

# Driving the Next Generation of Cell-Based Therapies

MaxCyte Corporate Presentation

NASDAQ: MXCT • LSE: MXCT

April 2024



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# A Leading Provider of Cell-Engineering Platform Technologies



**With 683 platforms in place\*, our proprietary technology unlocks the significant potential of advanced therapeutics**



- Extensive product portfolio, supported by 150 granted U.S. and foreign patents
- Total revenue of \$41.3 million in 2023, and core revenue of \$29.8 million
- Gross profit \$36.5 million in 2023, representing gross margin of ~89%
- Total cash, cash equivalents and investments were \$211.2 million as of December 31, 2023.

**Leading the growing next-generation cell therapy market and capitalizing on rising demand for non-viral engineering approaches**



- 20+ years of cell engineering expertise; 36+ field sales and application scientists that support our customers\*
- Enables delivery of almost any molecule into almost any cell type
- Leads the industry in performance (measured by consistency, efficiency, viability, flexibility and scale)
- FDA Master File and International Technical Files provide clear regulatory path, potentially reducing clinical risk/shortening clinical development
- Used to manufacture drug products for over 60 clinical trials to date

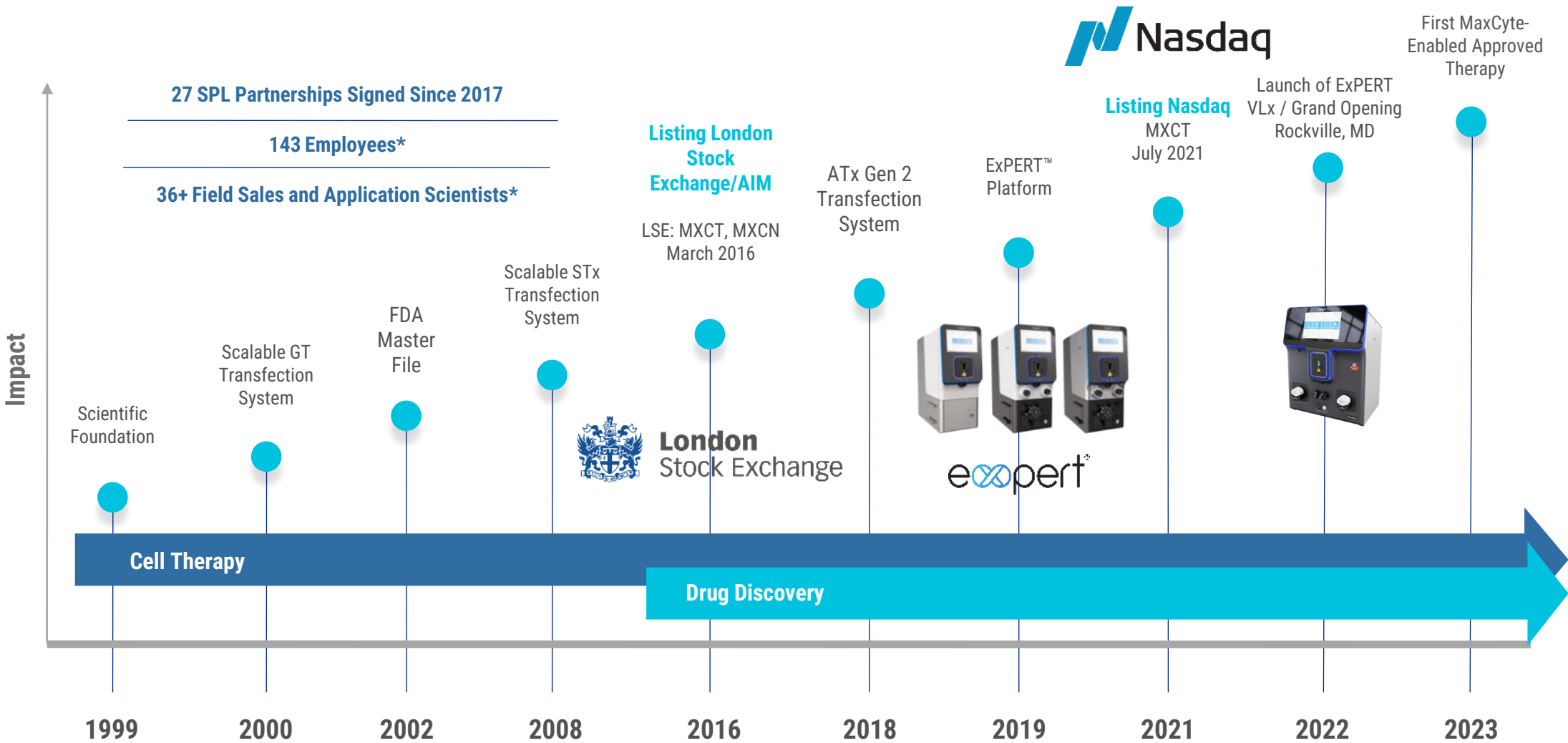
**Innovative business model focused on value creation and shared partnership success**



- Allows MaxCyte to participate in the value created by our partners' programs
- 27 SPL partnerships, which include approximately \$2B in potential pre-commercial milestone payments with upside from commercial sales-based payments
- Focused over the long-term on creating a diverse portfolio of patient treatments for indications developed by our strategic partners

\*As of December 31, 2023

# Who We Are - Collaborative, Innovative and Experienced Partner

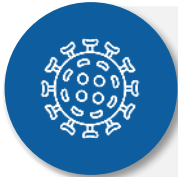


\*As of December 31, 2023

# ExPERT™ Platform Addresses Industry Challenges



## Challenges



Lack of industry standard for process design causes development to be costly and inconsistent across manufacturing runs



Next-generation cell therapy programs have become increasingly complex requiring multiple edits



Regulatory risk increases with new unknowns (donor cells, next-gen approaches, new indications)



Vein-to-vein manufacturing times are high; optimizations needed to deliver medicines to patients faster

## MaxCyte's Solutions



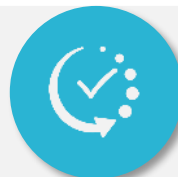
MaxCyte technology allows plug and play processes with rapid optimization delivering reproducible outcomes and the ability to seamlessly scale up from pre-IND to the clinic and commercialization



Flow Electroporation® technology facilitates multiplex and sequential engineering without the payload and capacity limitations of viral approaches

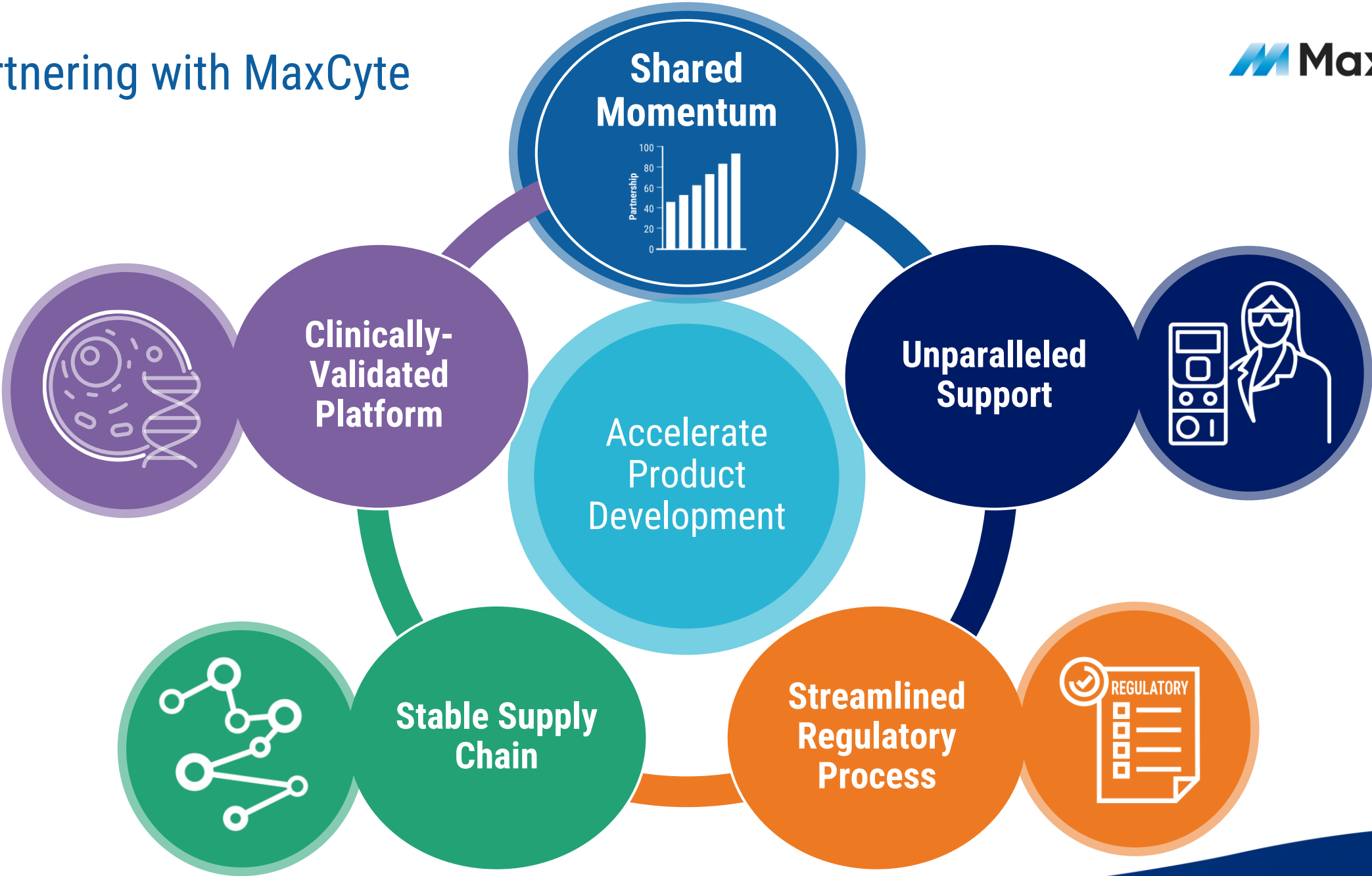


FDA Master File can be referenced in regulatory filings to accelerate and de-risk regulatory review

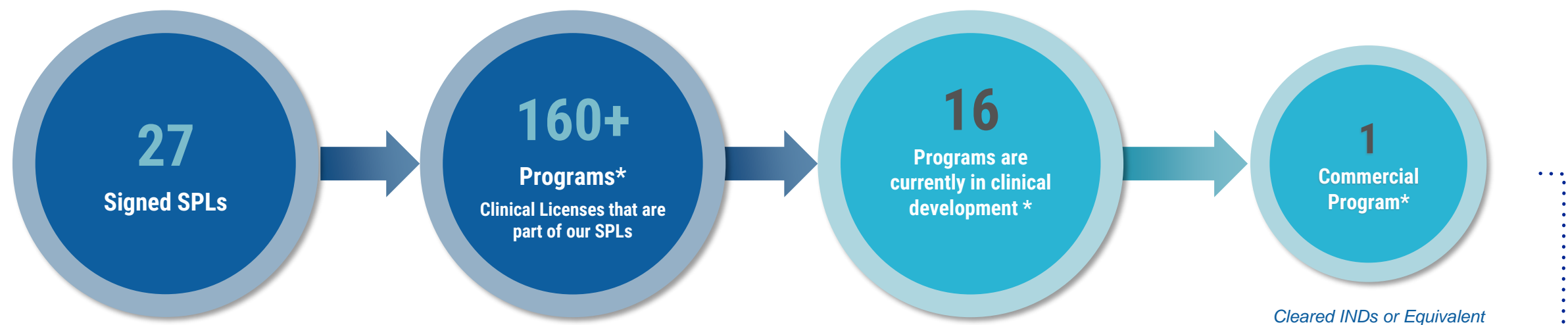


ExPERT™ platform provides industry leading transfection efficiency & cell viability at high scale in 30 minutes or less, enabling manufacturers to quickly scale up production

# Partnering with MaxCyte



# MaxCyte: Leading Partner for Complex Cellular Engineering



*\*Updated as of December 31, 2023*



**Strategic Platform Licenses (SPL), including 5 in 2023 and 4 in 2024**



# Value Creation from SPLs

Licensing deals include significant development milestones and high-value participation in future commercial success of partners



Potential value of pre-commercial (clinical development) milestones from SPLs: ~\$2B



Sales-based payments upon partner's product commercialization



Recurring revenues from lease of instruments and sales of single-use disposables that grow with program success

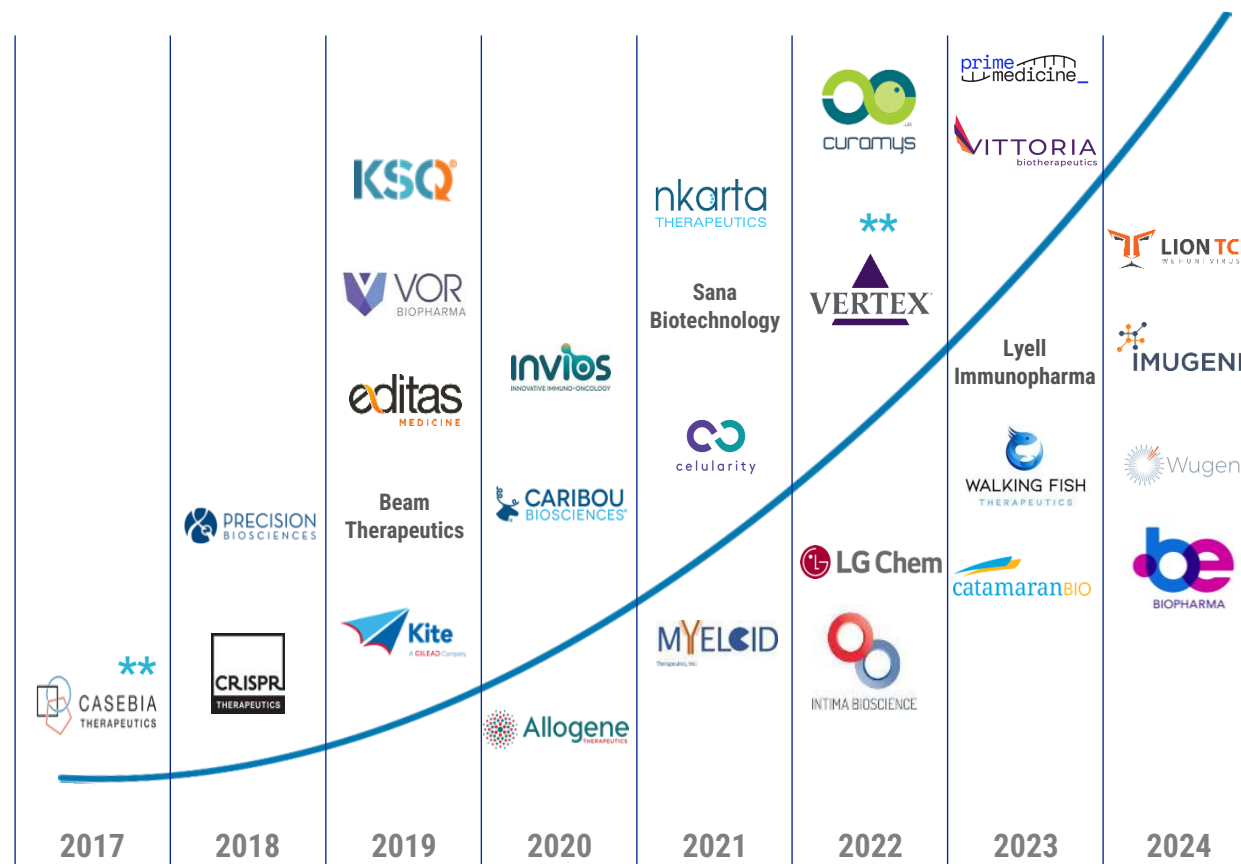


Milestone revenue is MaxCyte's highest growth revenue stream

\*\*Casebia/CRISPR's SPL partnership (signed in 2017) included the rights to use MaxCyte's technology in the development of exa-cel (formerly known as CTX001). As announced in the press release on September 28th, 2022, Vertex has signed an SPL agreement with MaxCyte – Vertex has obtained the clinical and commercial rights to use MaxCyte's technology for the development of exa-cel (formerly known as CTX001).

## Cumulative Potential Pre-CML Milestones

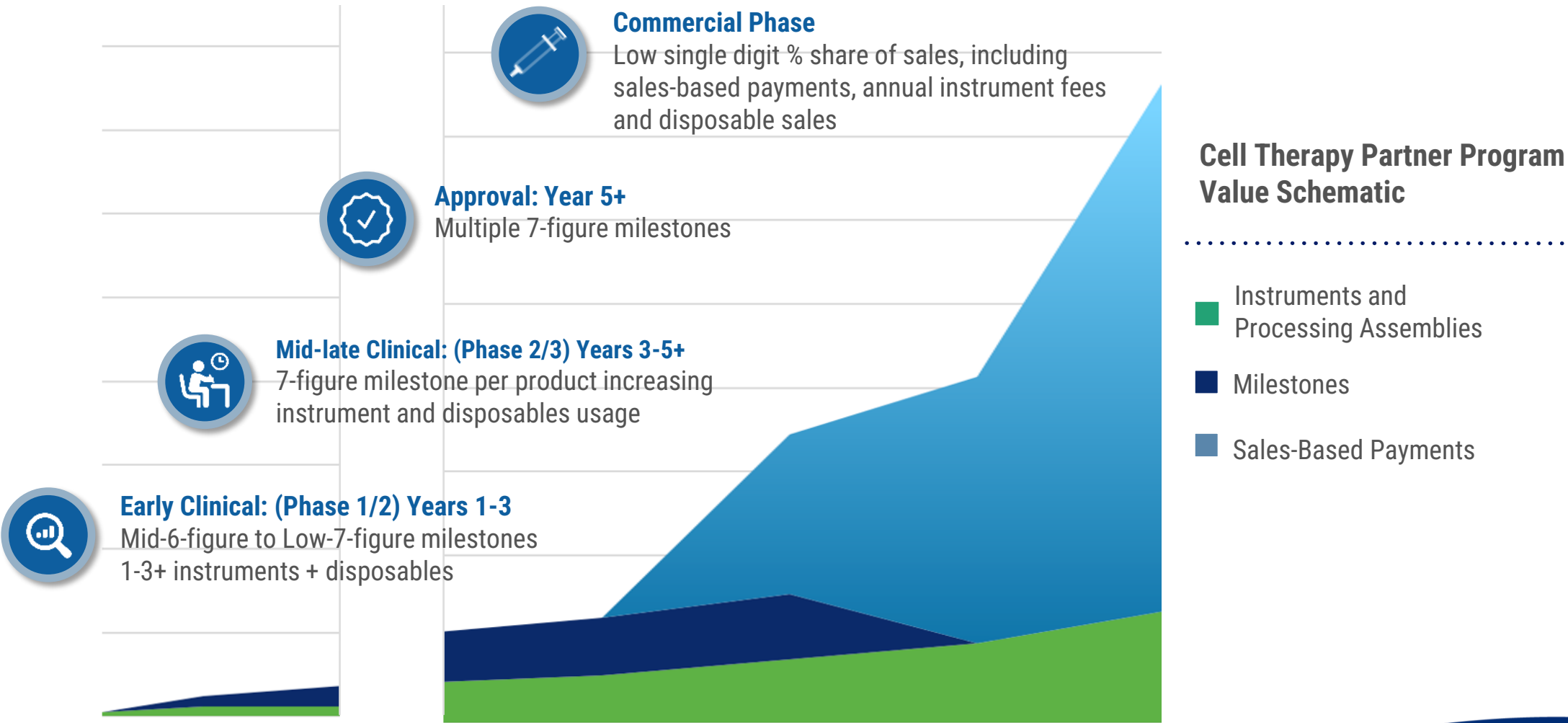
Potential Value of Pre-Commercial Milestones: ~\$2B USD



Graph is provided for illustrative purposes only.



# Example: Typical Single-Product Revenues from a Representative License Deal



# SPL Partnerships Offer Significant Revenue Upside, Particularly in Commercial

## Example Partnerships Value to MaxCyte\*

Assumes 6 programs per SPL launching 1 year apart, 2 fail in preclinical, 4 enter clinical, and 1 reaches commercial

### Higher Value Partnership Value

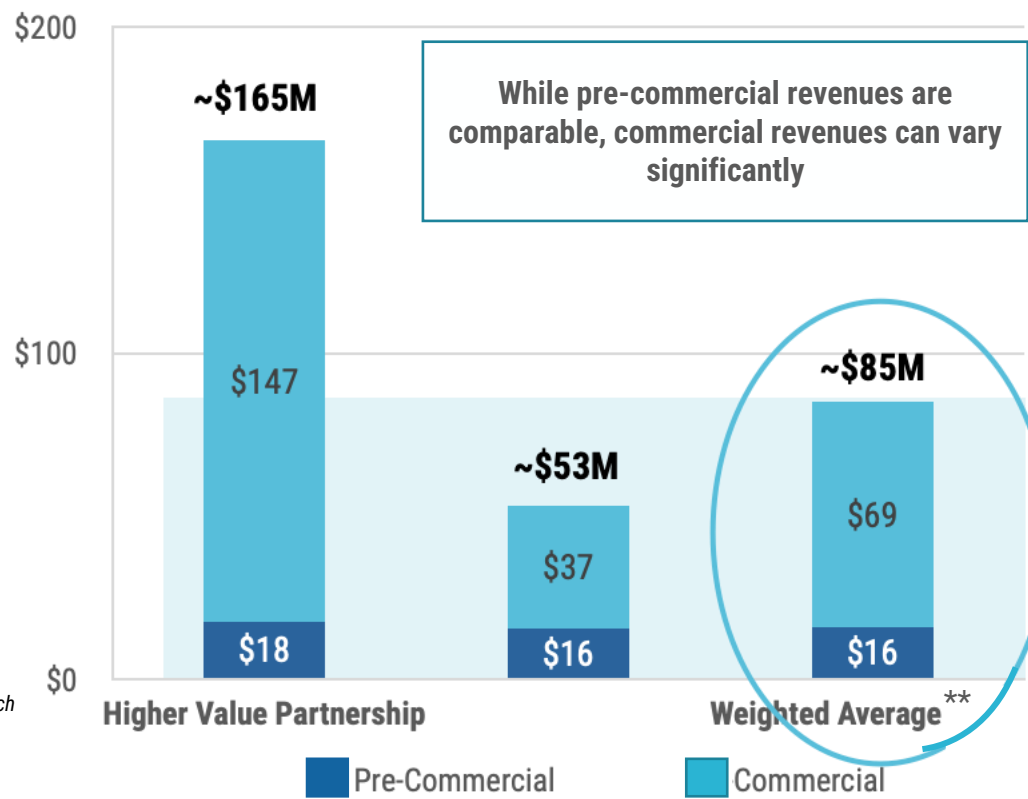
#### Influencing Factors:

- *Large indications* – greater royalty revenues or early achievement of sales-based milestones
- *Instrument & consumables* – Higher utilization

**Significant upside in commercial revenue opportunity**

\*10-year Value to MaxCyte

\*\*Weighted based on the expected split of commercial programs in Year 6 (assuming earliest approval); Assumes first 5-years of standard ten-year biotech sales curve



Numbers are illustrative as an example and not specific to one SPL Partnership

### Lower Value Partnership Value

#### Influencing Factors:

- *Small indications* – lower sales royalties or longer time period to realize commercial milestones
- *Conservative commercial milestones* – Smaller opportunity
- *Instrument & consumables* – Lower utilization

**Lower-bound estimate per Partnership**

# MaxCyte Partnerships – Near and Long-Term Revenue Potential with Strong Upside in Commercial Opportunity



## First Wave

**1 Approved Partner Program**

**Launched:**  
2023

**SPL Program:**  
Vertex's Exa-Cel

**Indications:**  
Sickle Cell Disease  
Beta-Thalassemia

## Second Wave

**6 Potential Approved Partner Programs**

**Launch Potential:**  
2026-2027

**Indications:**  
Lymphoma/Leukemia  
Solid Tumors  
Sickle Cell Disease  
Beta-Thalassemia

## Third Wave

**10 Potential Approved Partner Programs**

**Launch Potential:**  
2028-2030

**Example Indications:**  
Solid Tumors  
Lymphoma/Leukemia  
Multiple Myeloma  
Sickle Cell Disease  
Beta-Thalassemia  
Autoimmune Diseases

## Fourth Wave

**Additional Preclinical Partner Programs**

**Launch Potential:**  
2030+

**Example Indications:**  
Solid Tumors  
Autoimmune Diseases  
Neurodegenerative Diseases  
Genetic Diseases  
Lymphoma/Leukemia

## Fifth Wave

**Additional Licensed Programs and New Partnerships Signed**

**Launch Potential:**  
2032+

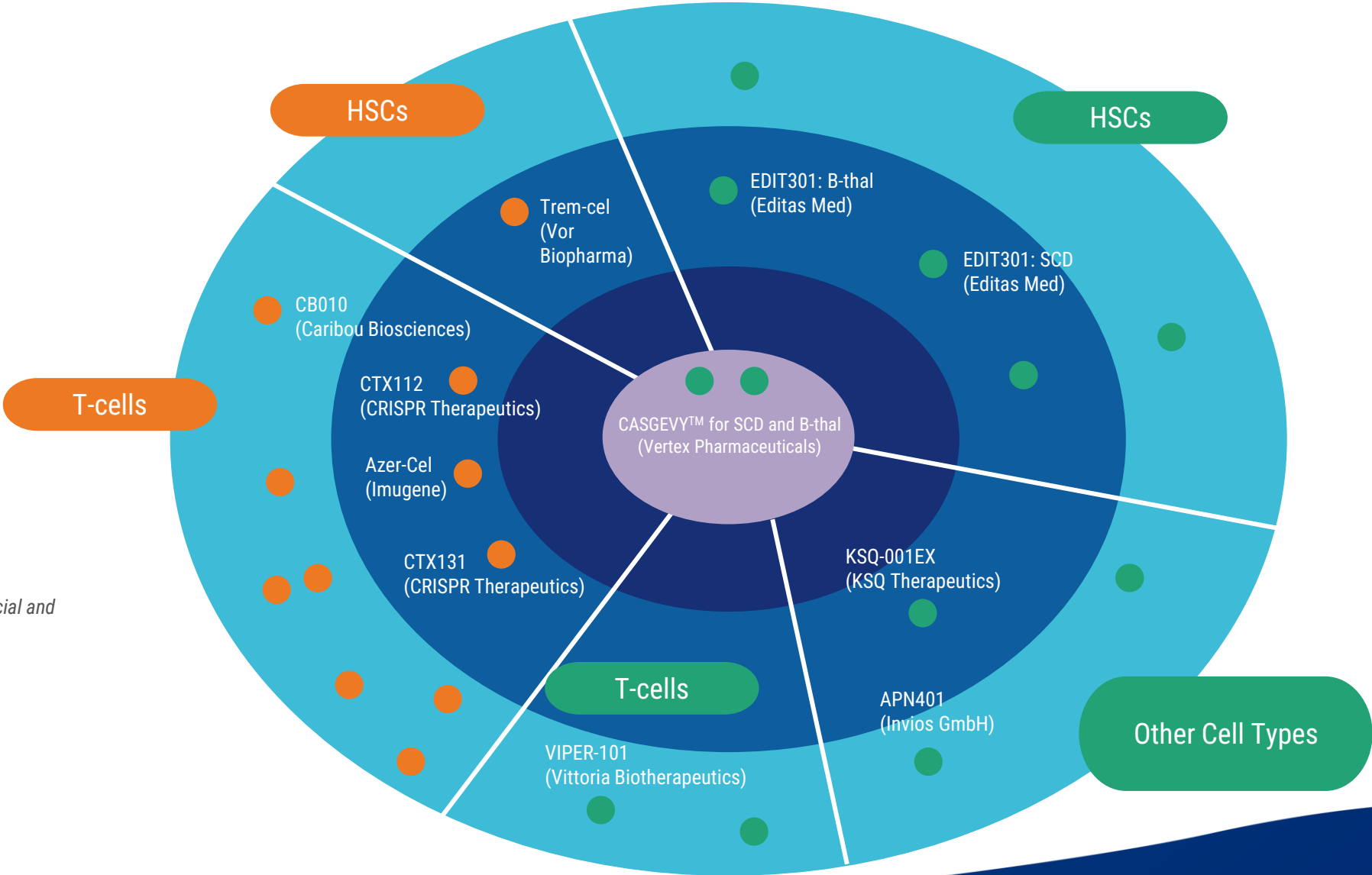
# MaxCyte-Enabled Active Clinical Trials

**Clinical Phase:**

- Phase 1
- Phase 1/2
- Pivotal
- Commercial

**Cell Approach:**

- Allogeneic
- Autologous



As of March 2024 / Includes Commercial and Academic Clinical Trials

# MaxCyte Enables Next-Generation Cell Therapies Across a Variety of Diseases

## Indications in Active MaxCyte-Enabled Clinical Trials

*Clinical trial = FDA IND clearance or equivalent*

### Genetic Diseases

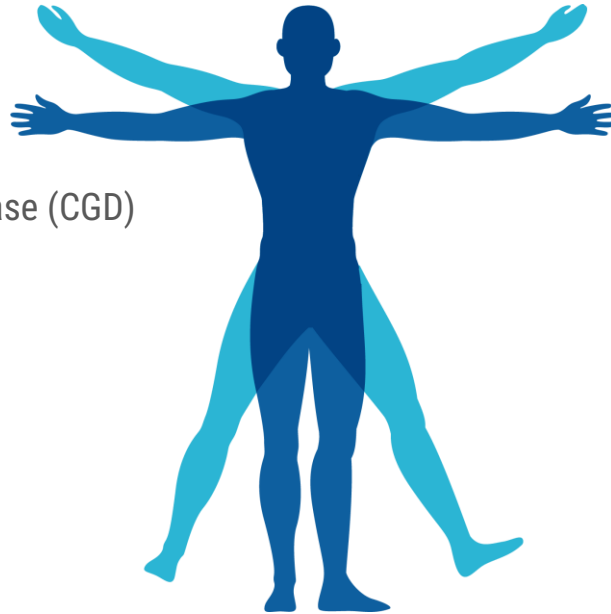
Beta-Thalassemia  
Sickle Cell Disease  
Chronic Granulomatous Disease (CGD)

### Solid Tumors

Non-small Cell Lung Cancer  
Head and Neck Cancer  
Glioblastoma  
Renal Cell Carcinoma  
Melanoma  
Other Solid Tumors

### Infectious Disease

HIV



*As of March 2024 / Includes Commercial and Academic Clinical Trials. Source: clinicaltrials.gov*

### Hematological Malignancies

Acute Lymphoblastic Leukemia  
Acute Myeloid Leukemia  
Chronic Lymphocytic Leukemia  
Multiple Myeloma  
Non-Hodgkin Lymphoma  
T Cell Lymphoma

### Autoimmune Diseases

Lupus Nephritis  
ANCA-associated vasculitis  
Other autoimmune diseases

## Gene-Editing Tools used in MaxCyte-Enabled Clinical Trials

- ARCUS
- Base-editing (CRISPR)
- CRISPR
- RNA-Based Engineering
- TALENS
- Zinc Finger Nucleases (ZFNs)

**First MaxCyte-Enabled Therapy is Approved**  
**CASGEVY™ for Sickle Cell Disease and for**  
**Beta-Thalassemia (2023/2024)**

# The ExPERT™ Platform Enabling Non-Viral Cell Engineering



- Launched in 2019 based on MaxCyte's **proprietary Flow Electroporation® technology** and has been optimized for the past 20+ years
- Leverages the reversible permeability of the cell membrane in response to an electric charge
- **Universally delivers molecules**, such as nucleic acids, gene-editing tools and proteins, into cells
- **Agnostic to cell type, approach (auto/allo)** and/or gene manipulation technology
- Enables customers to use a **single platform from concept through to the clinic** in a GMP environment
- Supported by a **robust intellectual property portfolio** (150+ patents granted in US and foreign jurisdictions and 95+ patents pending worldwide)

## ExPERT™ Instrument Portfolio



ATx

Small/mid-scale  
RUO



STx

Full scale  
RUO



GTx

Full scale  
RUO/cGMP



VLx

Large Scale  
RUO/cGMP

### High Performance:

- >90% transfection efficiencies (depending on cell type and molecule)
- >90% cell viabilities
- Computer-controlled system for reproducible results

### Flexibility:

- Single, fully-defined, animal component-free electroporation buffer for all cell types
- Pre-loaded library of validated, cell-specific protocols

### Scalability – Ability to Transfect:

- 75,000 to 7 million cells in seconds
- Up to 20 billion cells in less than 30 minutes
- And up to 200 billion cells in less than 30 minutes with the high scale VLx

### High Quality:

- Sterile, single-use processing assemblies (PAs)
- Closed, cGMP-compliant, ISO-certified, and CE marked instruments
- Supported by US FDA Master File and global equivalents

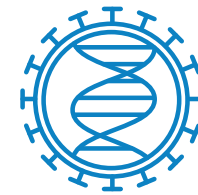
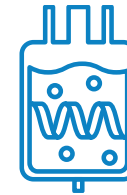
# MaxCyte Business Model – Drug Discovery Market

## DRUG DISCOVERY & DEVELOPMENT -

Cells used to Discover / Produce Drug Products

**Key Applications:** Cell-based assays, protein and antibody production, vaccine development

**Customer base:** Large/small biopharma and academic centers



Drug Discovery  
Revenue Model



Instrument sale (ATx/STx)



Single-use disposables  
(processing assemblies)



Razor/Razor Blade  
Economics



ATx<sup>®</sup>

Small/mid-scale  
RUO



STx<sup>®</sup>

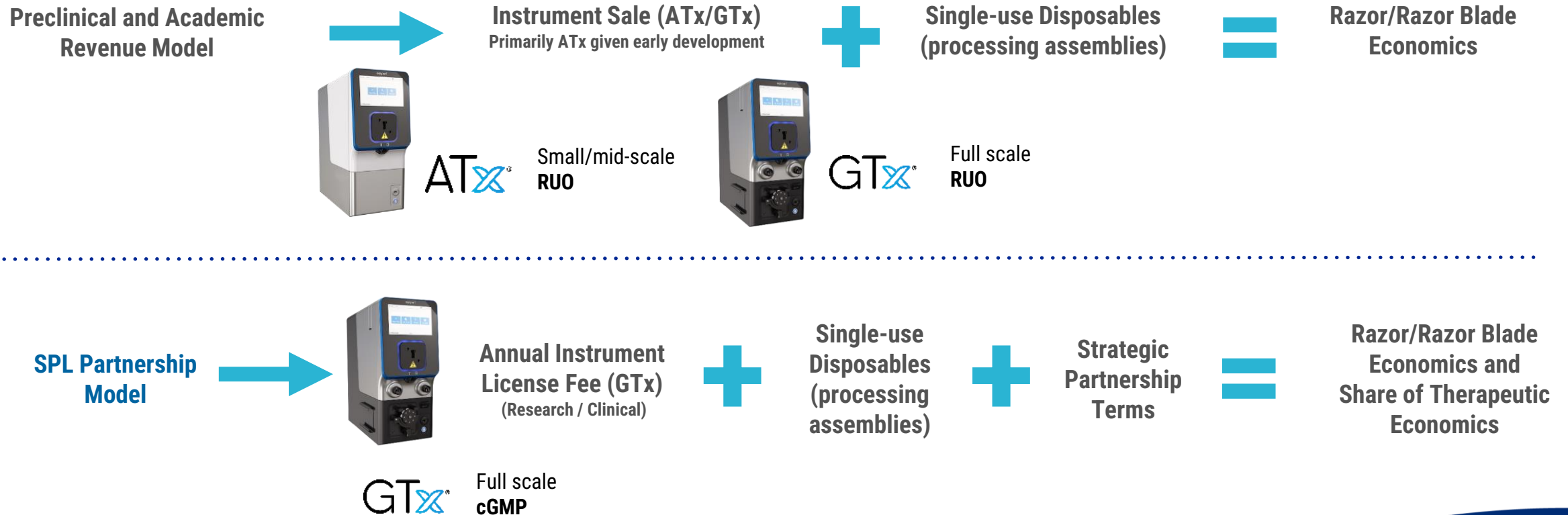
Full scale  
RUO

# MaxCyte Business Model – Cell Therapy Market

**CELL THERAPY** – Cell itself is the Drug

**Key Applications:** *Ex-Vivo* Engineered Cell Therapies

**Customer Base:** Leading global cell therapy developers and academic translational centers







### VLx Platform Overview

- Transfect up to 200 billion cells in a fully closed, single-use system in less than 30 minutes
- Achieve reproducible results, superior transfection efficiency, cell viability and protein expression, even with difficult-to-transfect cell lines
- Bench-scale, modular equipment with automated flow design, intuitive integrated software and user-friendly open architecture
- Proprietary Flow Electroporation™ Technology
- cGMP-compliant, closed, ISO-certified and CE-marked



### Biotherapeutic Development:

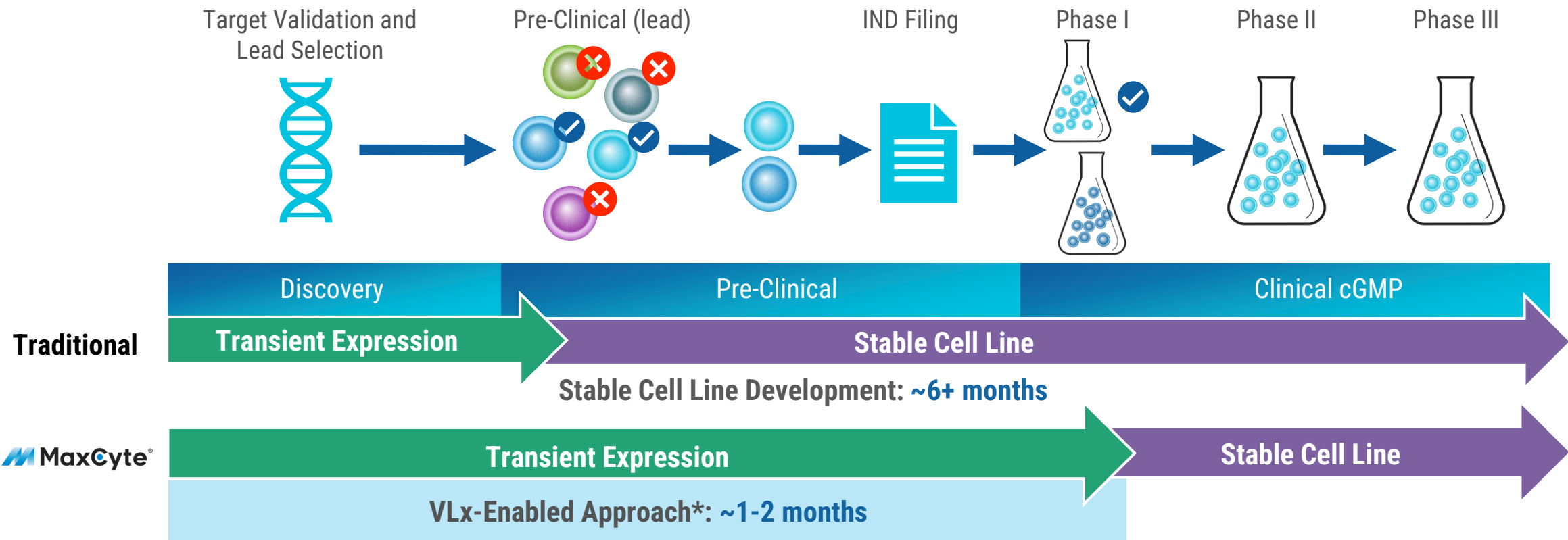
#### Monoclonal Antibodies, Recombinant Proteins and Vaccines Traditional Approach

- The process begins with transiently expressing product using transfection early on in Discovery phase followed by establishing a stable cell line process (industry standard ~6+ months) in preclinical development and beyond
- **Stable cell line development process is lengthy, cumbersome, complex, and costly, and significantly contributes to time to IND filing**

#### VLx-Enabled Approach

- **Expedites the production of the required amount of product (multi-gram quantify) to conduct in-vivo and in-vitro studies for IND filing in only ~4-6 weeks**
- **This concept introduces a new “speed to product selection” strategy, enabling investment in stable cell line development only for promising/successful drug candidates**

# VLx-Enabled Approach for Biotherapeutic Development



*\* MaxCyte's VLx workflow enables production of multi-gram quantity of transiently-produced proteins in-house in only 4-6 weeks for use in pre-clinical and early-clinical studies.*

**MaxCyte<sup>®</sup> cGMP Optimized Workflow**

# 2023 Summary and 2024 YTD Achievements



## 2023 Achievements

- Five SPL partnerships announced in 2023:
  - Prime Medicine in August, Lyell Immunopharma and Vittoria Biotherapeutics in July, Walking Fish Therapeutics in May and Catamaran Bio in January
- Douglas J. Swirsky appointed MaxCyte's Chief Financial Officer, bringing over two decades of experience in the healthcare sector, including as a public company executive at Nasdaq-listed organizations
- Published Inaugural ESG 2023 Summary Report in May
- First MaxCyte-Enabled Therapy is Approved
  - Vertex/ CRISPR's Exa-cel (CASGEVY™) for Sickle Cell Disease (UK + US) and for Beta-Thalassemia (UK)

## 2024 YTD Achievements

- Maher Masoud appointed MaxCyte's President and Chief Executive Officer, bringing more than 25 years of experience in the biopharmaceutical industry, including 17 years as an attorney and general counsel
- Four SPL Partnerships announced in 2024 YTD
  - **Lion TCR** to develop and scale TCR-T cell therapies for solid tumors and viral-related diseases
  - **Imugene** to support azer-cel – a potential first-in-class allogeneic CD19 CAR T product candidate for the treatment of blood cancer along with additional novel cell therapy programs
  - **Wugen** - WU-CART-007 lead asset in global Phase 1/2 clinical trial for treatment of relapsed or refractory T-cell lymphoblastic leukemia/lymphoblastic lymphoma
  - **BE Biopharma** to support the development of Engineered B Cell Medicines (BCMs) for patients with cancer, rare diseases and other serious conditions
- SPL Partnerships now stands at 27

# Thank you!

## Any questions?



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