



# Creating transformative gene-based medicines for serious diseases

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Corporate Overview  
Q2 2025

# Forward-Looking Statements

*Statements contained in this presentation and other related materials regarding matters that are not historical facts are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Because such statements are subject to risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. Such statements include, but are not limited to, statements regarding any or all of the following: (i) CRISPR Therapeutics’ preclinical studies, clinical trials and pipeline products and programs, including, without limitation, manufacturing capabilities, status of such studies and trials, potential expansion into new indications and expectations regarding data, safety and efficacy generally; (ii) data included in this presentation, as well as the ability to use data from ongoing and planned clinical trials for the design and initiation of further clinical trials; (iii) CRISPR Therapeutics’ strategy, goals, anticipated financial performance and the sufficiency of its cash resources; (iv) plans and expectations for the commercialization of, and anticipated benefits of, CASGEVY, including anticipated patient access to CASGEVY; (v) regulatory submissions and authorizations, including timelines for and expectations regarding additional regulatory agency decisions; (vi) expected benefits of CRISPR Therapeutics’ collaborations; and (vii) the therapeutic value, development, and commercial potential of CRISPR/Cas9 gene editing technologies and therapies, including as compared to other therapies. Risks that contribute to the uncertain nature of the forward-looking statements include, without limitation, the risks and uncertainties discussed under the heading “Risk Factors” in CRISPR Therapeutics’ most recent annual report on Form 10-K and in any other subsequent filings made by CRISPR Therapeutics with the U.S. Securities and Exchange Commission. Existing and prospective investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date they are made. CRISPR Therapeutics disclaims any obligation or undertaking to update or revise any forward-looking statements contained in this presentation and any related materials, other than to the extent required by law.*

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*Our vision is to develop cures for people suffering from serious diseases through transformative gene-based medicines*



CASGEVY® for severe sickle cell disease and beta thalassemia enabled by Nobel-Prize winning CRISPR-Cas9 technology

Expanded portfolio into both common and rare diseases with de-risked underlying biology

Establish a sustainable industry-leading genomic medicines company

# Executing on Our Vision Across Four Therapeutic Franchises



## Heme

Partnered with Vertex on global launch of **CASGEVY**, **best-in-class, commercial *ex vivo* CRISPR-Cas9 therapy** for sickle cell disease and beta-thalassemia

Continued focus on **innovation to expand potential market** for CASGEVY

Advancing *in vivo* approaches **leveraging LNP delivery**



## CAR T

**Best-in-class** allogeneic cell therapies with novel potency edits

**CTX112** demonstrates promising efficacy/safety profile in oncology

**Expanding CTX112 into autoimmune disease** to significantly increase value

Pipeline diversification with **CTX131** and **auto-GPC3 targeting solid tumors**



## *In vivo*

Establishing a differentiated **LNP-mRNA platform**, initially focused on the liver

Two **Phase I programs (CTX310 and CTX320)** in cardiovascular disease to de-risk platform

**CTX310 targeting ANGPTL3** has potential to benefit >40M patients in the U.S.

Building **extrahepatic delivery** and **next-gen editing** capabilities



## T1D

Utilizing gene editing to develop an **allogeneic beta-cell replacement therapy** for diabetes

Goal to achieve **insulin independence without chronic immunosuppressive**

Advancing dual delivery strategies: device-based (CTX211) and deviceless (CTX213) approaches

# Broad and Diversified Pipeline

	Program	Disease(s)	Research	IND-enabling	Clinical	Approved	Partner	Structure
Heme	CASGEVY <sup>1</sup>	Severe sickle cell disease (SCD)	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	VERTEX	Collaboration
		Transfusion-dependent $\beta$ -thalassemia (TDT)	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>		
	CD117 ADC / <i>In vivo</i> HSC editing	SCD, TDT and others	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>		
CAR T I/O & Autoimmune	CTX112	B cell malignancies	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	ROSWELL PARK	Wholly owned
	Anti-CD19 allogeneic CAR T	SLE, SSC, and IIM	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>		
	CTX131	Renal cell carcinoma and other solid tumors	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>		Wholly owned
	Anti-CD70 allogeneic CAR T	Hematological cancers	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>		
	Anti-GPC3 autologous CAR T	Hepatocellular carcinoma	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>		
In Vivo Cardiovascular & Rare Disease	CTX310: ANGPTL3	HeFH, HoFH, Mixed dyslipidemias, and sHTG	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>		Wholly owned
	CTX320: LPA	ASCVD with elevated Lp(a)	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>		Wholly owned
	CTX340: AGT	Refractory hypertension	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>		Wholly owned
	CTX450: ALAS1	Acute hepatic porphyria (AHP)	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>		Wholly owned
T1D	CTX211	Type I diabetes mellitus	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>		Wholly owned
	CTX213	Type I diabetes mellitus	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>		Wholly owned
Other disclosed partnered	SRSD107	Thromboembolic conditions	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	Sirius THERAPEUTICS	Collaboration and License
	Duchenne's muscular dystrophy (DMD), myotonic dystrophy type I (DM1), cystic fibrosis (CF)		<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	VERTEX	License

HeFH: Heterozygous familial hypercholesterolemia; HoFH: Homozygous familial hypercholesterolemia; sHTG Severe hypertriglyceridemia SLE: Systemic Lupus Erythematosus; SSC: Systemic Sclerosis; IIM: Idiopathic Inflammatory Myopathies

<sup>1</sup> Currently approved in some countries for certain eligible patients with SCD or TDT; <sup>2</sup> Collaboration with Vertex for applications in TDT and SCD

# Entering a Critical Phase of Our Growth Journey

## Foundational Years

- Relentless focus to bring CASGEVY to global approval and launch
- Diversified into other therapeutic areas with multiple clinical candidates
- Operationalized in-house manufacturing capabilities

2020 - 2024

## Inflection Year

- Strong launch trajectory for CASGEVY globally with favorable market access in SCD and TDT
- Clinical updates across core franchises including cardiovascular, immuno-oncology, and autoimmune
- Opportunistic business development across the portfolio exemplified by Sirius Therapeutics collaboration

2025

## Sector-Leading Biotech

- CASGEVY revenue provides a path to a sustainable biotech company
- Clinical programs progress into later stages of development and potential approval
- Platform engine generating 1 to 2 new IND/CTAs annually
- Ongoing business development aligned with strategic priorities

2026+

Established efficient operating model and strong balance sheet of ~\$1.86 billion<sup>1</sup>

<sup>1</sup> As of March 31, 2025

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## Hemoglobinopathies



# 2024: A Foundational Year for CASGEVY

Unparalleled speed  
and execution to a  
landmark approval<sup>1</sup>



WSJ

## FDA Approves World's First Crispr Gene-Editing Drug for Sickle-Cell Disease

Landmark decision heralds a new type of medicine that  
can tackle genetic conditions that are hard to treat



*F.D.A. Approves Sickle Cell Treatments,  
Including One That Uses CRISPR*

TIME

## Cutting Edge Gene Therapy

Vertex Pharmaceuticals and CRISPR Therapeutics Casgevy

## Addressable Market<sup>2</sup>



~60,000

Severe patients in approved  
territories eligible for  
treatment

Investments made to meet global demand for disease-modifying therapy

<sup>1</sup> Approved by the U.S. FDA for treatment of patients aged 12 years and older with sickle cell disease (SCD) with recurrent vaso occlusive crises (VOCs) and transfusion-dependent  $\beta$ -thalassemia (TDT)

Granted conditional marketing authorization by the UK MHRA and Bahrain NHRA for patients 12 years of age and older with SCD with recurrent VOCs or TDT for whom hematopoietic stem cell transplantation is appropriate and a human leukocyte antigen matched related hematopoietic stem cell donor is not available. CASGEVY has also been approved in other countries for certain eligible patients with SCD or TDT

<sup>2</sup> Including U.S., U.K., E.U., Kingdom of Saudi Arabia (KSA), Bahrain, Canada, Switzerland, and United Arab Emirates (UAE)



# 2025: Focused on Execution and Expansion of Opportunity

## *Continued Progress in U.S. to Serve Significant Unmet Need*



### **Cell and Gene Therapy Access Model**

Rolling start for states: January 2025 to January 2026

New CMMI model to improve access and health outcomes, as well as reduce expenditures (\$3B annual U.S. SCD cost)

## *Expanding into untapped Middle East and ex-U.S. Markets*

Saudi Arabia Successfully Treats First Patient  
With Casgevy for Beta-Thalassemia



First GCC patient reimbursed at ~\$2M;  
NHS reimbursement achieved for beta-thal.

## *Manufacturing Expansion to Support Launch<sup>1</sup>*

Commercial agreement to manufacture CASGEVY®

# Lonza

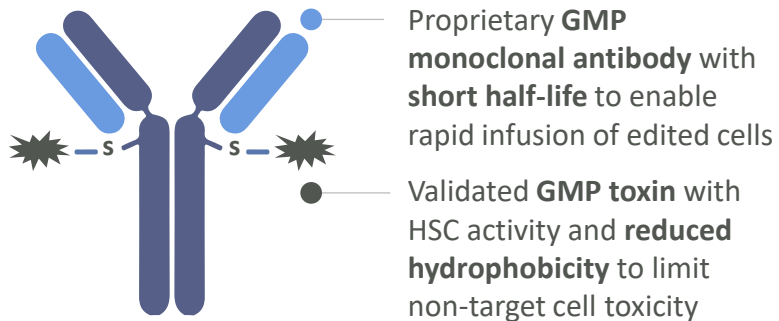
Manufacturing agreement for global  
commercial supply with Lonza

**As of May 1st 2025, CASGEVY is approved in 8 jurisdictions, >65 authorized treatment centers (ATCs) have been activated globally and ~90 patients have initiated cell collection**

# Serial Innovation in Enabling Technologies to Broaden Access

## Targeted conditioning

cKit (CD117) antibody-drug conjugate (ADC) for specific depletion of hematopoietic stem cells (HSCs) and no off-target/bystander toxicity

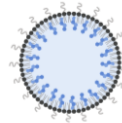


Studies in non-human primates (NHP) ongoing

150k+ addressable patients worldwide

## *In vivo* editing of HSCs




DELIVERY



EDITING



Creating optimized system for *in vivo* HSC editing with ideal characteristics, including:

-  Tolerable doses with no off-target toxicities
-  Editing of LT-HSCs for durable effects vs. HSPCs only
-  Potential for redosability to enhance editing

Core research focus in 2025 – NHP studies ongoing

400k+ addressable patients worldwide

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CAR T

# Best-in-Class Cell Therapy Platform for Treating Cancer and Autoimmune Disease

## CTX112

Currently in Phase I/II trial in r/r NHL, plus Phase I trial in SLE/SSc/IIM

Update mid-2025

## CTX131


Currently in Phase I/II trial in RCC, plus Phase I/II trial in TCL

Update in 2025

## Autologous GPC3

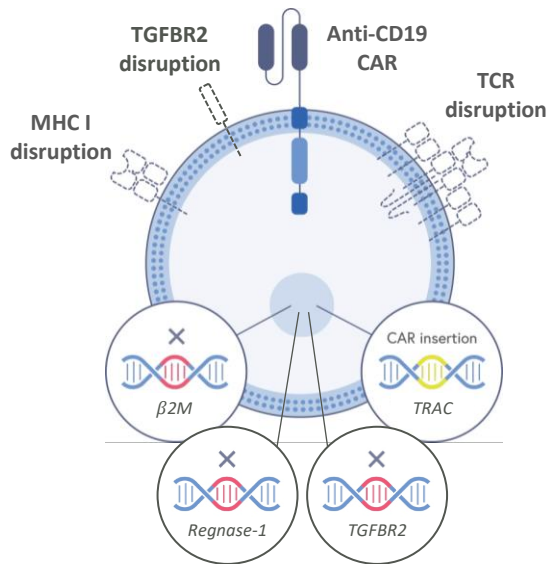
Ongoing preclinical work with anti-GPC3 autologous CAR T with TGFBR2 KO

IND accepted and trial open

Program	Indication(s)	Research	IND-enabling	Clinical	Partner
<b>CTX112</b> Anti-CD19 allogeneic CAR T	B cell malignancies	●	●	●	
	SLE/SSc/IIM	●	●	●	
<b>CTX131</b> Anti-CD70 allogeneic CAR T	Renal cell carcinoma and other solid tumors	●	●	●	
	Hematological cancers	●	●	●	
<b>Anti-GPC3</b> Autologous CAR T	Hepatocellular carcinoma	●	●	●	

# CTX112: An Allogeneic CAR T Optimized for Potency

## CTX112 Novel Potency Edits (TGFB2, Regnase-1)



*Regnase-1 and TGFB2 edits synergistically increase CAR T potency*

## Other CTX112 Competitive Advantages



Ability to multiplex gene edits precisely and efficiently



Comprehensive and FDA-validated genomic analysis



Scalability and low COGS to enable global expansion

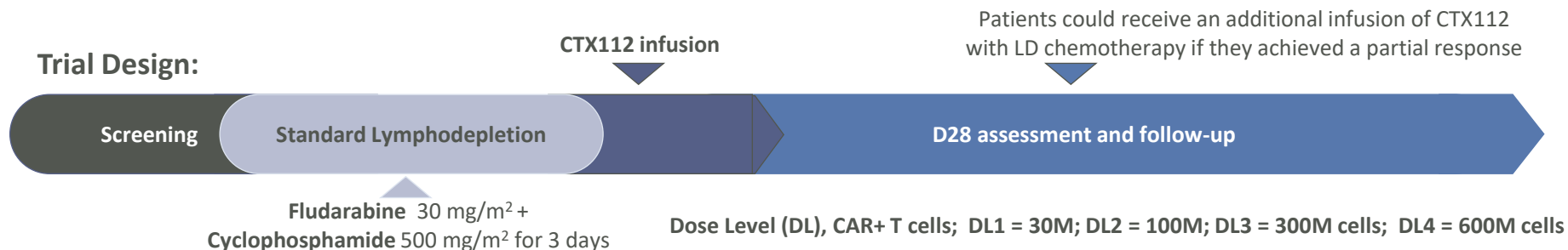


In-house manufacturing enables direct control over process and timelines

*Multiple scientific, manufacturing and regulatory advantages for CTX112*

# CTX112 Phase I Immuno-Oncology Clinical Trial Design

Open-label, multicenter, Phase I/II study evaluating the safety and efficacy of CTX112 in relapsed or refractory B-cell malignancies



## Benefits of Allogeneic CAR T:

- Short screening timeframe
- No apheresis
- No bridging chemotherapy
- On-site availability of CAR T cell product

### Key eligibility criteria:

- Age ≥18 years
- Patient population: R/R FL grade 1-3a, MZL, MCL, DLBCL NOS, DLBCL/high-grade lymphoma with MYC and BCL-2 rearrangement, grade 3b FL, DLBCL arising from FL or MZL or LBCL with prior CAR T
- No prior allogeneic SCT and no history of CNS lymphoma involvement
- Adequate organ function

### Primary endpoint

- Incidence of AEs, defined as DLTs
- ORR (per Lugano 2014 criteria or iwCLL 2018 guidelines for CLL/SLL)

### Secondary endpoints

- CR rate
- Duration of response (DOR)
- Progression-free survival (PFS)
- Overall survival



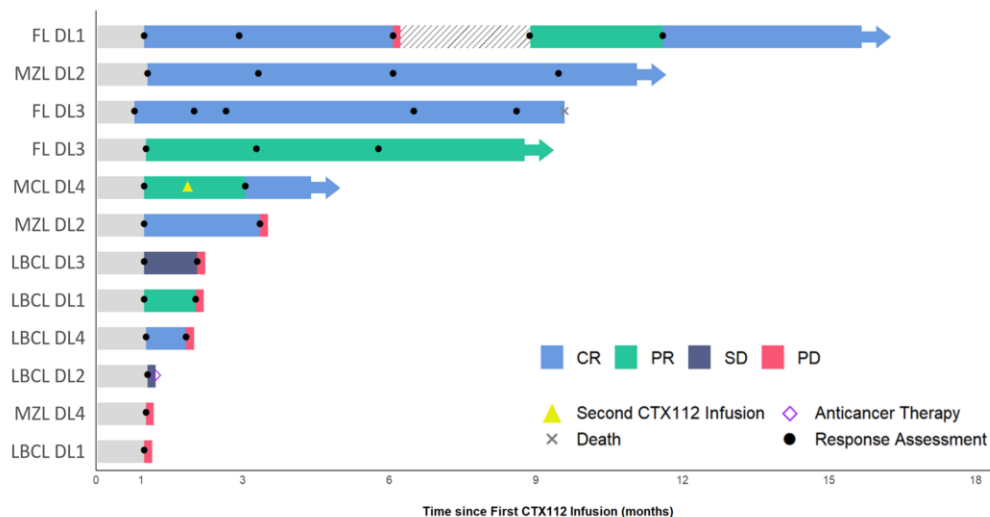
# Initial Efficacy Data On Par with Auto CAR T

## CTX112 Initial Efficacy Data (N=12)

High risk patient population (58% primary refractory; 67% >3 prior therapies; 50% with tumor SPD > 4000 mm<sup>2</sup>)

CTX112 demonstrated tolerability with no CRS, ICANS or infections Grade ≥3

### Patient-level data



### Aggregated data per dose level

Cell dose (CAR+ T cells)	DL1 30M N=3	DL2 100M N=3	DL3 300M N=3	DL4 600M N=3	Total N=12
ORR n (%)	2 (67)	2 (67)	2 (67)	2 (67)	8 (67)
CR n (%)	1 (33)	2 (67)	1 (33)	2 (67)	6 (50)
PR n (%)	1 (33)	0	1 (33)	0	2 (17)

Ongoing Responses in Patients with Poor Prognostic Factors

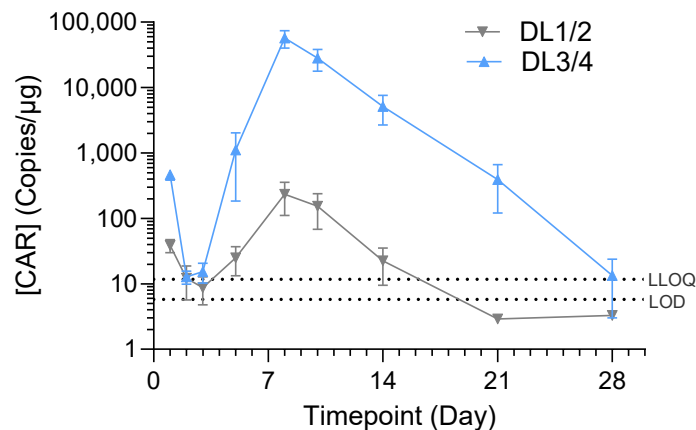
ORR/CR rate in line with approved autologous CAR T<sup>1</sup>



# Updated CTX112 Data Shows PK in Line with Auto CAR T

*Analysis from subsequent data cut on Dec 20, 2024 (N=25)*

*CTX112 Cell Expansion Data*



*Dose Dependent Increases in AUC and  $C_{max}$*

*CAR T Cell Expansion Comparison*

	CTX112 (DL3/4)	Autologous CAR T	Other Allogeneic CAR T
Mean $C_{max}$ (copies/μg)	45,000-70,000 <sup>1</sup>	Apx. 6,000-30,000 <sup>2</sup>	Apx. 500-5,000 <sup>3</sup>

*Cell expansion comparable to autologous CAR T<sup>2</sup>*

# Updated CTX112 Data Shows Efficacy in post-TCE Subset

*Analysis from subsequent data cut on Dec 20, 2024*

	Histology	# Prior Lines	Prior Bispecific T Cell Engager (TCE)	TCE Best Overall Response	CTX112 Best Overall Response
Dose level 3	FL	7	5L: Mosunetuzumab	PR	PR
	LBCL	2	2L: R-ICE & Epcoritamab	PD	PR
	LBCL	10	5L: Mosunetuzumab	UNK	PR
			6L: Tafasitamab & Rituximab & Lenalidomide	PD	
Dose Level 4	LBCL	4	4L: Epcoritamab & GemOx	CR	CR
	FL	8	7L: Imvotamab (IGM-2323)	PD	CR
	FL	5	3L: Glofitamab & RG6333 (CD19/CD28)	PR	CR

**100% overall response rate (ORR) for 6 patients receiving CTX112 post-TCE therapy**  
**100% ORR for 3 LBCL patients at higher dose levels**

# CTX112 is Positively Differentiated From Other CD19 Therapies

## CTX112 vs. Autologous CAR T

- **Safety benefits** are critical in context of larger patient populations and in community hospital settings
- **Improved patient experience** with no apheresis; enables rapid enrollment to dosing without the need to pause immunosuppressants
- **Significantly lower COGS and scalability** are critical for expanding the addressable population

## CTX112 vs. TCE

- **Initial clinical results with CAR Ts show deep B-cell depletion in tissues**, likely critical for immune reset
- **Long-term data in oncology supports more durable clinical responses** with CAR T therapy vs. TCEs
- Initial **CTX112 data shows promising efficacy in post-TCE patients** (e.g., 100% OR rate)

## CTX112 vs. Other Allogeneic CAR T / NK

- **Case studies** from other allogeneic CAR T therapies in AID **provide derisking for CTX112**
- CTX112 may be superior, with potency edits leading to **significantly higher CAR T cell expansion and functional persistence**

Broad CTX112 update across Oncology and Autoimmune disease expected in mid-2025

# Next-Generation CAR T for Solid Tumors

## Solid Tumor CAR T pipeline

### Program

### Indications

#### CTX131

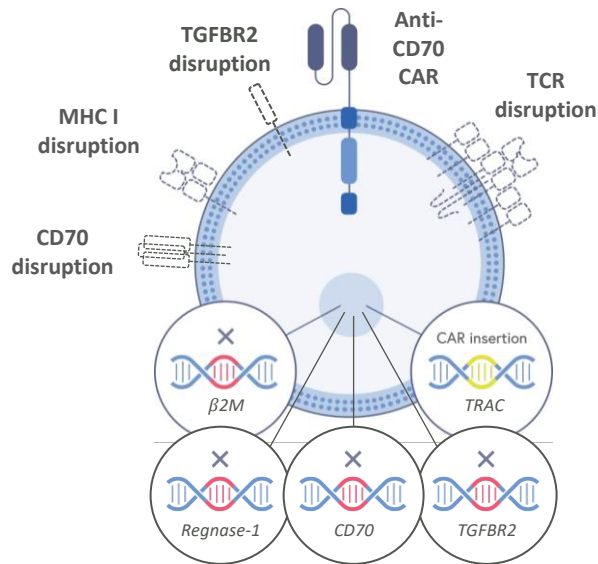
Anti-CD70  
allogeneic CAR T

- Phase I trial in RCC and other solid tumors ongoing; update in 2025
- Phase I trial in hematologic malignancies, including T cell lymphomas (TCL) dose escalation ongoing

Anti-GPC3  
autologous  
CAR T with  
TGFB $\beta$  KO

- IND accepted and trial open for Phase I in HCC
- TGFB edit prevents exhaustion; validating data from China clinical trials
- Roswell Park conducts manufacturing and clinical trial; CRISPR has commercial rights

## CTX131 Next-Generation CAR T Chassis: Most sophisticated allogeneic CAR T candidate in the clinic



**Regnase-1 and TGFB $\beta$ 2 edits synergistically increase CAR T potency**



*In Vivo*

The background of the slide is a detailed, artistic illustration of a cell's surface. It features several green, spherical structures, likely representing viral particles or receptors, which are densely covered with fine, hair-like projections. Two of these green structures have a bright orange, double-helix DNA structure visible within them. The overall color palette is dominated by deep blues and greens, with some purple and yellow highlights, creating a complex, textured appearance that suggests a microscopic or molecular environment.



# Plug-and-play LNP/mRNA Platform for Gene Disruption

## CTX310

ANGPTL3 targeted asset with potential across multiple indications

**Update in 2H 2025**

## CTX320

Potential to address large patient populations with elevated Lp(a)

**Update in 1H 2026**

## CTX340/450

Additional preclinical programs targeting AGT and ALAS1 respectively

**Progressing to IND/CTA**

Program	Indication(s)	Research	IND-enabling	Clinical
CTX310: ANGPTL3	HeFH <sup>1</sup> , HoFH <sup>2</sup> , Mixed dyslipidemias, and sHTG <sup>3</sup>	●	●	●
CTX320: Lp(a)	ASCVD with elevated Lp(a)	●	●	●
CTX340: AGT	Refractory hypertension	●	●	●
CTX450: ALAS1	Acute hepatic porphyria	●	●	●

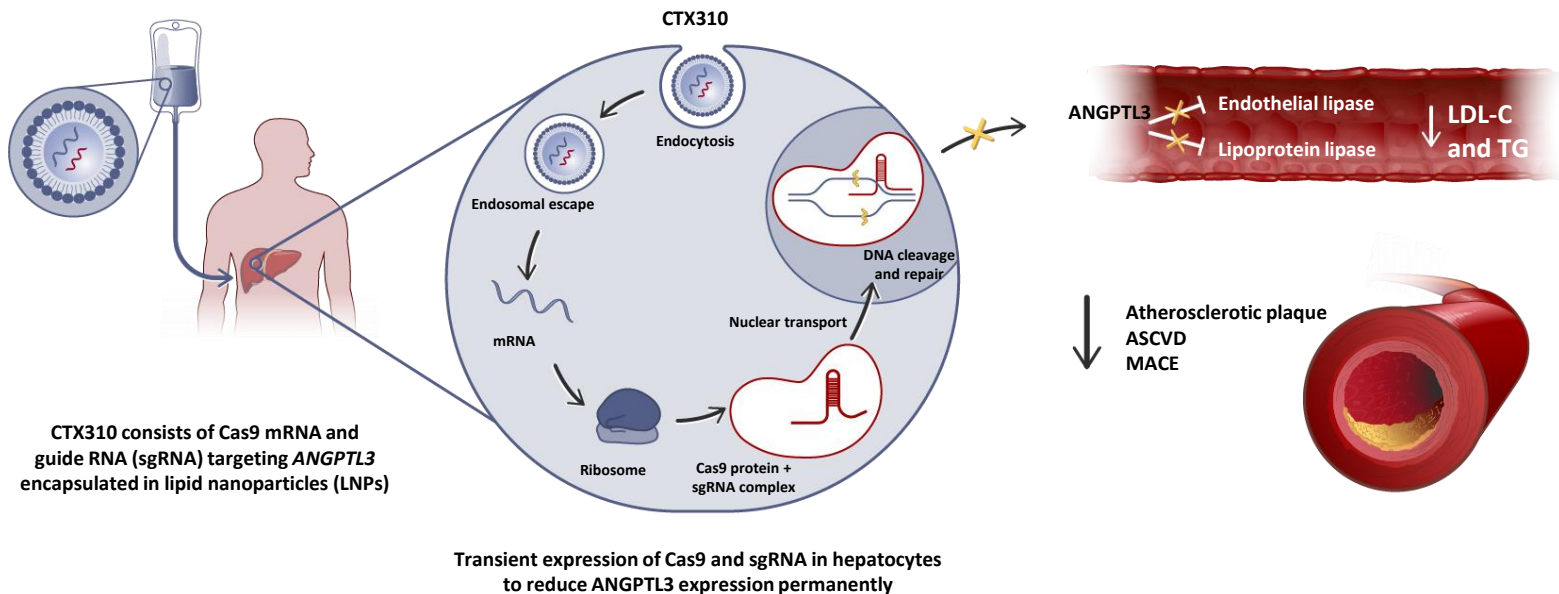
<sup>1</sup> Heterozygous familial hypercholesterolemia; <sup>2</sup> Homozygous familial hypercholesterolemia; <sup>3</sup> Severe hypertriglyceridemia

# CTX310: A One-Time Therapy to Silence Expression of ANGPTL3

Intravenous delivery  
targeting the liver

CRISPR/Cas9-based editing of *ANGPTL3*

Reduced atherogenic  
lipoprotein concentrations



Unlike other targets (e.g., PCSK9, APOC3), ANGPTL3 can simultaneously address elevated LDL/TG



# Phase I Study Evaluating the Safety and Efficacy of CTX310

Open-label, multicenter, Phase Ia/Ib study evaluating the safety and efficacy of CTX310 in homozygous familial hypercholesterolemia (HoFH), heterozygous familial hypercholesterolemia (HeFH), severe hypertriglyceridemia (sHTG), or mixed dyslipidemias



Phase Ia: Single ascending dose escalation to identify optimal biological dose

DL4 – 0.8mg/kg

DL3 – 0.6mg/kg

DL2 – 0.3mg/kg

DL1 – 0.1mg/kg

## Key eligibility criteria

- Age  $\geq 18$ -75 years
- TG ( $>300$  mg/dL) and/or LDL-C ( $>100$  mg/dL);  $>70$  mg/dL for subjects with ASCVD
- No significant comorbidities

## Key Objectives/Endpoints

- Safety and Tolerability
- Preliminary efficacy including changes in ANGPTL3, LDL, TG and ApoB compared to baseline
- Pharmacokinetics



Phase Ib

- Patients with refractory hypercholesterolemia and or hypertriglyceridemia
- Phase Ib dose informed by Phase Ia

# Initial Results for CTX310 Phase 1 Dose Escalation Trial

N=10; data cutoff April 16, 2025

	Mean % Change from Baseline at Day 30 post-infusion (+/- SEM)		
Dose Level (DL)	0.1 + 0.3 mg/kg (n=6)	0.6 mg/kg (n=3)	0.8 mg/kg (n=1)
Patient type	HeFH(4), MDL, sHTG	MDL(2), HeFH	sHTG
Triglycerides	-10.6% ± 13.1%	-55.7% ± 8.0%	-81.9%
LDL	34.8% ± 27.0%	-28.5% ± 24.4%	-64.6%

## Efficacy Highlights

- 0.8 mg/kg (DL4) patient with sHTG had an 82% reduction in triglycerides from a baseline of 1073 mg/dL at day 30
- 0.6 mg/kg (DL3) patient with HeFH had an 81% reduction in LDL-C from a baseline of 256 mg/dL at day 90

## Safety Highlights

- No treatment-related severe adverse events (SAEs) and no grade ≥3 adverse events (AEs)
- No clinically significant changes in ALT, AST, bilirubin, or platelets any dose level

All dose levels well tolerated - no dose dependent trend in any lab measure

# Large Addressable Patient Population for CTX310

HoFH	HeFH	Mixed dyslipidemias	sHTG
<ul style="list-style-type: none"><li>LDL-C can reach &gt;400 mg/dL</li></ul>	<ul style="list-style-type: none"><li>LDL-C can reach &gt;190 mg/dL</li></ul>	<ul style="list-style-type: none"><li>Adults with high LDL-C and TG 150-499 mg/dL</li></ul>	<ul style="list-style-type: none"><li>Adults with <math>\geq 500</math> mg/dL fasting triglyceride levels</li></ul>
~1.5K U.S. Patients <sup>1</sup>	~1M U.S. Patients <sup>2</sup>	>40M U.S. Patients <sup>3</sup>	~3M U.S. Patients <sup>4</sup>

Increasing LDL-Cholesterol

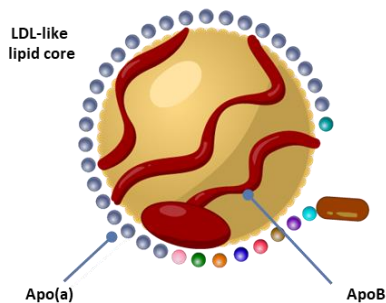
Increasing Triglycerides

>40M U.S. patients affected by elevated LDL, severely elevated TGs or both; CTX310 initially focused on high-risk patient subset with greatest unmet need

# Lp(a): An Emerging Key Target to Potentially Reduce CV Events

## Lp(a) is an independent risk factor for atherosclerotic cardiovascular disease (ASCVD)

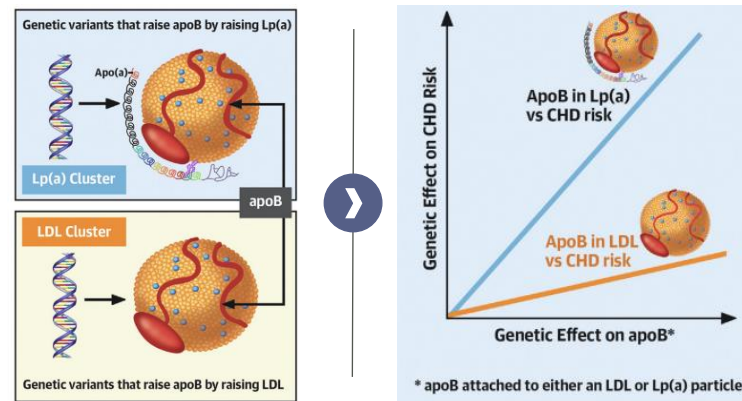
Lp(a) contains a single apo(a) molecule covalently bound by a disulfide bridge to ApoB



Apo(a) is encoded by the *LPA* gene and determines plasma Lp(a) levels

- Lp(a) is an LDL-like lipoprotein synthesized and secreted by hepatocytes
- Epidemiologic, Mendelian randomization, and genome-wide association studies have shown that elevated Lp(a) levels increase ASCVD risk<sup>1,2,3</sup>
- The genetic risk associated with elevated Lp(a) is cumulative over a person's lifetime and cannot be adequately reduced by lifestyle changes or currently approved therapies

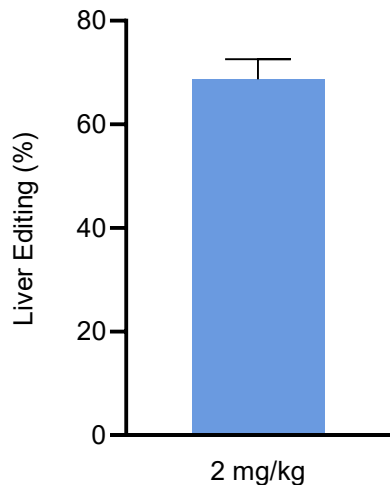
## Comparison of atherogenicity of Lp(a) and LDL



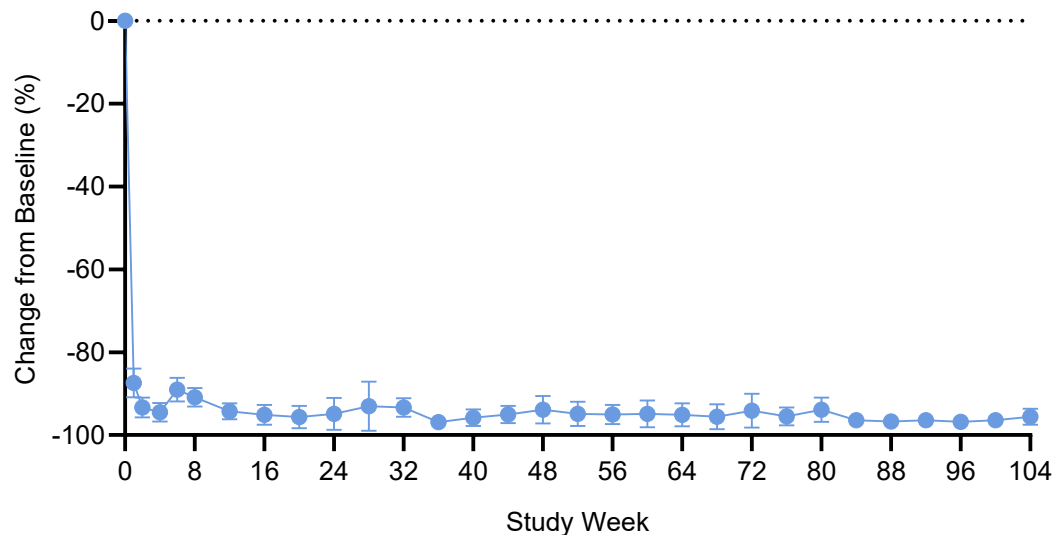
***Lp(a) is 6x more atherogenic than LDL on a per-particle basis<sup>4</sup>, highlighting Lp(a) as a key target for drug-based intervention***

# Single CTX320 Dose Resulted in Durable Lp(a) Reduction (NHP)

~70% editing of *LPA*<sup>1</sup> at 1 year



~95% reduction in plasma Lp(a) sustained at 2 years

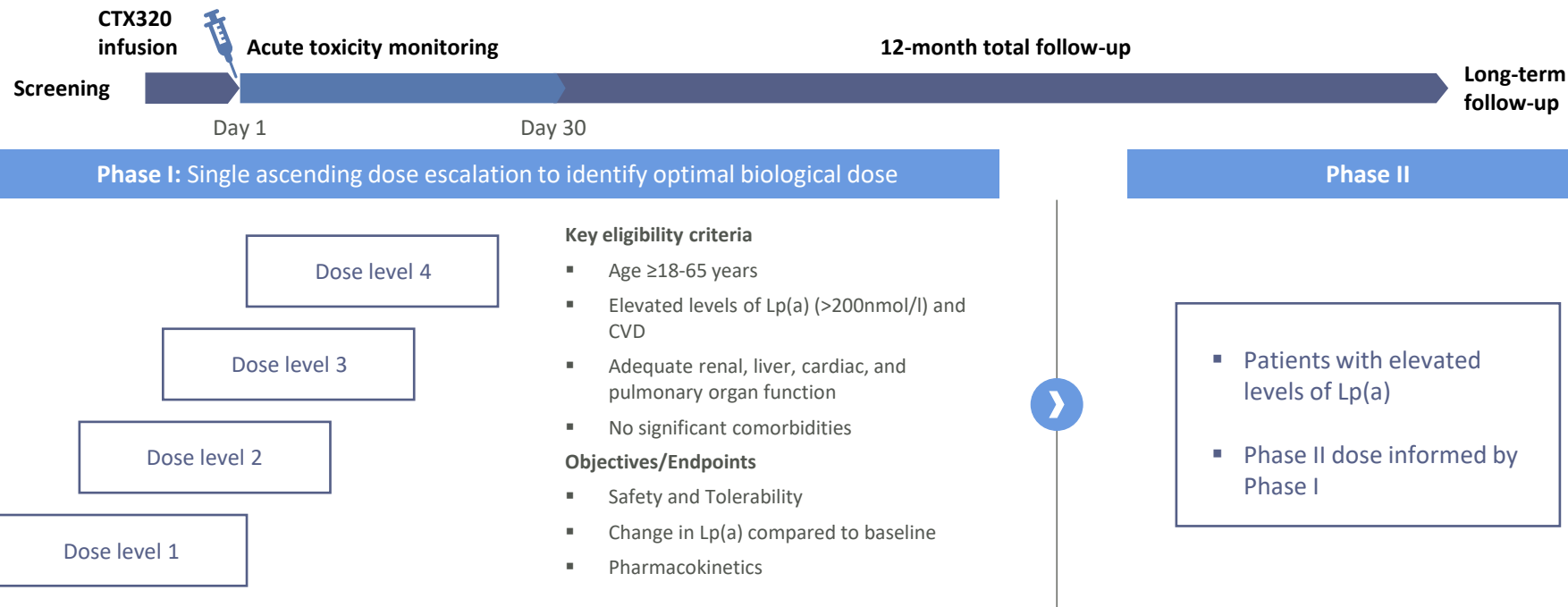


Updated NHP data demonstrate continued durability of CTX320 out to 2 years

Single dose of CTX320 (2 mg/kg) administered to NHPs (N=4) on Day 1; Editing data presented at the American Heart Association Scientific Sessions. 11 Nov 2023; Editing rate reflects whole liver editing

<sup>1</sup> LPA gene encodes apolipoprotein(a), a key component of lipoprotein(a)

# Phase I Study Evaluating the Safety and Efficacy of CTX320

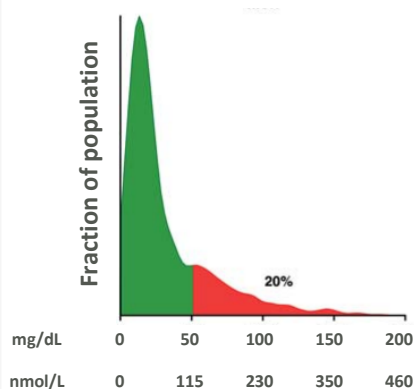


CTX320 update in 1H 2026

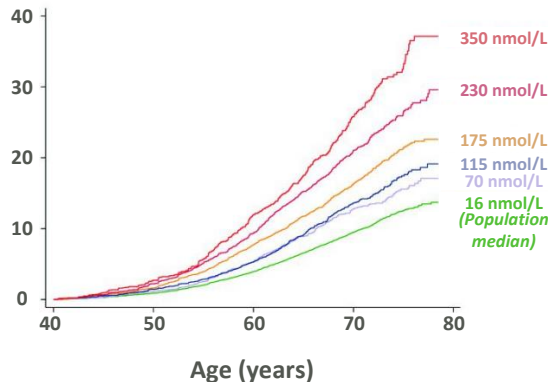
# CTX320 Has Potential to Address Population with Elevated Lp(a)

Elevated Lp(a) is considered the most common genetically inherited risk factor for cardiovascular disease (CVD)<sup>1</sup>

*Distribution of Lp(a) levels in general population<sup>2</sup>*



*Lifetime risk of major cardiovascular events with increasing Lp(a) levels<sup>3</sup>*



*Approximately one-fifth of the global population have elevated Lp(a) levels ~3x greater lifetime risk for most elevated Lp(a) population*

*A one-time durable reduction in Lp(a) has the potential to transform the current treatment paradigm in cardiovascular disease (compliance with small molecules and mAbs remains key issue)*

*siRNA cardiovascular outcomes trials in 2025/2026 have the potential to significantly de-risk Lp(a) as a therapeutic target*

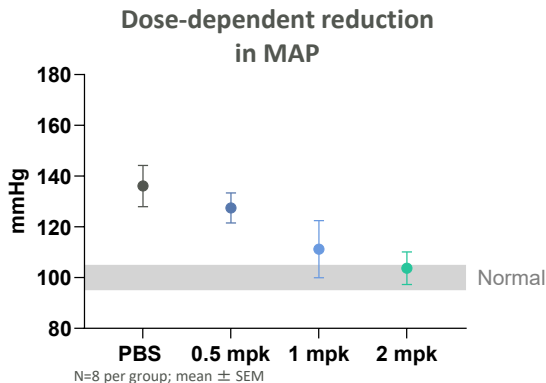
CTX320 has potential to benefit >60M U.S. patients with elevated Lp(a)



# Two Additional Programs Advancing Toward Clinic

## CTX340 Targeting AGT For Refractory Hypertension

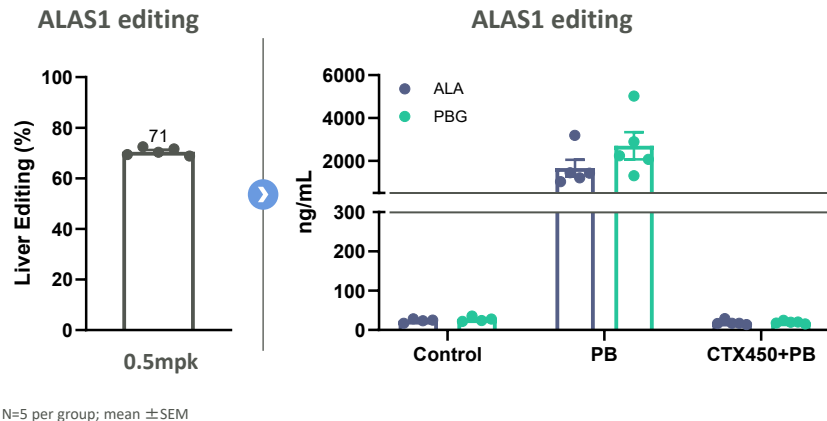
- Hypertension is the leading cause of cardiovascular morbidity and mortality worldwide<sup>1,2</sup>
- By going upstream of typical therapeutic approaches by targeting AGT, we can significantly impact hypertension and reduce dependence on other antihypertensives



**Dose-dependent, durable reduction in blood pressure in SHR model**

## CTX450 Targeting ALAS1 for AHPs

- Acute hepatic porphyrias (AHP) are caused by deficiencies of specific enzymes in the heme biosynthesis pathway leading to the build-up of toxic metabolites<sup>3,4</sup>
- By targeting the upstream enzyme ALAS1 we can significantly reduce the production of these metabolites (e.g., ALA, PBG)



**~70% editing of ALAS1 Leading to reduction of ALA and PBG biomarkers in PB challenge model**

# Three Parallel Efforts in Type 1 Diabetes (T1D)

Gene editing is key to achieving the goal of developing a beta-cell replacement product to treat diabetes without requiring long-term immunosuppression

1

## CTX211

**First-in-class edited beta-cell replacement therapy**

Encapsulated pancreatic progenitor cells derived from pluripotent stem cells with gene-edits for immune evasion and cell survival

**Phase I clinical trial**

2

## CTX213

**Deviceless, iPS-derived, edited beta-cell replacement therapy**

Pancreatic progenitor cells derived from edited pluripotent stem cells directly infused vs. delivered via device

**Advancing into IND-enabling phase**

3

## Non-exclusive license with Vertex

Covers Vertex's gene-edited hypoimmune programs for T1D

\$170M in upfront and milestone payments to CRISPR in 2023

Up to \$160M in additional research and development milestones, plus royalties on future products

**T1D update in 2025**

# Next-Generation Editing and Proprietary LNP Platform

The race to bring next-generation gene-editing technologies to the clinic has only just begun

Both editing and delivery expertise are needed to make the required edit at the required location

No single editing approach will dominate; each disease will require its own optimal strategy



CRISPR-✂️

Dedicated internal research group focused on emerging technologies for gene correction and insertion, including non-viral DNA delivery and all-RNA systems



LNP

Dedicated LNP group supporting liver-directed and extrahepatic *in vivo* programs with novel lipids and formulations, targeting moieties, etc.

Most next-generation editing technologies combine the RNA-guided endonuclease activity of Cas9 with a fused effector domain, e.g., a reverse transcriptase – **we have issued foundational IP covering such fusions**

# 2025: A Year of Significant Value Creation

 Ongoing launch of **CASGEVY** with investments driven by strong patient demand

 **Catalyst rich year with several data readouts** expected across our pipeline:

- CTX112 update in Oncology and Autoimmune diseases
- CTX310 update in the second half of 2025
- Additional updates across our pipeline, including CTX131 and T1D

 **Strong balance sheet** with clear path toward building a sustainable biotechnology company

 Opportunities for **additional business development across our portfolio**