# Driving the Next Generation of Cell-Based Therapies

MaxCyte Corporate Presentation

NASDAQ: MXCT • LSE: MXCT

May 2024



### Disclaimer



The content of this document (the "Presentation") has not been approved by an authorized person within the meaning of the Financial Services and Markets Act 2000 ("FSMA"), as amended. Reliance on this document for the purpose of engaging in any investment activity may expose an individual or organization to a significant risk of losing all of their investment. If you are in any doubt about the investment to which this Presentation relates, you should consult a person authorized by the Financial Conduct Authority who specializes in advising on securities of the kind described in this Presentation or your stockbroker, bank manager, solicitor, accountant or other financial adviser. This Presentation has been issued by MaxCyte Inc (the "Company") and does not constitute or form part of, and should not be construed as, an offer or invitation to sell or issue or any solicitation of any offer to purchase or subscribe for any securities in the Company in any jurisdiction. Neither this Presentation, nor any part of it nor anything contained or referred to in it, nor the fact of its distribution, should form the basis of or be relied on in any connection with or act as an inducement in relation to a decision to purchase or subscribe for or enter into any contract or make any other commitment whatsoever in relation to any such securities. This Presentation does not constitute a recommendation regarding the securities of the Company.

This Presentation is only addressed to and directed at (i) persons who are outside the United Kingdom, (ii) persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion)

Order 2005, as amended (the "Order"), (iii) persons who are high net worth entities falling within Article 49(2)(a) to (d) of the Order, and/or (iv) any other persons to whom this Presentation may otherwise lawfully be communicated without contravention of section 21 of the Financial Services and Markets Act 2000 or to whom it may otherwise lawfully be distributed (all such persons together being referred to as "relevant persons"). This Presentation may not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this Presentation relates is available only to relevant persons.

Certain statements in this Presentation are, or may be deemed to be, forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, including but not limited to statements regarding our expected potential future revenue. The words "may," "might," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "expect," "estimate," "seek," "predict," "future," "project," "potential," "continue," "target" and similar words or expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Any forward-looking statements in this Presentation are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this Presentation, including, without limitation, statements regarding the Company's future growth, results of operations, performance, future capital and other expenditures (including the amount, nature and sources of funding thereof), competitive advantages, business prospects and opportunities. These and other risks and uncertainties are described in greater detail in the section entitled "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2023, filed with the Securities and Exchange Commission from time to time. These documents are available through the Investor Menu, Financials section under "SEC filings" on the Investors page of our website at <a href="http://investors.maxcyte.com">http://investors.maxcyte.com</a>.

No statement in this Presentation is intended to be, or intended to be construed as, a profit forecast or profit estimate or to be interpreted to mean that earnings per Company share for the current or future financial years will necessarily match or exceed the historical earnings per Company share. As a result, no undue reliance should be placed on such statements.

Any forward-looking statements represent our views only as of the date of this Presentation and should not be relied upon as representing our views as of any subsequent date. We explicitly disclaim any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements.

## A Leading Provider of Cell-Engineering Platform Technologies



With 708 platforms in place\*, our proprietary technology unlocks the significant potential of advanced therapeutics



Innovative business model focused on value creation and shared partnership success

- Extensive product portfolio, supported by 150 granted U.S. and foreign patents
- Total revenue of \$11.3 million in first quarter 2024, and core revenue of \$8.2 million
- Gross profit \$9.9 million in first quarter of 2024, representing gross margin of ~88%
- Total cash, cash equivalents and investments were \$202.5 million as of March 31, 2024.

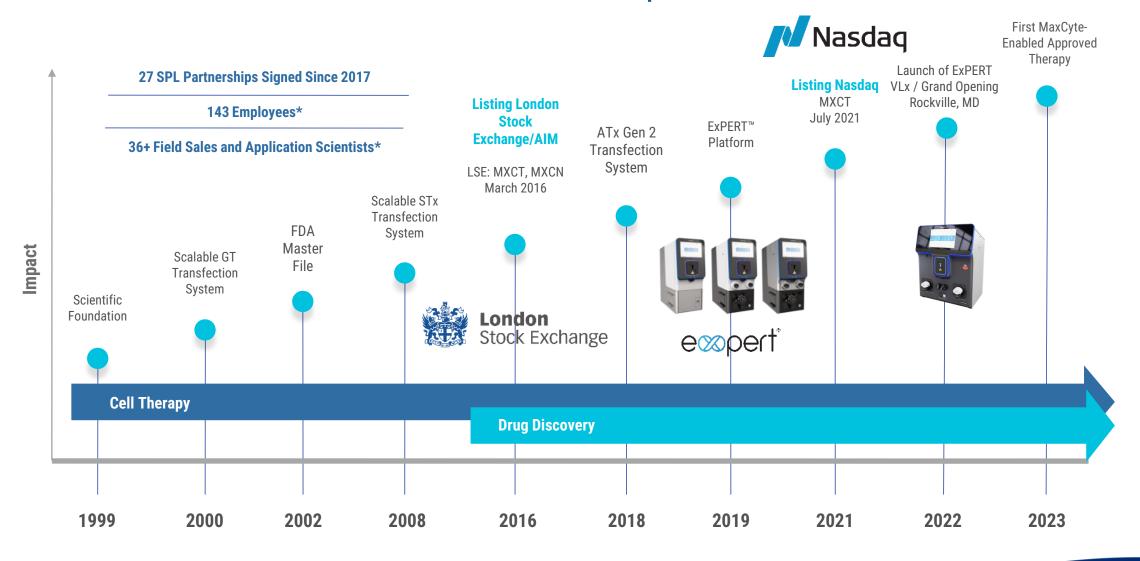
- 20+ years of cell engineering expertise; 36+ field sales and application scientists that support our customers\*
- Enables delivery of almost any molecule into almost any cell type
- Leads the industry in performance (measured by consistency, efficiency, viability, flexibility and scale)
- FDA Master 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

- 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 March 31, 2024

## Who We Are - Collaborative, Innovative and Experienced Partner





## **ExPERT™ Platform Addresses Industry Challenges**



### **Challenges**

## **MaxCyte's Solutions**



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



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



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



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



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



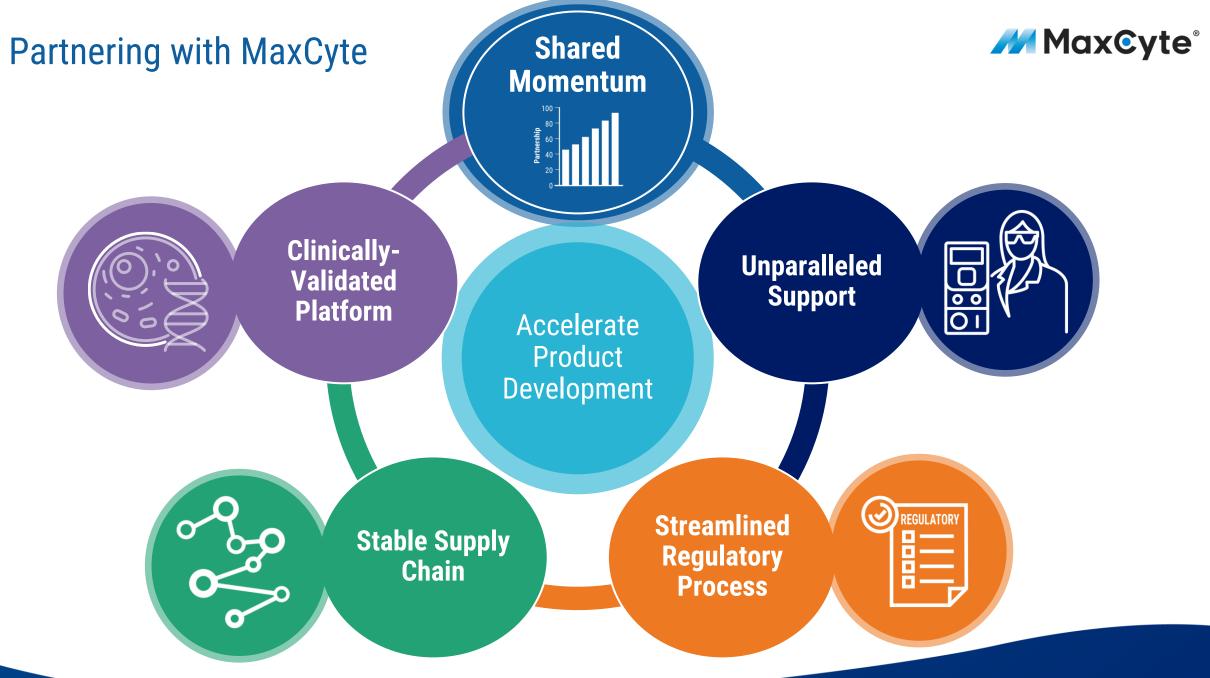
FDA Master File can be referenced in regulatory filings to accelerate and de-risk regulatory review



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

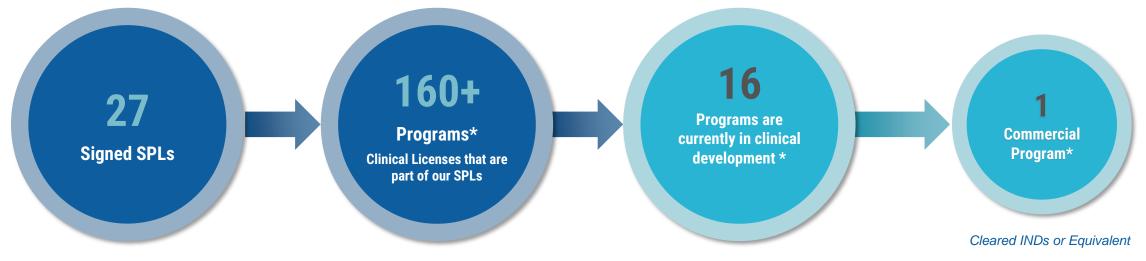


ExPERT™ platform provides industry leading transfection efficiency & cell viability at high scale in 30 minutes or less, enabling manufacturers to quickly scale up production



## MaxCyte: Leading Partner for Complex Cellular Engineering





27

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

















\*Updated as of December 31, 2023







































### Value Creation from SPLs

**MaxCyte**°

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



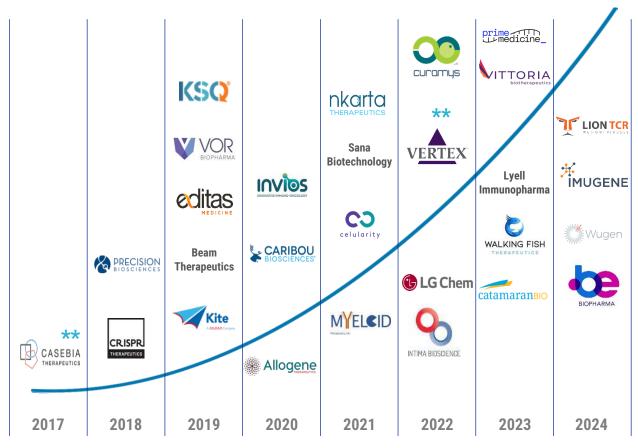
Recurring revenues from lease of instruments and sales of single-use disposables that grow with program success



Milestone revenue is MaxCyte's highest growth revenue stream

#### **Cumulative Potential Pre-CML Milestones**

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

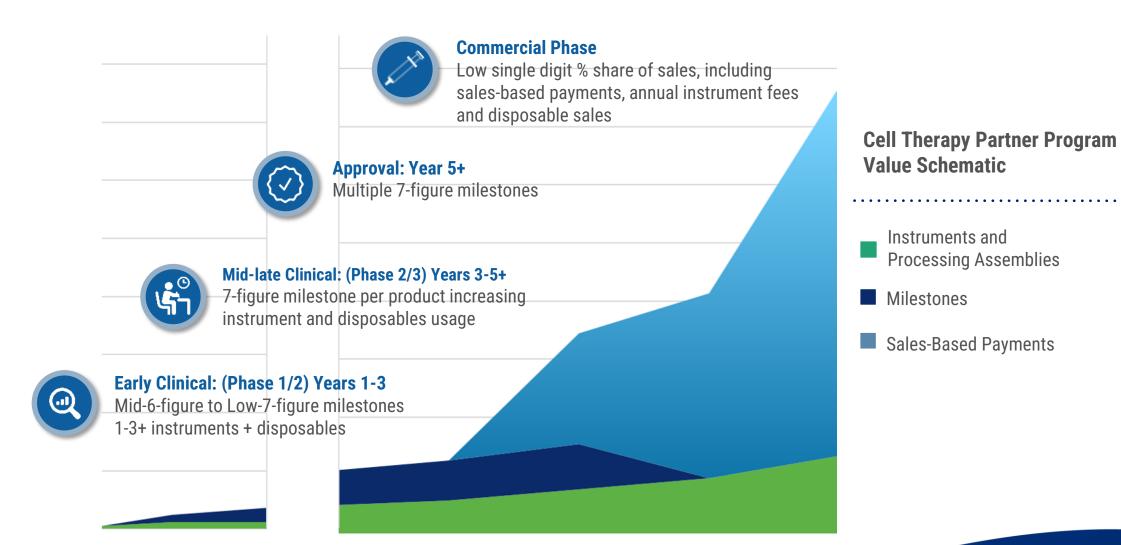


Graph is provided for illustrative purposes only.

<sup>\*\*</sup>Casebia/CRISPR's SPL partnership (signed in 2017) included the rights to use MaxCyte's technology in the development of exacel (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).

## 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

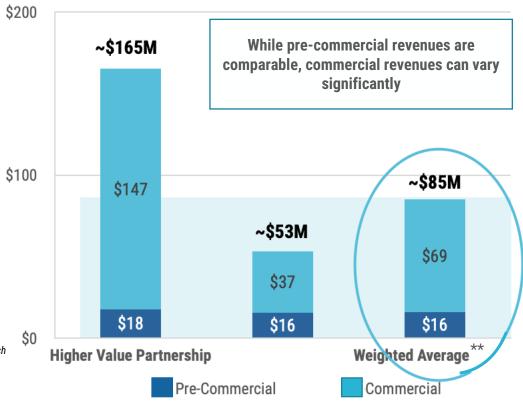
#### Higher Value Partnership Value

#### **Influencing Factors:**

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

## Significant upside in commercial revenue opportunity

<sup>\*\*</sup>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

<sup>\*10-</sup>year Value to MaxCyte

## 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+

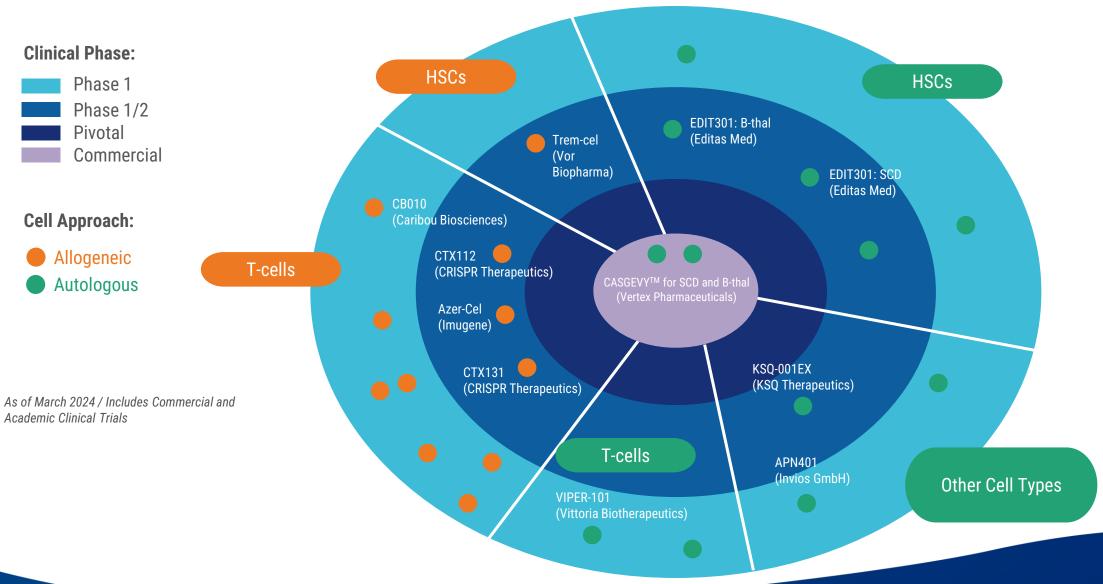
Example Indications:
Solid Tumors
Autoimmune Diseases
Neurodegenerative Diseases
Genetic Diseases
Lymphoma/Leukemia

#### Fifth Wave

Additional Licensed Programs and New Partnerships Signed Launch Potential: 2032+

## MaxCyte-Enabled Active Clinical Trials





## 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

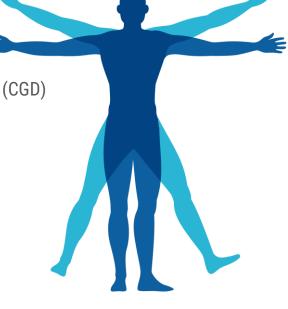
Renal Cell Carcinoma

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**



Small/mid-scale **RUO** 



Full scale **RUO** 



Full scale **RUO/cGMP** 



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











**Instrument sale (ATx/STx)** 



Single-use disposables (processing assemblies)



Razor/Razor Blade Economics



ATX Small/mid-scale RUO



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

**Preclinical and Academic Revenue Model** 



**Instrument Sale (ATx/GTx)** Primarily ATx given early development



**Single-use Disposables** (processing assemblies)



Razor/Razor Blade **Economics** 



Small/mid-scale



Full scale



**Annual Instrument** License Fee (GTx) (Research / Clinical)



Single-use **Disposables** (processing assemblies)



**Strategic Partnership Terms** 



Razor/Razor Blade **Economics and Share of Therapeutic Economics** 



Full scale **cGMP** 



#### **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

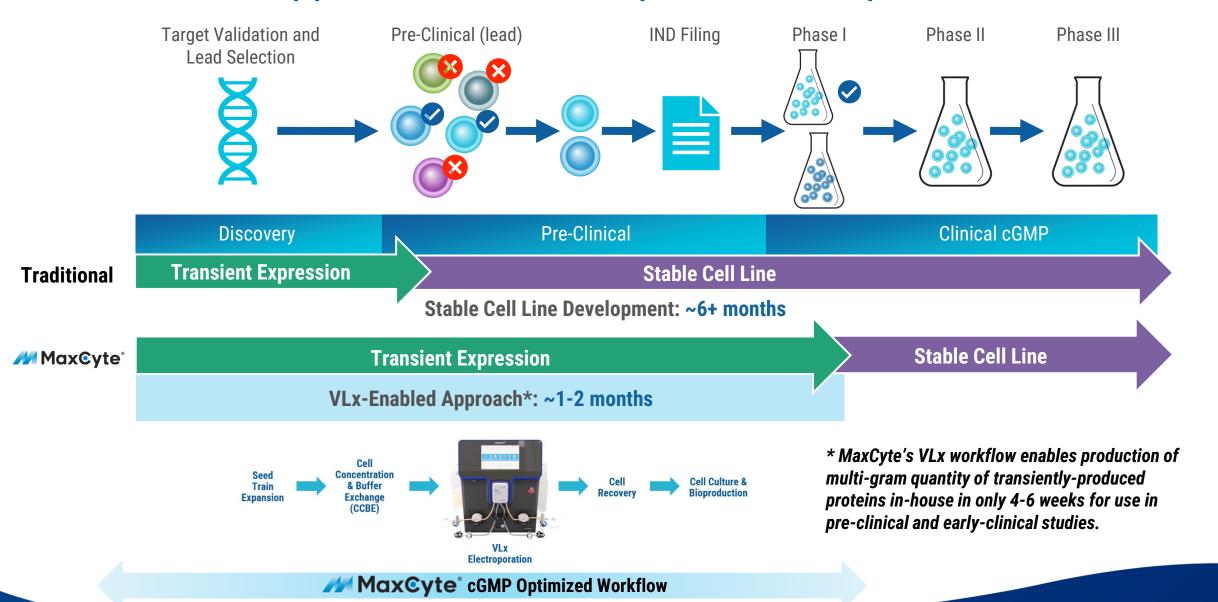
- The process begins with transiently expressing product using transfection early on in Discovery phase followed by establishing a stable cell line process (industry standard ~6+ months) in preclinical development and beyond
- Stable cell line development process is lengthy, cumbersome, complex, and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

#### **VLx-Enabled Approach**

- Expedites the production of the required amount of product (multigram 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





## 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<sup>™</sup>) 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?



ir@maxcyte.com

© 2023 MaxCyte, Inc. All rights reserved. MaxCyte®, MaxCyte ATx®, MaxCyte GT®, MaxCyte STx®, MaxCyte VLX®, Flow Transfection®, Flow Electroporation®, ⊖∞ρ⊖ና†®, ATx®, STx® and GTx™, are registered trademarks of MaxCyte, Inc. MaxCyte GTx™, MaxCyte STx™, ExPERT ATx™, ExPERT GTx™, ExPERT STx™, ExPERT VLx™, ExPERT™, ATx™, GTx™, STx™, VLx™, and VLx™ are trademarks of MaxCyte, Inc.





## Appendix – Historical Core Business Disclosure

	1Q'21	2Q'21	3Q'21	4Q'21	1Q'22	2Q'22	3Q'22	4Q'22	1Q'23	2Q'23	3Q'23	4Q'23	1Q'24
(in \$ thousands)													
Cell Therapy	4,729	4,766	6,226	7,263	7,416	7,688	7,897	7,544	5,975	6,637	4,700	5,518	6,415
Drug Discovery	1,762	1,838	1,909	2,885	2,167	1,916	1,991	3,026	1,797	1,652	1,900	1,644	1,773
Total Core Revenue	6,491	6,604	8,135	10,148	9,583	9,604	9,889	10,570	7,772	8,289	6,601	7,161	8,188
Instrument	1,627	1,417	2,517	2,917	2,728	2,697	2,575	3,705	2,189	2,126	1,672	2,330	1,928
PAs	2,449	2,624	2,927	4,309	3,840	4,114	4,350	3,721	2,600	3,293	2,227	2,163	3,432
Lease	2,247	2,362	2,503	2,623	2,706	2,622	2,736	2,813	2,809	2,667	2,444	2,400	2,604
Other	168	201	189	299	310	171	227	331	174	203	258	269	224
Total Core Revenue	6,491	6,604	8,135	10,148	9,583	9,604	9,889	10,570	7,772	8,289	6,601	7,161	8,188
Installed base of instruments (sold or leased)	420	445	472	502	521	546	575	616	633	654	664	683	708
Core Revenue Generated by SPL Clients as a % of Core Revenue	42%	43%	37%	39%	47%	47%	40%	34%	52%	49%	45%	45%	53%