

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): October 21, 2020

CRISPR THERAPEUTICS AG

(Exact name of Registrant as Specified in Its Charter)

Switzerland
(State or Other Jurisdiction
of Incorporation)

001-37923

Not Applicable
(IRS Employer
Identification No.)

Baarerstrasse 14
6300 Zug, Switzerland
(Address of Principal Executive Offices)

(Commission File Number)

Not Applicable
(Zip Code)

Registrant's Telephone Number, Including Area Code: +41 (0)41 561 32 77

Not Applicable

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Shares, nominal value CHF 0.03	CRSP	The NASDAQ Global Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 7.01. Regulation FD Disclosure.

On October 21, 2020, CRISPR Therapeutics AG (the “Company”) issued a press release announcing initial top-line data from the Company’s ongoing Phase 1 clinical trial investigating the safety and efficacy of CTX110™ for the treatment of relapsed or refractory B-cell malignancies. A copy of the press release is attached hereto as Exhibit 99.1.

The information in this Item 7.01 of Form 8-K, including the accompanying Exhibit 99.1, shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934 (the “Exchange Act”), or otherwise subject to the liability of such section, nor shall such information be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, regardless of the general incorporation language of such filing, except as shall be expressly set forth by specific reference in such filing.

Item 8.01. Other Events

On October 21, 2020, the Company hosted a conference call and webcast to discuss the initial top-line data from the Company’s ongoing Phase 1 clinical trial investigating the safety and efficacy of CTX110 for the treatment of relapsed or refractory B-cell malignancies. A copy of the presentation slides used by the Company during the conference call and webcast is attached hereto as Exhibit 99.2 and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits

Exhibit Number	Description
99.1	Press release issued by CRISPR Therapeutics AG, dated October 21, 2020
99.2	Presentation slides, dated October 21, 2020
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

CRISPR THERAPEUTICS AG

Date: October 21, 2020

By: /s/ Samarth Kulkarni
Samarth Kulkarni, Ph.D.
Chief Executive Officer

CRISPR Therapeutics Reports Positive Top-Line Results from Its Phase 1 CARBON Trial of CTX110™ in Relapsed or Refractory CD19+ B-cell Malignancies

-50% (2/4) complete response (CR) rate at three months in the Dose Level 3 (DL3) cohort; both responders remain in CR-

-Early evidence of dose-dependent responses with CTX110-

-Acceptable safety profile at DL3 or below-

-Management to host webcast and conference call today at 8:30 a.m. ET-

ZUG, Switzerland and CAMBRIDGE, Mass., October 21, 2020 -- CRISPR Therapeutics (Nasdaq: CRSP), a biopharmaceutical company focused on creating transformative gene-based medicines for serious diseases, today announced positive top-line results from the Company's ongoing Phase 1 CARBON trial evaluating the safety and efficacy of CTX110, its wholly-owned allogeneic CAR-T cell therapy targeting CD19+ B-cell malignancies.

"We are highly encouraged by today's data, which demonstrate the promise of allogeneic therapies in treating hematological malignancies," said Samarth Kulkarni, Ph.D., Chief Executive Officer of CRISPR Therapeutics. "Over time, we believe CRISPR-edited allogeneic CAR-T has the potential to leapfrog autologous CAR-T and benefit much broader patient populations. We continue to enroll patients and look forward to additional data read-outs for this program as well as our other allogeneic CAR-T programs, CTX120™ and CTX130™, next year. We are grateful to the patients and investigators who have made this important research possible."

"From this early data read-out, CTX110 has shown dose-dependent efficacy and response rates that are comparable to the early autologous CAR-T trials. Furthermore, CTX110 had an acceptable safety profile, which could make CAR-Ts more widely accessible," said Joseph McGuirk, D.O., Professor of Medicine and Division Director of Hematologic Malignancies and Cellular Therapeutics at the University of Kansas Medical Center and investigator in the Phase 1 CARBON trial of CTX110. "While longer follow-up is required, these early data support the potential for CTX110 to become an effective off-the-shelf CAR-T therapy for patients with relapsed or refractory B-cell malignancies."

CARBON Trial Overview

The Phase 1 CARBON trial is an open-label, multicenter study evaluating the safety and efficacy of CTX110 in adult patients with relapsed or refractory non-Hodgkin lymphoma, who have received at least two prior lines of therapy. As of the September 28, 2020, data cutoff, 12 patients were enrolled and infused with CTX110. Data are reported for the 11 patients who had at least completed their one-month assessment as of the data cutoff date.

Patients were infused with CTX110 following three days of lymphodepletion using fludarabine (30mg/m²/day) and cyclophosphamide (500mg/m²/day). The primary endpoints include safety as measured by the incidence of dose limiting toxicities (DLTs) and overall response rate. Key secondary endpoints include duration of response, progression-free survival and overall survival.

Additional details may be found at clinicaltrials.gov, using identifier: NCT04035434.

Safety Data Overview

Dose Levels 1 – 3 (n=10)

No DLTs were observed. There were no cases of Graft-vs-Host Disease (GvHD) despite high HLA-mismatch between allogeneic CAR-T donors and patients. No infusion reactions to either lymphodepleting chemotherapy or CTX110 were observed. Cytokine Release Syndrome (CRS) occurred in three patients (30%) and in each case was Grade 2 or below and resolved with tocilizumab administration. One patient (10%) had Grade 2 Immune Effector Cell-Associated Neurotoxicity Syndrome (ICANS) that improved within 24 hours with standard interventions. Two additional serious adverse events (periorbital cellulitis and febrile neutropenia) occurred after CTX110 infusion, both of which resolved and were determined to be unrelated to disease progression or CTX110.

Dose Level 4 (n=1)

One patient received Dose Level 4 of CTX110. On Day 5, the patient experienced Grade 2 CRS which resolved in 5 days. The PET/CT assessment at Day 25 showed the patient had achieved a complete response. The following day, the patient was hospitalized with febrile neutropenia and developed symptoms of short-term memory loss and confusion. The symptoms eventually progressed to significant obtundation that required intubation. He was initially treated for ICANS with steroids, anakinra and intrathecal chemotherapy without improvement. The patient was later found to have reactivation of HHV-6 and HHV-6 encephalitis and treated with antiviral therapy. The decision was made to withdraw supportive care and the patient died 52 days after CTX110 infusion.

Clinical Activity (n=11)

Early evidence of dose-dependent anti-tumor activity was seen with CTX110. Disease assessment was performed by centralized independent radiological review according to the 2014 Lugano response criteria.

Cell dose (CAR+ T cells)	DL1 30x10 ⁶ N=3	DL2 100x10 ⁶ N=3	DL3 300x10 ⁶ N=4	DL4 600x10 ⁶ N=1
Overall response rate (ORR), N (%)	0 (0%)	1 (33%)	2 (50%)	1 (100%)
Complete response (CR) rate, N (%)	0 (0%)	1 (33%)	2 (50%)	1 (100%)

- Complete response (CR) was achieved at Dose Levels 2, 3, and 4. At DL3, two out of four patients had a complete response. These two patients remain in CR.
 - The four patients with CR had deep responses including the complete resolution of extranodal disease, normalization of all nodal disease to 1.5 cm or smaller, and a Deauville score of 2 or lower. Additionally, one of these patients who had 30% lymphoblasts in the bone marrow achieved complete clearance after CTX110 infusion.
 - CR was achieved both in patients with diffuse large B-cell lymphoma and with transformed follicular lymphoma, as well as in patients who were primary refractory and who had relapsed after autologous stem cell transplant.
-

- At DL2 and above, CTX110 was detected at multiple time points in all patients, with peak expansion occurring at 1-2 weeks and cells detected as late as 180 days post-infusion.

Conference Call and Webcast

CRISPR Therapeutics will host a conference call and webcast today at 8:30 a.m. ET. The webcast will be made available on the CRISPR Therapeutics website at <https://crisprtx.gcs-web.com/events> in the Investors section under Events and Presentations. Following the live audio webcast, the presentation and replay will be available on the Company's website for approximately 30 days.

Dial-In Information

Live (U.S. / Canada): +1 (866) 342-8588

Live (International): +1 (203) 518-9865

Conference ID: 80521

About CTX110™

CTX110, a wholly owned program of CRISPR Therapeutics, is a healthy donor-derived gene-edited allogeneic CAR-T investigative therapy targeting cluster of differentiation 19, or CD19. CTX110 is being investigated in the CARBON trial.

About CARBON

The ongoing Phase 1 single-arm, multi-center, open label clinical trial, CARBON, is designed to assess the safety and efficacy of several dose levels of CTX110 for the treatment of relapsed or refractory B-cell malignancies. CRISPR Therapeutics is the sponsor of the CARBON trial.

About CRISPR Therapeutics

CRISPR Therapeutics is a leading gene editing company focused on developing transformative gene-based medicines for serious diseases using its proprietary CRISPR/Cas9 platform. CRISPR/Cas9 is a revolutionary gene editing technology that allows for precise, directed changes to genomic DNA. CRISPR Therapeutics has established a portfolio of therapeutic programs across a broad range of disease areas including hemoglobinopathies, oncology, regenerative medicine and rare diseases. To accelerate and expand its efforts, CRISPR Therapeutics has established strategic partnerships with leading companies including Bayer, Vertex Pharmaceuticals and ViaCyte, Inc. CRISPR Therapeutics AG is headquartered in Zug, Switzerland, with its wholly-owned U.S. subsidiary, CRISPR Therapeutics, Inc., and R&D operations based in Cambridge, Massachusetts, and business offices in San Francisco, California and London, United Kingdom. For more information, please visit www.crisprtx.com.

CRISPR Forward-Looking Statement

This press release may contain a number of “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including statements made by Drs. Kulkarni and McGuirk in this press release, as well as regarding CRISPR Therapeutics’ expectations about any or all of the following: (i) the safety, efficacy and clinical progress of our various clinical programs; (ii) the status of clinical trials (including, without limitation, activities at clinical trial sites) and expectations regarding the data that is being presented; (iii) the data that will be generated by ongoing and planned clinical trials, and the ability to use that data for the design and initiation of further clinical trials; and (iv) the therapeutic value, development, and commercial potential of CRISPR/Cas9 gene editing technologies and therapies, including as compared to other therapies. Without limiting the foregoing, the words “believes,”

“anticipates,” “plans,” “expects” and similar expressions are intended to identify forward-looking statements. You are cautioned that forward-looking statements are inherently uncertain. Although CRISPR Therapeutics believes that such statements are based on reasonable assumptions within the bounds of its knowledge of its business and operations, forward-looking statements are neither promises nor guarantees and they are necessarily subject to a high degree of uncertainty and risk. Actual performance and results may differ materially from those projected or suggested in the forward-looking statements due to various risks and uncertainties. These risks and uncertainties include, among others: the potential for initial and preliminary data from any clinical trial and initial data from a limited number of patients not to be indicative of final trial results; the potential that clinical trial results may not be favorable; potential impacts due to the coronavirus pandemic, such as the timing and progress of clinical trials; that future competitive or other market factors may adversely affect the commercial potential for CRISPR Therapeutics’ product candidates; uncertainties regarding the intellectual property protection for CRISPR Therapeutics’ technology and intellectual property belonging to third parties, and the outcome of proceedings (such as an interference, an opposition or a similar proceeding) involving all or any portion of such intellectual property; and those risks and uncertainties described under the heading “Risk Factors” in CRISPR Therapeutics’ most recent annual report on Form 10-K, quarterly report on Form 10-Q and in any other subsequent filings made by CRISPR Therapeutics with the U.S. Securities and Exchange Commission, which are available on the SEC’s website at www.sec.gov. 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 press release, other than to the extent required by law.

CRISPR THERAPEUTICS® standard character mark and design logo, CTX110™, CTX120™, and CTX130™ are trademarks and registered trademarks of CRISPR Therapeutics AG. All other trademarks and registered trademarks are the property of their respective owners.

Investor Contact:

Susan Kim
+1-617-307-7503
susan.kim@crisprtx.com

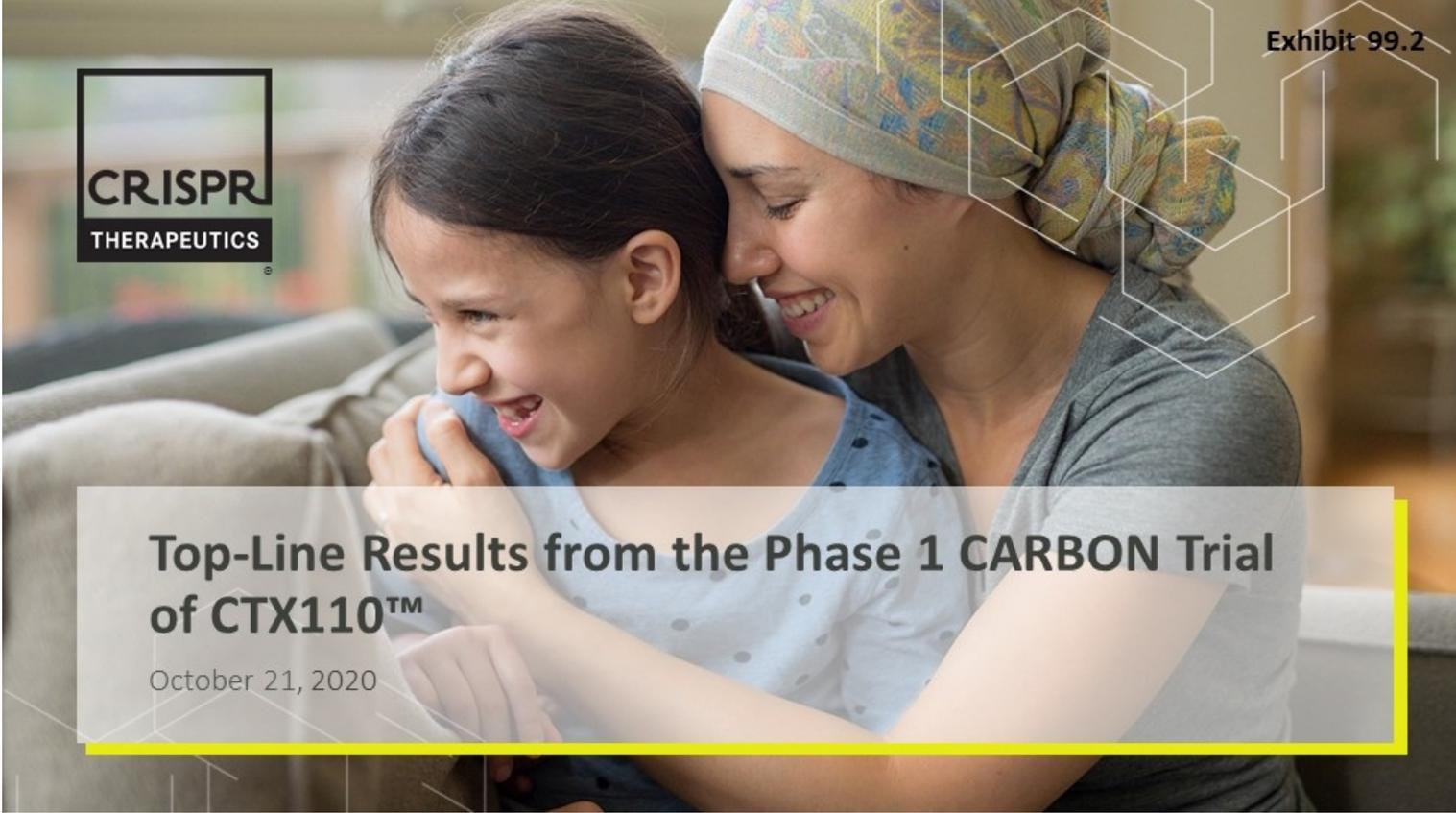
Media Contact:

Rachel Eides
WCG on behalf of CRISPR
+1-617-337-4167
reides@wcgworld.com



Top-Line Results from the Phase 1 CARBON Trial of CTX110™

October 21, 2020



The presentation and other related materials may contain a number of "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including statements regarding CRISPR Therapeutics' expectations about any or all of the following: (i) the safety, efficacy and clinical progress of our various clinical programs; (ii) the status of clinical trials (including, without limitation, the expected timing of data releases, announcement of additional programs and activities at clinical trial sites) and expectations regarding the data that is being presented; (iii) the data that will be generated by ongoing and planned clinical trials, and the ability to use that data for the design and initiation of further clinical trials; and (iv) the therapeutic value, development, and commercial potential of CRISPR/Cas9 gene editing technologies and therapies, including as compared to other therapies. Without limiting the foregoing, the words "believes," "anticipates," "plans," "expects" and similar expressions are intended to identify forward-looking statements. You are cautioned that forward-looking statements are inherently uncertain. Although CRISPR Therapeutics believes that such statements are based on reasonable assumptions within the bounds of its knowledge of its business and operations, forward-looking statements are neither promises nor guarantees and they are necessarily subject to a high degree of uncertainty and risk. Actual performance and results may differ materially from those projected or suggested in the forward-looking statements due to various risks and uncertainties. These risks and uncertainties include, among others: the potential for initial and preliminary data from any clinical trial and initial data from a limited number of patients not to be indicative of final trial results; the potential that clinical trial results may not be favorable; potential impacts due to the coronavirus pandemic, such as the timing and progress of clinical trials; that future competitive or other market factors may adversely affect the commercial potential for CRISPR Therapeutics' product candidates; uncertainties regarding the intellectual property protection for CRISPR Therapeutics' technology and intellectual property belonging to third parties, and the outcome of proceedings (such as an interference, an opposition or a similar proceeding) involving all or any portion of such intellectual property; and those risks and uncertainties described under the heading "Risk Factors" in CRISPR Therapeutics' most recent annual report on Form 10-K, quarterly report on Form 10-Q and in any other subsequent filings made by CRISPR Therapeutics with the U.S. Securities and Exchange Commission, which are available on the SEC's website at www.sec.gov. 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, other than to the extent required by law.

CRISPR THERAPEUTICS® standard character mark and design logo, CTX001™, CTX110™, CTX120™, and CTX130™ are trademarks and registered trademarks of CRISPR Therapeutics AG. All other trademarks and registered trademarks are the property of their respective owners.

Presenters on Today's Call



Samarth Kulkarni, PhD

Chief Executive Officer
CRISPR Therapeutics



Ewelina Morawa, MD

Vice President, Clinical Development
CRISPR Therapeutics



Joseph McGuirk, DO

Professor of Medicine and Division Director of Hematologic Malignancies
and Cellular Therapeutics
University of Kansas Medical Center



Tony Ho, MD

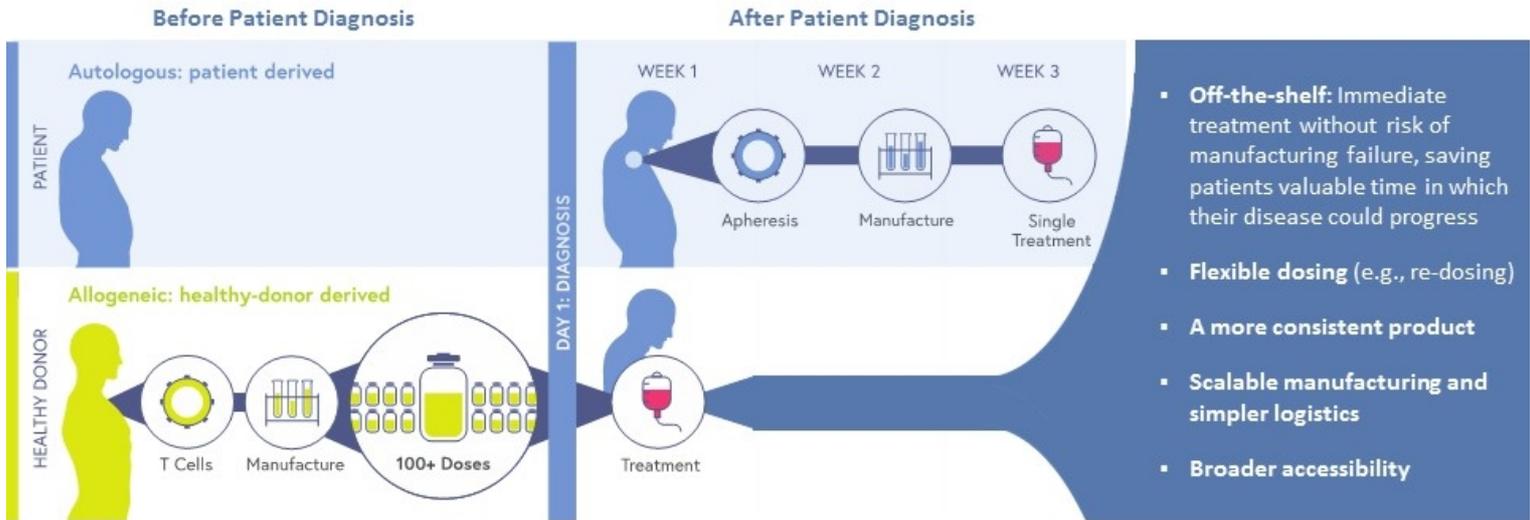
Executive Vice President, Head of Research & Development
CRISPR Therapeutics

We Have Made Tremendous Progress Over the Past 5 Years



- **Built the leading CRISPR company:** 4 programs in the clinic; >300 employees; >\$1B cash balance
- **Demonstrated, for the first time, the power of CRISPR gene editing in rare diseases:** initial data with CTX001™ supportive of a potential functional cure for sickle cell disease and beta thalassemia
- **Advanced three gene-edited allogeneic CAR-T programs into the clinic** across four trials
- **In parallel, expanded into regenerative medicine and progressed our *in vivo* efforts**
- **Created a sustainable innovation engine with pre-eminent capabilities**
- **And today, we show the promise and potential of CRISPR-edited cell therapies in the fight against cancer**

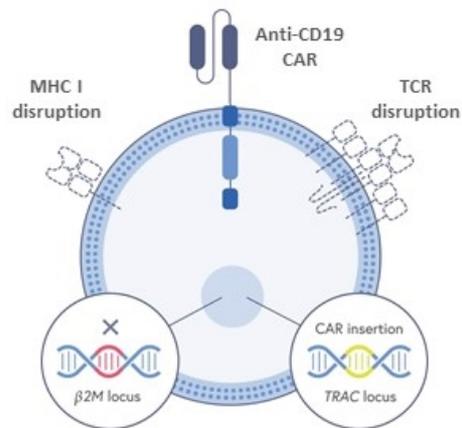
Allogeneic CAR-T Therapy Has Transformative Potential



*Specificity, efficiency, and versatility of **CRISPR gene editing** facilitates consistent, multiplex editing to produce allogeneic cell therapies and enhance immune cell performance*

Multiplex CRISPR gene editing in one step designed to:

- **Improve persistence in the allo setting** via β 2M knock-out to eliminate MHC I expression
- **Avoid need** for more toxic lymphodepletion regimens

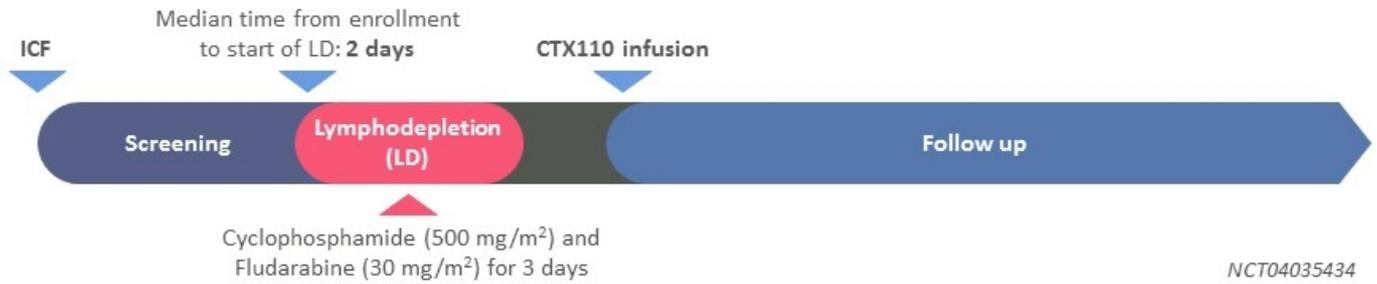


- **Prevent GvHD** via TCR disruption
- **Improve consistency and safety** by precise insertion of CAR construct into *TRAC* locus without using lentivirus or retrovirus

CTX120TM and CTX130TM utilize the same CRISPR-edited allogeneic T cell design, but with different CAR targets, as well as additional editing in the case of CTX130

CARBON: Single-arm study evaluating the safety and efficacy of CTX110

Allogeneic CAR-T enables simplified trial design: short screening timeframe, no apheresis, no bridging chemotherapy, and on-site availability of CAR-T cell product



Key eligibility criteria

- Age ≥ 18 years
- Relapsed/refractory non-Hodgkin lymphoma, as evidenced by 2+ lines of prior therapy
- ECOG performance status 0 or 1
- Adequate renal, liver, cardiac, and pulmonary organ function
- No prior allogeneic SCT or treatment with CAR-T therapy

Primary endpoints

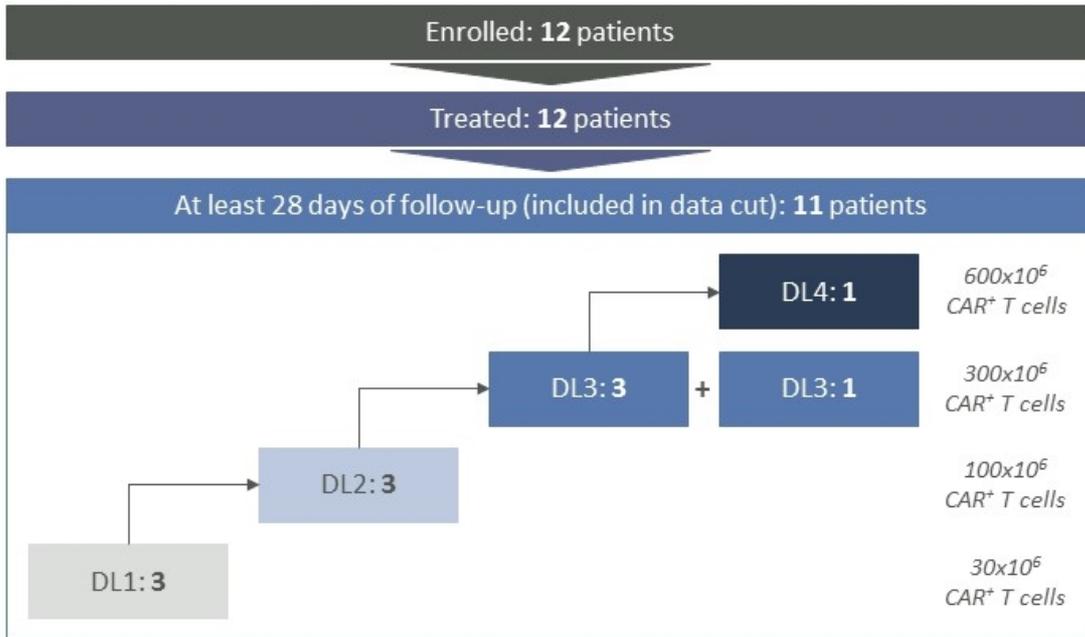
- Incidence of adverse events, defined as DLTs
- ORR

Key secondary endpoints

- DoR, PFS, and OS

CARBON: Patient Flow

As of the data cutoff date:



- At each completed dose level, **two lots of CTX110 manufactured from different healthy donors** were used
- Given antitumor activity observed, **additional patients enrolled at DL3 and DL4 added**

Data as of September 28, 2020

CARBON: Baseline Patient Characteristics

N (%) (unless otherwise noted)

Cell dose (CAR ⁺ T cells)	DL1 30x10 ⁶ N=3	DL2 100x10 ⁶ N=3	DL3 300x10 ⁶ N=4	DL4 600x10 ⁶ N=1
Median age, years (range)	52 (50-61)	64 (58-74)	64.5 (62-74)	72
Male	2 (66.7)	2 (66.7)	1 (25)	1 (100)
Lymphoma subtypes				
Diffuse large B-cell lymphoma (DLBCL) ¹	1 (33.3)	3 (100)	2 (50)	0
Transformed follicular lymphoma (tFL)	1 (33.3)	0	2 (50)	1 (100)
Other (Richter's Transformation)	1 (33.3)	0	0	0
Current disease stage (per Lugano 2014)²				
Stage III	1 (33.3)	1 (33.3)	2 (50)	0
Stage IV	2 (66.7)	2 (66.7)	1 (25)	1 (100)
Prior treatments				
Median number (range)	2.0 (2-8)	3.0 (2-3)	2.0 (2-4)	5
Hematopoietic stem cell transplant	0	0	3 (75)	1 (100)
Refractory to last therapy	3 (100)	3 (100)	0	0

(1) Including high grade lymphoma (e.g., triple hit); (2) One patient with Stage II disease treated at DL3

Data as of September 28, 2020

Dose-Dependent Responses Observed with CTX110

Best response per 2014 Lugano criteria¹ by independent central assessment

Cell dose (CAR+ T cells)	DL1 30x10 ⁶ N=3	DL2 100x10 ⁶ N=3	DL3 300x10 ⁶ N=4	DL4 600x10 ⁶ N=1
Overall response rate (ORR), N (%)	0 (0%)	1 (33%)	2 (50%)	1 (100%)
Complete response (CR) rate, N (%)	0 (0%)	1 (33%)	2 (50%)	1 (100%)

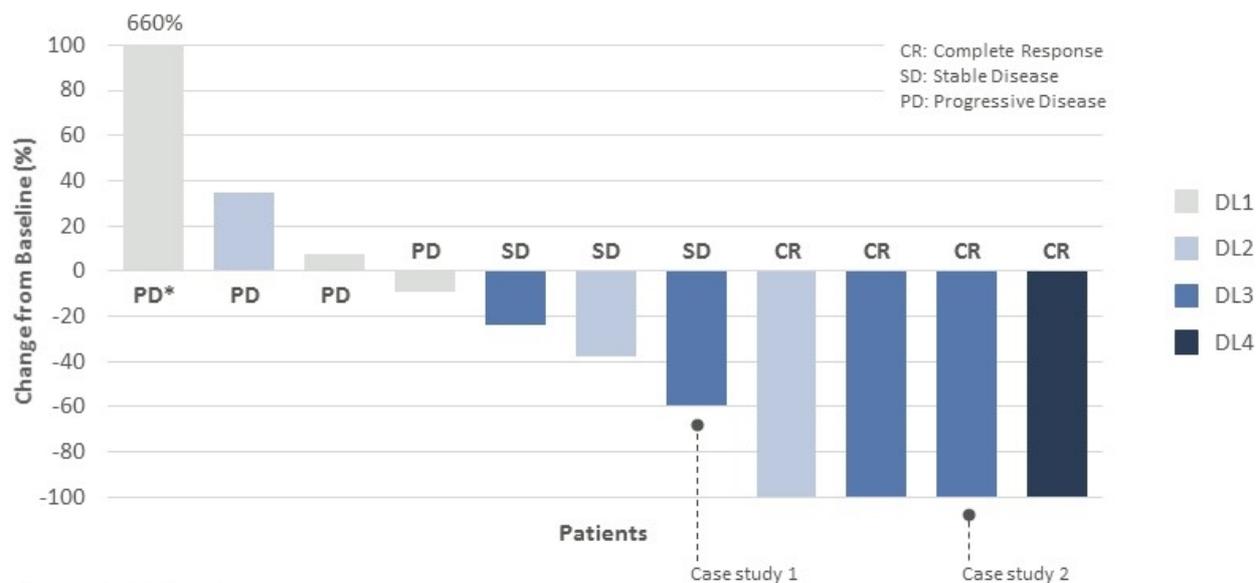
First efficacy assessment occurs at M1 visit

(1) Cheson, et al. *J Clin Oncol.* (2014)

Data as of September 28, 2020

Dose-Dependent Reduction in Tumor Size with CTX110

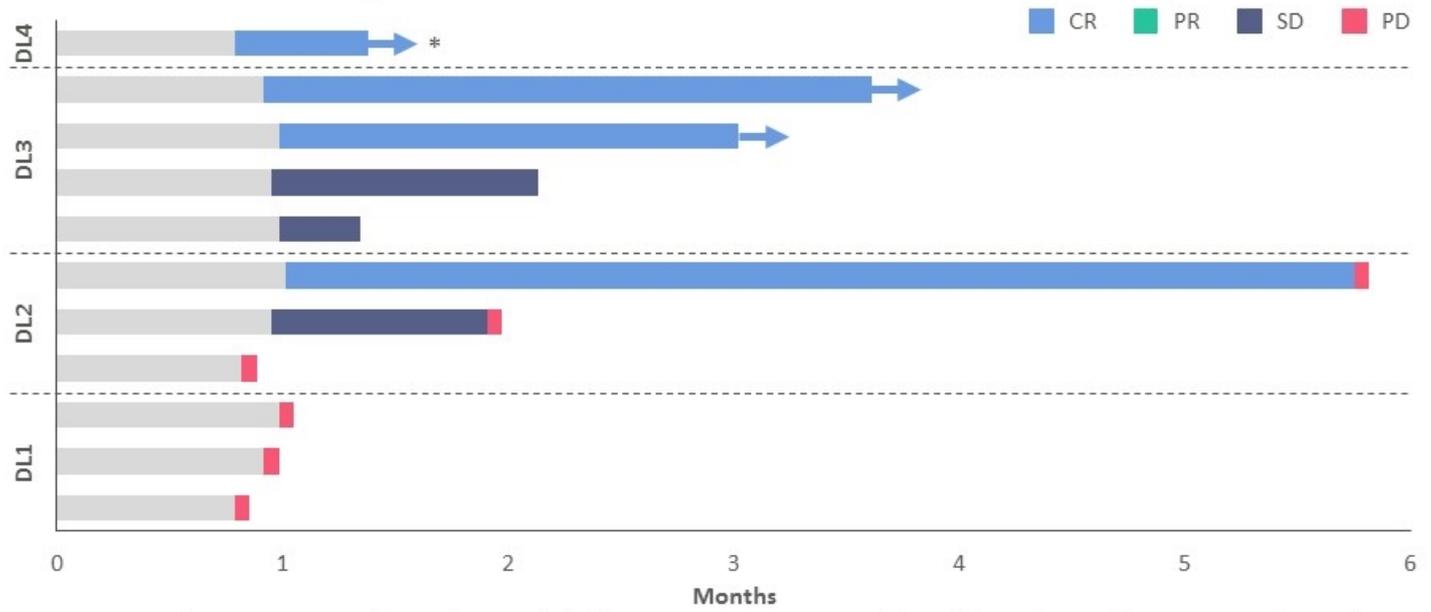
Best tumor size reduction per 2014 Lugano criteria by independent central assessment



* Patient subsequently failed autologous CAR-T

Data as of September 28, 2020

Complete Responses with CTX110 Showed Durability at Month 3 and Beyond



Imaging per protocol occurs at M1, M3, and M6; * Patient died while in CR at Day 52 post CTX110 infusion following data cutoff Data as of September 28, 2020

Treatment-emergent adverse events (AEs) of special interest in DL1-3, N (%)

N=10	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Graft-versus-Host Disease (GvHD)	0	0	0	0	0
Cytokine Release Syndrome (CRS) ^{1,2}	1 (10%)	2 (20%)	0	0	0
ICANS ^{1,3}	0	1 (10%)	0	0	0
Infections	0	0	1 (10%)	0	0

For patients in DL1 through DL3 (N=10):

- **No GvHD** despite all patients with $\leq 3/12$ HLA match to CTX110 donors
- **No CRS or ICANS above Grade 2**
- **No infusion reactions**
- **4 serious adverse events (SAEs) following CTX110 infusion not related to disease progression among 3 treated patients:** ICANS (n=1), CRS (n=1), periorbital cellulitis (n=1), febrile neutropenia (n=1)

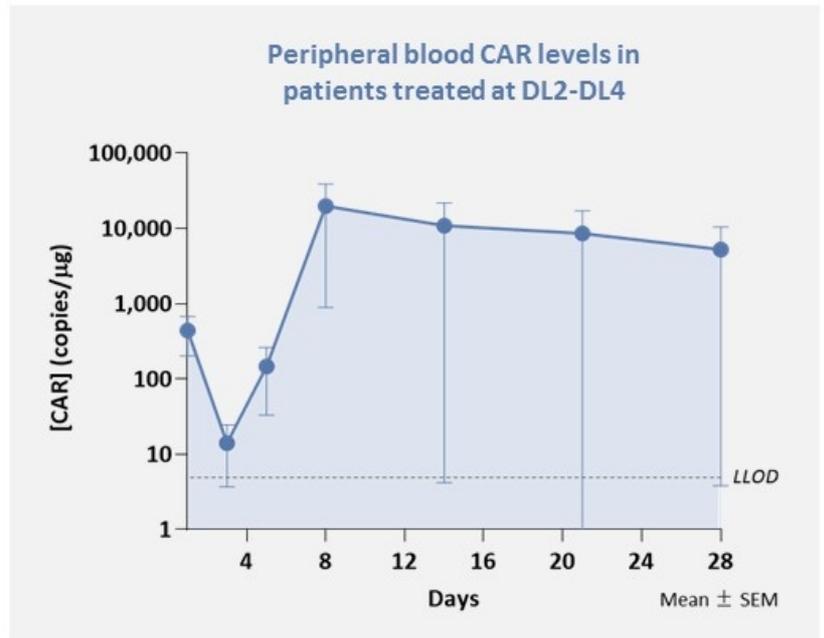
(1) Per ASTCT criteria; other AEs graded per CTCAE; (2) Includes two separate episodes of CRS (1 G1, 1 G2) in single patient; worst grade reported; (3) Immune effector Cell-Associated Neurotoxicity Syndrome

Data as of September 28, 2020

- **Patient characteristics:** 72-year-old male with relapsed transformed follicular lymphoma following five prior lines of therapy, including autologous stem cell transplant
- **Efficacy:** Complete response on Day 25 post infusion of CTX110
- **Safety:**
 - Experienced Grade 2 CRS at Day 5 that resolved
 - Admitted with febrile neutropenia at Day 26 and developed confusion and memory loss starting at Day 28, with further deterioration ultimately requiring intubation for airway protection
 - Initially treated for ICANS and later found to have reactivation of HHV-6 and HHV-6 encephalitis
 - Despite treatments, patient remained obtunded and died on Day 52 after family requested withdrawal of care

For patients in DL2 through DL4:

- **CAR-T cells detected at multiple time points in all patients**
- **Redistribution phase** observed from Day 1 to Day 3, followed by expansion
- **Consistent peak expansion** of CTX110 in the peripheral blood **seen around 1-2 weeks post infusion**
- **CTX110 detected out as late as 180 days** after administration



CTX110 Case Study: Stable Disease with Remaining Tumor Negative for CD19

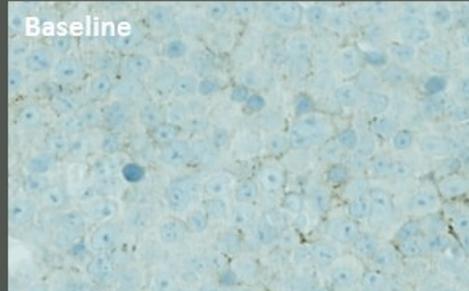
Patient characteristics

- 62-year-old male with transformed follicular lymphoma
- Relapsed following two prior lines of therapy
- Treated with CTX110 at DL3 (300x10⁶ CAR⁺ T cells)

Safety and efficacy

- No fever, CRS, or ICANS
- Visible reduction in lymph nodes on physical exam
- SD at day 28 with 59% reduction in tumor size, but remaining sites of disease were FDG avid
- Pre-treatment tumor biopsy showed positive staining for CD19 by IHC, whereas Day 41 post-CTX110 tumor biopsy did not, indicative of CD19-negative disease

IHC: Immunohistochemistry; FDG: Fluorodeoxyglucose



CTX110 Case Study: Complete Response Following Eradication of a Large Tumor Mass

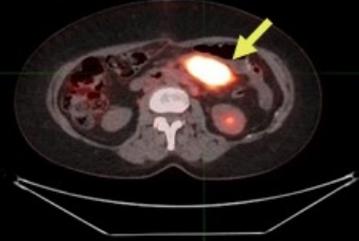
Patient characteristics

- 62-year-old female diagnosed with DLBCL
- Relapsed following two prior lines of therapy, including autologous SCT
- Treated with CTX110 at DL3 (300x10⁶ CAR⁺ T cells)

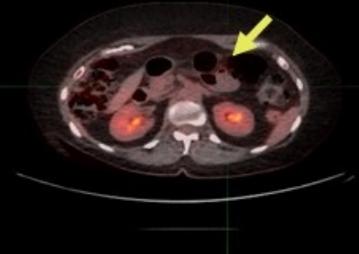
Safety and efficacy

- CR at Day 28 with no tumor visible
- Deauville 5 to Deauville 1 for FDG uptake
- No fever, CRS, or ICANS
- CR ongoing at 3+ months

Baseline



D28 (CR)



Initial CTX110 Data Supports Our Approach



Dose-dependent antitumor activity

- Early evidence of dose response
 - Complete responses achieved in 4 patients (both DLBCL and tFL)
 - Data in line with early autologous CAR-T trials
-

Acceptable safety profile at DL3 and below

- No CRS or ICANS above Grade 2 at DL3 and below; no GvHD at any dose level
 - Responses achieved without the use of more toxic lymphodepletion agents, consistent with CTX110 being engineered for immune evasion
-

Initial experience demonstrates versatility of allogeneic CAR-T

- All enrolled patients treated rapidly – no need for bridging chemotherapy or risk of manufacturing failure
- Responses seen across multiple product lots manufactured from different donors
- Validates our CRISPR-edited allogeneic CAR-T approach

Planned Next Steps for CTX110 and Our CRISPR-Edited CAR-T Pipeline



- **“Full steam ahead” on CTX110**

- Proceed into expansion cohort following selection of optimal dose
- Re-dosing now included as an option in all cohorts; one patient re-dosed with CTX110 at DL3 so far

- **Continue rapid progress on CTX120 and CTX130**

- Dosing ongoing in trial of CTX120 in multiple myeloma
- Dosing ongoing in trials of CTX130 in renal cell carcinoma and in T and B cell lymphomas
- Initial data for both programs expected in 2021

- **Building on the pipeline:** announcement of additional programs planned in 2021

Our I/O Strategy and Pipeline



	PROGRAM	RESEARCH	IND-ENABLING	CLINICAL	MARKETED	STATUS
Validate <i>allogeneic platform with proven targets</i>	CTX110 Anti-CD19 allogeneic CAR-T	█	█	█	█	<i>Enrolling</i>
	CTX120 Anti-BCMA allogeneic CAR-T	█	█	█	█	<i>Enrolling</i>
Expand <i>from hematologic cancers into solid tumors</i>	CTX130 in lymphomas Anti-CD70 allogeneic CAR-T	█	█	█	█	<i>Enrolling</i>
	CTX130 in RCC Anti-CD70 allogeneic CAR-T	█	█	█	█	<i>Enrolling</i>
Unlock <i>the full potential of I/O cell therapy with CRISPR</i>	Anti-CD33 allogeneic CAR-T	█	█	█	█	<i>Incorporating additional editing, novel targeting, etc.</i>
	Anti-PTK7 allogeneic CAR-T	█	█	█	█	
	Additional undisclosed programs	█	█	█	█	

CTX110 sites



United States

- **University of Kansas Medical Center** *Westwood, KS*
- **Oregon Health and Science University** *Portland, OR*
- **Sarah Cannon Research Institute** *Nashville, TN*
- **University of Chicago** *Chicago, IL*
- **Mayo Clinic** *Jacksonville, FL*
- **Texas Transplant Institute** *San Antonio, TX*

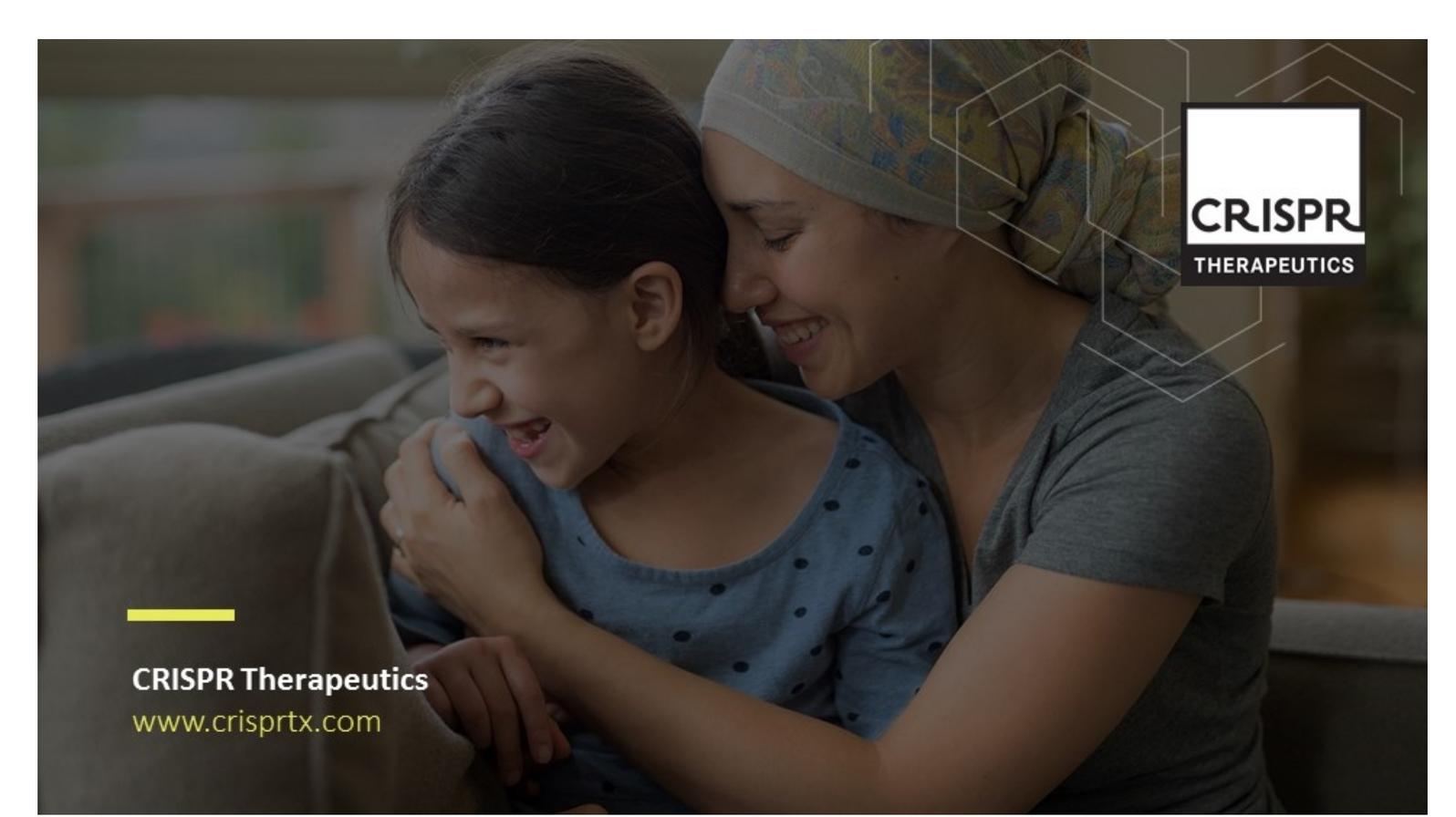
Europe

- **University Medical Center Hamburg-Eppendorf** *Hamburg, Germany*

Australia

- **Peter MacCallum Cancer Centre** *Melbourne*
- **Royal Prince Alfred Hospital** *Sydney*

Thank you to patients and their families, investigators, and site staff



CRISPR
THERAPEUTICS

CRISPR Therapeutics
www.crisprtx.com

