IMUGENE

Developing Cancer Immunotherapies

ASX: IMU

DEVELOPING TRANSFORMATIVE CANCER MEDICINES

Annual General Meeting 2023

CEO Presentation

Release authorised by the Managing Director and Chief Executive Officer Imugene Limited

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INTERNATIONAL LEADERSHIP TEAM WITH EXTENSIVE COMMERCIALISATION EXPERTISE IN THE SECTOR

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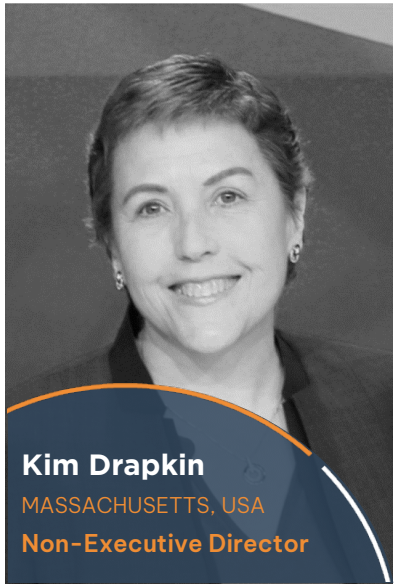
Imugene has a team with vast oncology drug development experience



IMUGENE CLINICAL EXECUTIVE TEAM

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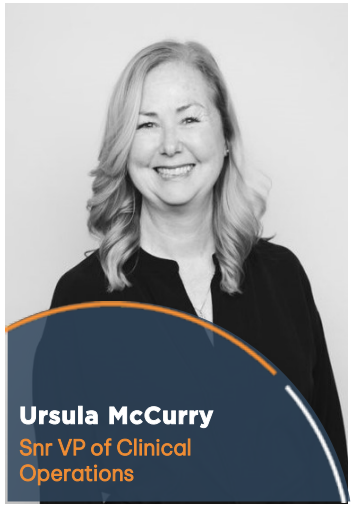
Over 150 years of combined experience in Clinical Development
13 FDA Approved Drugs to market

Genentech
A Member of the Roche Group
EXELIXIS®
Roche
gsk

IMMUNE-ONC therapeutics
Bellicum
Genentech
A Member of the Roche Group
AMGEN
EXELIXIS®

celularity®
Kite
A GILEAD Company
Roche
illumina®
Genentech
A Member of the Roche Group



AMUNIX™
Genentech
A Member of the Roche Group
EXELIXIS®
SuperGen

Fate THERAPEUTIC
Lyell
JUNO THERAPEUTICS
Genentech
A Member of the Roche Group

WindMIL THERAPEUTICS®
Bristol Myers Squibb
AMGEN
NOVARTIS
Celgene

INVESTMENT HIGHLIGHTS

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MARKET CAPITALISATION
29 November 2023

A$752M
US$496M

CASH AS OF
30 September 2023

A$163M
US$104M

3 PRIORITY PLATFORM TECHNOLOGIES

Allo CAR T Cell Therapy

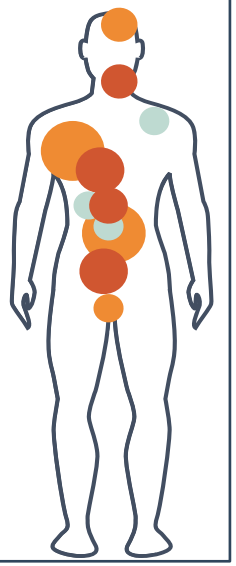
onCARlytics

CF33 Oncolytic Virus

IN-HOUSE GMP CELL THERAPY MANUFACTURING FACILITIES

DISEASE AREAS

Blood cancers
Breast (TNBC)
Lung (NSCLC)
Gastric
Gastroesophageal
Colorectal (CRC)
Melanoma
Head and Neck
Hepatocellular
Pancreatic
Glioblastoma (GBM)
Bile Duct Cancer



5 CLINICAL STUDIES

azer-cel Ph1b DLBCL (FDA IND)
nextHERIZON: Ph2 HER2+ Metastatic GC (FDA IND)
MAST: Ph1 Solid Tumors (FDA IND)
onCARlytics: Ph1 Solid Tumors (FDA IND)
PD1-Vaxx: Ph1 MSI-H CRC

LONG-LIFE PATENT PORTFOLIO

KEY CATALYSTS FOR THE NEXT 12 MONTHS

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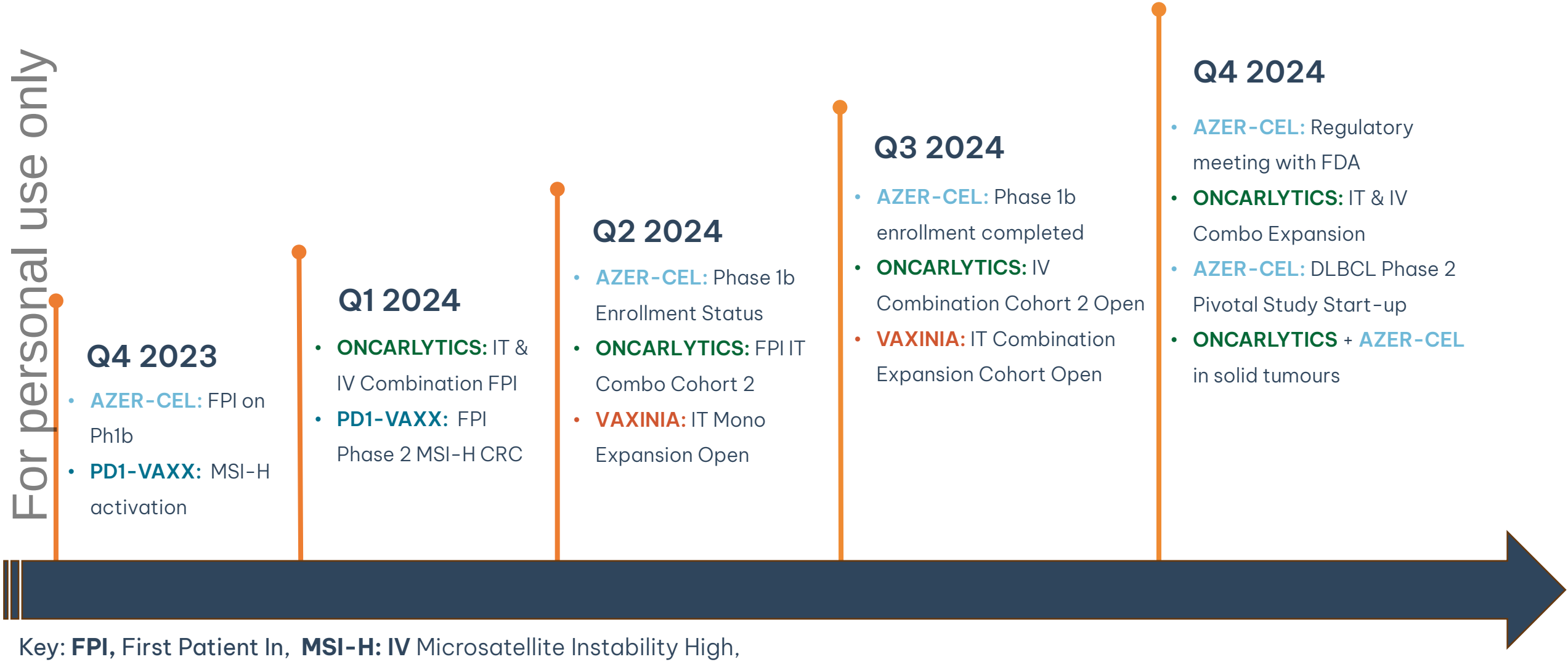

Key: **FPI,** First Patient In, **MSI-H: IV** Microsatellite Instability High,

IV: Intravenous, **IT:** Intratumoural, **Mono:** Monotherapy, **DLBCL:** Diffuse Large B-Cell Lymphoma,

COMMERCIALISATION STRATEGY

Clinical Success Drives Value Realisation Opportunities

- Model for biotech commercialisation strategy is to out-license the technology to Big Pharma
- Out-licensing is highly dependent upon demonstrating safety in Phase 1 and convincing signals of efficacy in Phase 1b/2
- Licensing deals are generally structured with an up-front cash payment, payments upon reaching certain development milestones such as entering Phase 3 trials, payment on FDA approval of the drug, and royalties on net sales when the drug is on the market

COMPANY ACQUISITION

PARTNER WITH BIG PHARMA

LICENSE TECHNOLOGIES SEPARATELY

DEVELOP / COMMERCIALISE INDEPENDENTLY

CELL THERAPY AND ONCOLYTIC VIRUS PLATFORMS DELIVER INNOVATIVE AND POTENT THERAPIES TO PATIENTS

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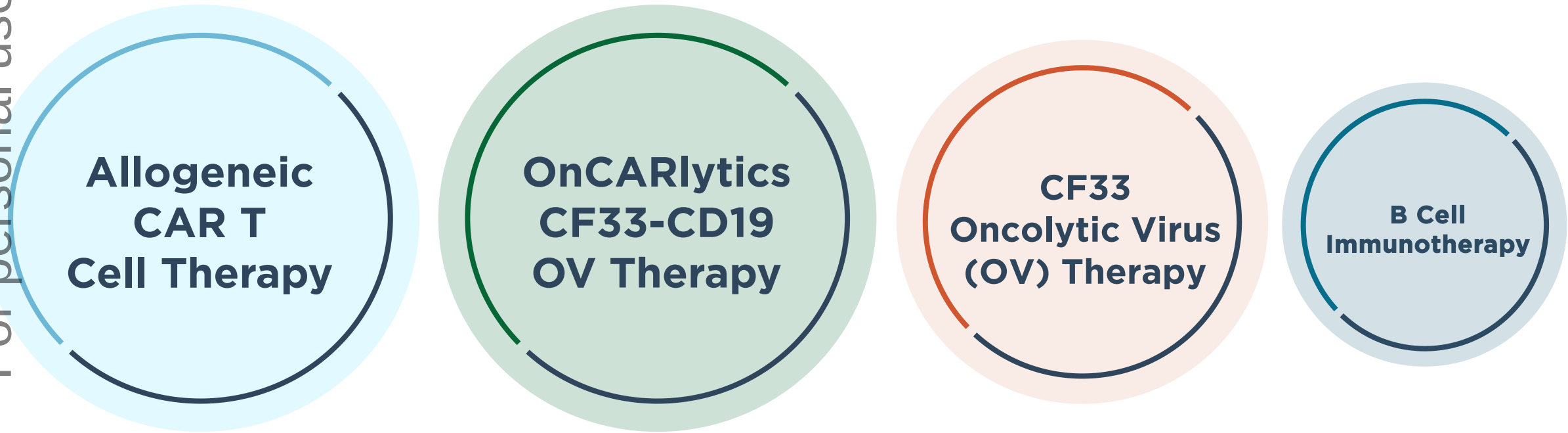


azer-cel

onCARlytics

VAXINIA

HER-Vaxx & PD1-Vaxx

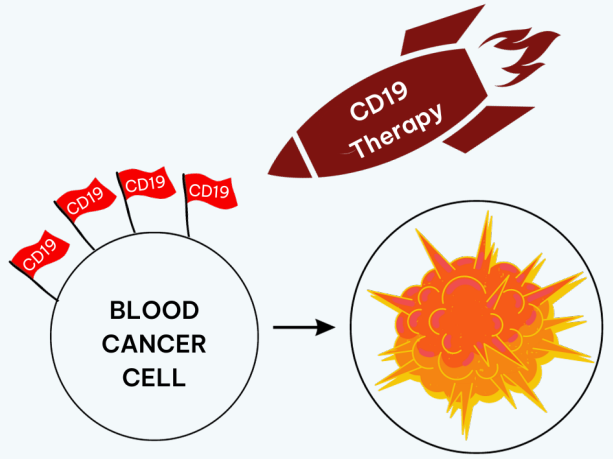
IMUGENE IS AN INDUSTRY LEADER IN ALLOGENEIC CELL THERAPY

Allo CAR T Cell Therapy
IMUGENE

- Imugene acquired azercabtagene zapreleucel (azer-cel) in August 2023
- Phase 1 trial was completed in 84 blood cancer patients with encouraging safety and efficacy data
- Patients with Diffuse Large B Cell Lymphoma (DLBCL) who relapsed after autologous (auto) CAR T therapy demonstrated an 83% overall response rate with 61% Complete Response Rate and 55% duration of response was ≥ 6 months
- Positive feedback from the FDA on Phase 1 results
- Phase 1b confirmatory study to enroll 10 DLBCL patients relapsed after auto-CAR T: **First Patient In on 10 November 2023**
- Strategy is to commence a Phase 2 registration study in the next 12-18 months

Mechanism of Action

CD19 is a common molecule found on blood cancers, so a CAR T therapy designed to attack CD19 is like a deadly missile against a cancer cell with CD19 on its surface



PHASE 2 POTENTIAL REGISTRATION TRIAL

Allo CAR T Cell Therapy
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Potential registrational study (subject to FDA approval) to start upon completion of the Phase 1b study H2 2024

Population: Diffuse large B cell lymphoma (DLBCL) patients who have relapsed after auto CAR T therapy

Positive initial FDA guidance on the potential registrational study received in July 2023

~35+ sites in the US: Phase 1b trial currently conducted at Moffit, COH, Karmanos, U Minnesota, Rhode Island, Cornell, Columbia

Drug product for Phase 1b trial completed

Drug is manufactured Imugene's facility in North Carolina

PHASE 1 CF33 MAST STUDY

Making a Meaningful Impact for Patients

FDA U.S. FC ADMINI FAST TRACK Designation

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- The Phase 1 study treats advanced cancer patients intravenously (IV) or intratumourally (IT) with CF33-hNIS (VAXINIA) alone, or in combination with pembrolizumab in multiple solid cancers
- 34 heavily pre-treated patients dosed to date; doses have been determined to be safe and tolerable; 25 patients currently evaluable for response (received at least their first scan at 6 weeks)
- One Complete Response (iCR)* in bile duct cancer and one Partial Response (PR)* in melanoma at the mid level dose, 16 patients with Stable Disease (SD)
- 7 patients with gastrointestinal cancers who received CF33 alone including 3 colorectal cancer, 2 bile duct, 1 pancreatic and 1 liver cancer showed disease control (CR, PR and SD) of 86%
- Study expansion is planned for 10 additional patients with bile duct cancer
- Phase 1 trial is conducted at 12 centers in the US and Australia

ST VINCENT'S HOSPITAL MELBOURNE
A FACILITY OF ST VINCENT'S HEALTH AUSTRALIA

Karmanos CANCER INSTITUTE

City of Hope

HIGHLANDS ONCOLOGY

Cancer Center

HUNTSMAN CANCER INSTITUTE UNIVERSITY OF UTAH

*iRECIST and RECIST: (immune) Response evaluation criteria in solid tumours
*PFU: Plaque Forming Unit

FDA U.S. FOOD & DRUG ADMINISTRATION

First Patient Dosed May 2022

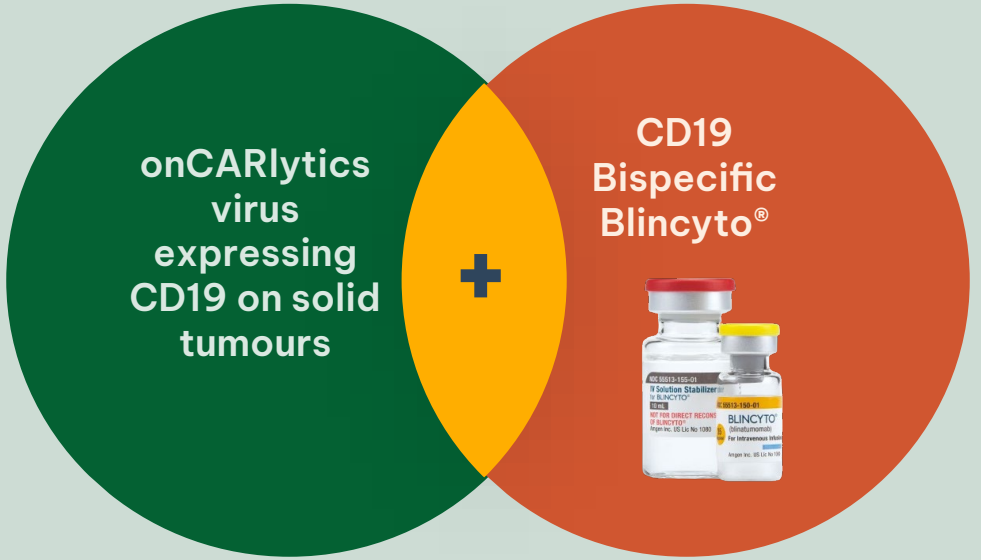
Identify: Recommended Phase 2 Dose (RP2D) – Monotherapy and Combination
Based on: Safety, Immunogenicity, Tumour Response

FIRST PATIENT TREATED WITH ONCARLYTICS IN PHASE 1 OASIS STUDY OF METASTATIC ADVANCED SOLID TUMOURS

onCARlytics IMUGENE

- The Phase 1 study is designed to treat with onCARlytics (CF33-CD19) alone, or in combination with Blincyto® (bispecific antibody targeting CD19) and either dosed intravenously (IV) or intratumourally (IT) in metastatic advanced patients across multiple solid tumours
- First patient enrolled (ovarian cancer) at City of Hope in October 2023
- Phase 1 planned for ~10 sites in the U.S.
- Many CD19 approved drugs which could become preferred partners to combine with onCARlytics (~90% of cancer)

Combination treatment for solid tumours



FDA U.S. FOOD & DRUG ADMINISTRATION

First Patient Enrolled, Oct 2023 | Identify: Recommended Phase 2 Dose (RP2D) – Monotherapy and Combination
Based on: Safety, Immunogenicity, Tumor Response

ONCARLYTICS + AZER-CEL ERADICATES MULTIPLE TUMOUR TYPES IN EARLY PRECLINICAL STUDIES

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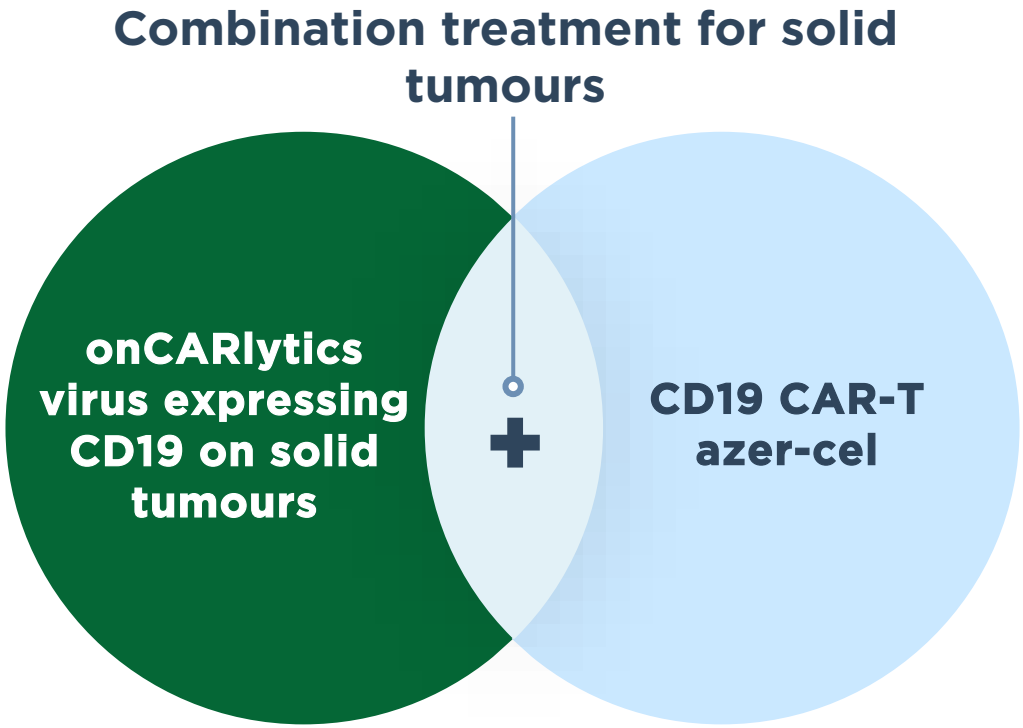
- Azer-cel in combination with onCARlytics demonstrated sustained, robust activity against multiple tumour types
- 100% impressive killing of Triple Negative Breast Cancer and Gastric Cancer lines was observed compared to controls



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