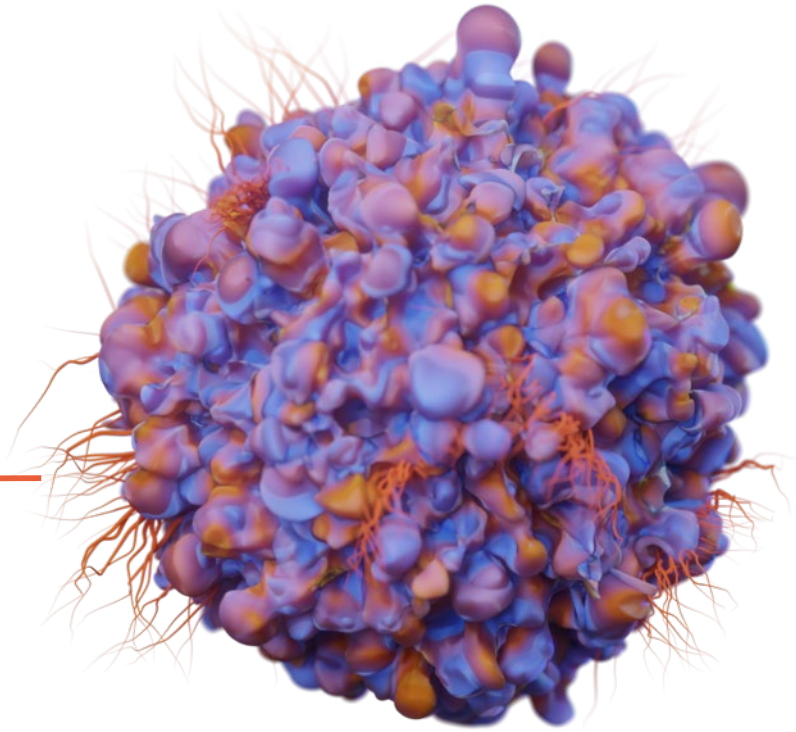
# CARTemis therapeutics



Next-generation CAR T-cell therapies engineered to disrupt the tumor microenvironment

MAX DELBRÜCK CENTER

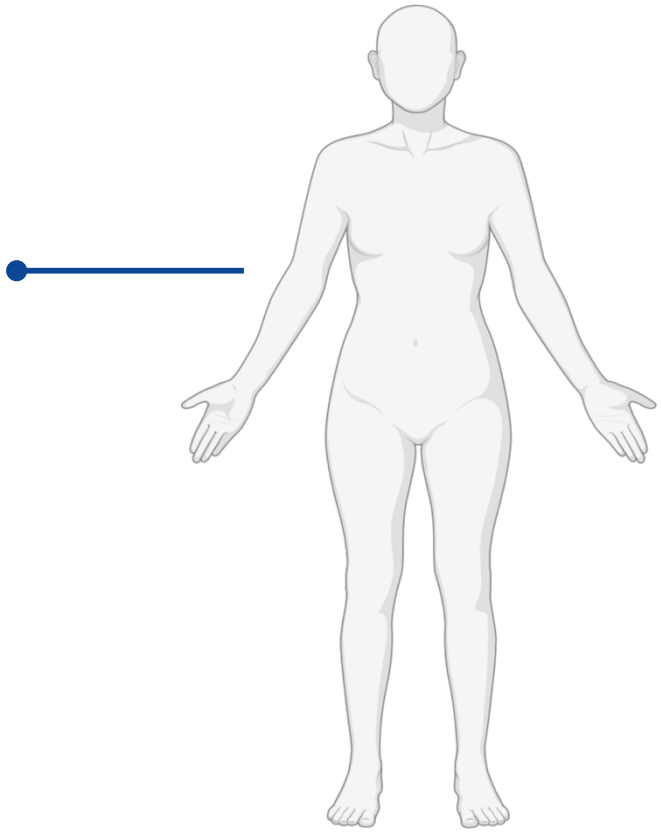
WOMEN TechEU

Funded by the European Union

# B-cell non-Hodgkin’s lymphoma

## A global burden for patients and healthcare systems

Most common type of blood cancer



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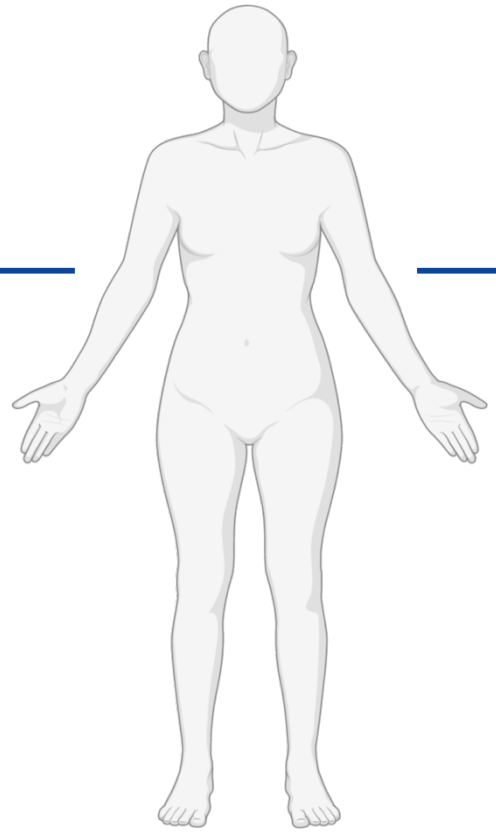

≈ 500.000 people newly diagnosed each year

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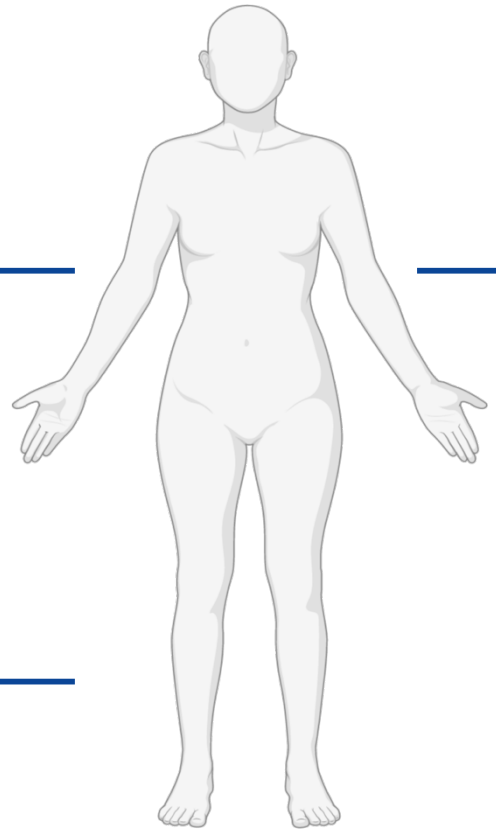

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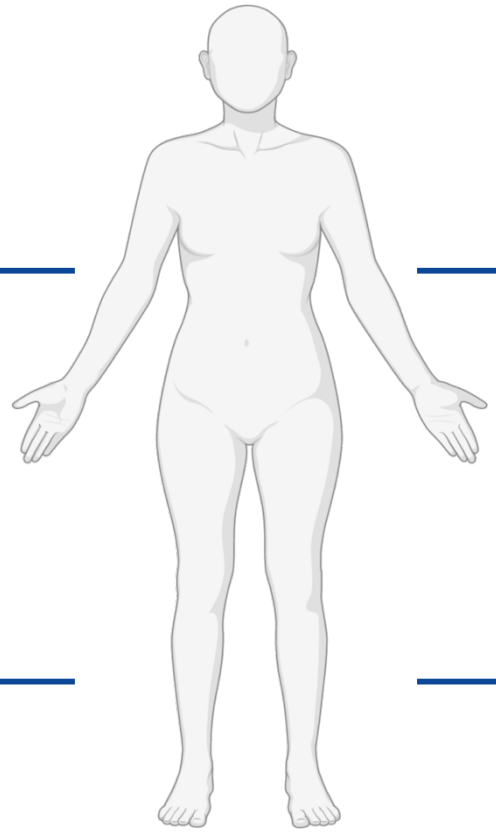

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Immunotherapy as salvage strategy

# Commercially available CARs target CD19 as tumor antigen

## High unmet medical need: treatment failures occur in every second patient

**Current therapies:**

**4** anti-CD19 CAR T-cell products[1]

↓

**50%** relapse

[1]Kymriah (Novartis) , Yescarta (Kite Pharma), Tecartus (Kite Pharma), and Breyanzi (Juno Therapeutics)

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**Challenges:**

1) Antigen escape

2) Tumor microenvironment



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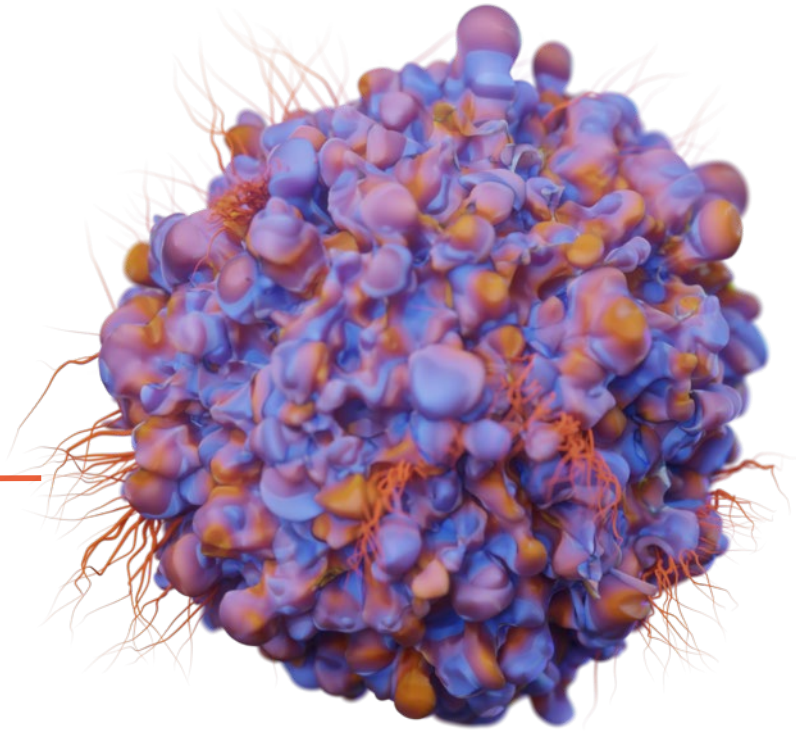

Next-generation CAR T-cell therapies engineered to disrupt the tumor microenvironment

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# CARTemis unravels the next-generation of CAR T-cells

## Anti-CXCR5 CAR with the potential to prevent relapses

**CXCR5 as novel target antigen** to avoid antigen escape

**Dual functionality** destroys tumor niche

**IP protection** and high-rank publication[1]

[1]Bunse et al., 2021, Nature Communications; **IP: WO2019038368A1**

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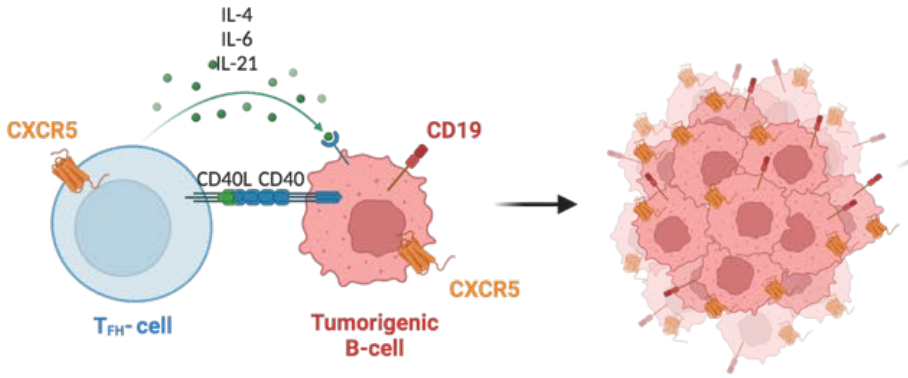


T follicular helper cells support tumor growth

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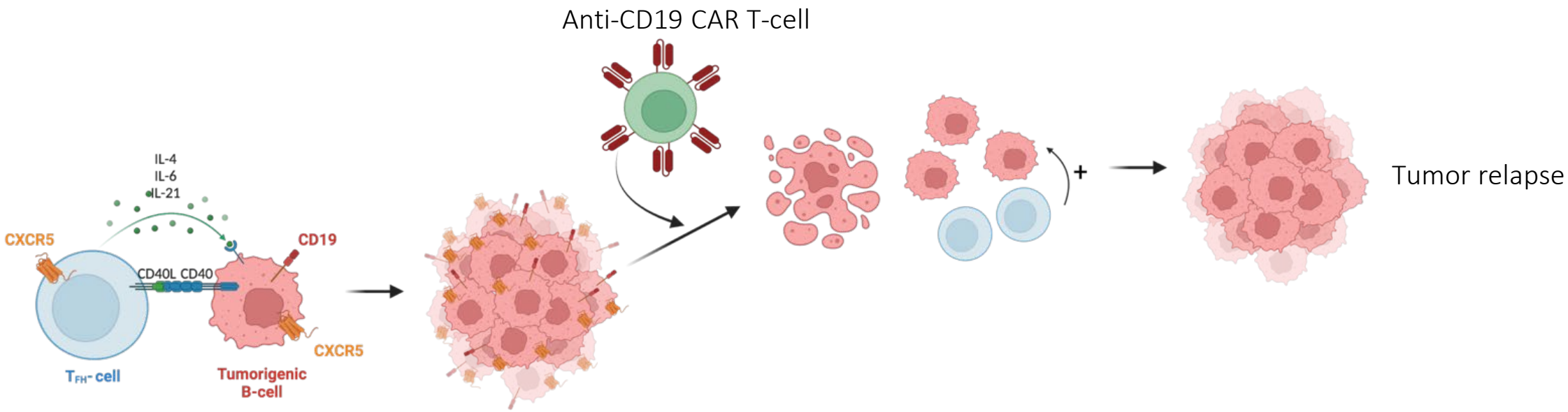


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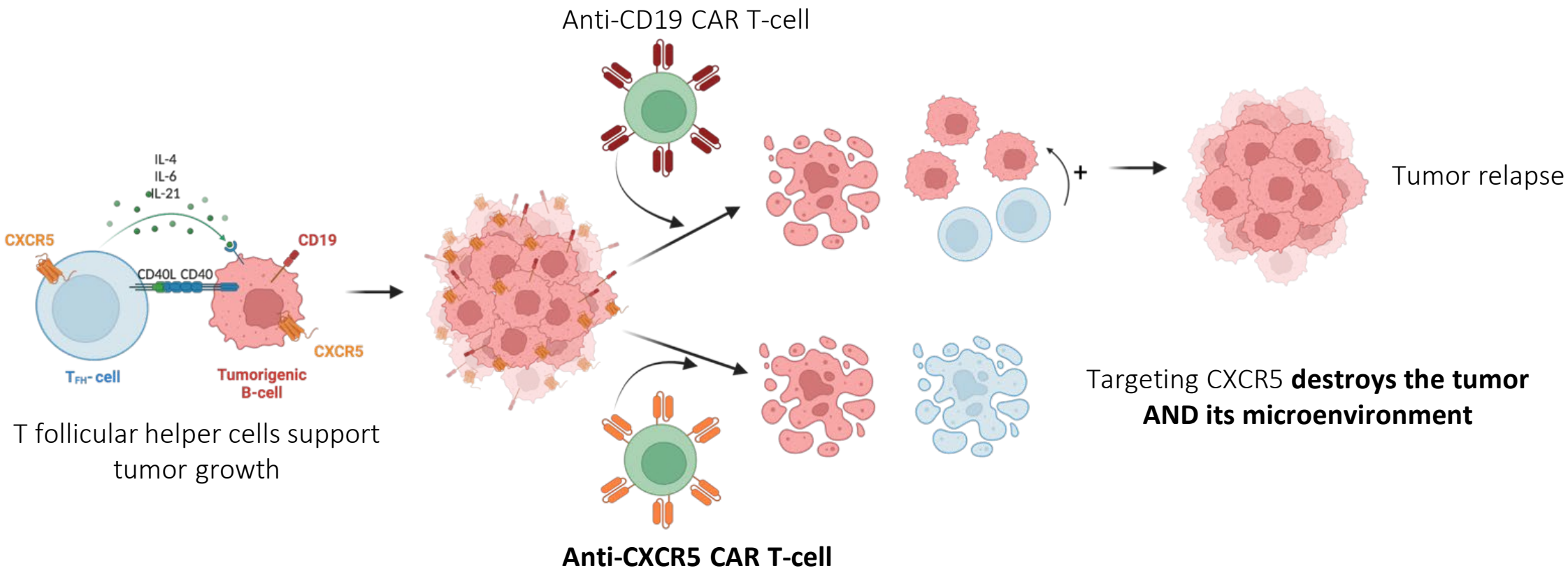


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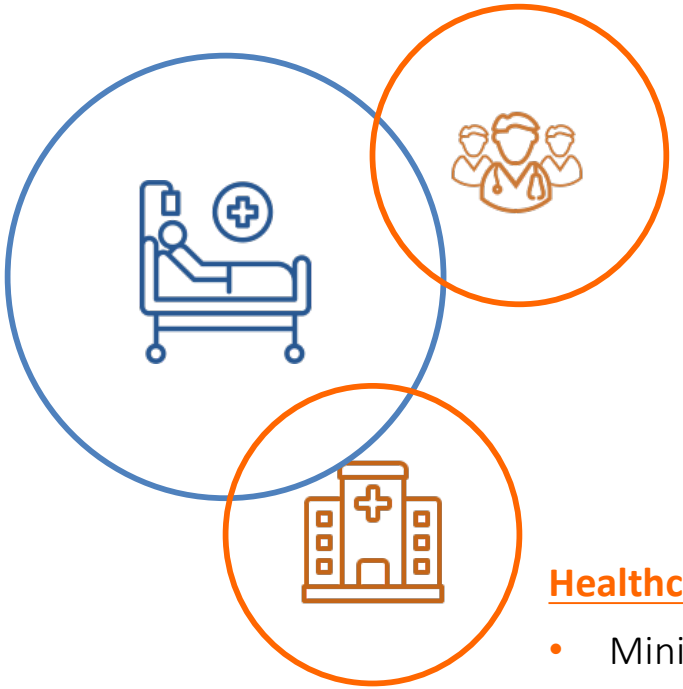
# Anti-CXCR5 CAR as potentially curative one-time treatment

## Substantial benefits for all stakeholders involved

**Patients:**

- Minimized risk for relapse
- Improved quality of life



**Physicians:**

- Provision of potentially life-saving therapies
- Gain of distinguished reputation

**Healthcare facilities or insurances:**

- Minimized need for additional treatment modalities
- Reduced hospitalization time and costs

# Competitive landscape

## CXCR5 as superior antigen exploiting a novel targeting mechanism


CARTemis is **uniquely positioned** by introducing a **novel target antigen** that simultaneously allow for the **disruption of the tumor microenvironment**.

# Market opportunities beyond oncology

## The anti-CXCR5 CAR is of importance for the treatment of autoimmune diseases

**Expansion of indications** from oncology to autoimmune diseases

**Oncology**:
B-NHL subtypes (FL, CLL & more),
**6.4 B $** expected market size in 2028

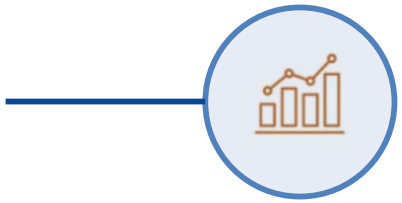
**Autoimmune diseases:**
Rheumatoid Arthritis, SLE & more,
**150 B $** expected market size in 2030

# Achievements

## Pre-clinical safety and efficacy of the anti-CXCR5 CAR was successfully demonstrated

**Pre-clinical proof-of-concept and high-rank publication:**
Bunse et al., 2021, Nature Communications

Favorable scientific advice meeting at Paul-Ehrlich Institute



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Spin-off from
**Max Delbrück Center, Berlin**

Backed by:
**Helmholtz Enterprise**
**Women TechEU**

**IP protection:** WO2019038368A1

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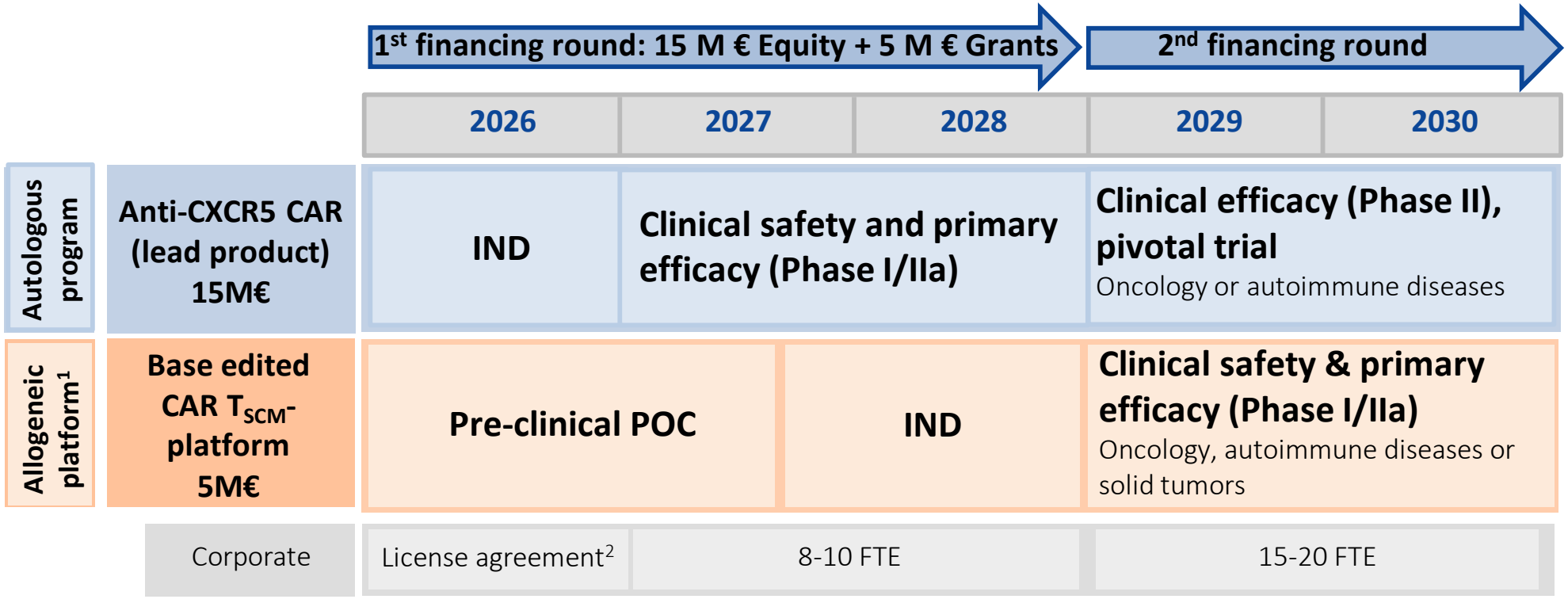
# Use of funds

## Clinical proof-of-concept for the anti-CXCR5 CAR will be reached within three years




[1]Pipeline program will be financed through non-dilutive funding opportunities

[2]Signed term sheet with Max Delbrück Center regarding IP-licensing of core technology in place

# Team

## Strong scientific foundation supported by biotech expertise

### Founders & Inventors

**Dr. Anthea Wirges**
**CEO**
Helmholtz Enterprise, Women TechEU, EIC Women leadership programme

**PD Dr. Uta E. Höpken**
**CDO**

**Dr. med. Armin Rehm**
**CMO**

**→ Involved in initiation and implementation of several investigator-initiated CAR T-cell trials**

### CMC

**Dr. Christian Kaps**
**COO**
Expert in ATMP manufacturing

### Finance & Business

**Dr. Thomas Klaue**
**CFO**
Successfully closed multiple financing rounds

**Dr. Peter Heinrich**
**Chairman of the Board**
Long standing biotech executive with extended network

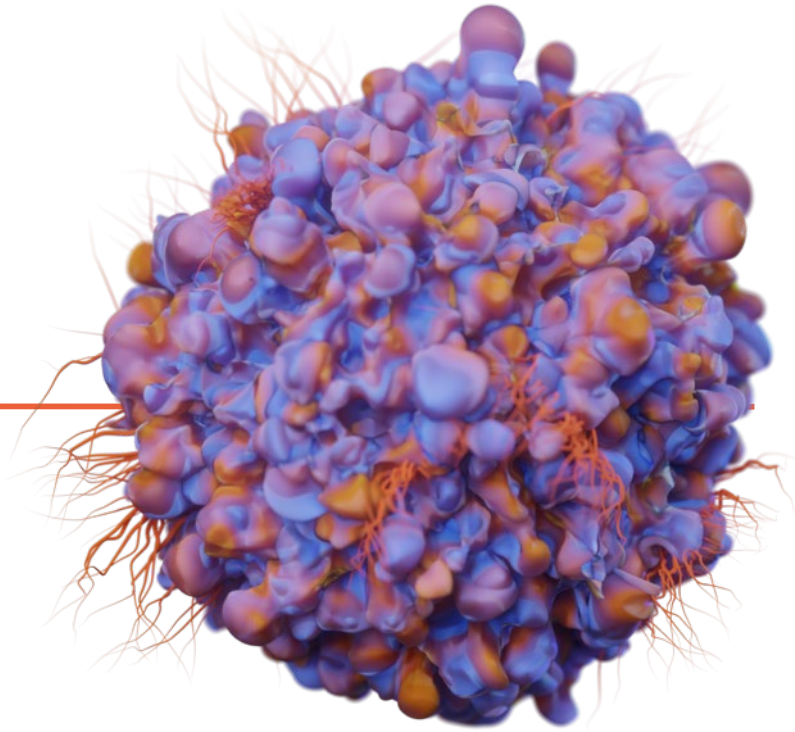
MAX DELBRÜCK CENTER
CHARITÉ UNIVERSITÄTSMEDIZIN BERLIN
NCT
HEIDELBERG UNIVERSITY HOSPITAL
JUNO THERAPEUTICS
MediGene
MediGene
Adaptimmune
syntab therapeutics

## Join our journey!

We are looking for investors and/or partners to advance our lead candidate, the anti-CXCR5 CAR, into Phase I/IIa.

**15 M €**

**Q4/2025**



Get in touch!


Anthea Wirges

**wirges@cartemis.de**


CARTemis herapeutics