Sangamo to acquire TxCell

Building the leader in CAR-Treg cell therapy for immunology

July 23, 2018

Forward Looking Statements

This presentation contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, as amended. These forward-looking statements include, but are not limited to, statements related to the anticipated completion of the purchase by Sangamo of the TxCell ordinary shares pursuant to the definitive stock purchase agreement, or the block purchase, the filing and completion of the cash tender offer for TxCell ordinary shares, and the anticipated timing and benefits thereof; Sangamo's beliefs as the potential of CAR-Treg therapies; Sangamo's plans to submit a clinical trial authorization application (CTA) in Europe for TxCell's first CAR-Treg investigational product candidate in 2019, and to initiate a Phase 1/2 clinical trial later in the year; Sangamo's intent to evaluate the potential of CAR-Treg therapies to prevent graft rejection in solid organ transplant and for the treatment of autoimmune diseases; the intent to genetically modify Tregs to create a new class of antigen and tissue specific immunosuppressive medicines for autoimmune diseases; the expectation that TxCell will become a subsidiary of Sangamo operating under the name of Sangamo Therapeutics SA; the intent to delist TxCell and the intended treatment of TxCell warrants; and other statements that are not historical facts. These statements are based upon our current expectations and speak only as of the date hereof. Our actual results may differ materially and adversely from those expressed in any forward-looking statements as a result of various factors and uncertainties. Factors that could cause actual results to differ include, but are not limited to, Sangamo's ability to complete the block purchase and the cash tender offer on the proposed terms and schedule, including risks and uncertainties related to the satisfaction of closing conditions and the receipt of requisite AMF and other regulatory approvals; the possibility that competing offers will be made; risks associated with business combination transactions, such as the risk that the acquired TxCell business will not be integrated successfully or that such integration may be more difficult, time-consuming or costly than expected; risks related to future opportunities and plans for the combined company, including uncertainty of the expected future regulatory filings, financial performance and results of the combined company following completion of the proposed transaction; the possibility that if Sangamo does not achieve the perceived benefits of the proposed acquisition as rapidly or to the extent anticipated by financial analysts or investors, the market price of Sangamo's common stock could decline; uncertainties related to the planned CTA submission and initiation and completion of clinical trials; whether clinical trial results will validate and support the safety and efficacy of the planned CAR-Treg product candidate; and the reliance on third-parties to meet their clinical and manufacturing obligations. These risks and uncertainties are described more fully in Sangamo's Annual Report on Form 10-K and Quarterly Reports on Form 10-Q as filed with the Securities and Exchange Commission. Forward-looking statements contained in this presentation are made as of the date hereof, and Sangamo undertakes no obligation to update such information except as required under applicable law.

Agenda

1. Proposed TxCell acquisition and Sangamo corporate strategy
2. Treg biology and engineered CAR-Tregs
3. Clinical development of CAR-Tregs for renal transplant and autoimmune diseases
4. Transaction details and next steps

Sangamo + TxCell: Taking the lead in CAR-Treg cell therapy development

Seize leadership of CAR-Treg cell therapy in immunology

- Acquire lead therapeutic program in engineered Tregs (regulatory T cells), exclusive access to CARs (chimeric antigen receptors) and relationships with KOLs
- Synergy between Sangamo's *ex vivo* gene editing capabilities and TxCell's expertise in Treg biology / manufacturing holds the potential for innovative cell therapies for autoimmune diseases

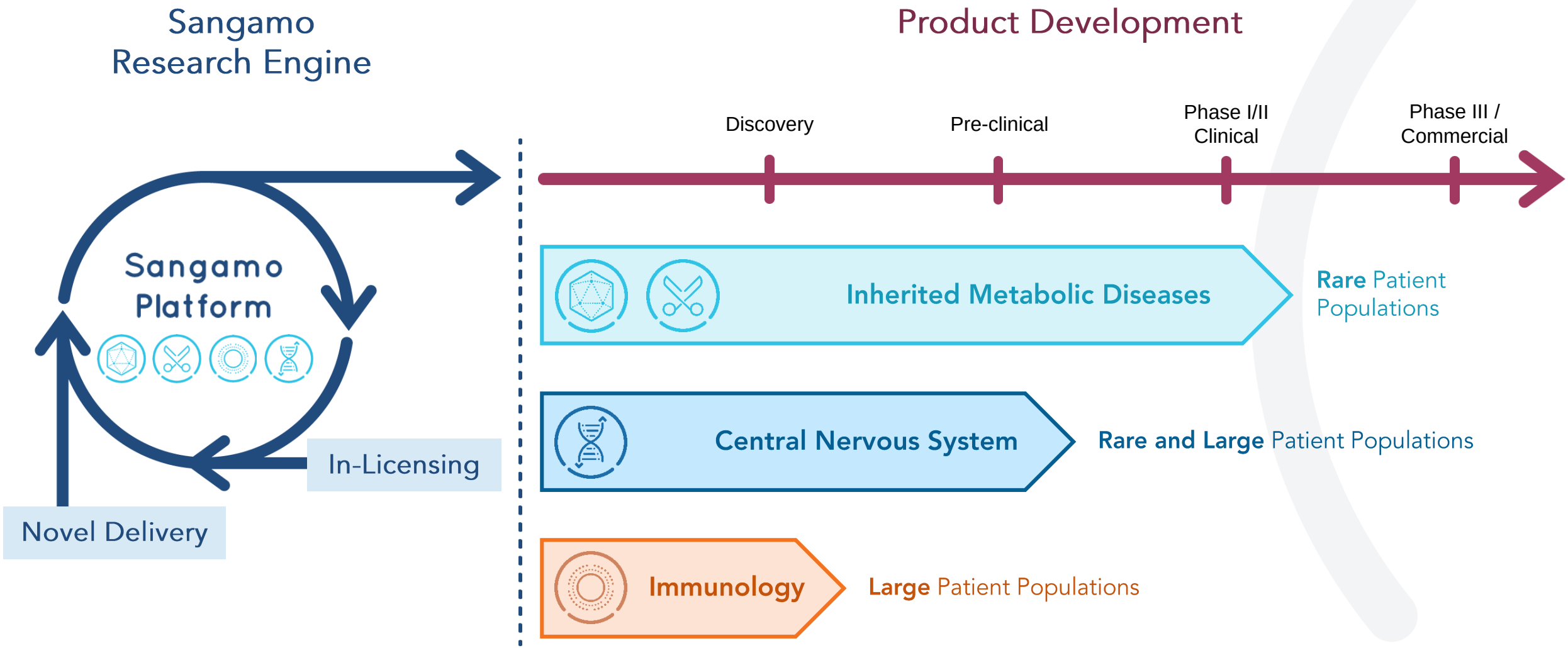
Leapfrog the competition, positioning Sangamo at the forefront of this emerging field

- Acquisition accelerates Sangamo's immunology strategy by two years
- 1st CAR-Treg clinical trial in 2019; ZFN-edited CAR-Treg programs to follow

Capture the next big opportunity in cell therapy

- Leverage precision, efficiency and specificity of ZFN gene editing platform
- Expect to be the first in clinic with a CAR-Treg candidate, with the goal of creating next-generation treatments for rare and highly prevalent diseases (e.g. multiple sclerosis, Crohn's disease, diabetes)
- Antigen-specific, tissue targeted CAR-Tregs have the potential to overcome limitations of systemically-acting immunosuppressants

Our vision to develop and commercialize our own products across three therapeutic areas



Genome Editing | Cell Therapy | Gene Regulation | Gene Therapy

TxCell delivers immediate CAR-Treg expertise

TxCell

- Professional and integrated team with a wealth of Treg know-how
- Leaders in the discovery and development of Treg-based cell therapies
- Robust IP for Treg and CAR-Treg
- Extensive knowledge of Treg biology
- Industry leading experience in CAR-Treg manufacturing
- Bolt-on autoimmune disease pipeline and a lead CAR-Treg asset to enter the clinic in 2019

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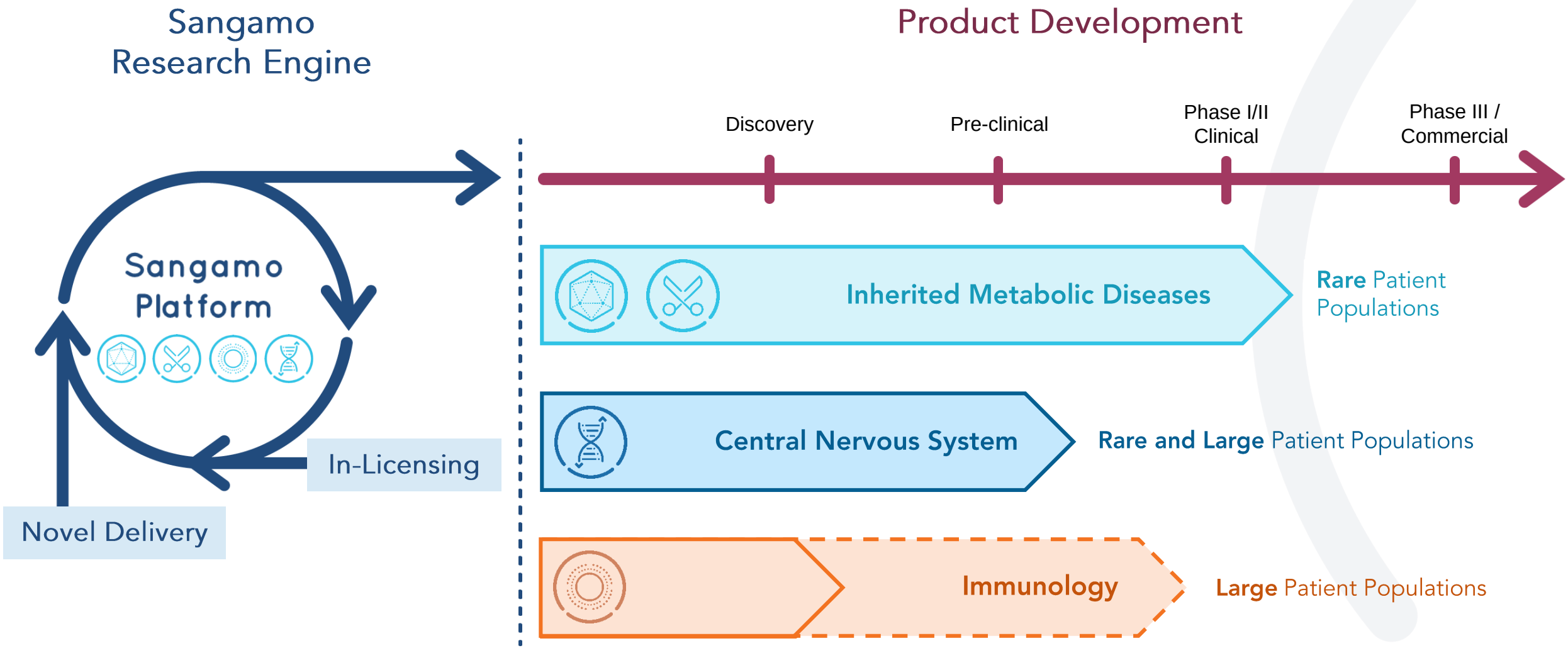
TxCell's expertise accelerates realization of Sangamo's immunology strategy



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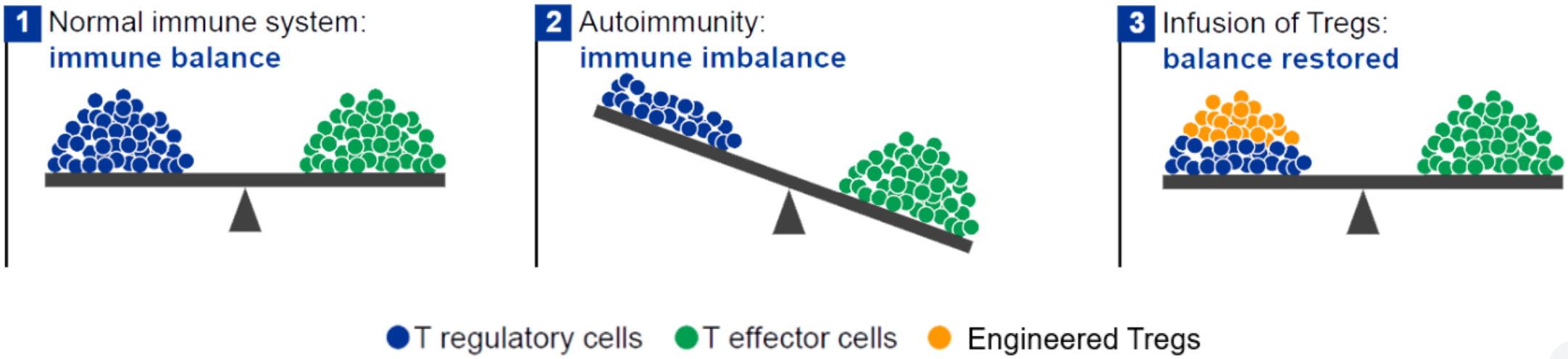
Regulatory T Cells

Treg biology and
CAR-Tregs

Regulatory T cells (Tregs): a new class of cell-based therapeutics

- Tregs maintain immune homeostasis at various tissues
- The suppressive function of Tregs inhibits mounting inflammatory responses. i.e. Tregs confer tolerance
- Tregs can be used as a cell-based therapy across various applications where induction of immune tolerance can restore homeostasis and counter disease-state
  - e.g. prevention of transplant rejection, treatment of a multitude of autoimmune diseases



Prior studies with non-engineered Tregs point to the potential for improved safety and efficacy of CAR-Tregs

Safety

- Infusion of non-engineered Tregs has been tested across several indications:
  - Kidney[1], liver[2] and bone marrow[3] transplant
  - Type 1 diabetes[4]
  - Crohn's disease[5]

Efficacy

- Clinical efficacy observed in early phase studies
  - Liver transplant: induced operational tolerance in 7/10 subjects[2]
  - Bone marrow transplant: reduce incidence of acute GvHD from 45% to 9%[3]
  - Crohn's disease: induced CDAI* remission in 38% of subjects 5 weeks post-infusion at optimal dose[5]

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1. Mathew et al 2018; 2. Todo et. al. 2016; 3. Brunstein et al 2016; 4. Bluestone et. al. 2016; 5. Desreumaux et. al. 2012
*Crohn's Disease Activity Index

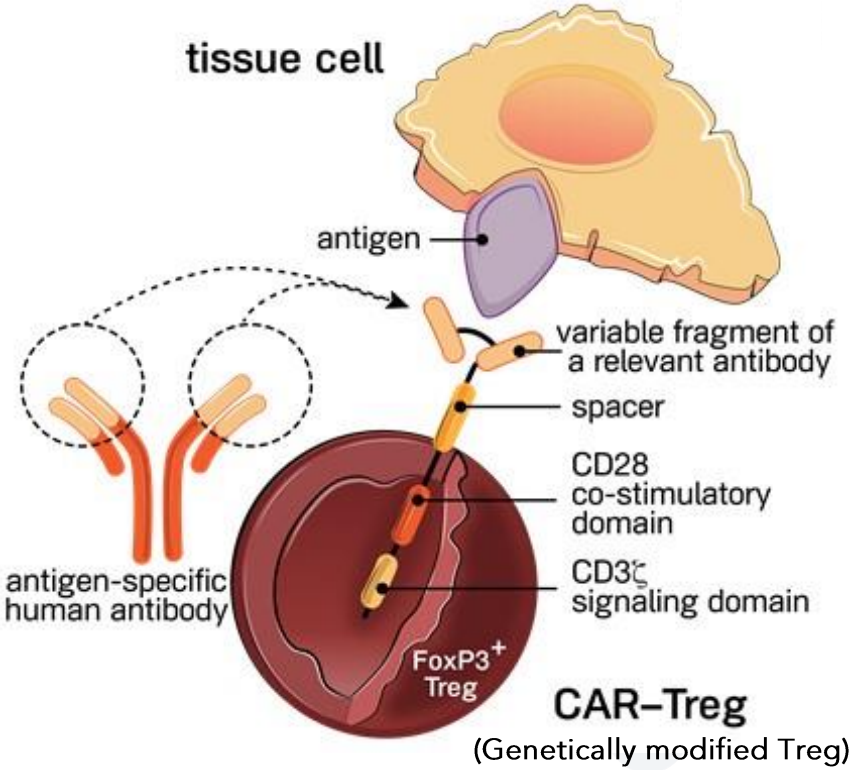
CAR-Tregs have the potential to generate antigen and tissue specific cell therapy products for immunology

Engineered CAR-Tregs

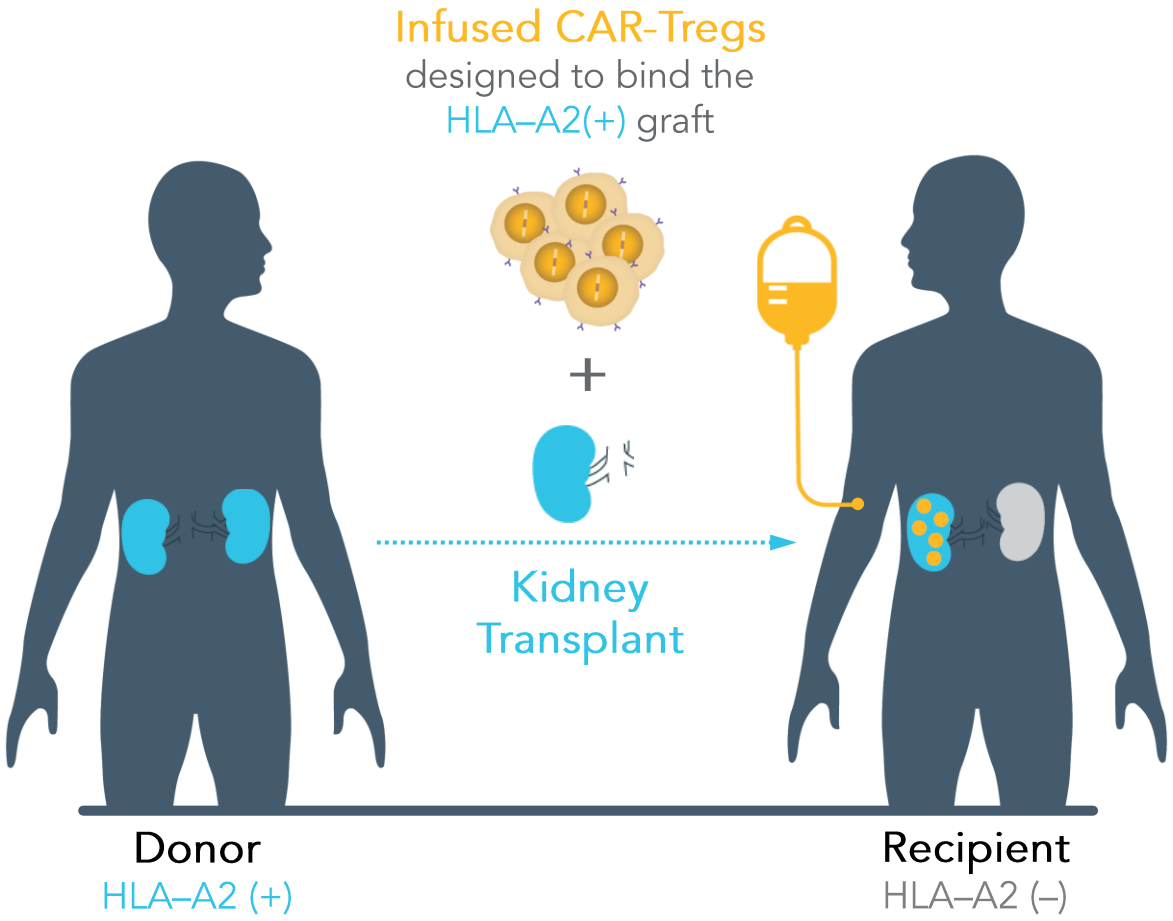
Cell Product Characteristics

- **Antigen localized:** tissue-specific activity
- **Antigen activated:** better controlled cell product and dosing
- **Robust and scalable** processes

Antigen-specific CAR-Treg



HLA-A2 CAR-Treg: induction of site-specific immune tolerance in solid organ transplant



- HLA-A2 antigen on graft is recognized by CAR-Treg cells
- Activated CAR-Treg cells exert **site specific** suppressive function

Objective: achieve tolerance and long-term protection of graft

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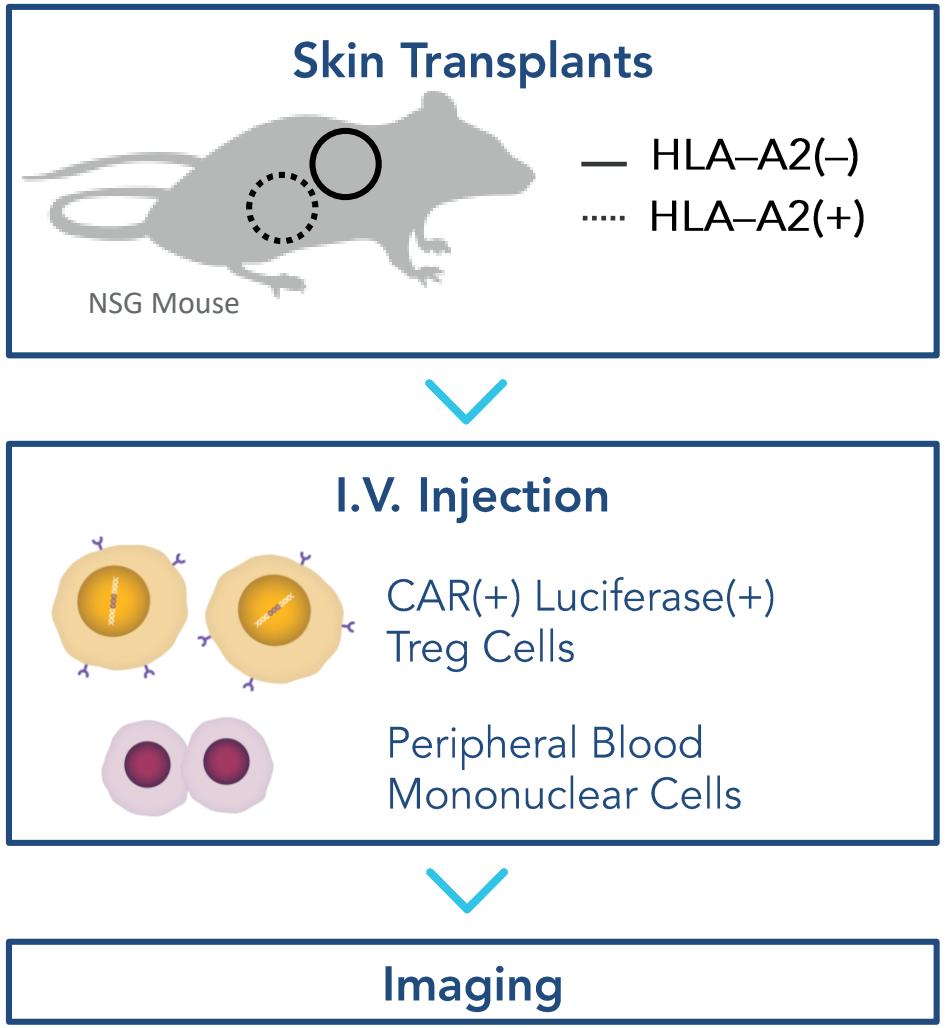
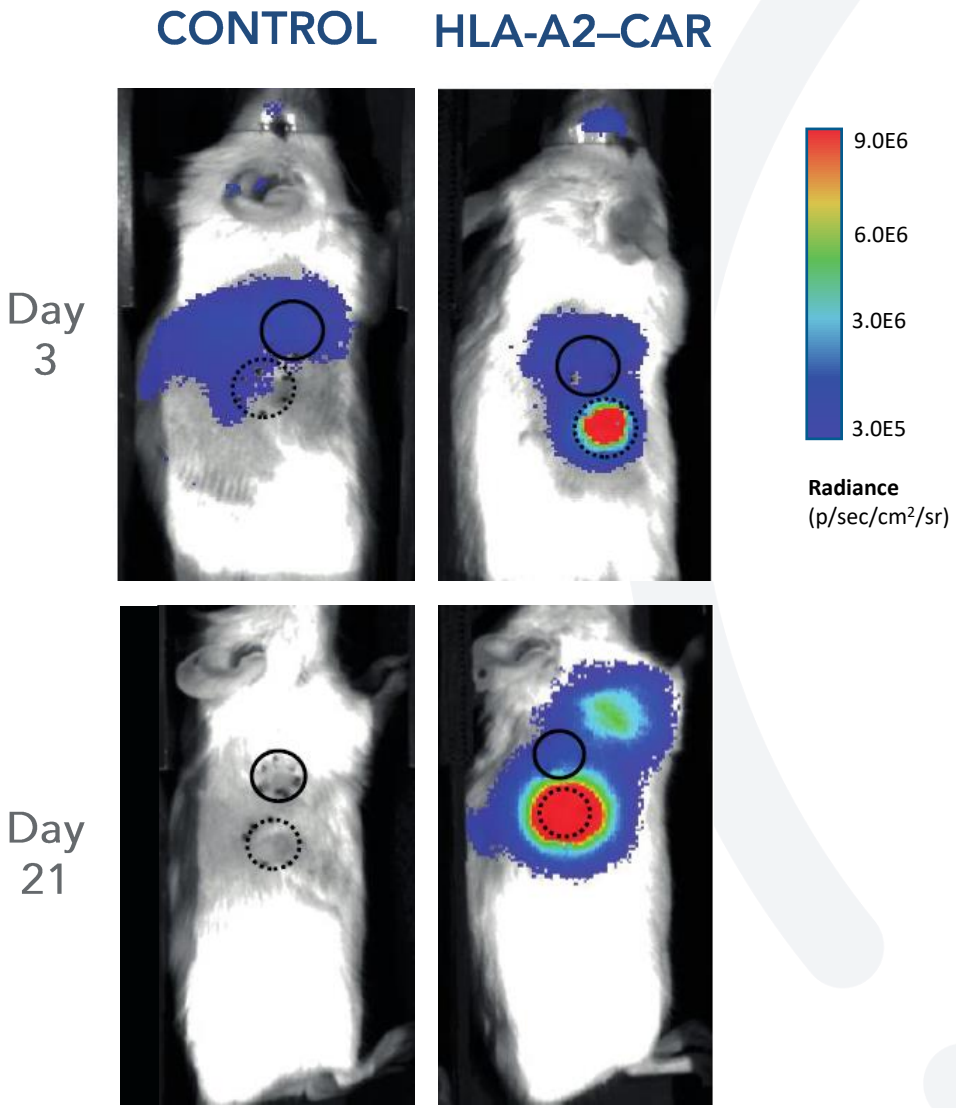
CAR-Tregs achieve precise and durable targeting of skin graft in a mouse model





Data from Megan Levings, PhD, University of British Columbia

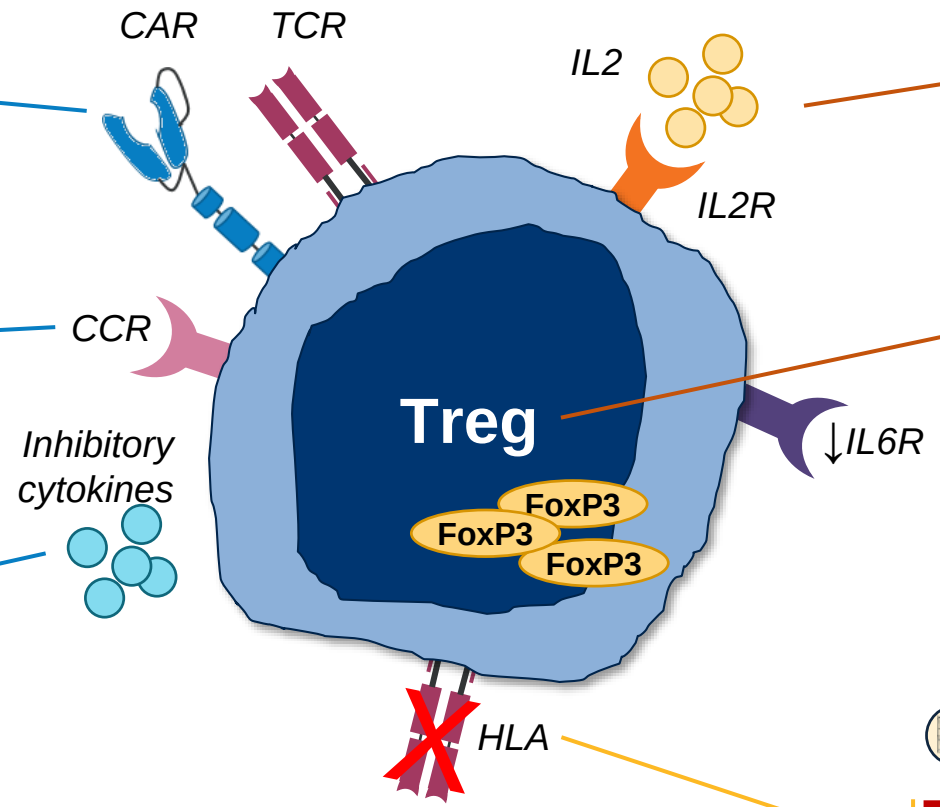
Sangamo plans to develop next generation CAR-Treg products with ZFN gene editing

Increase Efficacy & Potency

Target tissue-specific antigen(s) w/CAR

Promote localization to disease site(s) with chemokine receptors

Bolster immunosuppressive function



Increase Persistence & Stability

Increase Treg proliferation and durability

Improve CAR-Treg stability and safety

Off-The-Shelf Approach

Genetic engineering to allow allogeneic application of CAR-Tregs

Clinical Development

CAR-Treg renal transplant

Autoimmune diseases

Tx200: CAR-Treg renal transplant study designed to provide proof-of-concept and inform next generation ZFN CAR-Treg programs

1 Proof of Concept

Initial indication (renal transplant) evaluates:

- Safety of escalating doses of potent tissue-specific therapy
- Localization of CAR-Tregs to target organ
- Stability and duration of CAR-Tregs
- Manufacturing and logistics to treat transplant patients
- Therapeutic impact of localized CAR-Treg immunosuppression

2 Discover

Data from renal transplant program inform:

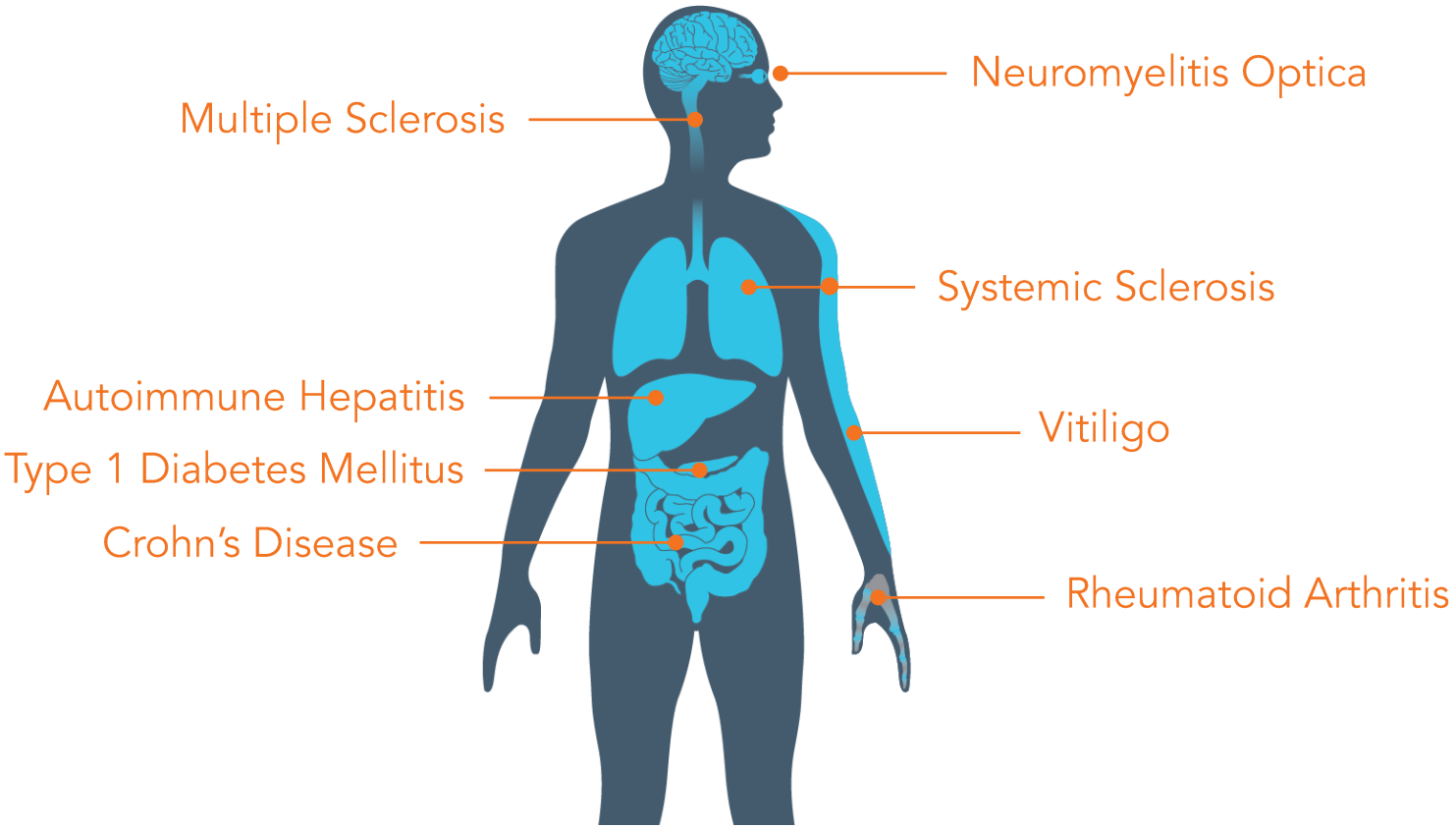
- Development of other transplant programs
- Future programs in autoimmune diseases

3 Design ZFN CAR-Tregs

Build out Treg immunology pipeline with ZFN-mediated CAR editing, including allogeneic product candidates for:

- Lung / skin transplants
- Multiple sclerosis
- Crohn's disease

Market opportunity for Tregs holds significant potential in autoimmune diseases



Several autoimmune diseases with large patient populations and high unmet need present significant market opportunities for CAR-Treg cell therapies

Closing Remarks

- Financials
- Next steps

Transaction details and next steps

- Consideration of €72 million (€2.58 per share) to acquire 100% of equity interests on debt-free and cash-free basis

- Next steps:
  - September 2018: expected to finalize purchase of 53% of shares following review by French financial regulatory authorities
  - Launch simplified tender offer for shares not purchased previously
  - Complete procedure for remaining shares

- Q4 2018: expected acquisition completion

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Thank you