®CRISPR Therapeutics Provides First Quarter 2025 Financial Results and Announces Positive Top-Line Data from Phase 1 Clinical Trial of CTX310™ Targeting *ANGPTL3*

-Initial CTX310™ Phase 1 clinical data demonstrates dose-dependent decreases in triglycerides (TG) and low-density lipoprotein (LDL), with peak reduction of up to 82% in TG and up to 81% in LDL, with a well-tolerated safety profile; presentation anticipated at a medical meeting in the second half of 2025-

-CASGEVY® continues to gain momentum; more than 65 authorized treatment centers (ATCs) activated globally for CASGEVY, and more than 90 patients have had cells collected across all regions; new patient initiations expected to grow significantly in 2025-

-Clinical trial ongoing for CTX320™, targeting the LPA gene; top-line data update on track for the second quarter of 2025-

-Clinical trials ongoing for next-generation CAR T product candidates, CTX112™ and CTX131™, targeting CD19 and CD70 across multiple indications; broad updates for CTX112 in oncology and autoimmune diseases expected mid-2025 with CTX131 updates also expected in 2025-

-Strong balance sheet with approximately $1.86 billion in cash, cash equivalents, and marketable securities as of March 31, 2025-

ZUG, Switzerland and BOSTON, Mass. – May 6, 2025-- CRISPR Therapeutics (Nasdaq: CRSP), a biopharmaceutical company focused on creating transformative gene-based medicines for serious diseases, today reported financial results for the first quarter ended March 31, 2025.

"CRISPR Therapeutics remains focused on executing our strategic priorities and advancing our portfolio of innovative therapies. We are highly encouraged by the initial data from our Phase 1 trial for CTX310, which demonstrates the power of our *in vivo* gene editing platform to deliver paradigm changing medicines to patients with serious cardiovascular disease," said Samarth Kulkarni, Ph.D., Chairman and Chief Executive Officer of CRISPR Therapeutics. "Additionally, we are pleased with the continued progress of Casgevy and the broader pipeline, and we look forward to sharing further clinical updates in the months ahead."

Recent Highlights and Outlook

- ***In Vivo Liver Editing Programs***
    - CTX310™ targets *ANGPTL3*, a gene that encodes for key protein involved in the regulation of low-density lipoprotein (LDL) and triglyceride (TG) levels – both well-established risk factors for atherosclerotic heart disease (ASCVD). Loss-of-function mutations in ANGPTL3 are associated with significantly reduced levels of LDL and TGs, as well as reduced risk of ASCVD, without adverse effects on overall health. In the U.S. alone, more than 40 million patients are affected by elevated LDL, severely elevated TGs or both – representing a large addressable patient population. CTX310 is initially

focused on a high-risk subset of this group with the greatest unmet medical need and limited effective treatment options.

- CTX310 is in an ongoing Phase 1 first-in-human dose escalation clinical trial targeting ANGPTL3 in four patient groups with elevated LDL, TG or both including homozygous familial hypercholesterolemia (HoFH), severe hypertriglyceridemia (sHTG), heterozygous familial hypercholesterolemia (HeFH), or mixed dyslipidemias (MDL) with levels of TG (>300 mg/dL) and/or LDL-C (>100 mg/dL); >70 mg/dL for subjects with ASCVD. TG and LDL, both of which are validated as surrogate endpoints for clinical benefit and accepted by regulatory agencies, were assessed at various timepoints.

- Top-line data reported today are from the first 10 patients across the first four cohorts (lean body weight-based doses of DL1 [0.1 mg/kg], DL2[0.3 mg/kg], DL3 [0.6 mg/kg] and DL4 [0.8 mg/kg]) with at least 30 days of follow-up for each participant as of a data cutoff date of April 16, 2025.

- A single dose of CTX310 demonstrated dose-dependent decreases in ANGPTL3, TGs, and LDL. Based upon ANGPTL3 knockdown, DL1 and DL2 were minimally active doses, whereas treatment at DL3 and DL4 resulted in reductions of up to 75% of baseline levels in ANGPTL3. CTX310 has been well-tolerated, with no treatment-related severe adverse events (SAEs) and no grade ≥3 adverse events (AEs) reported. No clinically significant changes in alanine aminotransferase (ALT), aspartate aminotransferase (AST), bilirubin, or platelets were observed at any dose level. There were no dose-dependent trends in any of these laboratory measurements.

	Mean % Change from Baseline at Day 30 post-infusion (+/- SEM)		
Dose Level (DL)	**DL1 + DL2 0.1 + 0.3 mg/kg (n=6)**	**DL3 0.6 mg/kg (n=3)**	**DL4 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%

- Compelling individual patient responses highlight the therapeutic potential of CTX310: a DL4 patient with sHTG had an 82% reduction in triglycerides from a baseline of 1073 mg/dL at day 30, and a DL3 patient with HeFH had an 81% reduction in LDL-C from a baseline of 256 mg/dL at day 90 – supporting the potential for targeted efficacy in high-risk populations.

- These initial results represent a significant milestone in the advancement of CRISPR Therapeutics' proprietary lipid nanoparticle (LNP) delivery technologies for gene editing in the liver. The Company plans to present the CTX310 Phase 1 data at a medical meeting in the second half of 2025.

- CTX320 is in an ongoing Phase 1 clinical trial targeting the *LPA* gene in patients with elevated lipoprotein(a) [Lp(a)], a genetically determined risk factor associated with increased incidence of major adverse cardiovascular events (MACE). Elevated Lp(a) levels are prevalent in up to 20% of the global population. Dose escalation is ongoing, with an update expected in the second quarter of 2025.

- CRISPR Therapeutics continues to advance two preclinical programs: CTX340™, targeting angiotensinogen (AGT) for the treatment of refractory hypertension, and CTX450™, targeting 5' aminolevulinic acid synthase 1 (ALAS1) for the treatment of acute hepatic porphyrias (AHP). Both candidates are currently in IND/CTA-enabling studies.

- **Hemoglobinopathies and CASGEVY® (exagamglogene autotemcel [exa-cel])**

  - CASGEVY is approved in the U.S., Great Britain, the EU, the Kingdom of Saudi Arabia (KSA), the Kingdom of Bahrain (Bahrain), Canada, Switzerland and the United Arab Emirates (UAE) for the treatment of both SCD and TDT, and launches are ongoing. Building on the foundational launch in 2024, significant progress is being made to bring this transformative therapy to patients worldwide.

  - As of May 1, more than 65 authorized treatment centers (ATCs) have been activated globally and approximately 90 patients have had their first cell collection. The number of new patients initiating cell collection is expected to grow significantly throughout 2025.

  - Vertex has secured a formal reimbursement agreement with NHS England, enabling access to CASGEVY for patients with SCD. This follows an earlier agreement, reaching in August 2024, providing access for eligible patients with TDT. A similar reimbursement agreement has been established in Wales for eligible SCD and TDT patients. Following a positive assessment, national reimbursement was finalized in Austria. In the Middle East, reimbursement was also finalized across the majority of Emirates, following regulatory approval in the UAE.

  - A manufacturing license application has been submitted to the U.S. Food and Drug Administration (FDA), with commercial production in Portsmouth, New Hampshire expected to begin in the second half of 2025. This submission is part of the planned ramp-up of CASGEVY manufacturing capacity as demand for the therapy increases.

  - CRISPR Therapeutics continues to advance its next-generation approaches designed to significantly broaden the addressable patient population for SCD and TDT. The Company's internally developed targeted conditioning program, an anti-CD117 (c-Kit) antibody-drug conjugate (ADC), remains on track in preclinical development. In parallel,

the Company is making continued progress in its *in vivo* editing platform aimed at enabling direct editing of hematopoietic stem cells (HSC) without the need for conditioning. By potentially eliminating the need for conditioning, this approach could unlock access to transformative therapies for a significantly larger patient population.

- **Immuno-Oncology and Autoimmune Disease Programs**

    - Clinical trials are ongoing for its next-generation allogeneic CAR T product candidates, CTX112™ and CTX131™, targeting CD19 and CD70, respectively, across multiple indications. Both candidates incorporate novel potency edits which can lead to significantly higher CAR T cell expansion and cytotoxicity, potentially establishing them as best-in-class allogeneic CAR T products for their respective targets. CTX112 is being developed for hematologic malignancies and autoimmune diseases and has the potential to be best-in-class based on preliminary data.

    - Encouraging clinical data from the ongoing Phase 1/2 clinical trial of CTX112 in relapsed or refractory B-cell malignancies supported the FDA's decision to grant Regenerative Medicine Advanced Therapy (RMAT) designation for the treatment of relapsed or refractory follicular lymphoma and marginal zone lymphoma.

    - CTX112 is also in an ongoing Phase 1 clinical trial in autoimmune diseases, including indications such as systemic lupus erythematosus (SLE), systemic sclerosis and inflammatory myositis. Preliminary safety, pharmacokinetic, and pharmacodynamic data from oncology trials support its potential in autoimmune indications. The Company plans to provide an update for both oncology and autoimmune disease in mid-2025.

    - Clinical trials for CTX131™ are ongoing in both solid tumors and hematologic malignancies, with updates expected in 2025. In parallel, an Investigational New Drug (IND) application for glypican-3 (GPC3)-targeted gene-edited autologous CAR T program for the treatment of hepatocellular carcinoma has been opened by our partner, Roswell Park Comprehensive Cancer Center.

    - CRISPR Therapeutics' immuno-oncology and autoimmune disease efforts are supported by a wholly-owned, U.S. manufacturing facility located in Framingham, MA. This investment enables the production of clinical and commercial-stage good manufacturing practice (GMP) materials across the Company's allogeneic cell therapy programs.

- **Regenerative Medicine Programs**

    - CRISPR Therapeutics continues to advance its regenerative medicine efforts in Type 1 diabetes (T1D). In addition to CTX211, the Company continues to advance next-generation programs focusing on induced pluripotent stem cell (iPSC) derived, allogeneic, gene-edited, beta islet cell precursors. These approaches aim to achieve insulin independence in T1D patients without the need for chronic immunosuppression. The Company expects to provide an update in 2025.

- **Upcoming Events**

    - The Company will participate in the following events in May:
        - 3rd Annual H.C. Wainwright BioConnect Investor Conference, May 20
        - 2025 RBC Capital Markets Global Healthcare Conference, May 20

- **First Quarter 2025 Financial Results**

    - **Cash Position:** Cash, cash equivalents, and marketable securities were $1,855.3 million as of March 31, 2025, compared to $1,903.8 million as of December 31, 2024. The decrease in cash was primarily driven by operating expenses, offset by proceeds from interest income and employee option exercises.

    - **R&D Expenses:** R&D expenses were $72.5 million for the first quarter of 2025, compared to $76.2 million for the first quarter of 2024. The decrease in R&D expense was primarily driven by a decrease in employee-related expenses, including stock-based compensation expenses.

    - **G&A Expenses:** General and administrative expenses were $19.3 million for the first quarter of 2025, compared to $18.0 million for the first quarter of 2024.

    - **Collaboration Expense:** Collaboration expense, net, was $57.5 million for the first quarter of 2025, compared to $47.0 million for the first quarter of 2024. The increase in collaboration expense, net, was primarily attributable to costs related to CASGEVY and collaboration expenses related to *in vivo* HSC editing, offset by CASGEVY product sales.

    - **Net Loss:** Net loss was $136.0 million for the first quarter of 2025, compared to a net loss of $116.6 million for the first quarter of 2024.

About CASGEVY® (exagamglogene autotemcel [exa-cel])
CASGEVY is a non-viral, *ex vivo* CRISPR/Cas9 gene-edited cell therapy for eligible patients with SCD or TDT, in which a patient's own hematopoietic stem and progenitor cells are edited at the erythroid specific enhancer region of the *BCL11A* gene. This edit results in the production of high levels of fetal hemoglobin (HbF; hemoglobin F) in red blood cells. HbF is the form of the oxygen-carrying hemoglobin that is naturally present during fetal development, which then switches to the adult form of hemoglobin after birth. CASGEVY has been shown to reduce or eliminate recurrent vaso-occlusive crises (VOCs) for patients with SCD and transfusion requirements for patients with TDT. CASGEVY is approved for certain indications in multiple jurisdictions for eligible patients.

About the CRISPR Collaboration and Vertex
CRISPR Therapeutics and Vertex entered into a strategic research collaboration in 2015 focused on the use of CRISPR/Cas9 to discover and develop potential new treatments aimed at the underlying genetic causes of human disease. CASGEVY represents the first potential treatment to emerge from the joint research program. Under an amended collaboration agreement, Vertex now leads global development,

manufacturing, and commercialization of CASGEVY and splits program costs and profits worldwide 60/40 with CRISPR Therapeutics. Vertex is the manufacturer and exclusive license holder of CASGEVY.

About CTX112
CTX112 is being developed for both oncology and autoimmune indications. CTX112 is a next-generation, wholly-owned, allogeneic CAR T product candidate targeting Cluster of Differentiation 19, or CD19, which incorporates edits designed to evade the immune system, enhance CAR T potency, and reduce CAR T exhaustion. CTX112 is being investigated in an ongoing clinical trial designed to assess safety and efficacy of the product candidate in adult patients with relapsed or refractory B-cell malignancies who have received at least two prior lines of therapy. In addition, CTX112 is being investigated in an ongoing clinical trial designed to assess the safety and efficacy of the product candidate in adult patients with systemic lupus erythematosus, systemic sclerosis, and inflammatory myositis.

About CTX131
CTX131 is being developed for both solid tumors and hematologic malignancies, including T cell lymphomas (TCL). CTX131 is a next-generation, wholly-owned, allogeneic CAR T product candidate targeting Cluster of Differentiation 70, or CD70, an antigen expressed on various solid tumors and hematologic malignancies. CTX131 incorporates edits designed to evade the immune system, prevent fratricide, enhance CAR T potency, and reduce CAR T exhaustion. CTX131 is being investigated in ongoing clinical trials designed to assess the safety and efficacy of the product candidate in adult patients with relapsed or refractory solid tumors and hematologic malignancies, including TCL.

About *In Vivo* Programs
CRISPR Therapeutics has established a proprietary lipid nanoparticle (LNP) platform for the delivery of CRISPR/Cas9 to the liver. The Company's *in vivo* portfolio includes its lead investigational programs, CTX310 (directed towards angiopoietin-related protein 3 (*ANGPTL3*)) and CTX320 (directed towards *LPA*, the gene encoding apolipoprotein(a) (apo(a)), a major component of lipoprotein(a) [Lp(a)]). Both are validated therapeutic targets for cardiovascular disease. CTX310 and CTX320 are in ongoing clinical trials in patients with heterozygous familial hypercholesterolemia, homozygous familial hypercholesterolemia, mixed dyslipidemias, or severe hypertriglyceridemia, and in patients with elevated lipoprotein(a), respectively. In addition, the Company's research and preclinical development candidates include CTX340 and CTX450, targeting angiotensinogen (*AGT*) for refractory hypertension and 5'-aminolevulinate synthase 1 (*ALAS1*) for acute hepatic porphyria (AHP), respectively.

About CTX211
CTX211 is an allogeneic, gene-edited, stem cell-derived investigational therapy for the treatment of type 1 diabetes (T1D), which incorporates gene edits that aim to make cells hypoimmune and enhance cell fitness. This immune-evasive cell replacement therapy is designed to enable patients to produce their own insulin in response to glucose. A Phase 1 clinical trial for CTX211 for the treatment of T1D is ongoing.

About CRISPR Therapeutics
Since its inception over a decade ago, CRISPR Therapeutics has evolved from a research-stage company advancing gene editing programs into a leader that celebrated the historic approval of the first-ever CRISPR-based therapy. The Company has a diverse portfolio of product candidates across a broad range of disease areas including hemoglobinopathies, oncology, regenerative medicine, cardiovascular,

autoimmune, and rare diseases. In 2018, CRISPR Therapeutics advanced the first-ever CRISPR/Cas9 gene-edited therapy into the clinic to investigate the treatment of sickle cell disease and transfusion-dependent beta thalassemia. Beginning in late 2023, CASGEVY® (exagamglogene autotemcel [exa-cel]) was approved in several countries to treat eligible patients with either of these conditions. The Nobel Prize-winning CRISPR technology has revolutionized biomedical research and represents a powerful, clinically validated approach with the potential to create a new class of potentially transformative medicines. To accelerate and expand its efforts, CRISPR Therapeutics has formed strategic partnerships with leading companies including Vertex Pharmaceuticals. CRISPR Therapeutics AG is headquartered in Zug, Switzerland, with its wholly-owned U.S. subsidiary, CRISPR Therapeutics, Inc., and R&D operations based in Boston, Massachusetts and San Francisco, California. To learn more, visit www.crisprtx.com.

CRISPR Special Note Regarding Forward-Looking Statements

Statements contained in this press release 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 made by Dr. Kulkarni in this press release, as well as 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 press release, 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) the expected benefits of its collaborations; and (vii) the therapeutic value, development, and commercial potential of gene editing and delivery technologies and therapies, including CRISPR/Cas9. 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 its 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. We disclaim any obligation or undertaking to update or revise any forward-looking statements contained in this press release, other than to the extent required by law.

This press release also contains information regarding our industry, our business and the markets for certain of our product candidates, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Unless otherwise expressly stated, we obtained

this industry, business, market and other data from market research firms and other third parties, including medical publications, government data and similar sources. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information.

This press release discusses CRISPR/Cas9 gene editing investigational therapies and is not intended to convey conclusions about efficacy or safety as to those investigational therapies or uses of such investigational therapies. There is no guarantee that any investigational therapy will successfully complete clinical development or gain approval from applicable regulatory authorities.

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CRISPR Therapeutics AG
Condensed Consolidated Statements of Operations
(Unaudited, In thousands except share data and per share data)

	Three Months Ended March 31,	
	2025	2024
Revenue:		
Collaboration revenue	$ —	$ —
Grant revenue	865	504
Total revenue	$ 865	504
Operating expenses:		
Research and development	72,484	76,172
General and administrative	19,296	17,953
Collaboration expense, net	57,509	46,966
Total operating expenses	149,289	141,091
Loss from operations	(148,424)	(140,587)
Total other income, net	13,537	24,720
Net loss before income taxes	(134,887)	(115,867)
Provision for income taxes	(1,109)	(724)
Net loss	(135,996)	(116,591)
Foreign currency translation adjustment	41	(11)
Unrealized gain (loss) on marketable securities	2,254	(3,454)
Comprehensive loss	$ (133,701)	$ (120,056)
Net loss per common share — basic	$ (1.58)	$ (1.43)
Basic weighted-average common shares outstanding	85,938,720	81,794,630
Net loss per common share — diluted	$ (1.58)	$ (1.43)
Diluted weighted-average common shares outstanding	85,938,720	81,794,630

CRISPR Therapeutics AG
Condensed Consolidated Balance Sheets Data
(Unaudited, in thousands)

	As of	
	March 31, 2025	December 31, 2024
Cash and cash equivalents	$ 235,184	$ 298,257
Marketable securities	1,620,101	1,605,569
Working capital	1,748,164	1,849,350
Total assets	2,166,102	2,242,034
Total shareholders' equity	1,829,160	1,932,080