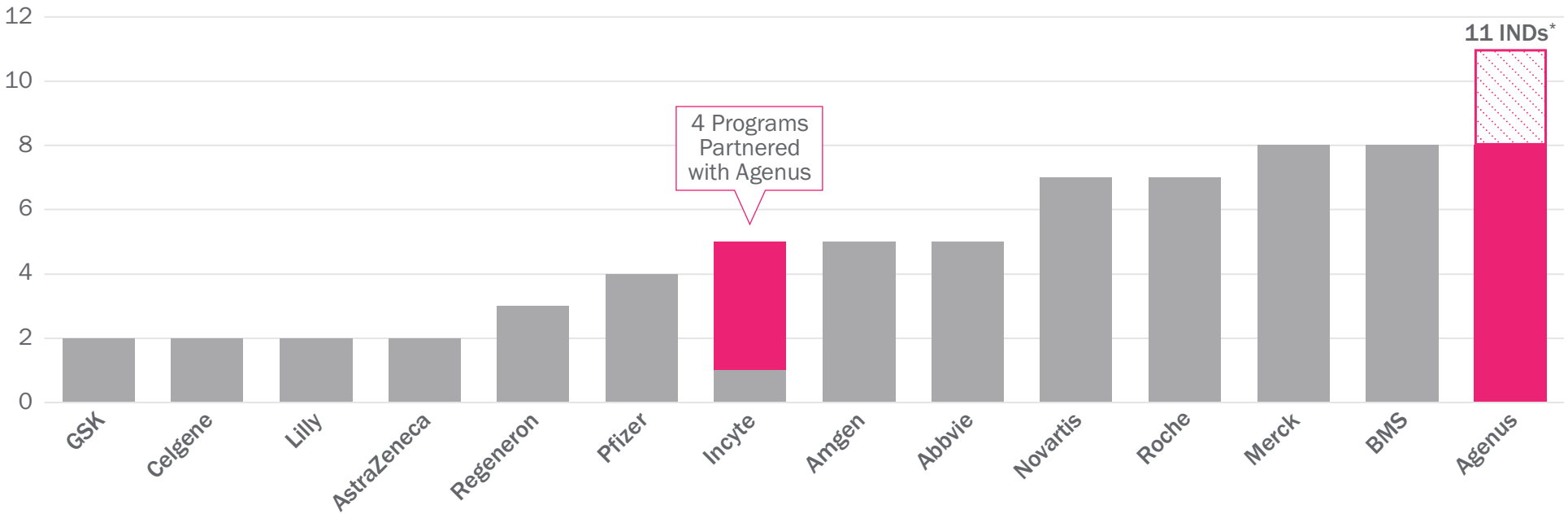
Broad Pipeline—Blockbuster Potential Products

Advanced Pipeline	**2 Antibodies (AGEN PD-1 & CTLA-4) in Trials Designed for BLA Filing 2020** Marketed PD-1 & CTLA-4 annual revenues ~$15Bn (2018)
Operational Execution	**5 INDs into 2018, Planned 6* INDs in 2018 and 2 in 1H2019** Treated Over 100+ Patients In Lead Programs
Successful Partnerships	**Partnerships for Rapid Expansion and Resources** GSK, Merck and Incyte
Intelligent Platforms Drive Discovery	**Platform Technologies Accelerate Development** Discovery Engine — 20+ candidates^ In-house Manufacturing — Delivering at Record Speed Artifical Intelligence (ALPS) Platform Enables High Throughput Discovery and Translation

* 3 INDs already filed in 2018
^ Includes Agenus proprietary and partnered pipeline

Agenus has Outpaced Big Pharma in Advancing I-O Programs to the Clinic

Number of I-O INDs from 2016 – 2018



* INDs include INCY partnered programs and 3 additional INDs planned in 2H2018

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Innovation & Speed are Key to Success

Validation

Anti-PD1
Anti-CTLA4

Disruption

Biologics
Vaccines
Cell Therapy
Bispecifics

20+^
Pipeline Candidates

8 INDs*
Already Filed

5 More INDs
Planned through 1H19

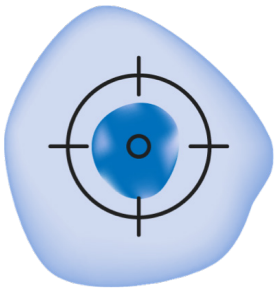
2018/19
Expand Partnerships

2020
Planned BLA Filing

^ Includes Agenus proprietary and partnered programs
* Includes 5 programs partnered with Incyte and Merck

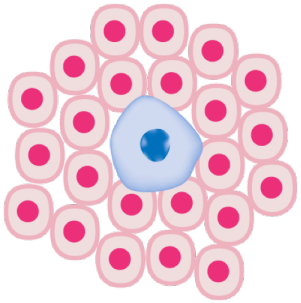
Combination Approaches Optimize Benefit

Training To Recognize Cancer



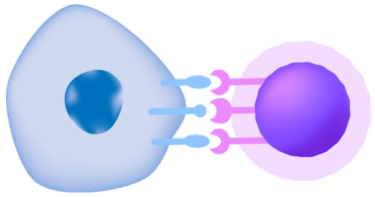
Cancer Vaccines

Expanding & Mobilizing Army



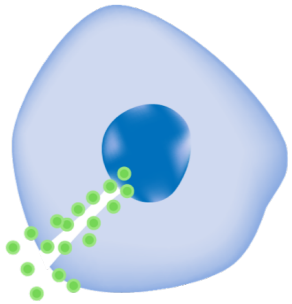
Priming Agents
CTLA-4, CD137

Hitting Gas, Stepping On Brakes



Immune Checkpoints & Optimized Cells
PD-1, CTLA-4, CD137, TIGIT, LAG-3, TIM-3, etc...

Creating Inroads Getting Past Barriers



Tumor Conditioners
Bispecifics (undisclosed)

A Comprehensive Approach to Cancer Immunotherapy

Agenus' Unique Strategy

Multi-Pronged Approach to Enable Immune System to Destroy Cancer

Checkpoint Antibodies

Unblock and/or Improve Response to Cancer

Cancer Vaccines

Improve Cancer Recognition

Adjuvants

Boost Cancer Recognition

Adoptive Cell Therapy*

Direct Attack on Cancer

* Programs advancing through a separate subsidiary, AgenTus Therapeutics

Agenus Proprietary Pipeline

Disease/Target	Product	Partner	Preclinical	Phase 1	Phase 2	Phase 3	Filed	Approved
Checkpoint Antibodies								
CTLA-4 (antagonist)	AGEN1884							
Next-Gen CTLA-4 (antagonist)	AGEN1181							
PD-1 (antagonist)	AGEN2034							
CD137 (agonist)	AGEN2373							
TIGIT (antagonist)	AGEN1307							
Bispecific (regulatory T cell depletion)	AGEN1223							
Bispecific (TME conditioning)	AGEN1423							
Undisclosed								
Vaccines								
Glioblastoma (newly diagnosed)	Prophage™							
Cancers	AutoSynVax™							
PhosphoSynVax™	PhosphoSynVax™							
Adoptive Cell Therapy								
Cancers	Undisclosed Target	AgenTus Therapeutics						

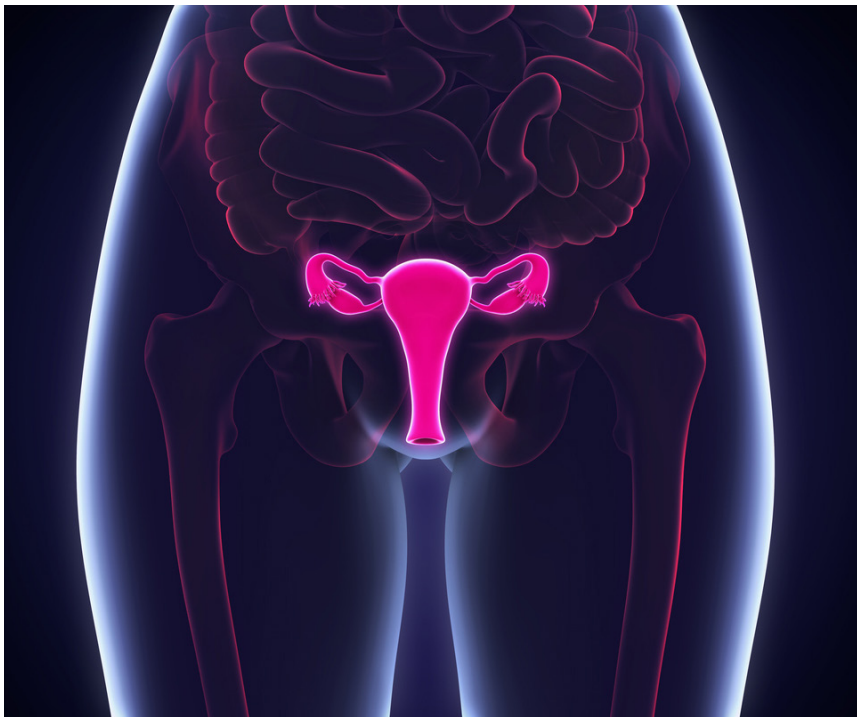
Notes: AGEN1884 and AGEN2034 are being evaluated in 2L cervical cancer and undisclosed tumors
Recepta Biopharma S.A. has exclusive rights to AGEN1884 and AGEN2034 in Brazil and five other South American countries

Agenus Partnered Pipeline

Disease/Target	Product	Partner	Preclinical	Phase 1	Phase 2	Phase 3	Filed	Approved
Checkpoint Antibodies								
GITR (agonist)	INCAGN1876	Incyte						
OX40 (agonist)	INCAGN1949	Incyte						
TIM-3 (antagonist)	INCAGN2390	Incyte						
LAG-3 (antagonist)	INCAGN2385	Incyte						
Undisclosed		Incyte						
Undisclosed		MERCK						
Adjuvant								
Shingles	QS-21 Stimulon®	gsk						
Malaria		gsk						

Potential Fast Path to BLA — Advancing PD-1 & CTLA-4 in Cervical Cancer

13,000	New cases of cervical cancer each year in the US
4,000+	Women die each year in the US from cervical cancer
35–44	Most frequent age range of women diagnosed
$2B	Cost of treating cervical cancer to the US healthcare system



Addition of CTLA–4 to PD–1 improves Response Rates & Durability

Indication	Anti–PD–1 Overall Response Rate (ORR)	Anti–PD–1 + Anti–CTLA–4 ORR	Trial
Melanoma	40%	50%	CHECKMATE-067[1]
MSI-H CRC*	28%	46%	CHECKMATE-142[1]
SCLC**	11%	23%	CHECKMATE-032[2]
RCC***	21.5% (2L)	41.6% (1L)	CHECKMATE-025 (2L)[1] CHECKMATE-214 (1L)[1]

* Microsatellite Instability-High (MSI-H) Metastatic Colorectal Cancer; ** Small Cell Lung Cancer; *** Renal Cell Carcinoma

References: 1. OPDIVO [package insert] Princeton, NJ: Bristol-Myers Squibb Company. Accessed July 11, 2018.
2. Checkmate-032 (Hellmann, J Thorac Oncol , Vol. 12 , Issue 1 , S393 - S394)

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Dual-Track Regulatory Strategy — Cervical Cancer Strategy

1

PD-1 Monotherapy Projected Filing in 2020

Earliest path to potential FDA approval

Expands options to patients

2

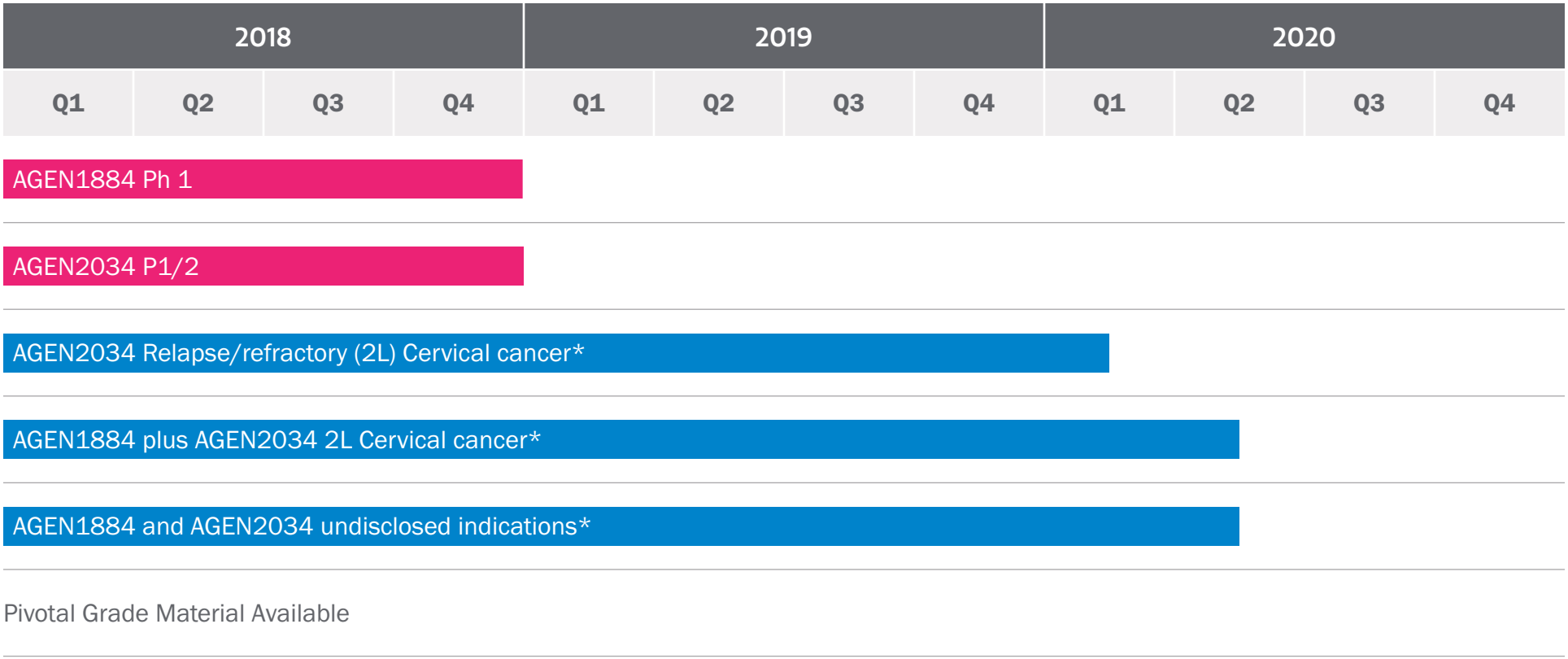
PD-1/CTLA-4 Combination Projected Filing in 2020

First to file combination potential

Expand response rates & durability

Monotherapy/Combination Approach to Maximize Market Opportunity

Planned Path to BLA: AGEN2034 (PD-1) & AGEN1884 (CTLA-4)



* Projections timelines and indications undisclosed
^ Designed as potential pivotal trials

Ph1 accrual | Pivotal design

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Early Signal of Clinical Benefit observed in 60% of 50 Evaluable Patients

Partial Responses	Stable Disease for ≥2 Tumor Assessments (>12 weeks)	Stable Disease for 1 Tumor Assessment (6 weeks)
Ovarian Cancer	Ovarian Cancer	Ovarian Cancer
Cervical Cancer	Ovarian Cancer	Ovarian Cancer
Breast Cancer	Cervical Cancer	Ovarian Cancer
	Cervical Cancer	Ovarian Cancer
	Endometrial Cancer	Cervical Cancer
	Endometrial Cancer	Cervical Cancer
	Endometrial Cancer	Endometrial Cancer
	Endometrial Cancer	Breast Cancer
	Ewing Sarcoma	Cholangiocarcinoma
	Prostate Cancer	Vaginal Cancer
	Adenoid Cystic Cancer	Soft Tissue Sarcoma
	Pancreatic Cancer	Leimyosarcoma
	Duodenal Cancer	Leimyosarcoma
	Colon Cancer	

1^Phase 1, open-label, dose-escalation trial in subjects with metastatic or locally advanced solid tumors, and Phase 2 expansion to evaluate efficacy in subjects with recurrent, unresectable, or metastatic (advanced) cervical cancer that has progressed after a platinum doublet. Reported on first 50 patients treated.

Investigator Reported Data – Data Cleaning Underway as of August 2018
Safety and pharmacology profile is consistent with drug class.

AGEN1884 (CTLA-4) Clinically Active and Tolerable

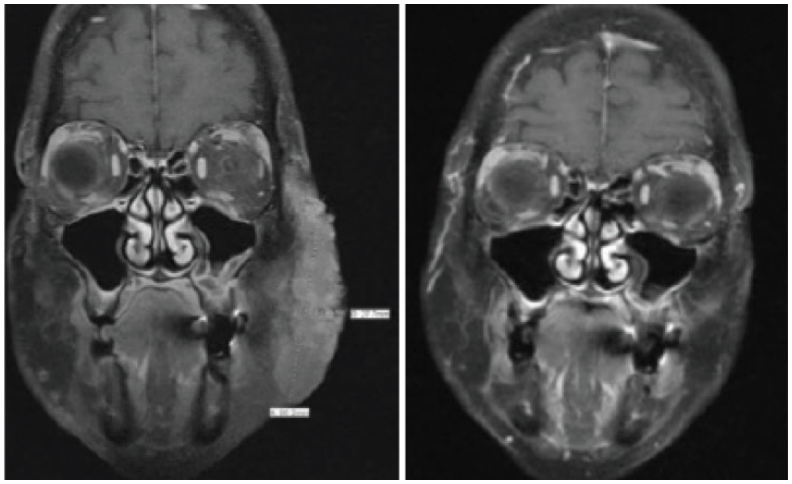
- First Dose of AGEN1884 08/2016
- At Week 12 (10/2016) SD and Week 21 (12/2016) PR
- At Week 43 (06/2016) CR and Imaging 11/2017 CR – Still Maintained

Subject 189-002

Complete Regression of Angiosarcoma of Nose and Cheeks after Treatment with AGEN1884 0.1 mg/kg



Baseline Week 43



Baseline Week 43

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AGEN1884 — Preliminary Responses Observed in 31% of Patients

- **Evaluable/Enrollment: 16/31**
- Safety and pharmacology profile is consistent with drug class (1/2 life ~16-23d)
- Clinical activity observed
- 1 complete response (1CR)
  - Refractory angiosarcoma
  - Failed multiple prior therapies
- 4 patients with stable disease

Overall Response	Cancer Type
Complete Response	Angiosarcoma nose/cheek
Stable disease	ACC
Stable disease	Metastatic Breast Cancer
Stable disease	Breast cancer
Stable disease	Ependymoma (anaplastic)

Phase 1 multicenter study to evaluate the safety, PK, and PD of an anti-CTLA-4 human monoclonal antibody (AGEN1884) with expansion cohorts at 1 mg/kg and 3 mg/kg; Reported on first 33 patients enrolled.

Investigator Reported Data – Data Cleaning Underway as of August 2018

Novel First/Best-In-Class Pipeline

Pipeline Designed For Comprehensive and Durable Patient Outcomes

AGEN2034/1884 Backbone IO Agents

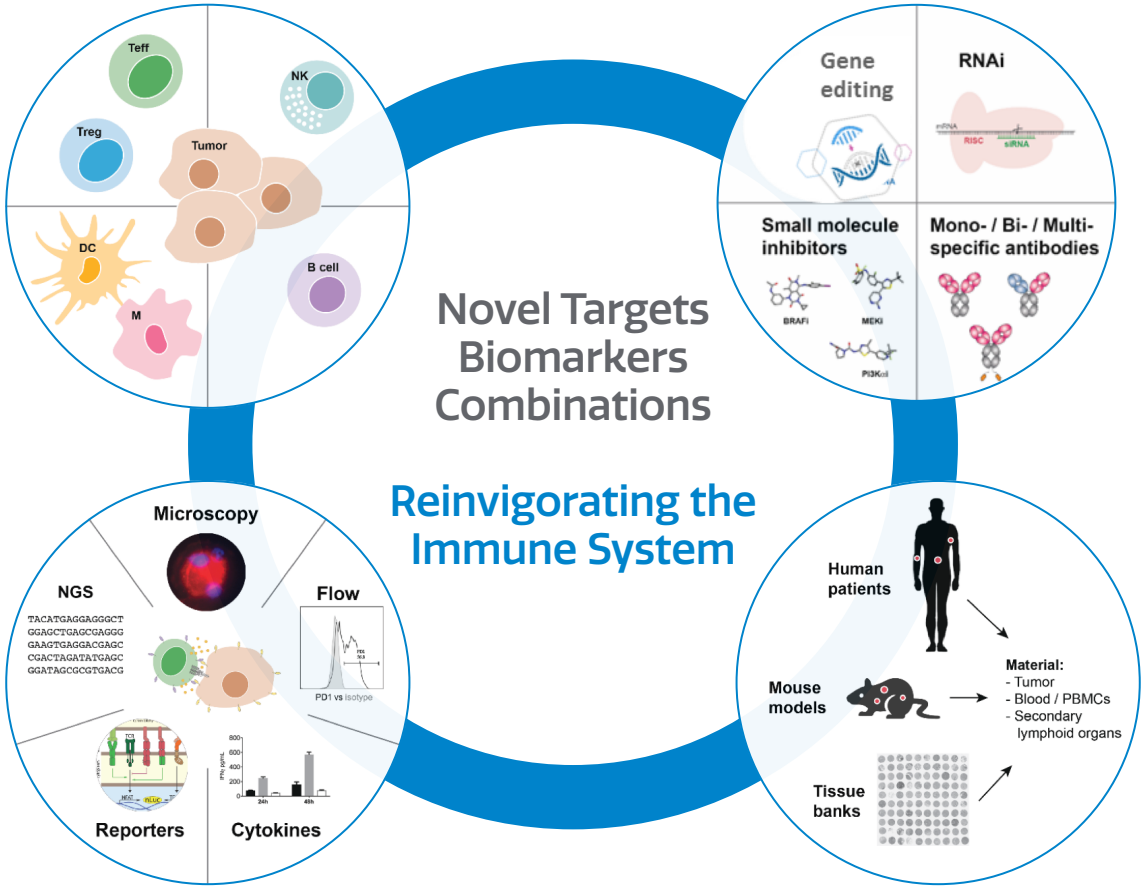
Next-Gen IO Therapies	Neoantigen Vaccines	Cell Therapy*
Address Therapeutic Resistance	**Establish Long-Term Memory**	**Introduce More Potent T Cells**
Attack further molecular pathways to break down cancer's defenses • Best-in-class antibodies (e.g. CD137, TIGIT) • Bispecific antibodies • Novel targets	Attack further molecular pathways to break down cancer's defenses • AutoSynVax • PhosphoSynVax • Prophage	Modify tumor-specific T cells to augment anti-cancer immunity • CAR-Ts • TCRs

* Program advancing through a subsidiary, AgenTus Therapeutics

An Integrated Approach to Target Discovery in Immuno-Oncology

Physiological Assays

Readout/Analysis Platforms



Perturbation Libraries

In vivo Material & Data

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ALPS — Changing the Way Drugs are Discovered & Developed



How It Works	Learn, Then Predict
High-Throughput Screenings Screening massive number of potential neoantigen targets for quick target generation	Model complex phenotypes of T-cells that enter the tumor microenvironment in real-time
Comparator Assays Computer-driven agnostic screening process to predict best pathways to block tumors	Track thousands of biomarkers over time that are indicative of a patient's prognosis
Potential Targets Derived Perform transcriptome, proteome, metabolome and epigenetic analyses from analyzing a single T-cell from a patient	Predict potential responses to a specific treatment, and calculate the best combination of targeted therapies for the patient
	Perform subgroup analyses to simulate and identify patient populations with predicted best responses

High Throughput Discoveries Drive New Clinical Programs



* Anticipated

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Neoantigen Vaccine Platform

ASV™ Clinically Validated* Neoantigen Vaccine Platform



ASV™

Potential best-in-class vaccine blueprint with QS-21 Stimulon® adjuvant for efficacy and manufacturing

Clinically validated in viral setting*

Long-term memory response (preclinical)

MHC class I and II presentation

Optimized delivery and peptide sparing

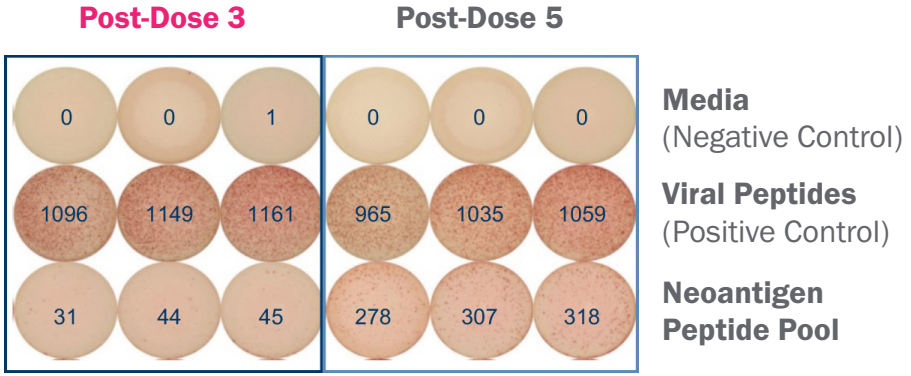
End-to-end logistics: 20 years operational & FDA audited

Clinical Status

Clinical safety & immunogenicity with ASV™ neoantigen vaccine platform demonstrated*

Combo with CPMs planned

ASV™ Promotes de novo Immune Recognition in Clinic*



Uduman et al. 2017 AACR

Clinically validated in viral dx setting and oncology compassionate use setting

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Partnerships Enhance R&D and Commercialization Capabilities



Adjuvants

- Shingrix with Agenus' QS-21 Stimulon
- Most effective Shingles vaccine (up to 97% efficacy)

Deal Economics

- Royalty monetized with HCR for $190M upfront*
- Up to $40M receivable*
- Initial FY sales projected to exceed $600M; 3X aggressive projections



Checkpoint Inhibitors

- Ongoing combination Ph1/2s
  - INCAGN1876 (GITR)
  - INCAGN1949 (OX-40)
  - INCAGN2385 (LAG-3)
- New candidate expected in clinic in 2018
  - INCAGN2390 (TIM-3)

Deal Economics

- $145M received^
- Up to $450M receivable



Checkpoint Inhibitors

- Lead antibody selected and advancing in Phase 1

Deal Economics

- $9M received
- Up to $85M receivable

* HCR royalty monetization detailed herein: https://www.sec.gov/Archives/edgar/data/1098972/000119312518005159/d522339d8k.htm
^ $95M in the form of equity investment

Key Anticipated Milestones Ahead

2018	**6 INDs Filed** First/Best-in-class checkpoint inhibitor and neoantigen vaccine programs
	3 Partnership Milestones Milestone payments up to $14M
2019	**Registration Trial Finishes Accrual** AGEN1884/2034 trial enrollment complete
	BLA Registration for AGEN2034 FDA filing preparation
	At least 2 INDs planned
2020	**Potential FDA Accelerated Approval for AGEN2034** PD-1 approval in advanced cervical cancer
	BLA Registration for AGEN2034/1884 Combination Potentially first PD-1/CTLA-4 combo approval in advanced cervical cancer

An Agenus Cell Therapy Company

AgenTus THERAPEUTICS

Bruno Lucidi, CEO AgenTus



- 30 years of industry experience
- Vice President and Head of Pediatric Vaccines at GSK Vaccines (developed $3bn global business)
- Worldwide Vice-President Virology & Oncology at Johnson & Johnson
- Leadership at Bristol-Myers Squibb responsible for EU strategy and launch of Videx® (didanosine), Zerit® (stavudine), Paraplatin® (carboplatin) and Taxol® (paclitaxel)
- Founding CEO of Idenix and the Chairman of Pharmasset where he laid the foundation for multi-billion dollar companies (MRK and GILD acquisitions $4bn and $11bn)

Differentiated Cancer Cell Therapy

Precision Receptors

- T-Rx Mammalian Display - Direct selection for function
- Targets optimal balance between activity and specificity

Novel Targets

- Proprietary target discovery and validation platforms
- Proprietary Phosphopeptide Tumor Targets

Allogeneic Format

- Allogeneic approach; “Off-the-shelf”
- Scalable, shorter diagnosis to treatment interval

For Information

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