



**COMMITMENT TO A CURE**

[cellectis.com](https://cellectis.com)



# FORWARD-LOOKING STATEMENTS

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This presentation contains “forward-looking” statements that are based on our management’s current expectations and assumptions and on information currently available to management.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

The risks and uncertainties include, but are not limited to the risk that the preliminary results from our product candidates will not continue or be repeated, the risk that our clinical trials will not be successful. The risk of not obtaining regulatory approval to commence clinical trials on additional UCART product candidates,

the risk that any one or more of our product candidates will not be successfully developed and commercialized.

Further information on the risk factors that may affect company business and financial performance, is included in our annual report on form 20-F and other filings Collectis makes with the securities and exchange commission from time to time and its financial reports.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in the forward-looking statements, even if new information becomes available in the future.

Collectis proprietary information.  
Not to be copied, distributed or used without Collectis’ prior written consent.

# WRITING THE HISTORY OF ALLOGENEIC CAR T-CELLS

**20 years**

of expertise in  
gene editing

**8 years**

of experience in allogeneic  
CAR-T manufacturing

**6 clinical trials**

ongoing as of 2020;  
3 Collectis-sponsored  
3 partnered

**INVENTORS / PIONEERS OF GENE EDITING & ALLOGENEIC CAR T-CELLS**



**In 2012 . .**

Mission to develop  
allogeneic CAR T-cells begins

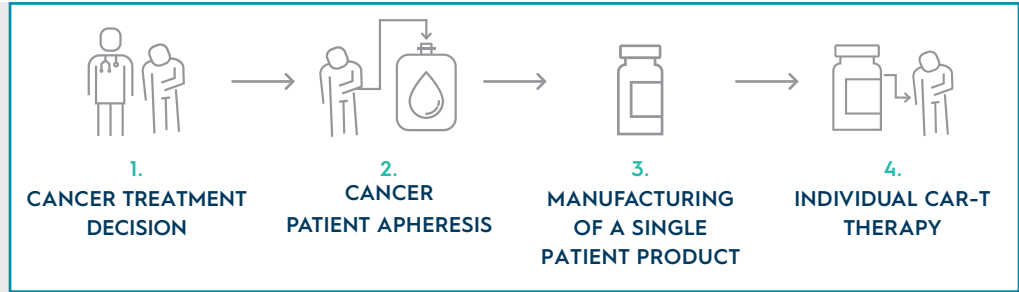
**In 2015 . .**

First-in-man compassionate  
use of an allogeneic CAR-T  
product candidate occurs

# ADVANTAGES OF ALLOGENEIC VS. AUTOLOGOUS CAR-T

## Autologous process:

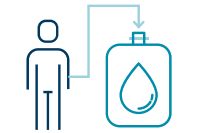
Manufacturing variability + several weeks before treatment is available



## Allogeneic process:

Consistent manufacturing + quality

Immediate treatment



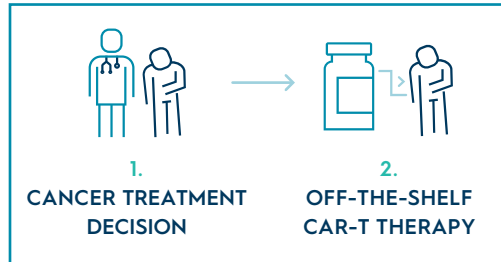
HEALTHY DONOR APHERESIS



SCALABLE MANUFACTURING OF 100+ DOSES/BATCH



MASS PRODUCED ALLOGENEIC CAR-T THERAPIES



- TIME SAVED
- COST EFFECTIVE
- MARKET ACCESS

# PARTNERSHIPS WITH INDUSTRY LEADERS

Up to \$3.9B in potential milestone payments plus royalties

15 Licensed Targets  
including UCARTBCMA



Fully funded clinical development  
Up To \$2.8B In Development &  
Sales Milestones + Royalties on Sales



Equity Investor



6.57% ownership in Cellecctis

As of August 31, 2019

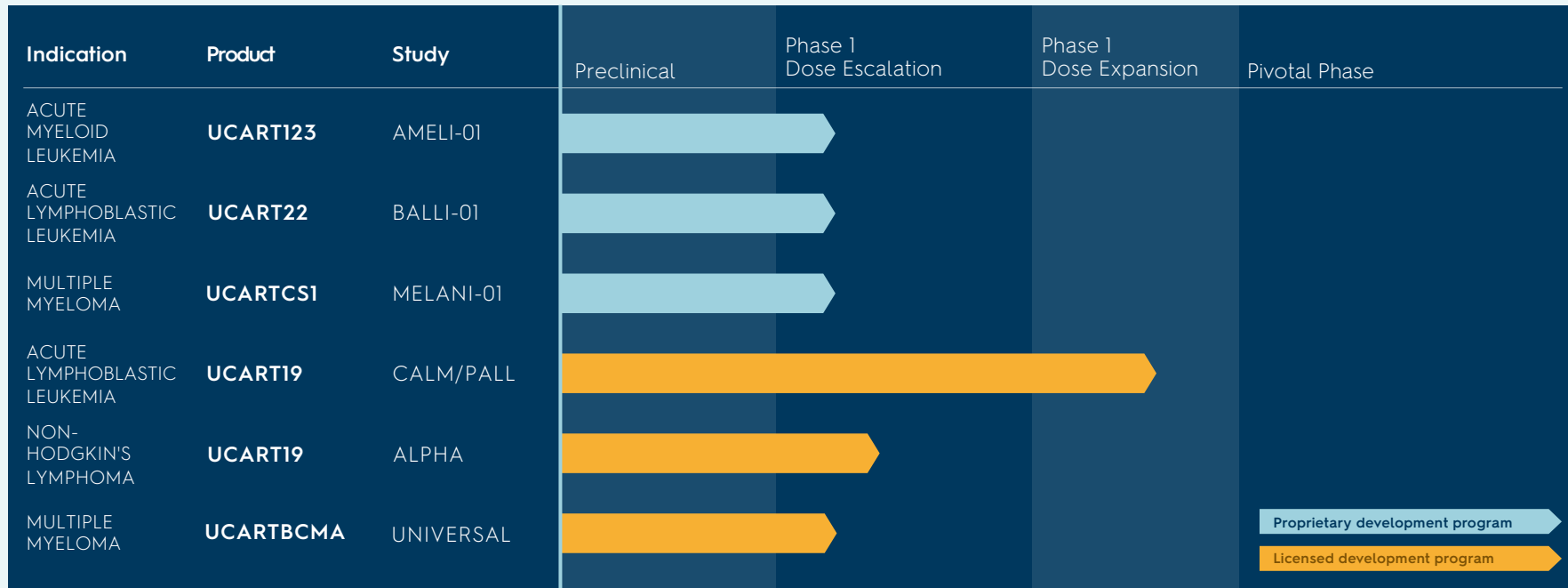
6 Licensed Targets  
including UCART19



Fully funded clinical development  
Up To \$1.1B In Development & Sales  
Milestones + Royalties on Sales



# PIPELINE: INNOVATIVE CANCER THERAPIES FOR UNMET NEEDS



Collectis and its partners are also working on a number of other preclinical targets

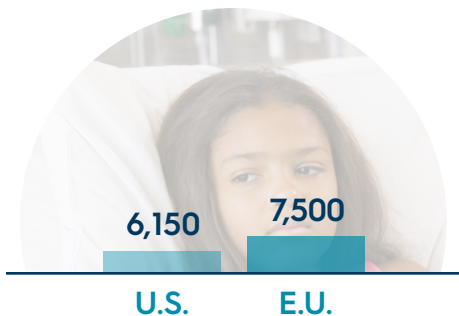


UCART19/ALLO-501 is exclusively licensed to Servier and under a joint clinical development program between Servier and Allogene.  
UCARTBCMA/ALLO-715 is exclusively licensed to Allogene.

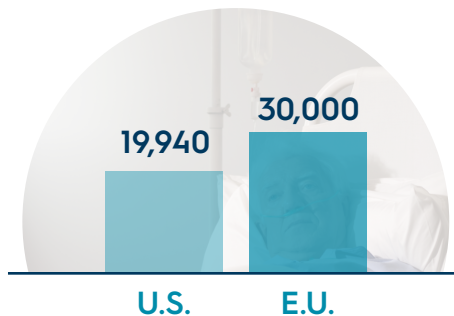
# PIPELINE TARGETS MULTIPLE UNMET NEEDS IN CANCER

## Incidence rates for 2020

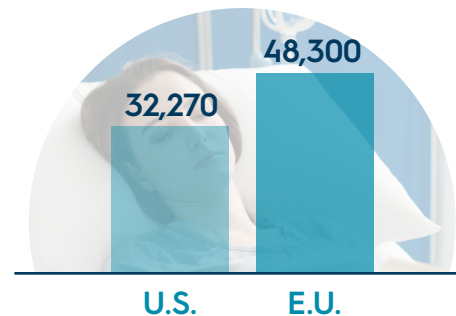
### ALL



### AML



### MM



## Survival data

**20%**

5-year OS\* in adults

**<6 months**

median disease-free survival in pediatric patients



**UCART22**

**27%**

5-year OS in adults

**6%**

5-year OS in adults >55 years old



**UCART123**

**50%**

5-year OS in adults

**43-83 months**

median OS for stages 2-3



**UCARTCS1**



\* Overall Survival

# CLINICAL TRIAL: DESIGN OF PHASE 1 STUDIES (DOSE FINDING)

Primary Objectives:

**Safety and Identification  
of Optimal Dose**

Secondary Objectives:

**Efficacy and Correlative  
Studies**

Dose Escalation:

Optimal dose definition



**DL1**  
2-4 patients



**DL2**  
2-4 patients



**DL3**  
2-4 patients



**DL4**  
2-4 patients  
for UCART123

DL: Dose Level



# UCART19: PROOF OF CONCEPT / FIRST ALLOGENEIC CAR-T

## PHASE 1 dose escalation in R/R ALL



### Safety – Primary Objective

**0%** Grade  $\geq 2$  skin Graft vs Host Disease

**0%** Grade 3-4 neurotoxicity

**14%** Grade 3-4 Cytokine Release Syndrome

### Efficacy – Secondary Objective

**82%** CR/CRi rate with optimal lymphodepletion

**67%** overall CR/CRi rate

**71%** of these patients were MRD-



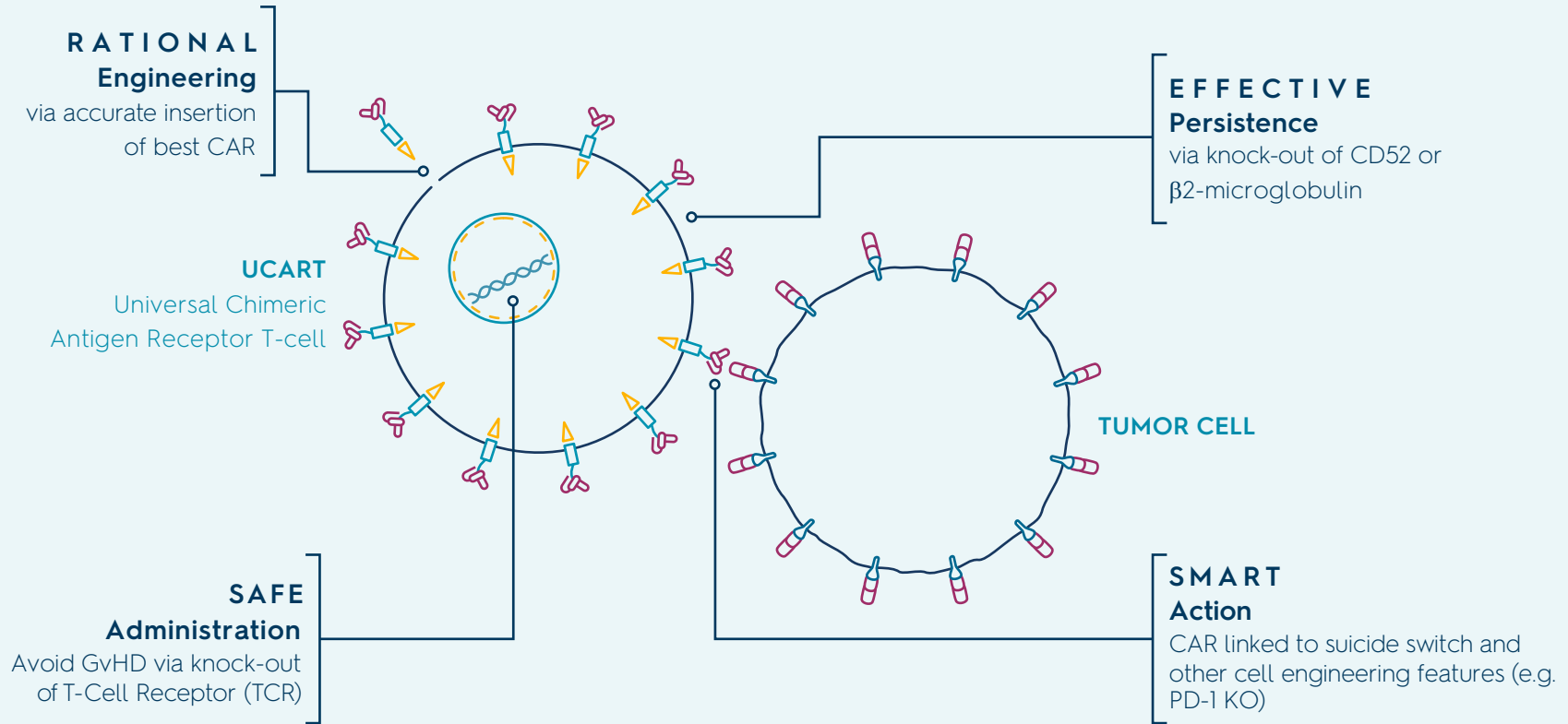
Re-dosing with UCART19 resulted in cell expansion and MRD- status in 2/3 patients



Peak expansion observed mostly at Day 14



# UCARTs – ALLOGENEIC CAR T-CELLS THROUGH PRECISION GENE EDITING



# TALEN® GENE EDITING – ADVANTAGES

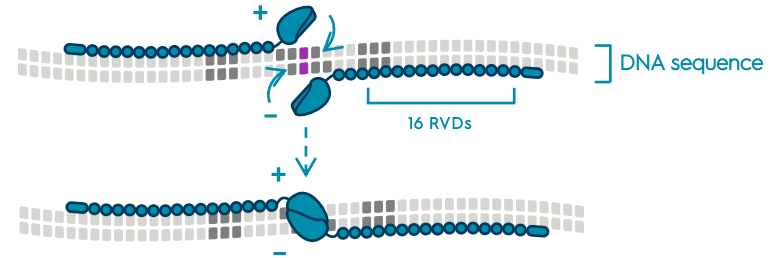
## TALEN®:

Driven by protein/DNA interactions to work on potential off-site cleavage

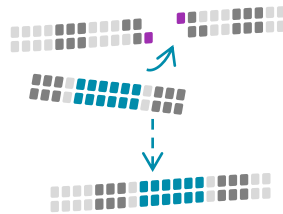
Releases DNA ends **accessible to DNA repair mechanisms to perform gene insertions and corrections** through homologous recombination and gene inactivation through non-homologous end joining

Over 20 years of building a **strong patent portfolio** with umbrella patents on gene editing

Our nucleases act like DNA scissors to edit genes at precise target sites:

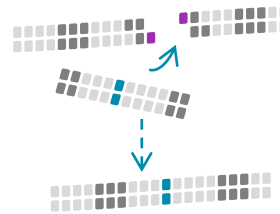


A) Gene insertion or Knock-In (KI)

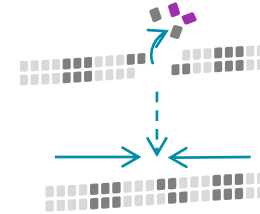


Require homologous recombination

B) Gene correction



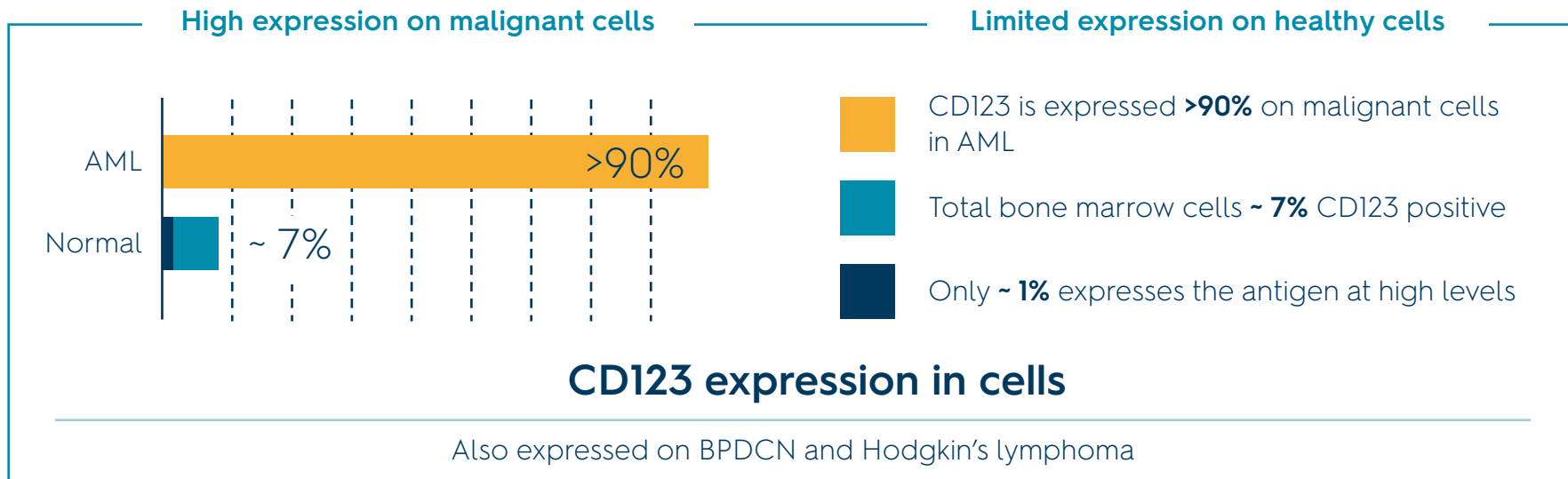
C) Gene inactivation or Knock-Out (KO)



>65% Knock-In Efficiency

96.8% Knock-Out Efficiency

# CD123 TARGET: RATIONALE FOR THERAPY IN ACUTE MYELOID LEUKEMIA



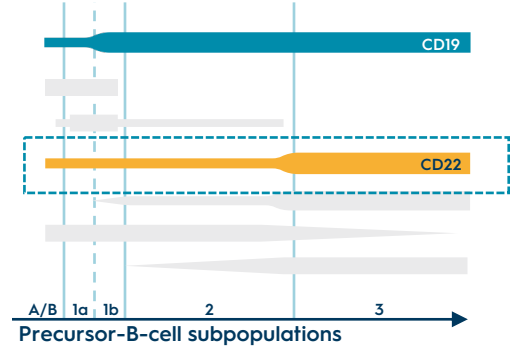
## Collectis Trial Recruitment Sites



# CD22 TARGET: RATIONALE FOR THERAPY IN ACUTE LYMPHOBLASTIC LEUKEMIA

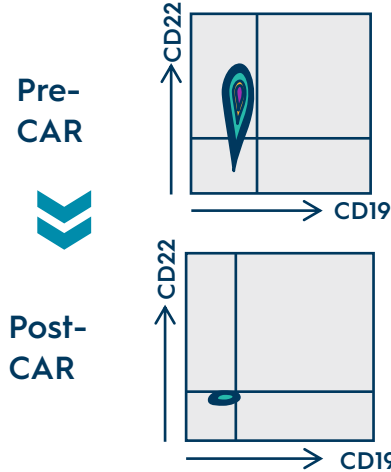
## CD22 Expression in B-cells

Flow cytometric analysis of B-cell differentiation



CD22 is expressed in >95% B-ALL cells

## Potential in disease space



Relapses following CD19-directed CAR T-cell therapy can show loss of CD19 antigen but persistent expression of CD22

Anti-CD22 CAR T-cells can induce remissions in **CD19 negative B-cells**

## Collectis Trial Recruitment Sites



# CS1-SLAMF7 TARGET: RATIONALE FOR THERAPY IN MULTIPLE MYELOMA

## High expression on malignant cells

>95%

expression in MM cells

- CS1 expression is **high and uniform** on MM cells

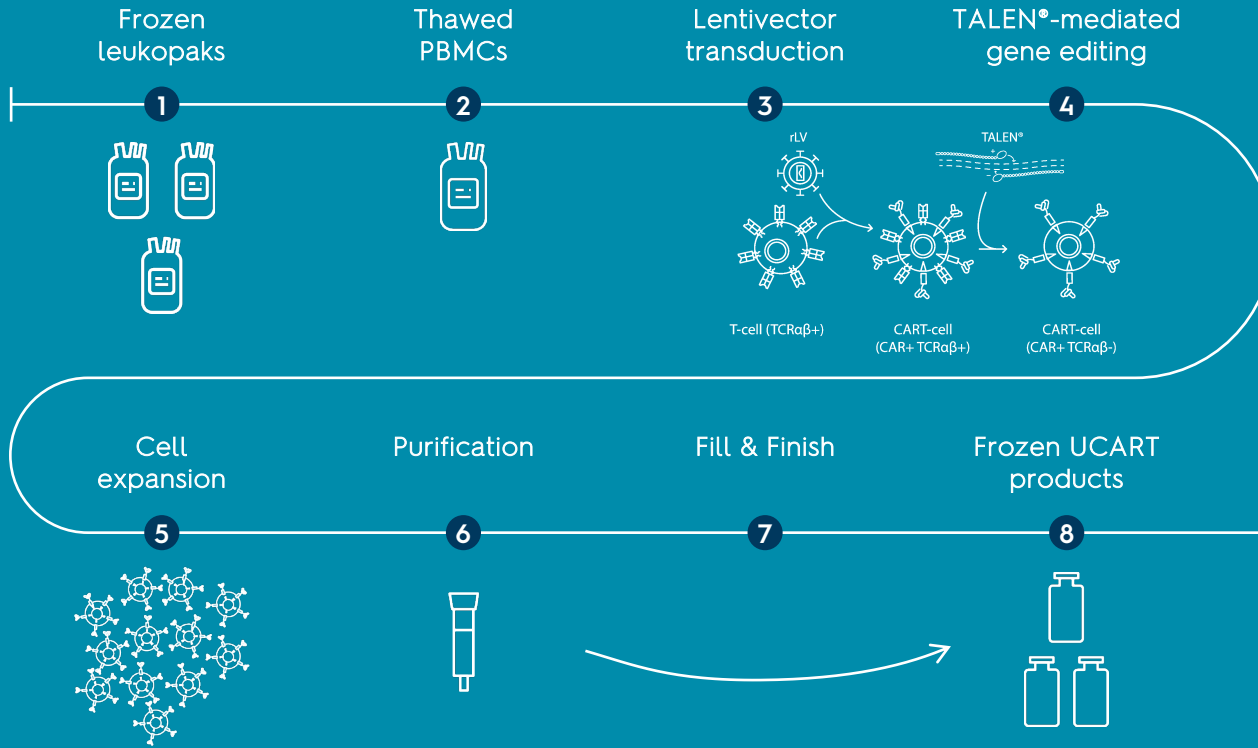
## Clinical validation

- **Elotuzumab** is a monoclonal antibody targeting CS1
- Elotuzumab is **safe and effective** in MM patients
- Elotuzumab (in combination with lenalidomide and dexamethasone in R/R MM patients) shows: **5% CR rate and 45% partial remissions**

## Collectis Trial Recruitment Sites



# UCART MANUFACTURING



- 8 years of experience in allogeneic CAR-T manufacturing
- Validated gene editing technology for cell manufacturing
- 4 UCART product candidates manufactured so far
- Full QC system in place
- 3 wholly controlled product candidates cleared for 3 clinical trials by the U.S. FDA

# IN-HOUSE MANUFACTURING

## Raw materials



## Clinical & Commercial UCART Product Candidates



**14,000 sq ft.** facility

Production of clinical starting materials

Operational "go-live" targeted **in 2020**

**82,000 sq ft.** facility

Production of clinical & commercial UCART product candidates

Operational "go-live" targeted **in 2021**



# THE COLLECTIS GROUP



NASDAQ: CLLS

EURONEXT GROWTH: ALCLS

~\$300M\*\* cash as of September 30, 2019

Expected to fund operations into 2022

Based in Paris, France, New York & Raleigh, USA

Patient focused

~69.1%\* ownership



Gene editing is the link



NASDAQ: CLXT

\$68M cash as of September 30, 2019

Expected to fund operations into mid-2021

Based in Minnesota, USA

Consumer focused

High value asset



\* As of September 30, 2019

\*\* \$367M of consolidated cash, cash equivalents, current assets and restricted cash (Collectis + Calyxt)

# ACHIEVED MILESTONES IN 2019

## Proprietary clinical programs

**UCARTCS1:** Phase 1 R/R MM ongoing; first patient dosed in Q4 2019

**UCART22:** Phase 1 in R/R ALL ongoing; first patient dosed in Q4 2019

**UCART123:** Phase 1 for R/R AML ongoing; New IND granted by FDA in Q3 2019

## Partnered clinical programs

**UCART19:** Phase 1 in R/R ALL ongoing

**UCART19 (ALLO-501):** Phase 1 in R/R NHL ongoing, first patient dosed in H1 2019

**UCARTBCMA (ALLO-715):** Phase 1 in R/R MM ongoing, first patient dosed in H2 2019

## Manufacturing

Ongoing construction of 2 in-house manufacturing plants:

Facility in Paris, France for raw material supply

Facility in Raleigh, North Carolina for GMP, commercial scale UCART manufacturing

# EXPECTED MILESTONES IN 2020

## Clinical programs

Provide interim clinical data on completed dose cohorts for proprietary and partnered programs at relevant scientific conferences

## Manufacturing

Go-live with Paris facility

Construction complete for Raleigh facility

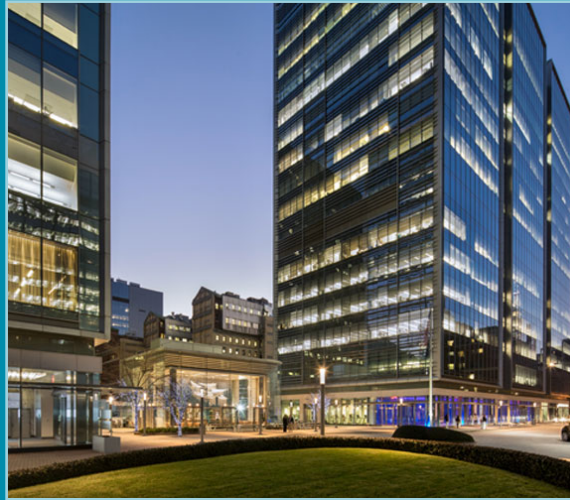


# THANK YOU

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