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Jefferies 2018 Healthcare Conference
June 7, 2018

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.

Who is Agenus?

1994

Therapeutic cancer vaccines

Individualized Medicine

2000

Acquired QS-21

World's best adjuvant

GMP Personalized Medicine Manufacturing

2014 to Present

Built an innovation engine

Team to execute

Acquired/Built End to End capabilities

Discovery – cell line – manufacturing – development

Results

5 INDs in 18 months

6 INDs in 2018

2 INDs 2019

Clinical data >100 patients

*Program advancing through a separate subsidiary, AgenTus Therapeutics

^Includes 2 programs partnered with INCY

^^Commercial grade CTLA-4; PD-1 anticipated 1H2018

Agenus today – innovation and speed

I-O Capabilities & Portfolio

4 Therapeutic modalities
CPMs, Vaccines, Cell Therapy*, Adjuvants

6 Technology platforms
Mammalian, Yeast, Phage, Bispecific, PTTs, Cell therapy*

5 Ongoing trials^

5 Partnerships

Speed & Efficiency

5 INDs^
Filed in 2016 – 2017

6 INDs^
On track for 2018 filing

2 Additional INDs^
On track for 1H2019 filing

2 Manufacturing sites
Commercial grade^^

>12 Pipeline Candidates

Optimal Combinations

I-O backbone
CTLA-4 and PD-1

Novel targets
Next gen CTLA-4
Tumor microenvironment conditioners (BiSpecifics)**

CPMs + vaccine
PD-1 + CTLA-4 + ASV™

CPM + CPM
Novel CPM + CTLA-4 + PD-1

CELL THERAPY*
IND planned for 2019

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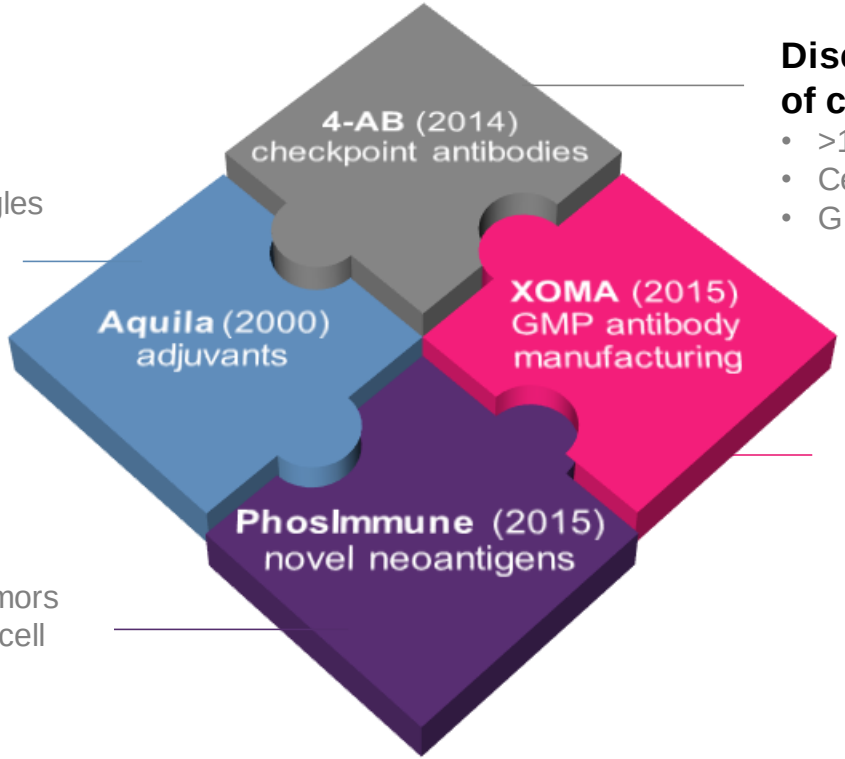
Key acquisitions

QS-21 Stimulon®

- Most powerful adjuvant
- Adjuvant in most effective Shingles vaccine (SHINGRIX)

Proprietary targets

- Novel targets common across tumors
- Proprietary targets vaccines and cell therapy



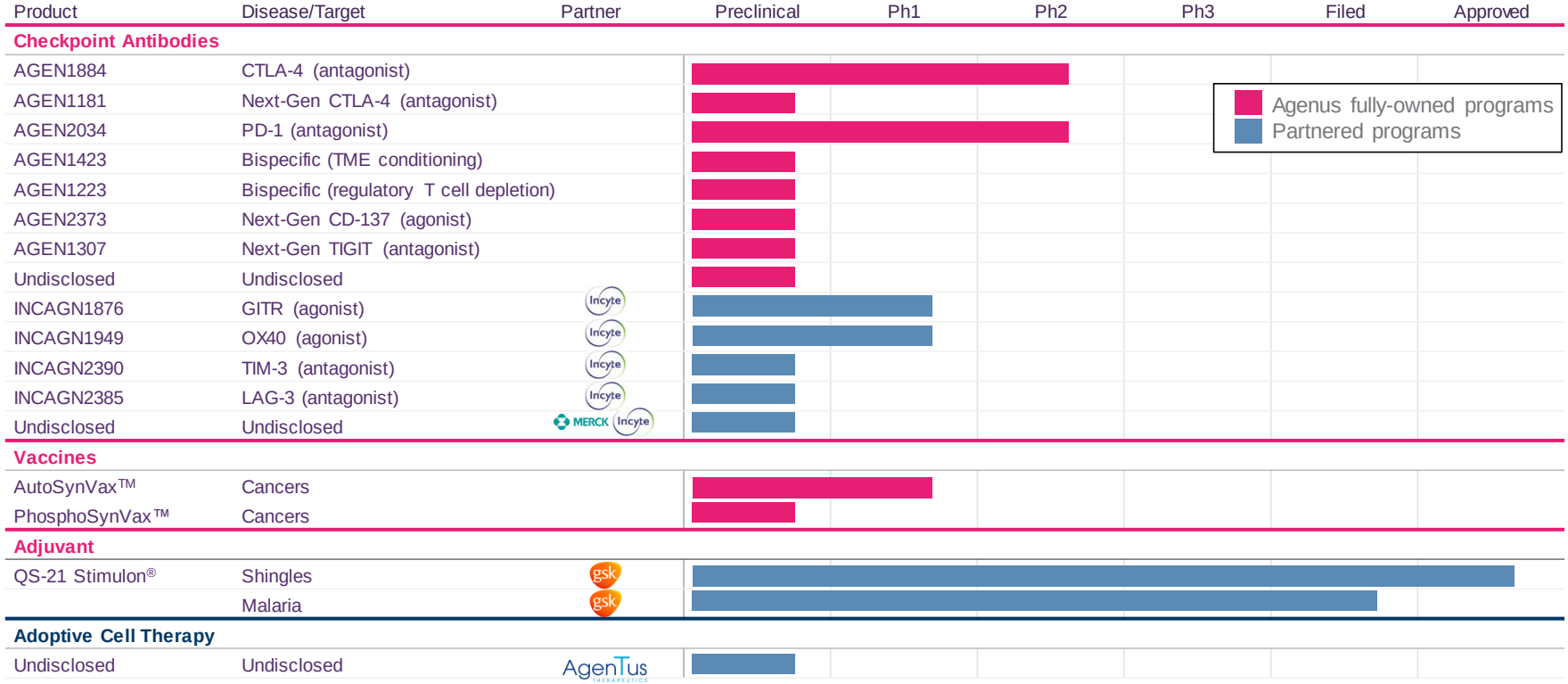
Discovery and development of checkpoint antibodies

- >12 programs
- Cell line development
- GMP manufacturing

Integrated GMP Antibody Manufacturing

- Rapid discovery to clinical material
  - Less than 12 months from clone evaluation to product fill

Agenus portfolio designed for rapid BLA & market expansion



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

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Agenus therapies enable effective combinations

Foundational Checkpoint Blockade

PD-1 & CTLA-4 Checkpoint Modulators (CPMs)
Phase II 2L Cervical Cancer Ongoing – BLA 2020
Additional Studies Planned

Enable Combination Therapy with Validated Targets

Next Generation Immunotherapies

First-in-Class TME Conditioning Agents – 2 INDs 2018
Best-in-Class CPMs – 3 INDs 2018/2019
Novel Target Discovery – Functional Genomics

Address Therapeutic Resistance

Neoantigen Vaccines

Warehouse & Personalized Neoantigen Vaccines
Vaccine + CPM Combination Study – IND 2018

Establish Long-Term Memory

Delivering on our partnerships



Shingrix with Agenus QS-21 Stimulon®

- Most effective Shingles vaccines (up to 97% efficacy)
- Initial FY sales projected to exceed $600M; 3X aggressive projections*
- Eligible to receive up to $40M sales milestones

*https://www.fiercepharma.com/vaccines/glaxosmithkline-s-shingrix-should-chip-about-600m-sales-year-execs-say

**Includes equity investments of $35M in February 2015 and $60M in February 2017



Multiple combination Ph2s ongoing:

- INCAGN1876 (GITR)
- INCAGN1949 (OX-40)
- Dose escalation complete; combinations underway

New candidates expected in clinic in 2018:

- INCAGN2390 (TIM-3) and INCAGN2385 (LAG-3)

Initial and Milestones:

- $140M received**
- Up to $510M receivable



1 undisclosed target

- Lead selection completed
- Initial milestone received; up to $99M receiveable

Foundational Checkpoint Antibodies

Critical enablers of I-O combination therapy

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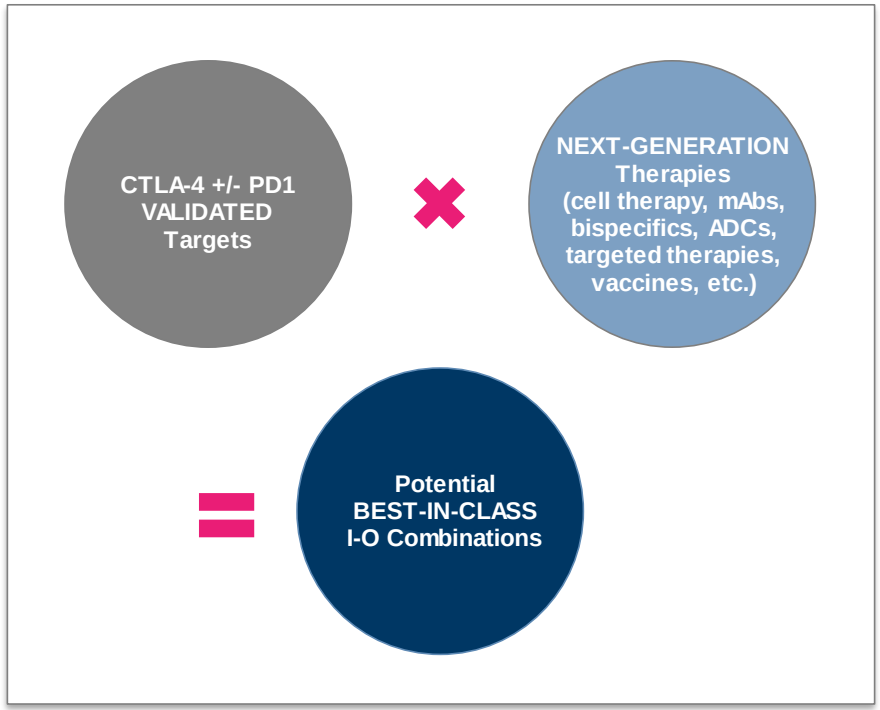
PD-1 and CTLA-4 are backbone innovative combinations

PD-1 / CTLA-4 is validated I-O/I-O antibody combination

AGEN2034[1]:
Anti-**PD-1** mAb –
Phase 2 ongoing

+

AGEN1884[1]:
Anti-**CTLA-4** mAb –
Phase 2 ongoing[2]



Recent posters on AGEN2034 and AGEN1884 available:
http://agenusbio.com/technology/publications/

1. AGEN2034 and AGEN1884 are partnered with Recepta for certain South American territories
2. Phase 2 recruiting in Australia

AGEN1884 (CTLA-4) and AGEN2034 (PD-1) – Clinically Active

- >100 patients treated; clinical benefit in 30 – 40% of patients with advanced refractory cancer
- Combination in 2L Cervical Cancer advancing

Complete responder post AGEN1884 treatment



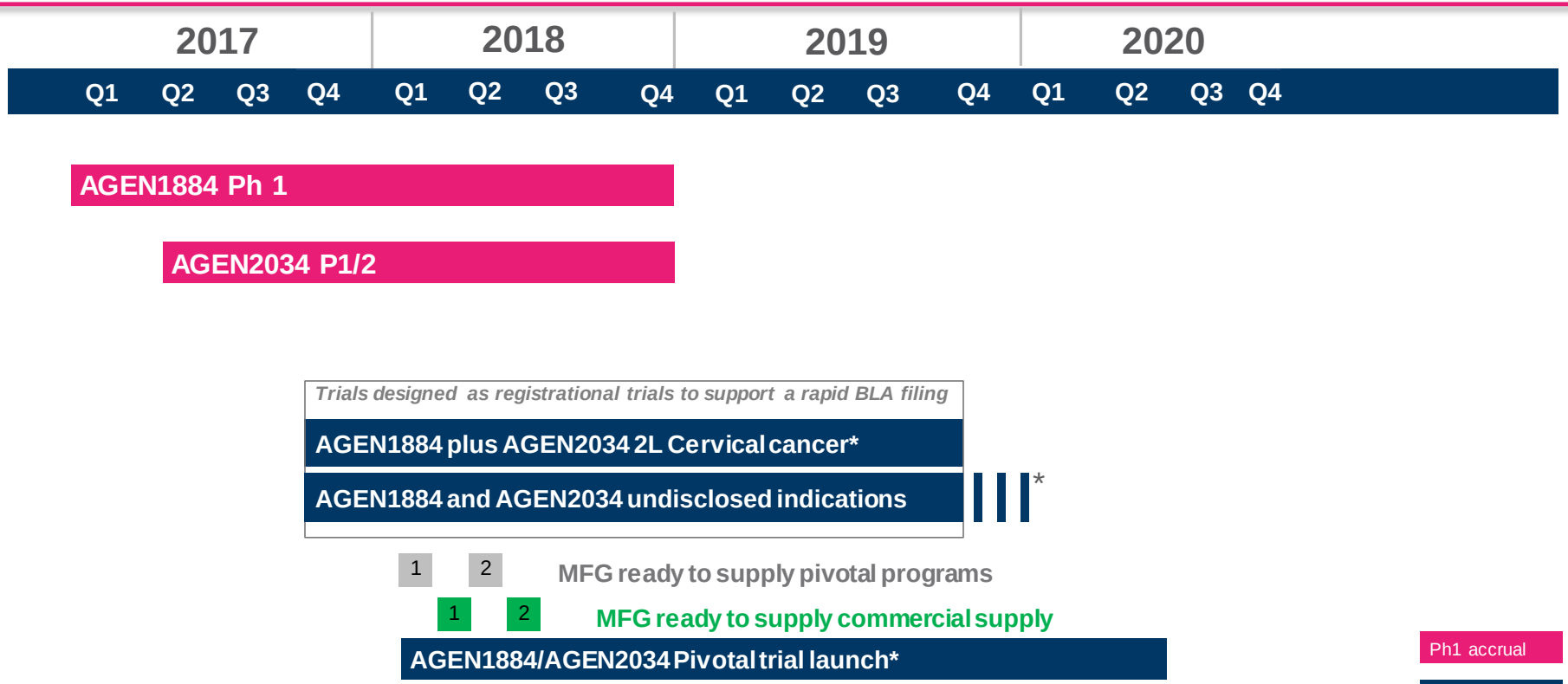
Baseline

Week 43

Wilky et al. ASCO 2018

CTLA-4 (AGEN1884)	Dose	Frequency
AGEN1884	0.1, 0.3, 1, 3, 6 mg/kg	Q3W
Keytruda + AGEN1884	200 mg 1 mg/kg	Q3W; Q6W
PD-1 (AGEN2034)	**Dose**	**Frequency**
AGEN2034	1, 3, 6, 10mg/kg;	Q2W; Q3W; Flat
Combination	**Dose**	**Frequency**
AGEN2034 + AGEN1884	1mg/kg 1mg/kg	Q2W Q6W
AGEN2034 + AGEN1884 **Ongoing**	3mg/kg 1mg/kg	Q2W Q6W

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



*Projections timelines and indications undisclosed
^Designed as potential pivotal trials
1=AGEN1884; 2=AGEN2034

Ph1 accrual

Pivotal design

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Expanding Beyond CTLA-4 & PD-1

Enabling cancer immune modulation beyond the T cell

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High Throughput Discoveries; 6 New Clinical Programs in ~2yrs*

Target ID/Validation	Functional genomics Immuno-Biology
Antibody Platforms	Phage Display Yeast Display (SECANT®) Mammalian Display (Retrocyte Display™) Immunization/Phage
Optimization Technologies	Fc-engineering Bioinformatics Computational/Structural Structural biology
Product Capabilities	Cell line development Manufacturing

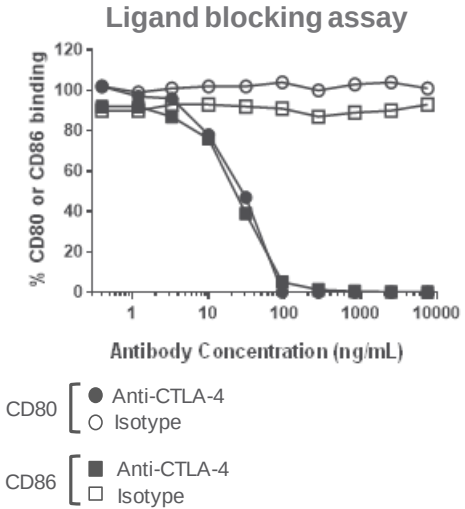
ASSET	HIT DISCOVERY	HIT OPTIMIZATION	LEAD OPTIMIZATION	CELL LINE DEVELOPMENT
Undisclosed bispecific #1 *Treg depletion, agonist costimulation*	*First-in-class Opportunity*			
Undisclosed bispecific #2 *TME conditioning, myeloid modulating*	*First-in-class Opportunity*			
CTLA-4 next generation *Fc engineered*	*Potential Best-in-class*			
TIGIT antagonist *Fc engineered*	*Potential Best-in-class*			
CD137 agonist *Conditionally active in TME*	*Potential Best-in-class*			
Undisclosed antagonist	*First-in-class Opportunity*			
Novel Bispecifics				

*anticipated

Next-Generation CTLA-4 with Novel Mechanisms – Planned IND 2018

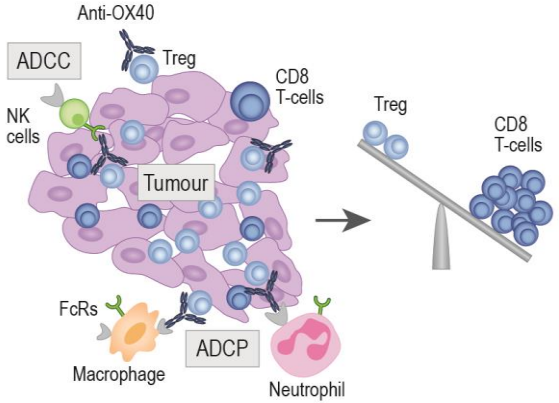
Mechanism #1

Blockade of CD80 & CD86 binding to CTLA-4



Mechanism #2

Depletion of intratumoral Tregs *via* co-engagement of FcγRs

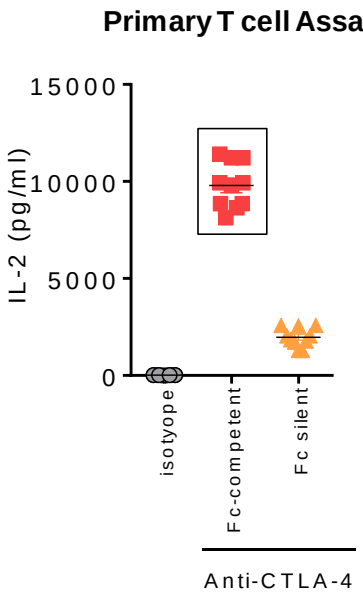


Smyth M. et al., *ICB* 2014
Bulliard Y. et al., *ICB* 2014
Bulliard Y. et al., *JEM* 2013
Simpson et al., *JEM* 2013
Shelby et al., *Can. Immunol. Res.* 2013

Mechanism #3

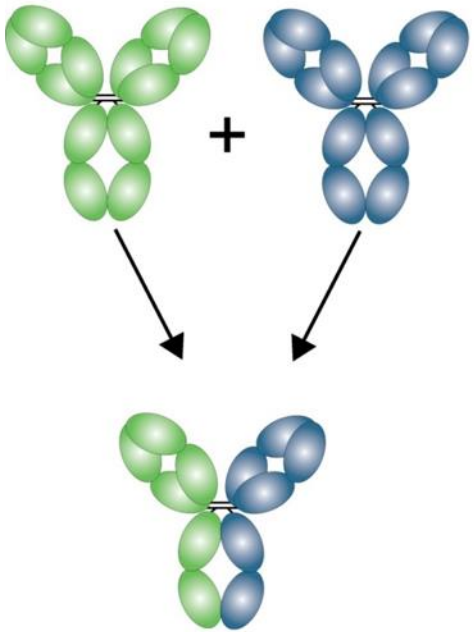
Agenus discovery

Enhanced T cell priming



Agenus Data

Best in Class & First in Class Bispecifics – Planned for IND in 2018



- **Regulatory T cells impair productive anti-tumor immune responses with multiple mechanisms of suppression**
- **Targeted elimination of regulatory T cells within the TME would address multiple suppressive mechanisms (*i.e.* in a single therapy)**
- **Agenus' novel bispecifics target elimination of regulatory T cells within the TME to address multiple suppressive mechanisms**
  - Selectively deplete intratumoral regulatory T cells as well as condition the tumor microenvironment.
  - May address tumor escape mechanisms in solid tumors as well as hematologic tumors, like B cell lymphoma.

Meng et al. Nat Rev Car. 2016
Liu et al. FEBS. 2016
Shang et al. Sci Rep. 2015

Neoantigen Vaccine Platform

Enabling differentiated personalized and warehouse vaccine offerings

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ASV™ Clinically Validated* Neoantigen Vaccine Platform

ASV™

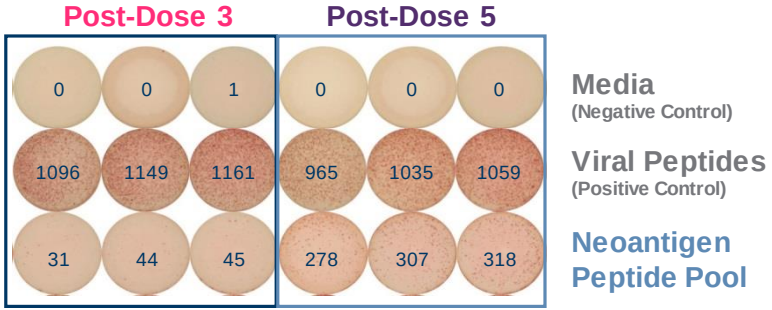


- **Potential best-in-class vaccine blueprint with QS-21 Stimulon® adjuvant for efficacy and manufacturing**
- Clinically validated in viral setting*
- Long-term memory response (preclinical)
- MHC class I and II presentation
- Optimized delivery and peptide sparing
- End-to-end logistics: 20 years operational & FDA audited

Clinical Status

- Clinical safety & immunogenicity with ASV™ neoantigen vaccine platform demonstrated*
- **Combo with CPMs planned for 2018**

ASV™ promotes *de novo* immune recognition in clinic*



Uduman et al. 2017 *AACR*

*Clinically validated in viral dx setting and oncology compassionate use setting


AgenTus
THERAPEUTICS
www.agentustherapeutics.com
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www.agenusbio.com

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


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