IMUGENE

Developing Cancer Immunotherapies

ASX: IMU

Developing Cancer Immunotherapies

JP Morgan, January 2023

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

DISCLAIMER

IMUGENE
Developing Cancer Immunotherapies

1. The information in this presentation does not constitute personal investment advice. The presentation is not intended to be comprehensive or provide all information required by investors to make an informed decision on any investment in Imugene Limited (Company). In preparing this presentation, the Company did not take into account the investment objectives, financial situation and particular needs of any particular investor.

2. Further advice should be obtained from a professional investment adviser before taking any action on any information dealt with in the presentation. Those acting upon any information without advice do so entirely at their own risk.

3. Whilst this presentation is based on information from sources which are considered reliable, no representation or warranty, express or implied, is made or given by or on behalf of the Company, any of its directors, or any other person about the accuracy, completeness or fairness of the information or opinions contained in this presentation. No responsibility or liability is accepted by any of them for that information or those opinions or for any errors, omissions, misstatements (negligent or otherwise) or for any communication written or otherwise, contained or referred to in this presentation.

4. Neither the Company nor any of its directors, officers, employees, advisers, associated persons or subsidiaries are liable for any direct, indirect or consequential loss or damage suffered by any person as a result of relying upon any statement in this presentation or any document supplied with this presentation, or by any future communications in connection with those documents and all of those losses and damages are expressly disclaimed.

5. Any opinions expressed reflect the Company's position at the date of this presentation and are subject to change

6. International offer restrictions – This document does not constitute an offer to sell, or a solicitation of an offer to buy, securities in the United States or any other jurisdiction in which it would be unlawful. In particular, the New Shares have not been, and will not be, registered under the US Securities Act of 1933 and may not be offered or sold in the United States except in transactions exempt from, or not subject to, the registration requirements of the US Securities Act and applicable US state securities laws. The distribution of this presentation in jurisdictions outside Australia may be restricted by law and any such restrictions should be observed.

INTRODUCTION TO IMUGENE

Imugene is a biotech company headquartered in Australia and publicly traded on the Australian Securities Exchange (ASX:IMU)

IMUGENE
Developing Cancer Immunotherapies

2013
Licensed HER-Vaxx from the Medical University of Vienna

2015
Leslie Chong from Genentech joins Imugene

2017
HER-Vaxx enters the clinic

2018
Licensed PD1-Vaxx from OSU & Mayo Clinic invented by Prof Pravin Kaumaya

2019
Licensed CF33 oncolytic virus platform from City of Hope invented by Dr Yuman Fong

2020
PD1-Vaxx enters the clinic

2021
Licensed onCARlytics from City of Hope invented by Dr Y Fong, Dr S Priceman & Dr A Park

2021
Strategic Partnership with Celularity

2021
CHECKvacc enters the clinic

2021
Strategic Partnership with Eureka

2021
HER-Vaxx Clinical Trial Supply Partnership with Merck KGaA & Pfizer

2021
PD1-Vaxx Clinical Trial Supply Partnership with Roche

2021
Entered the S&P/ASX 200 Index

2022
VAXINIA enters the clinic

2022
HER-Vaxx Phase 2 Final OS

2022
Strategic Partnership with Arovella

EXPERIENCED MANAGEMENT TEAM WITH SIGNIFICANT CLINICAL DEVELOPMENT EXPERTISE

IMUGENE
Developing Cancer Immunotherapies

Leslie Chong
Chief Executive Officer & Managing Director

Genentech
gsk
EXELIXIS
Roche

Dr Giovanni Selvaggi, MD
Chief Medical Officer

Bristol-Myers Squibb
ONCOLYTICS BIOTECH INC
NOVARTIS
gsk

Dr Monil Shah
Chief Business Officer

Bristol-Myers Squibb
Celgene
AMGEN®
NOVARTIS
WindMIL THERAPEUTICS®

THREE UNIQUE TECHNOLOGY PLATFORMS MAXIMIZE OPPORTUNITIES IN SOLID TUMORS

IMUGENE
Developing Cancer Immunotherapies

Therapeutic approaches with combination potential with existing standards of care

	IMUGENE Developing Cancer Immunotherapies		
PLATFORM	onCARlytics IMUGENE	CF33 Oncolytic Virus IMUGENE	B Cell Immunotherapy IMUGENE
	CF33-CD19 CAR T Combination Therapy	CHECKvacc	VAXINIA	HER-Vaxx	PD1-Vaxx
IP	**IP TO 2038** Filed in major territories	**IP TO 2037** Filed in major territories Granted in Japan/Mexico		**IP TO 2036** Granted in multiple countries (US/EU/Asia)	**IP TO 2037** Filed in major territories
CLINICAL TRIALS	TBC Phase 1	COH TNBC IST Phase 1	MAST Phase 1	HERIZON Phase 1b/2	IMPRINTER Phase 1
		DOMINICA Phase 1		nextHERIZON Phase 2	
				neoHERIZON Phase 2	
				TIGIT-Vaxx, PDL1-Vaxx, LAG3-Vaxx, TIM3-Vaxx, CTLA4-Vaxx	

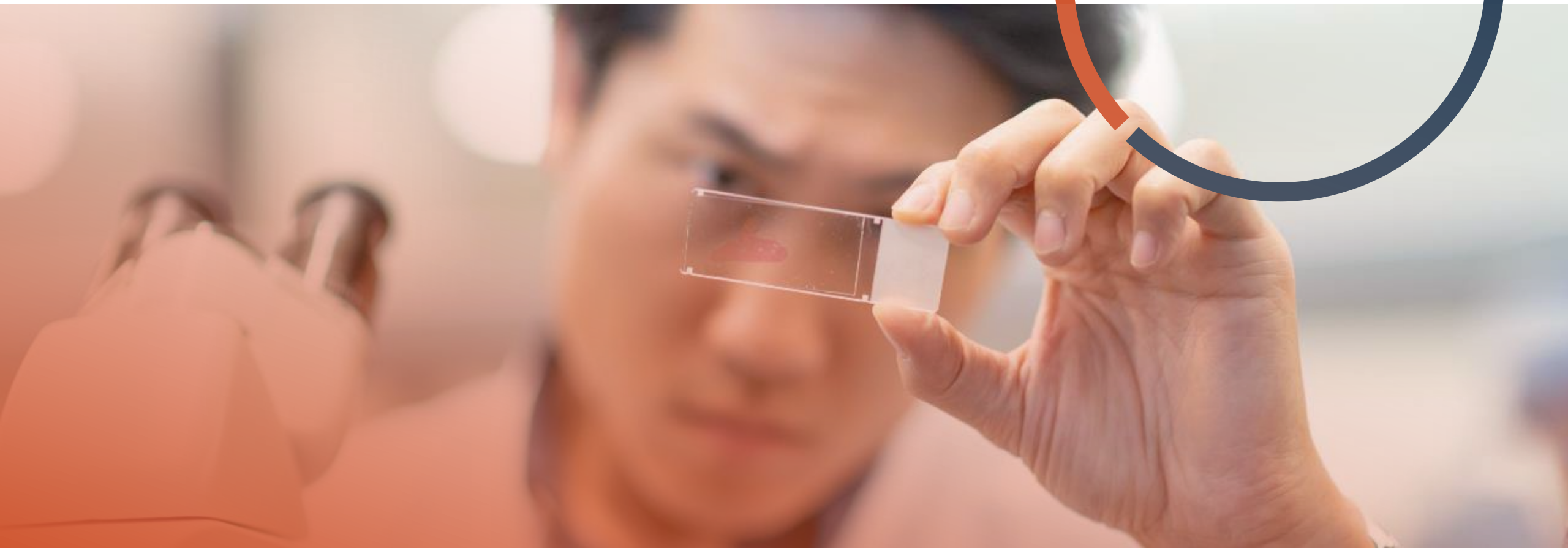
IMUGENE'S DEEP IMMUNOTHERAPY PIPELINE FOR THE TREATMENT OF SOLID TUMORS

IMUGENE
Developing Cancer Immunotherapies

PLATFORM	PROGRAM/ TARGET	COMBINATION APPROACH	INDICATION	IND	PRECLINICAL	IND	PHASE 1	PHASE 2	2023 EXPECTED MILESTONES
onCARIytics IMUGENE	**onCARIytics** (CF33-CD19)	CD19 targeted therapies	Metastatic Solid Tumors		**PHASE 1**				FDA IND FPI
CF33 Oncolytic Virus IMUGENE	**VAXINIA** (CF33)	Pembrolizumab	Metastatic Solid Tumors	✓	**MAST**				IV Cohort 2 Cleared Optimal Biological Dose Combination FPI IT and IV Combination OBD IV
	CHECKvacc (CF33-aPD-L1)	Checkpoint Inhibitors	Metastatic TNBC	✓	**CHECKvacc IST**				IT Cohort 3 Cleared Optimal Biological Dose
	CHECKvacc (CF33-aPD-L1)	Checkpoint Inhibitors	Solid Tumors		**DOMINICA**				FDA IND
B Cell Immunotherapy IMUGENE	**HER-Vaxx** (HER2)	Chemotherapy Checkpoint Inhibitors	First Line Gastric Cancer		**HERIZON**				Publication and Presentation (ASCO GI)
			Neoadjuvant Gastric Cancer		**neoHERIZON**				CTA Clearance FPI
			Metastatic Gastric Cancer	✓	**nextHERIZON**				ASCO GI TiP Interim Data Readout
	PD1-Vaxx (PD1)	Chemotherapy Atezolizumab	Metastatic NSCLC	✓	**IMPRINTER**				Combination FPI
			MSI High CRC		**NeoPolem IST**				CTA Clearance FPI

CF33 Oncolytic Virus
IMUGENE

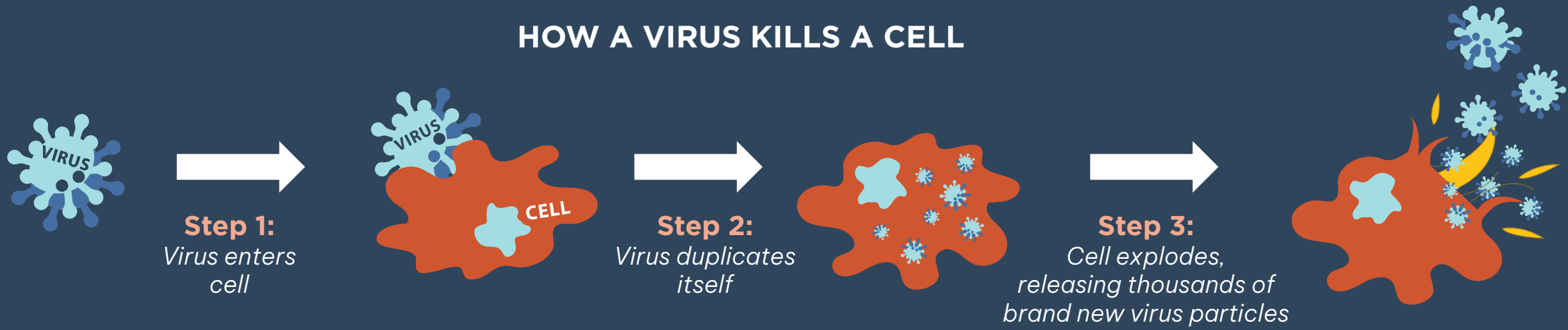
CF33 Oncolytic Virus



ONCOLYTIC VIRUSES OFFER A SELECTIVE IMMUNOGENIC APPROACH TO EFFECTIVELY KILL TUMOR CELLS

IMUGENE
Developing Cancer Immunotherapies

HOW A VIRUS KILLS A CELL



Engineering enhancements

- Infect and kill only cancer cells
- Carry additional payloads to augment killing (check point inhibitors, cytokines, anti-angiogenics)

Multiple ways to kill cancer cells

- Direct Lysis
- Immuno-activation
- Priming of TME to enhance checkpoint inhibitor response[1]

Precedent for approval

- Tvec approved in the United States for melanoma (2015)
- Oncorine approved in China for head and neck cancer (2005)
- Delytact approved in Japan for malignant glioma (2021)

TME: tumor microenvironment

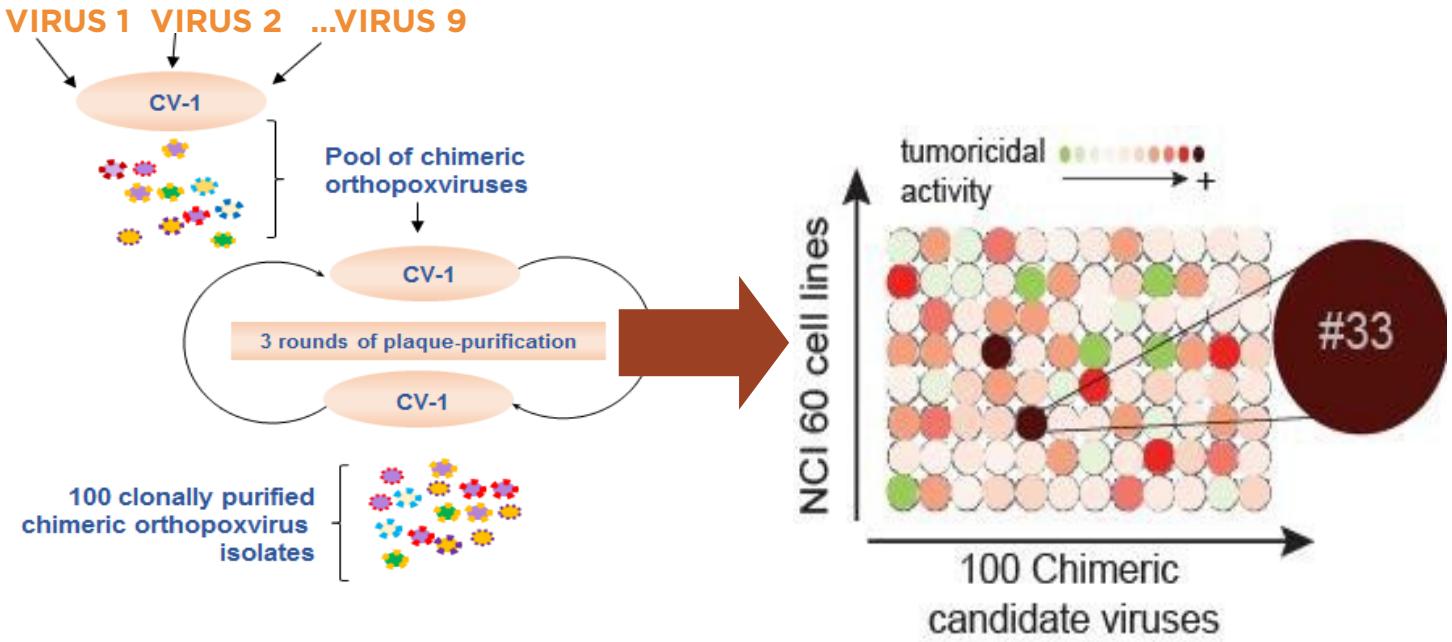
1: *Ribas et al., Cell 170:1109, 2017*

MAJOR ADVANTAGES OF VAXINIA CF33

IMUGENE
Developing Cancer Immunotherapies

Robust Efficacy	Highly potent cancer killing Converts ‘cold’ tumors to responsive ‘warm’ tumors Direct intra-tumor and systemic anti-tumor activity
Well-Tolerated	Large therapeutic window Genetically stable Combinability with targeted therapies
Broad Application	Tumor agnostic approach IT, IV or IP administration with potential to multi-dose Combination approaches
Scalability	Made in high titers Storage stability Clinically stable after mixing

CF33 GENERATION & EVALUATION OF NOVEL CHIMERIC POXVIRUSES



- Infection by 9 different pox vaccinia vaccine strains trading genetic material isolating over 100 different clones (new species)
- Placed in the State-of-the-art high throughput screening for efficacy against the NCI 60 cell lines.
- The 33rd virus was chosen for its eradication of all cancer cell lines in the NCI 60, CF33

IMUGENE
Developing Cancer Immunotherapies

STRATEGY

Engineer Novel Chimeric Viruses

High Through-put Screening for Efficacy Against NCI60

Safe in Animals

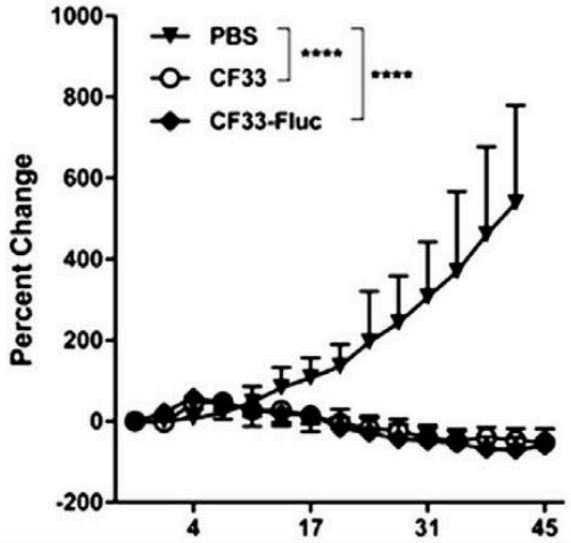
Arming with Additional Payloads

Hope Oncolytic Viruses (HOV)

COMPELLING KILLING OF MANY TUMOR TYPES AT LOW DOSES

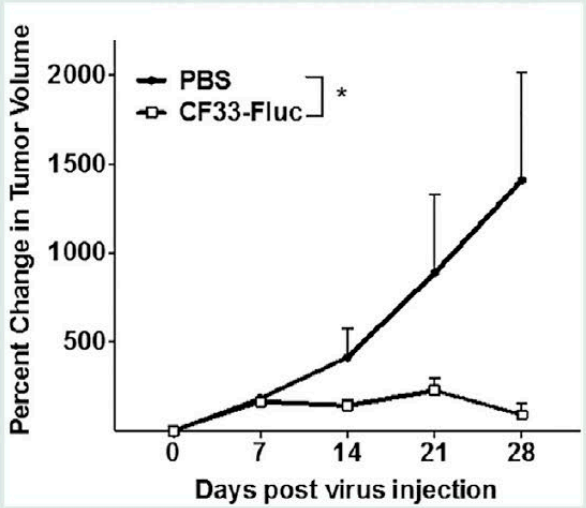
IMUGENE
Developing Cancer Immunotherapies

PANCREATIC



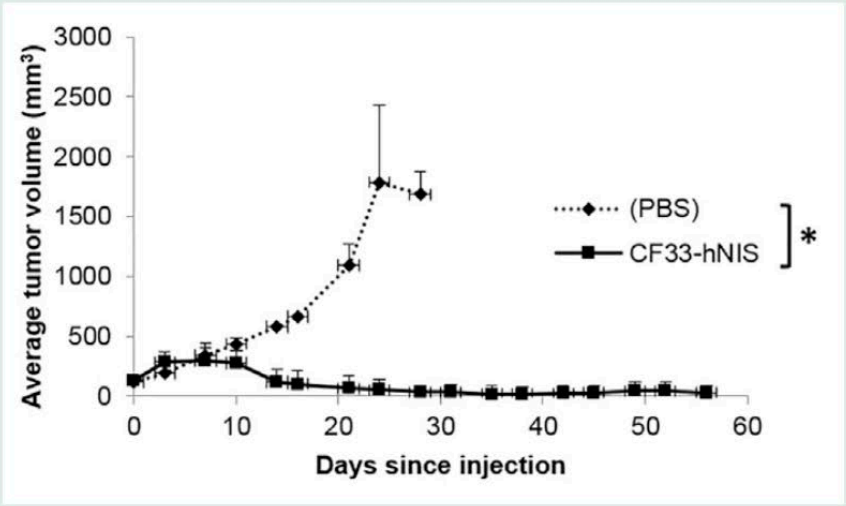
J Transl Med. 2018, 16, 110

COLORECTAL



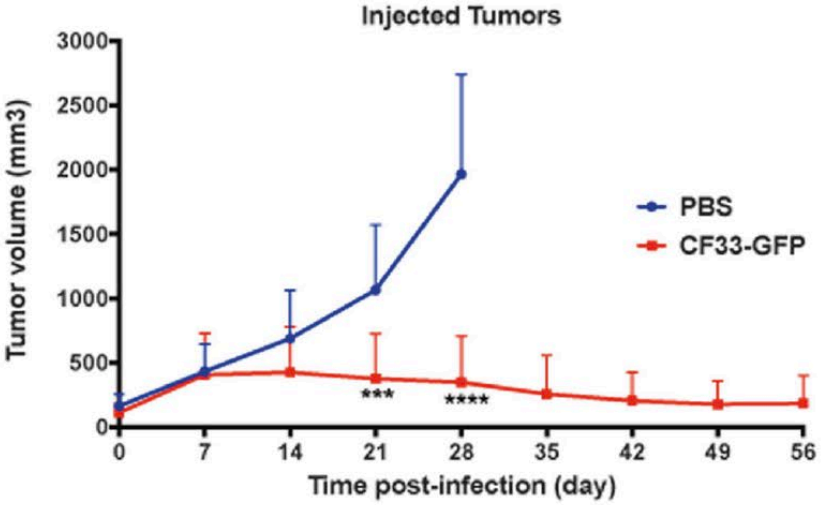
Mol Ther Oncolytics. 2018, 9, 13

COLON



Mol Ther Oncolytics. 2019, 13, 82

LUNG

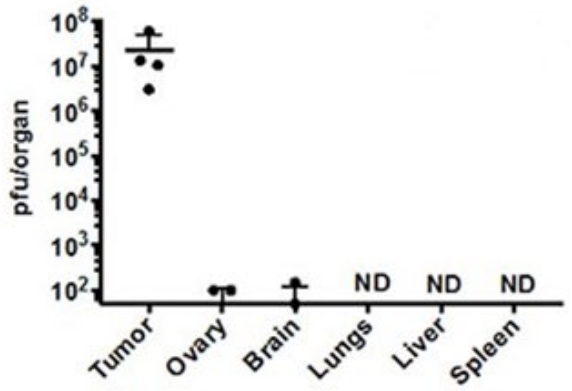


Cancer Gene Ther. 2019

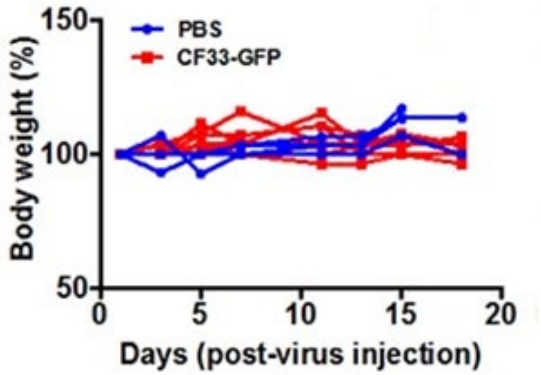
SAFELY DELIVERED ROUTES: IT, IP, IV ENABLES LARGE THERAPEUTIC INDEX IN PATIENTS

IMUGENE
Developing Cancer Immunotherapies

Tumor restricted viral delivery



No change in body weight



No toxicity across tumor models in over 1,000 mice until over 10^9

VIRUS	MOUSE	# OF MICE	DOSE	DELIVERY	TOXICITY
CF33-NIS	Nude	73	1e3-1e5	IT	No findings
CF33-miR	Nude	41	1e3-1e5	IT	No findings
CF33-Luc	Nude NSG	48 8	1e3-2e5 1e6	IT, IV & IP IT	No findings
CF33-GFP	Nude NSG	18 8	1e3-2e7 1e6	IT IT	No findings
CF33-hNIS-αPDL1	Nude Black/6 BALB/c	52 67 31	1e4 1e5-1e8 1e7	IT IT & IV (1e6) IT & IV	No findings
CF33-hNIS-Δ14.5	Nude Black/6 BALB/c	36 16 16	1e4 1e6 – 1e8 1e7-3e7	IT IT IT & IV (2e7)	No findings
CF33-CD19	NSG	288	1e6-1e8	IT	No findings

Majority of mice cured with a single injection of 1000 pfu via IT, IV and IP delivery

CF33-hNIS: TUMOR TRACKING AND TROPISM

IMUGENE
Developing Cancer Immunotherapies

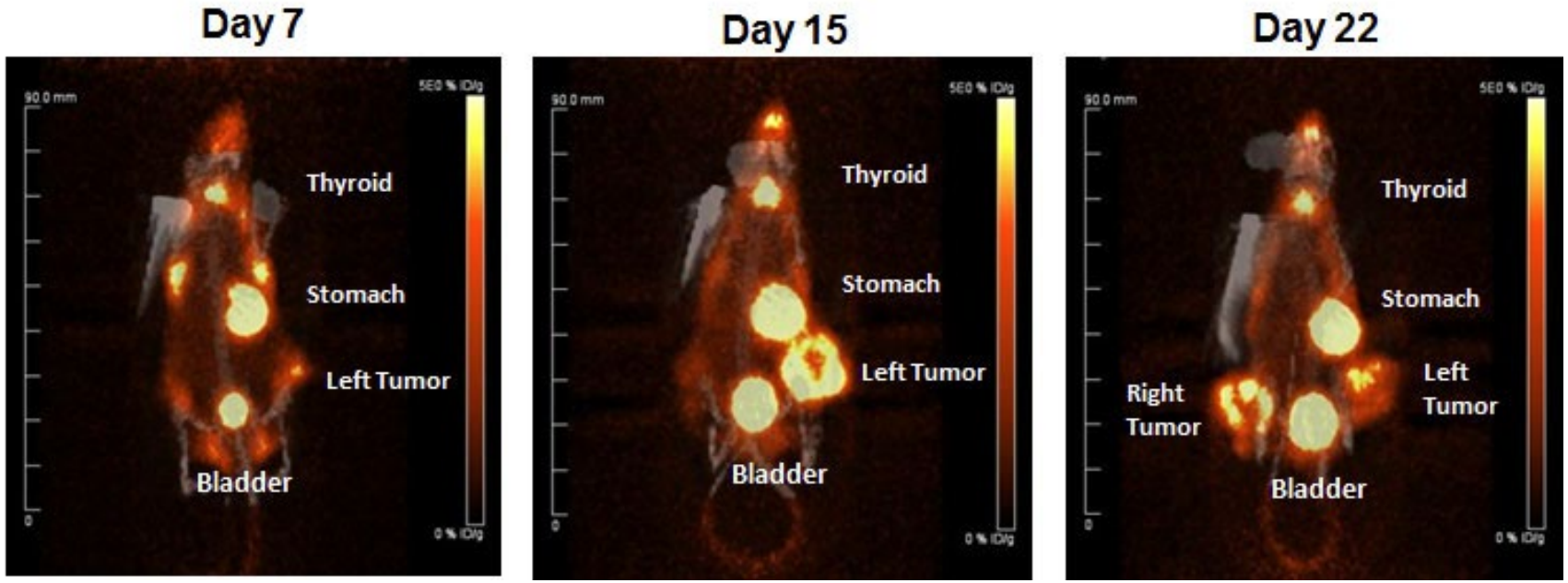
Genetic modification enables tumor tracking and tumor tropism

- hNIS (human sodium iodide symporter) protein is expressed on the tumor cell surface
- hNIS transgene inserted within J2R locus (Tk) to transport radioactive iodine for imaging

Tracked virus supports tumor specificity and systemic delivery

- Cross infection of tumors supported by 124I uptake in right side on day 22 following injection on left side
- Physiologic uptake in thyroid, stomach and bladder

^{124}I PET Imaging of CF33-hNIS-infected HCT116 (colon cancer) from flank xenografts in nude mice over time



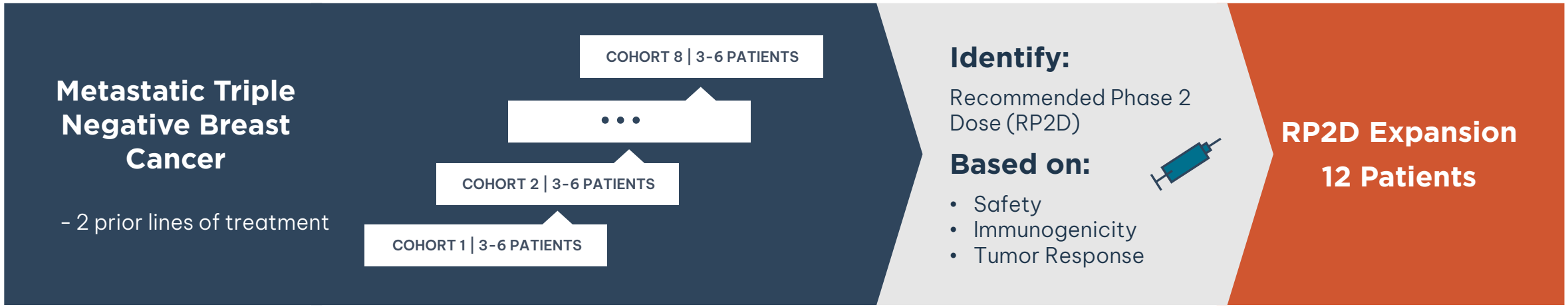
Ref: Mol Ther Oncolytics, 2019, **13**, 82

CHECKvacc PHASE 1 TNBC STUDY
CF33+hNIS+aPD-L1 ("Armed" Virus)

SAN ANTONIO BREAST CANCER SYMPOSIUM

IMUGENE
Developing Cancer Immunotherapies

Presented at SABC 2022



First Patient Enrolled October 2021

Disease of need

- 8-13 month survival for metastatic disease with few treatments

Potential target for immunotherapy

- Expresses PD1, PD-L1

Treatment responses to Atezolizumab (JAMA Oncology, 5:74, 2019)

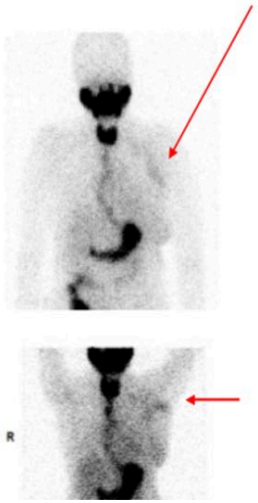
- 1st line: 24%; 2nd line: 6%
- Approved by FDA 8 March 2019

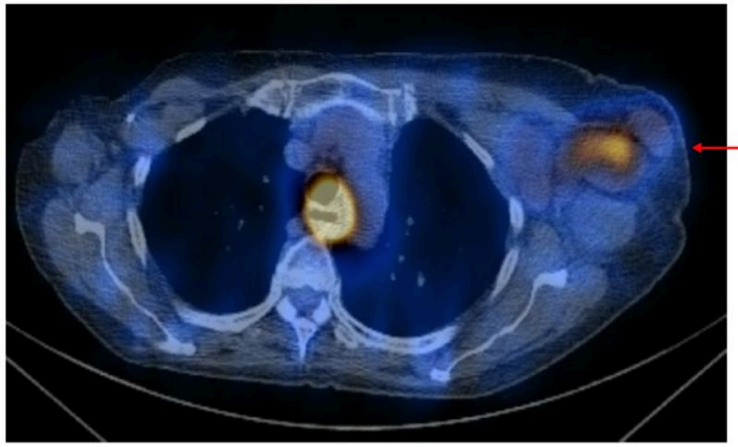
Potential for registration in well-designed, randomized P2 study

Indication	TNBC
FDA IND	CHECKvacc: CF33-hNIS-aPDL1
N	33-78
Location	Single Center: COH
Admin Route	Intratumoral (IT)

CHECKvacc (CF33-hNIS-antiPD-L1) TUMOR TRACKING

IMUGENE
Developing Cancer Immunotherapies

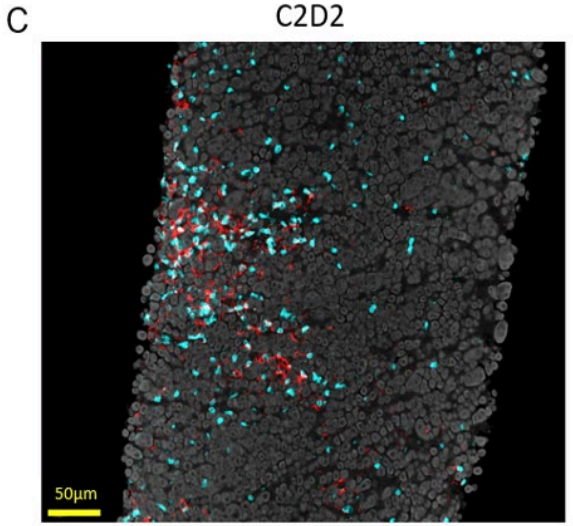


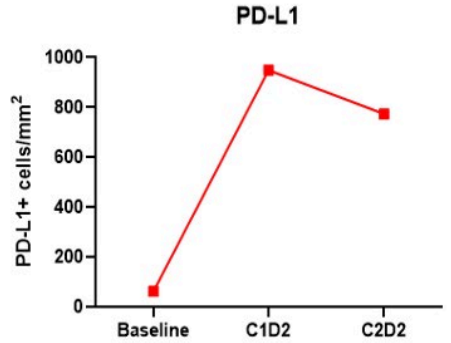


- hNIS 99m uptake in SPECT scan

SAN ANTONIO BREAST CANCER SYMPOSIUM

SPECT imaging of patient using Technetium-99m (C1D8): Patient COH-004 received CHECKvacc at Dose Level 2 ($3x10^5$ PFU). Injected lesion was left axilla showed significant enhancement of injected lymph node.





- Immune activation-increase in PD-L1

Multiplex immunofluorescence (mIF) of COH-004 tumor: C&D immune infiltrates shows increase density of PD-L1+ cells across patient tissue biopsies.

VAXINIA PHASE 1 MAST STUDY
(Metastatic Advanced Solid Tumors)

IMUGENE
Developing Cancer Immunotherapies

First Patient Enrolled May 2022, IV Cohort 1 Cleared Nov 2022

Dose Administration (Parallel Groups)

n=52-100

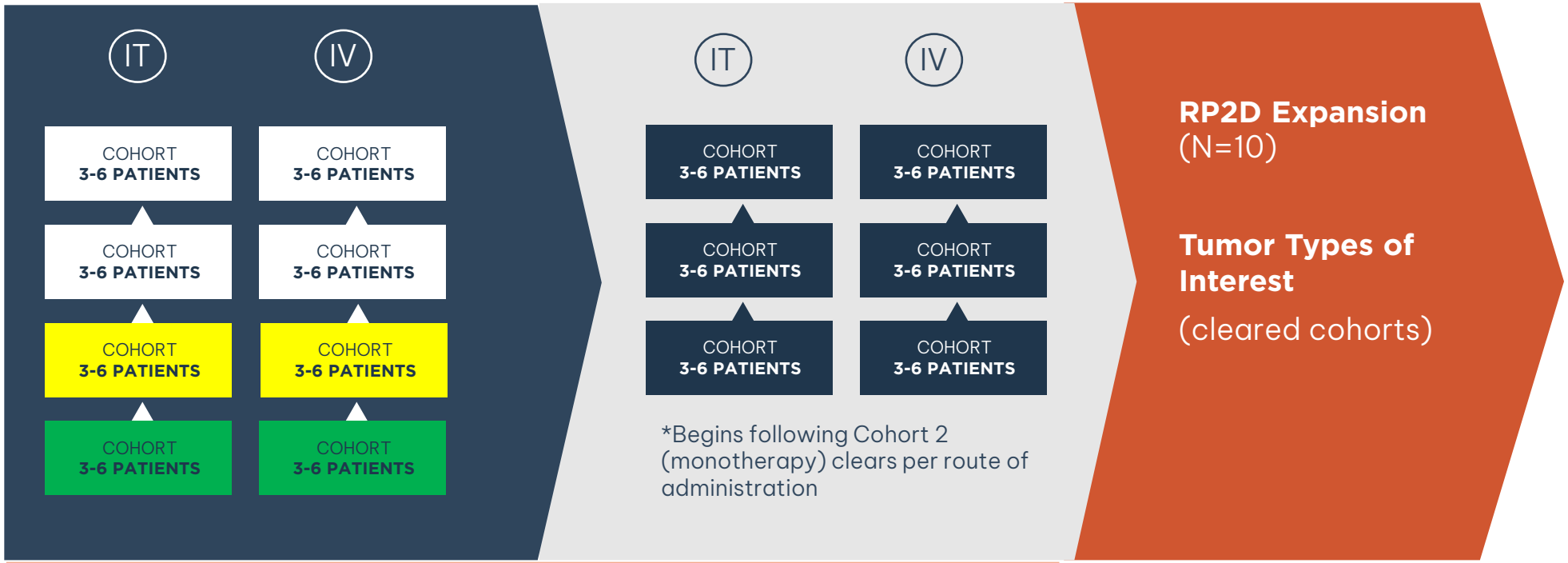
IT

IT Administration
Metastatic and Advanced Solid Tumors

IV

IV Administration
Metastatic and Advanced Solid Tumors

Site Location: USA, AUS



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

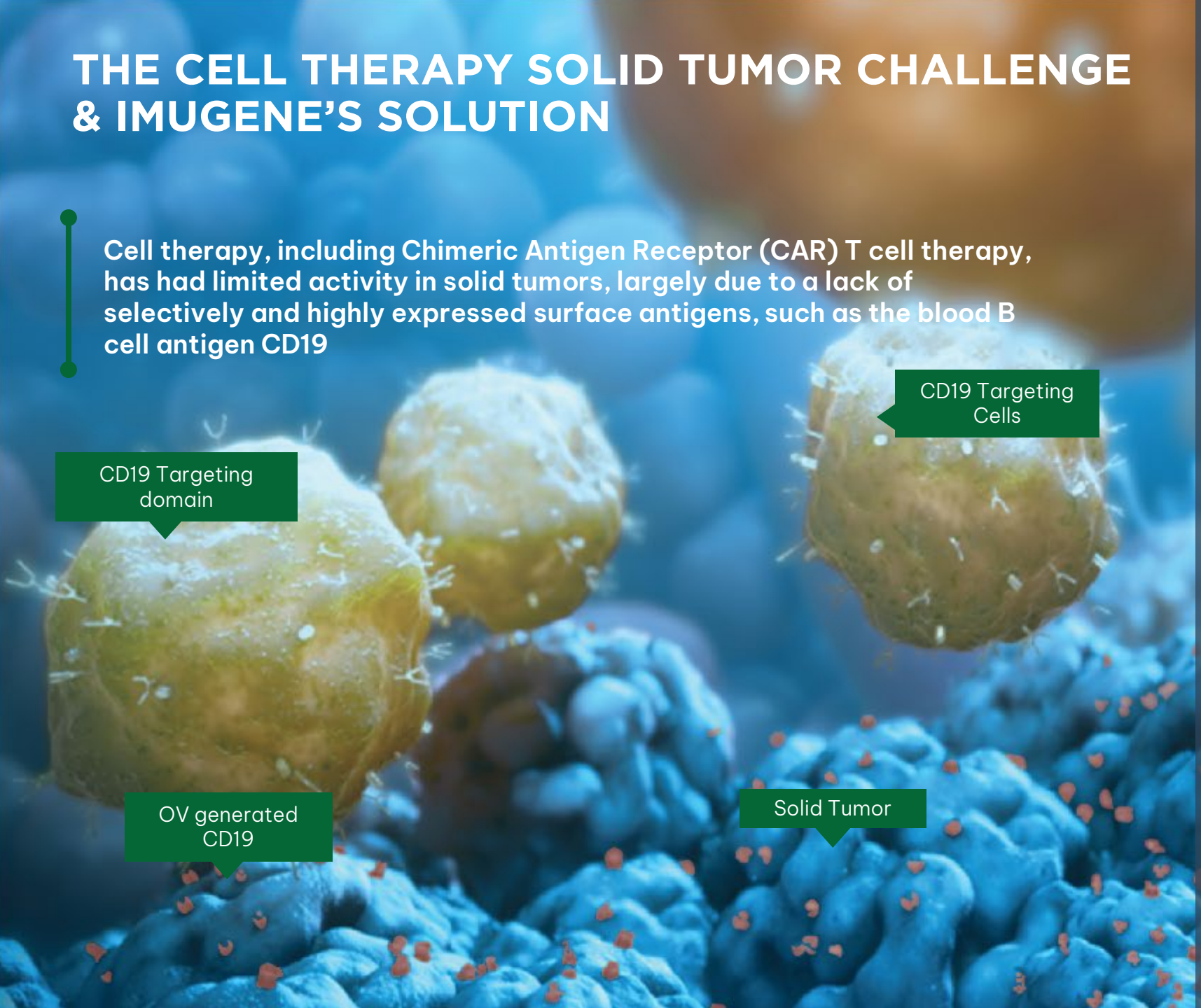
CF33 oncolytic virus alone and in combination with pembrolizumab

onCARlytics
IMUGENE

CF33-CD19

THE CELL THERAPY SOLID TUMOR CHALLENGE & IMUGENE'S SOLUTION

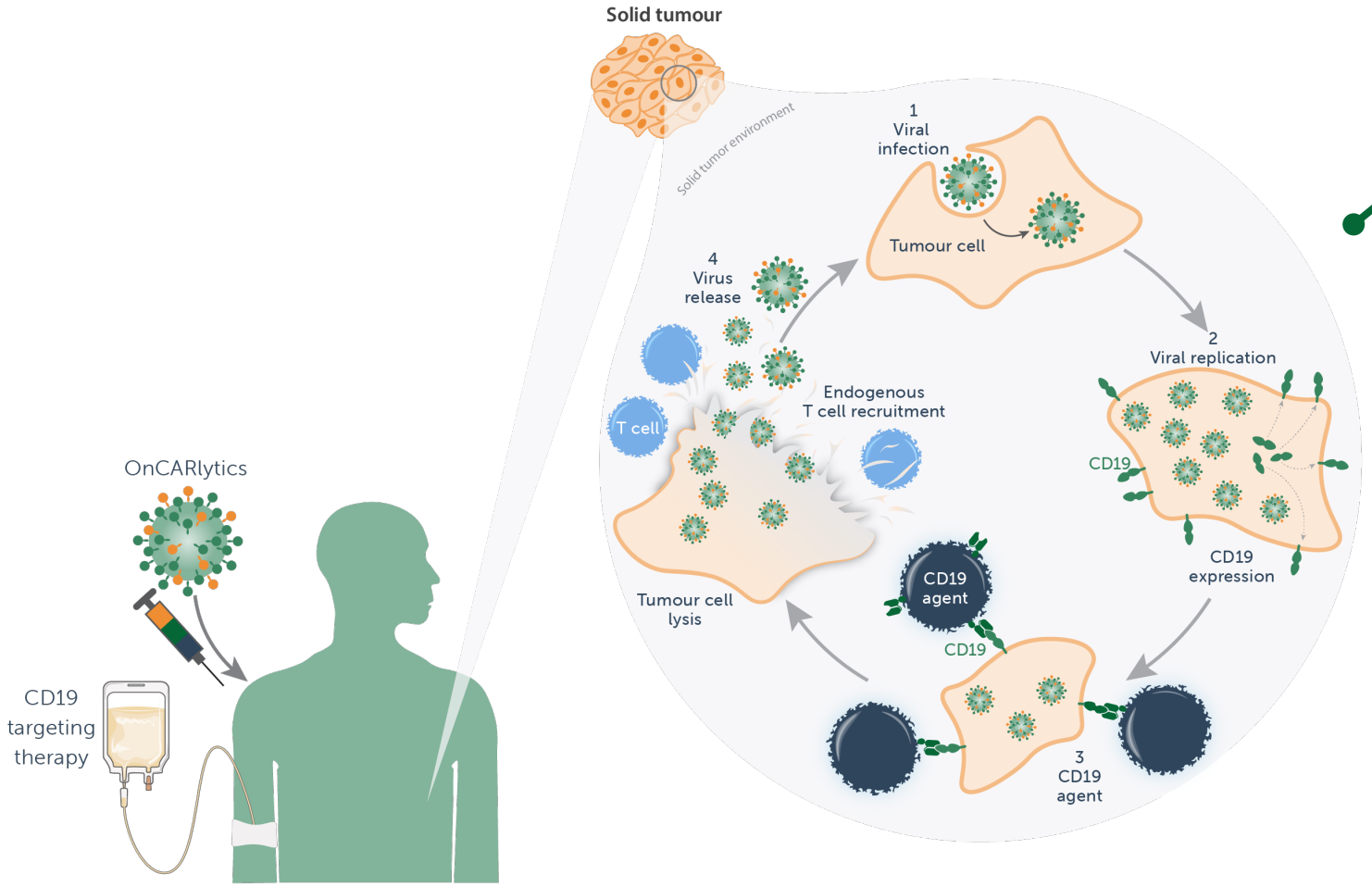
Cell therapy, including Chimeric Antigen Receptor (CAR) T cell therapy, has had limited activity in solid tumors, largely due to a lack of selectively and highly expressed surface antigens, such as the blood B cell antigen CD19



IMUGENE'S APPROACH

- Use onCARlytics (CF33-CD19) to express CD19 antigen on solid tumor cells
- Combine onCARlytics (CF33-CD19) with autologous or allogeneic CD19 CAR T cell therapies for the treatment of solid tumors

MECHANISM OF ACTION: HOW DOES IT WORK?

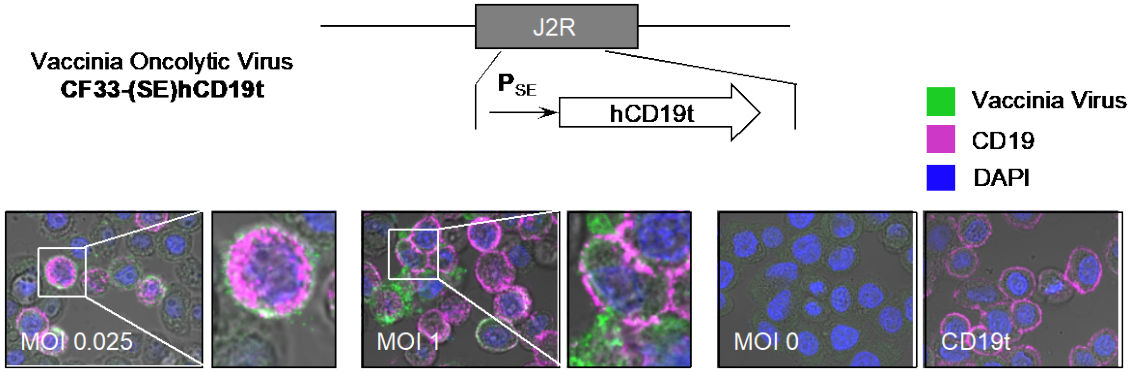


onCARlytics makes solid tumors "seen" by CD19 targeting therapies

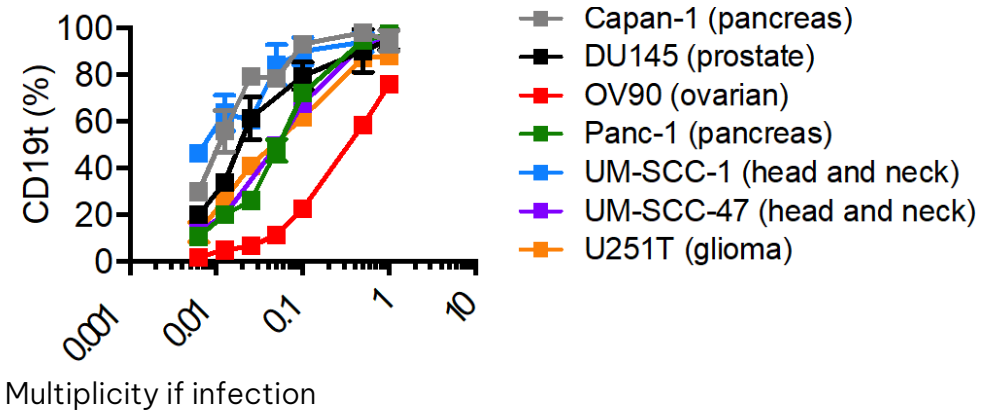
1. OnCARlytics infects Tumor cells
2. Virus replication and production of CF33-CD19 on the cell surface enabling CD19 cell targeting
3. Tumor cell lysis leads to viral particle release and the combination promotes endogenous immune cell recruitment to Tumors
4. Released viral particles re-initiate virus infection of surrounding Tumor cells.

onCARLYTICS DELIVERS TARGETS TO "TARGETLESS" SOLID TUMORS

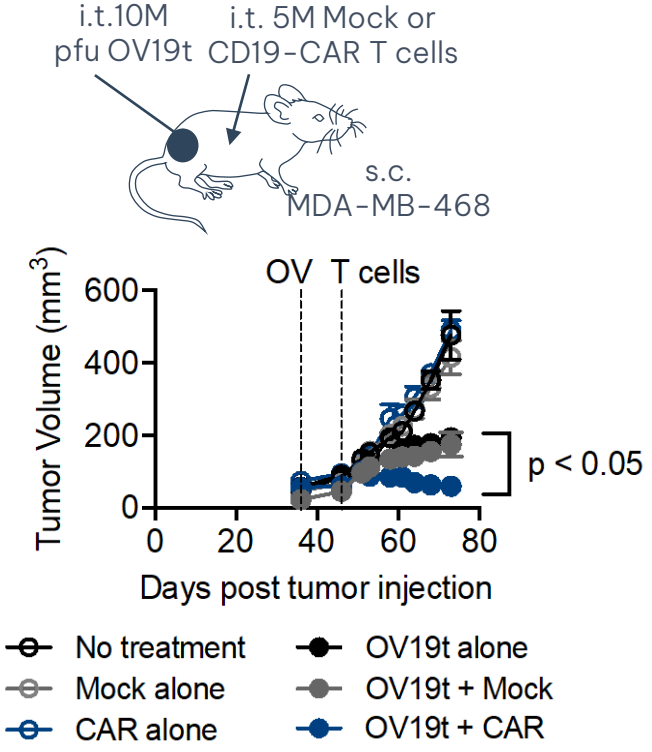
IMUGENE
Developing Cancer Immunotherapies



onCARlytics (CF33-CD19) infects a wide array of solid Tumor cell lines, with dose-dependent CD19 cell surface expression



Combination of onCARlytics (CF33-CD19) and CD19-CAR T cells promotes tumor regression in xenograft model of TNBC

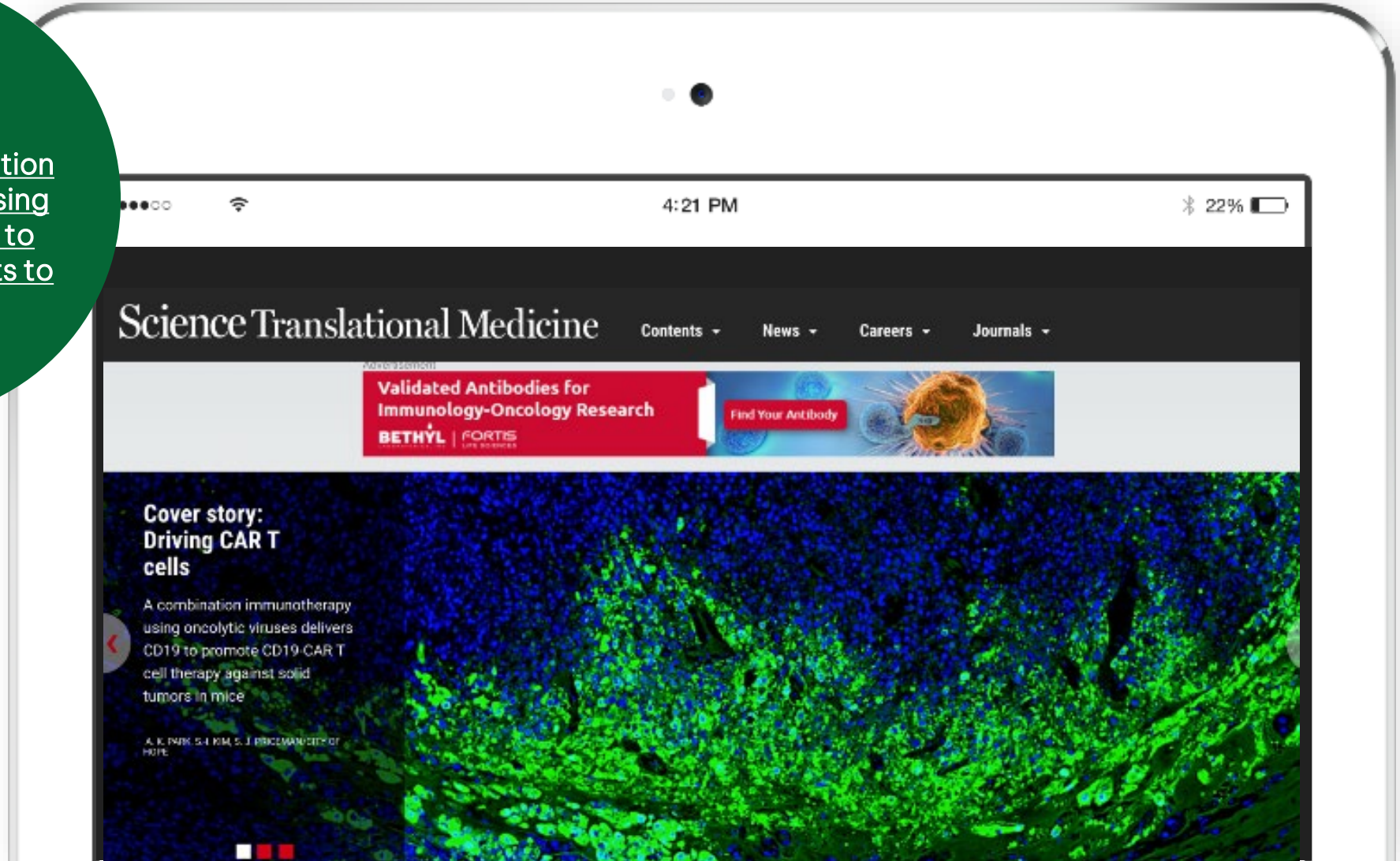


Park et al. *Science Translational Medicine* 2020

PUBLISHED FRONT COVER OF SCIENCE TRANSLATIONAL MEDICINE JOURNAL IN 2020

IMUGENE
Developing Cancer Immunotherapies

Effective combination immunotherapy using oncolytic viruses to deliver CAR targets to solid tumors



Park AK, Fong Y, Kim SI, Yang J, Murad JP, Lu J, Jeang B, Chang WC, Chen NG, Thomas SH, Forman SJ, Priceman SJ.Sci Transl Med. 2020 Sep 2;12(559): eaaz1863. doi: 10.1126/scitranslmed.aaz1863.PMID: 32878978

onCARLYTICS COMBINATION WITH CD19 TARGETING THERAPIES

IMUGENE
Developing Cancer Immunotherapies

Collaboration with Celularity, Eureka and Arovella for combination with onCARlytics

AUG 2021
Strategic Partnership with Celularity

Allogeneic CyCART19® T cells

NOV 2021
Strategic Partnership with Eureka

Autologous ARTEMIS® **T cells**

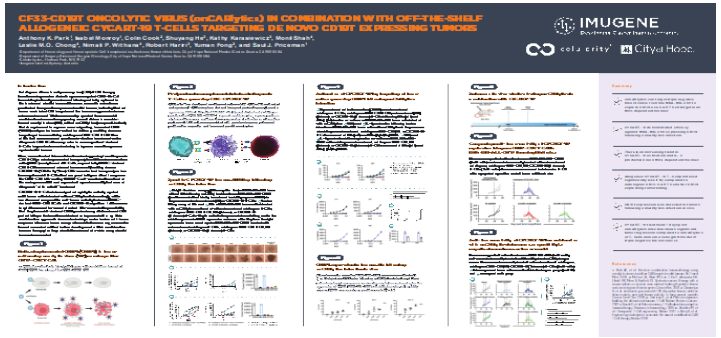
SEP 2022
Strategic Partnership with Arovella

Allogeneic invariant natural killer (iNKT) cells

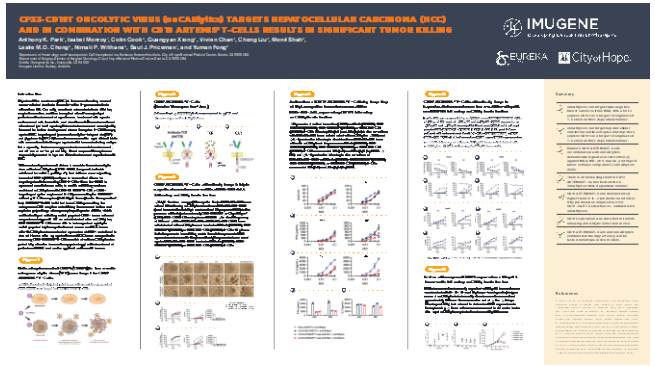
sitc
Society for Immunotherapy of Cancer

3 POSTERS PRESENTED AT SITC 2022

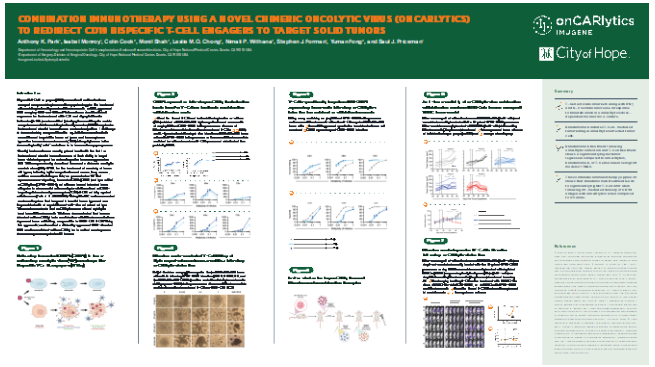
CyCART19®



Artemis®



BLINCYTO® (blinatumomab) for injection 35 mcg single-dose vial
AMGEN



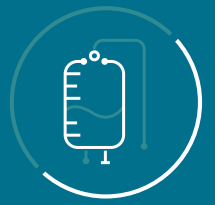
B Cell Immunotherapy
IMUGENE

HER-Vaxx

B CELL BASED ANTIBODIES HAVE DISTINCT COMPETITIVE ADVANTAGES TO EXISTING TREATMENTS

IMUGENE
Developing Cancer Immunotherapies

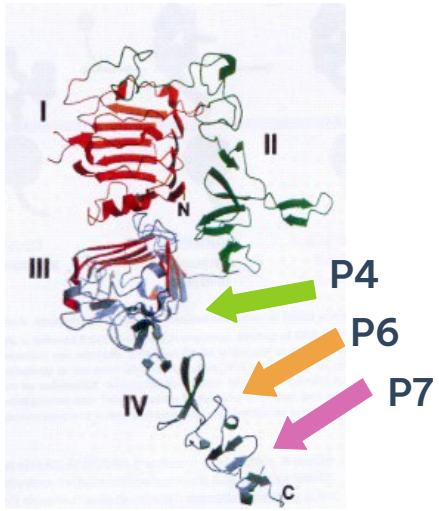
B cell vaccines offer a unique opportunity to intervene at multiple points in the immune system and create immune memory which enhances durability of response.

	NATURAL B CELL DERIVED ANTIBODIES 	MONOCLONAL ANTIBODIES 
Safety	Stimulates the immune system to produce Abs, which may be potentially safer	Synthetic Ab, with side effects (including ventricular dysfunction, CHF, anaphylaxis, infusion reactions, immune mediation)
Efficacy	Polyclonal Ab response reduces risk of resistance and potentially increases efficacy	Monoclonal Ab – may develop anti-drug antibodies
Durability	Antibodies continuously produced with lasting immune response to potentially inhibit tumor recurrence	Half life necessitates recurrent dosing
Usability	After priming, low numbers of vaccinations required per year	Requires regular infusion
Cost	Low cost of production enables greater pricing flexibility facilitating combination	Expensive course of treatment >US$100K per year

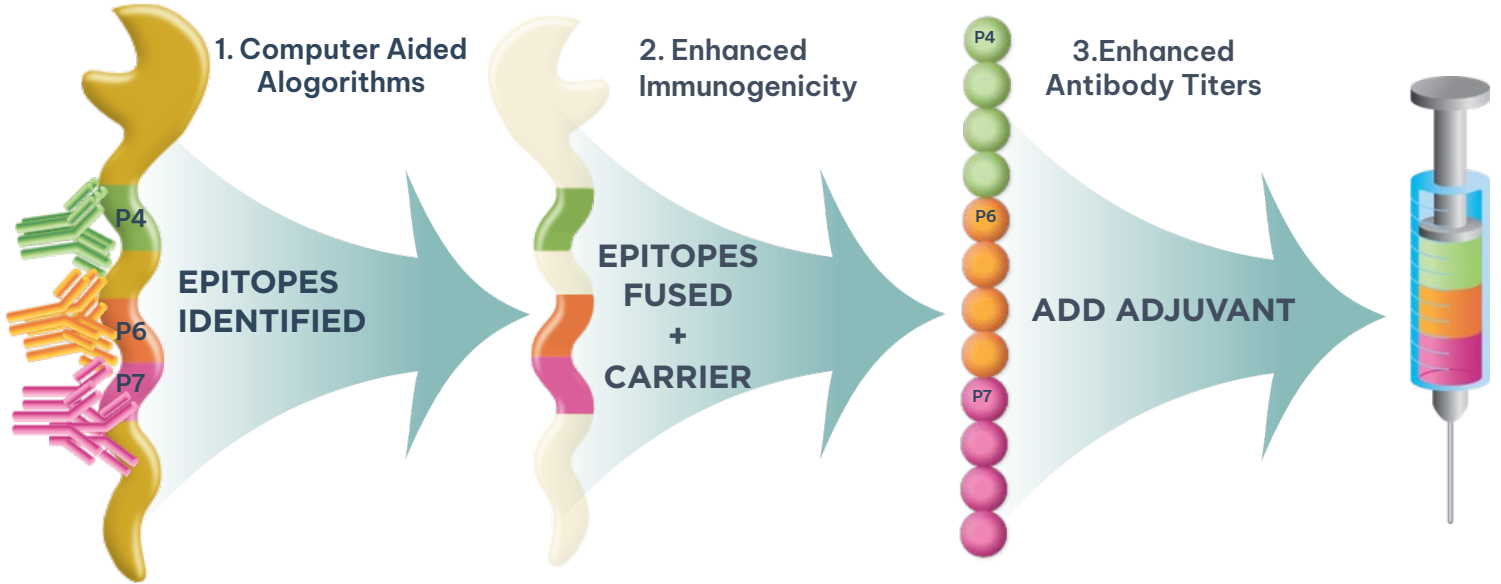
HER-Vaxx: B-CELL IMMUNOTHERAPY VACCINE AGAINST HER-2

IMUGENE
Developing Cancer Immunotherapies

- B-cell cancer vaccine designed to stimulate a patient's own immune system to repeatedly target the HER-2+ cancer with HER-2 directed antibodies
- Stimulates a patient's B cells to produce polyclonal antibodies that target cells with overexpressing HER-2 receptors on their surface
- HER-Vaxx consists (1) of three fused B-cell epitope peptides (P4, P6, P7) from the HER-2 receptor conjugated to (2) a carrier protein CRM197 plus (3) an adjuvant Montanide ISA51. Injected as a water-in-oil emulsion.

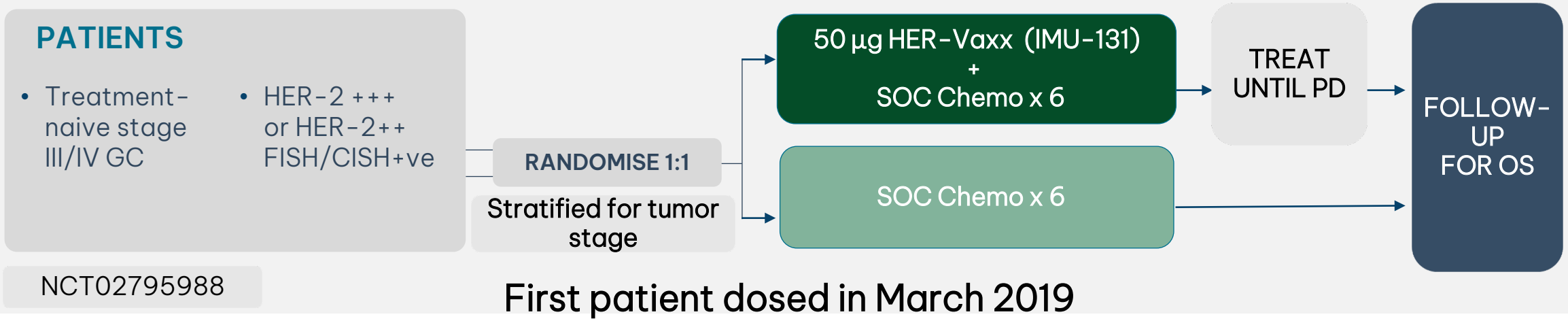


HER-2 RECEPTOR



HERIZON PHASE 1B/2 OPEN LABEL, MULTICENTER STUDY

IMUGENE
Developing Cancer Immunotherapies



NCT02795988

First patient dosed in March 2019

HER-Vaxx	C1D1, C3D1 then Q9 weeks till PD
Chemotherapy	6 cycles Q3 weeks (Cisplatin + 5FU or Capecitabine; Oxaliplatin + Capecitabine)

PRIMARY ENDPOINT OS (pre-spec 1-sided alpha 0.10, power 90% with critical HR 0.6 and 24 events)

SECONDARY ENDPOINTS PFS, Safety, Immune Response

NO. OF PATIENTS 36

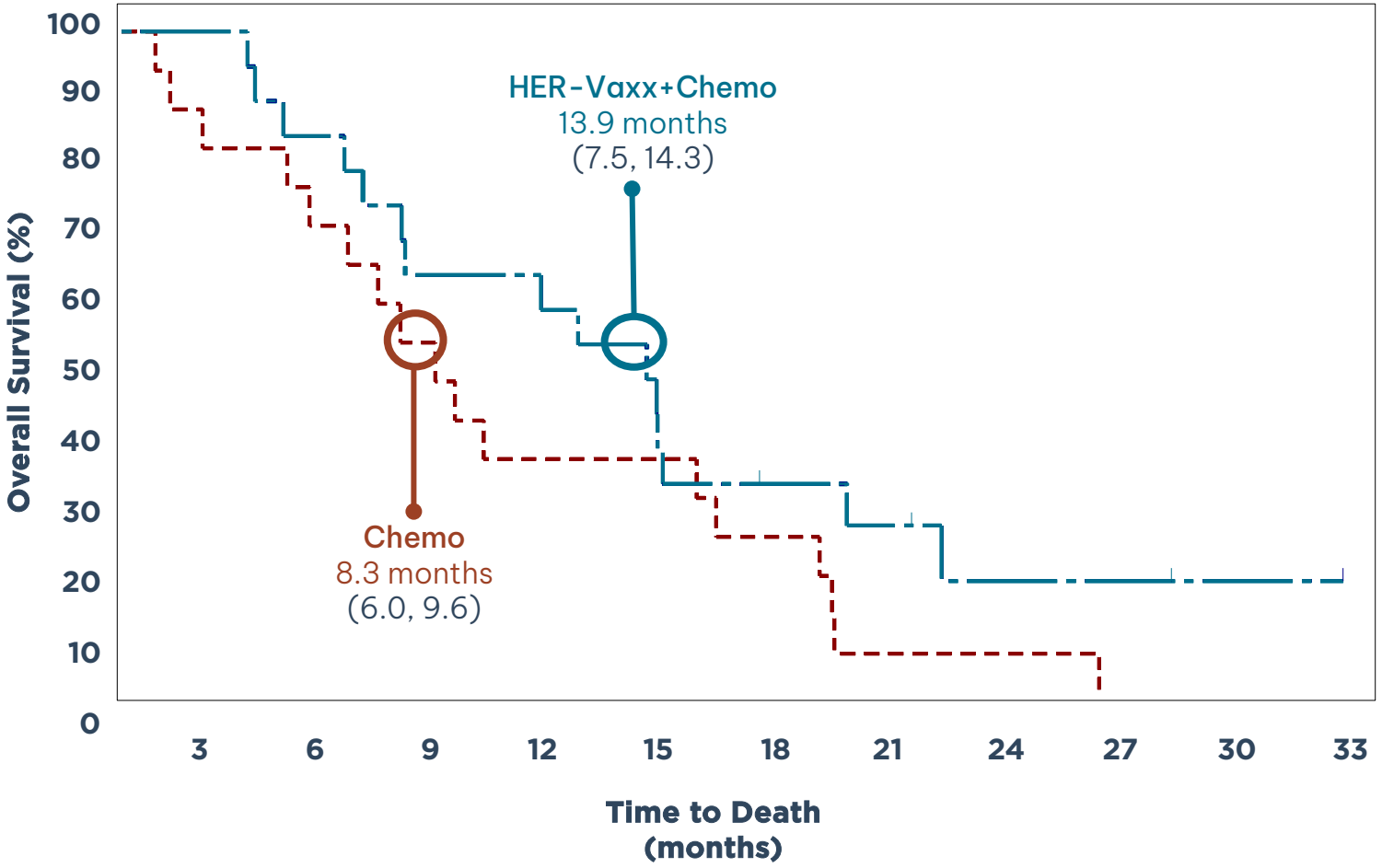
SITE LOCATION Eastern Europe, India

ASCO Gastrointestinal Cancers Symposium

SINGAPORE 2022 ESMO ASIA

HER-Vaxx SIGNIFICANTLY PROLONGS OVERALL SURVIVAL IN 1L PATIENTS WITH HER-2+ GASTRIC CANCER

IMUGENE
Developing Cancer Immunotherapies



	HER-Vaxx + Chemotherapy	Chemotherapy
Sample Size	19	17
Events	15	17
Median OS (2-sided 80% CI)	13.9 months (7.5, 14.3)	8.3 months (6.0, 9.6)
Median Duration of Response	30 weeks	19 weeks
HR	0.580	
2-sided 80%CI	(0.362, 0.927)	
Log-rank Test (1-sided p-value) *	0.066 *	

*Significant, 1-sided p < 0.10

HER-Vaxx PHASE 2:
HERIZON SAFETY

IMUGENE
Developing Cancer Immunotherapies

TREATMENT EMERGENT ADVERSE EVENTS

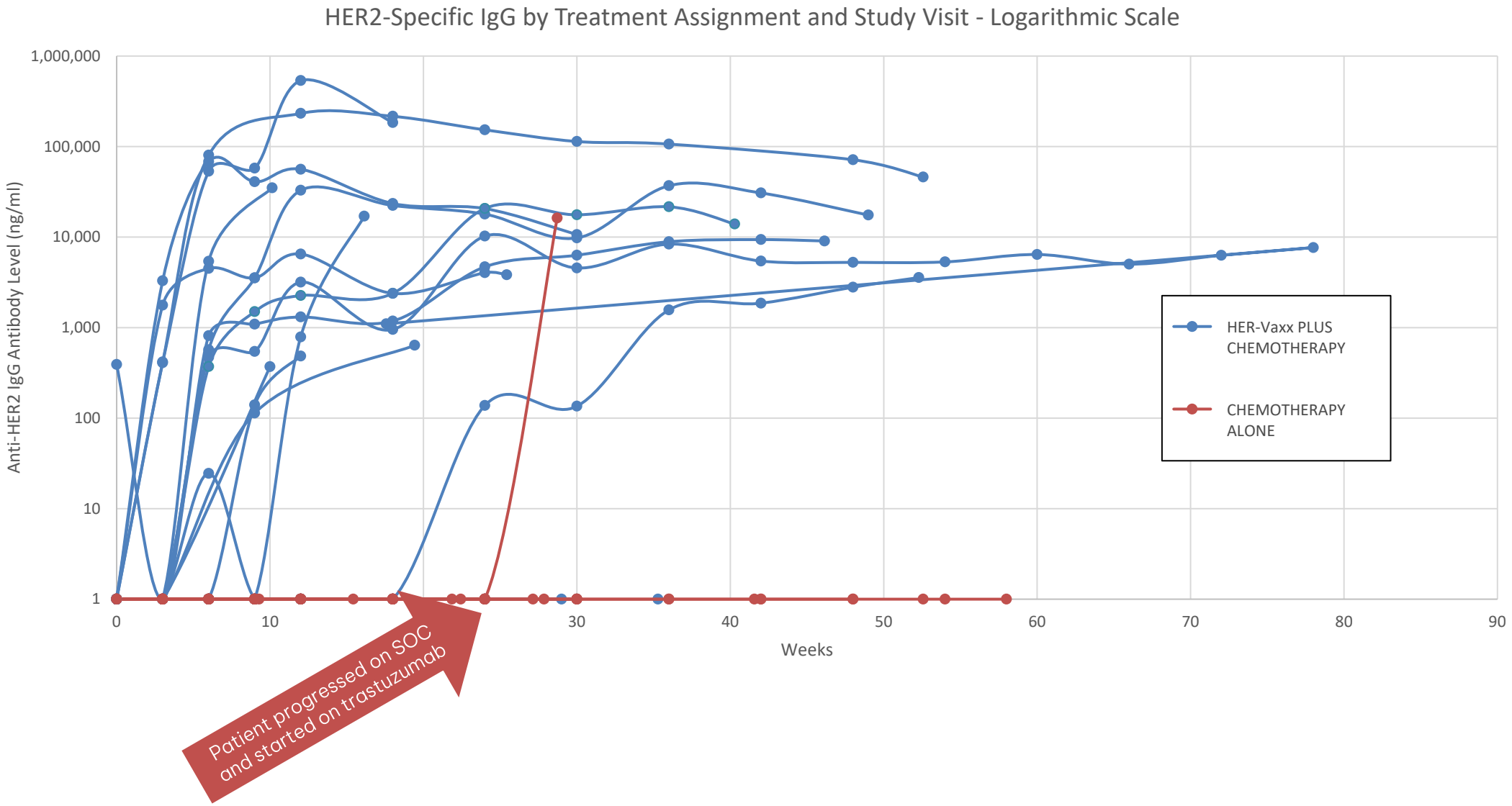
	HER-Vaxx + CHEMOTHERAPY (N =1 9) n (%)	CHEMOTHERAPY ONLY (N =1 7) n (%)
Patients with at least one TEAE	18 (94.7%)	16 (94.1%)
Grade 1 / 2	10 (52.6%)	9 (52.9%)
Grade ≥ 3	8 (42.1%)	7 (41.2%)
Serious AE*	2 (10.5%)	5 (29.4%)
Fatal AE	1 (5.3%)	1 (5.9%)

*SAEs are also included in the ≥3 AE. N = number of patients in the treatment arm at final analysis. n = number of patients who experienced the event.

HER-Vaxx PHASE 2:

HERIZON HER-2 ANTIBODY LEVELS PER PATIENT

IMUGENE
Developing Cancer Immunotherapies



Note: Antibodies were analysed from all enrolled patients. Values below LLOQ are represented as "1".

HER-Vaxx PHASE 2:
nextHERIZON IN METASTATIC GASTRIC CANCER AFTER PROGRESSION ON TRASTUZUMAB

ASCO Gastrointestinal Cancers Symposium

IMUGENE
Developing Cancer Immunotherapies

TRIAL
- Phase 2
- Open label
- USA, Australia, Asia
- Treat until progression/toxicity

PATIENTS
- > 1L
- Advanced or metastatic Gastric Cancer
- HER-2/neu overexpressing
- Progressed on prior trastuzumab

STUDY
- Non-Randomised
- HER-Vaxx in combination with paclitaxel + ramucirumab
  OR
  HER-Vaxx in combination with pembrolizumab

ENDPOINTS
Primary
- Objective Response Rate
- Safety

Secondary
- Overall Survival
- Progression-free survival
- Duration of Response

First Patient Enrolled Sept 2022

mGC/GEJ cancer
HER-2/neu overexpressing
Progressed on or after trastuzumab & previously received PD-1/PD-L1 treatment

→ **Arm 1: HER-Vaxx + SOC Chemotherapy**

mGC/GEJ cancer
HER-2/neu overexpressing
Progressed on or after trastuzumab

→ **Arm 2: HER-Vaxx + pembrolizumab**

PRIMARY ENDPOINTS:
ORR
Safety

SECONDARY ENDPOINTS:
OS
PFS
DoR

EXPLORATORY ENDPOINT:
Biomarker/Immune Response

HER-Vaxx PHASE 2:
neoHERIZON IN RESECTABLE GASTRIC CANCER

IMUGENE
Developing Cancer Immunotherapies

TRIAL

- Phase 2
- Open label
- Randomised
- Germany

PATIENTS

- Neoadjuvant Gastric Cancer
- HER-2+++/HER-2++ FISH/CISH +ve

STUDY

- Arm 1 – FLOT + HER-Vaxx
- Arm 2 – FLOT + Avelumab + HER-Vaxx

ENDPOINTS

Primary
- Pathological Complete Response

Secondary
- Safety
- Immune Response
- Duration of Response/Overall Survival

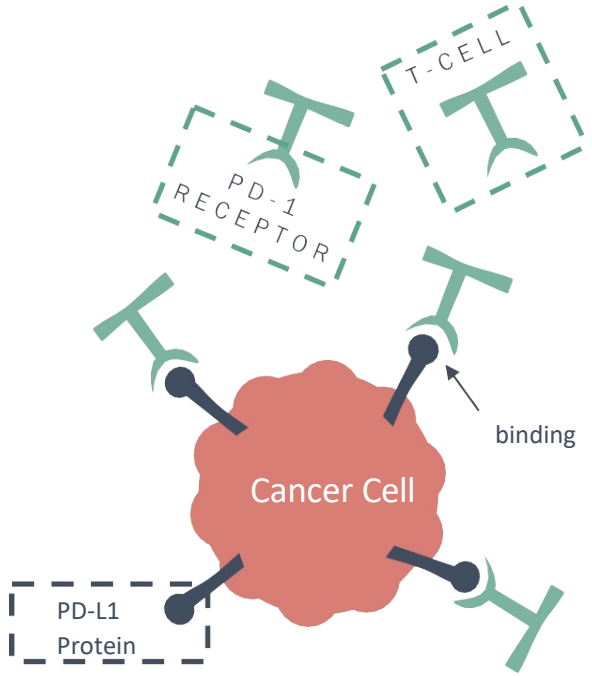
B Cell Immunotherapy
IMUGENE

PD1-Vaxx

PD1-VAXX STOPS CANCER CELLS FROM USING PD1 TO STAY UNDETECTED BY THE IMMUNE SYSTEM

IMUGENE
Developing Cancer Immunotherapies

PD-L1 binding to PD-1 prevents T cell recognition and killing of cancer cells

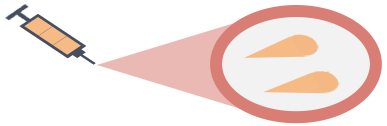


Cancer cells express PD-L1 which binds to the PD-1 receptor on T cells

PD1-Vaxx stops cancer cells from staying undetected by T cells

PD1 - VAXX
B cell vaccine

ANTI PD-1 pAb



1

Induces the body to produce polyclonal antibodies (pAb)

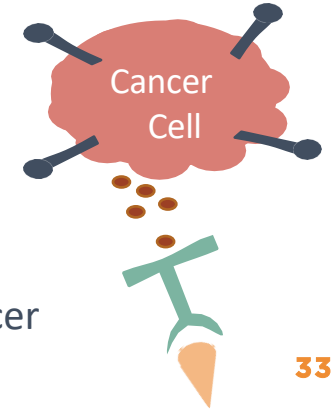
2

Anti-PD1 pAb binds PD1 on the T cell

3

PD-L1 PROTEIN

Anti-PD1 pAb blocks PD-L1 interaction on cancer cell



4

T cells recognize cancer cells and mount an immune response

IMPRINTER:
PD1-Vaxx NSCLC PHASE 1 STUDY DESIGN

IMUGENE
Developing Cancer Immunotherapies

Phase 1: PD1-Vaxx Monotherapy Dose Escalation & Expansion
2L+ NSCLC Progressed on/after ICI

Cohort 1
10 µg
PD1-Vaxx
n = 3-6

→

Cohort 2
50 µg
PD1-Vaxx
n = 3-6

→

Cohort 3
100 µg
PD1-Vaxx
n = 3-6

→

MONOTHERAPY OBD

→

Expansion
mOBD
PD1-Vaxx
n = 10

COMPLETED

Phase 1b: PD1-Vaxx NSCLC Combination Dose Escalation & Expansion

ARM 1: TPS/TC ≥ 50% or IC ≥ 10%

Cohort 1
10 µg
PD1-Vaxx +
atezolizumab
n = 3-6

→

Cohort 2
50 µg
PD1-Vaxx +
atezolizumab
n = 3-6

→

Cohort 3
100 µg
PD1-Vaxx +
atezolizumab
n = 3-6

ARM 2: Any PD-L1 Level

Cohort 1
10 µg
PD1-Vaxx +
atezolizumab +
chemotherapy
n = 3-6

→

Cohort 2
50 µg
PD1-Vaxx +
atezolizumab +
chemotherapy
n = 3-6

→

Cohort 3
100 µg
PD1-Vaxx +
atezolizumab +
chemotherapy
n = 3-6

→

COMBINATION OBD*

→ **ARM 1: Progressed on/after ICI TPS/TC ≥ 50% or IC ≥ 10%**
cOBD PD1-Vaxx + atezolizumab
n = 10

→ **ARM 2: Naïve to ICI TPS/TC ≥ 50% or IC ≥ 10%**
cOBD PD1-Vaxx + atezolizumab
n = 10

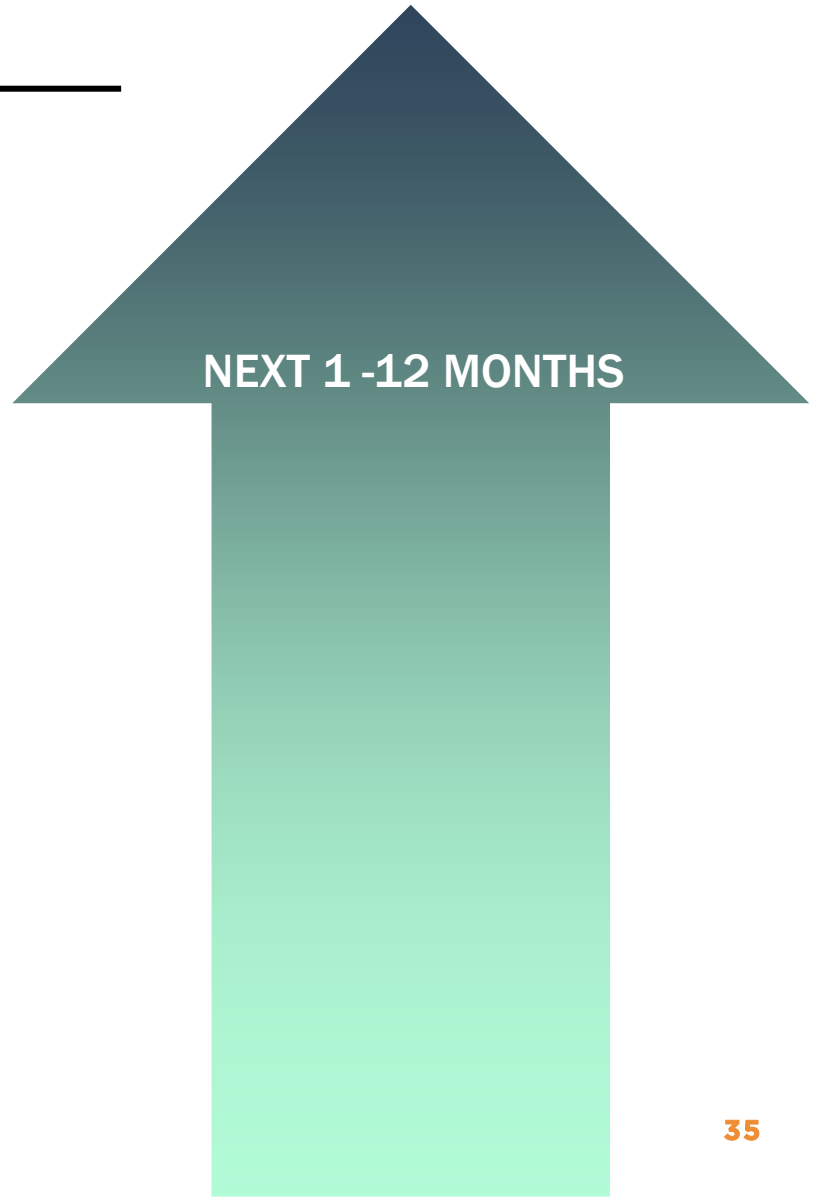
→ **ARM 3: Naïve to ICI Any PD-L1 Level**
cOBD PD1-Vaxx+ atezolizumab +
chemotherapy
n = 10

mOBD = monotherapy optimal biological dose
cOBD = combination optimal biological dose
**cOBD will be determined per arm*

VALUE INFLECTION POINTS EXPECTED IN THE NEXT 12 MONTHS

IMUGENE
Developing Cancer Immunotherapies

	TECHNOLOGY	MILESTONE
	VAXINIA	MAST: Combination OBD IV
	onCARlytics	FPI
	HER-Vaxx	neoHERIZON: FPI
	HER-Vaxx	nextHERIZON: Interim Data Readout
	VAXINIA	MAST: Optimal Biological Dose (Monotherapy IV and/or IT)
	HER-Vaxx	neoHERIZON: CTA Clearance
	CHECKvacc	Dominica: FDA IND
	CHECKvacc	COH IST: Optimal Biological Dose
	PD1-Vaxx	IMPRINTER: Combination FPI
	onCARlytics	FDA IND
	CHECKvacc	COH IST: IT Cohort 3 Cleared
	VAXINIA	MAST: Combination FPI IT and/or IV
	VAXINIA	MAST: IV Cohort 2 Cleared
	HER-Vaxx	HERIZON: Publication and Presentation (ASCO GI)
	HER-Vaxx	nextHERIZON: Trial in Progress Poster (ASCO GI)
✓	VAXINIA	MAST: IV Cohort 1 Cleared
✓	onCARlytics	Strategic Partnership with Arovella on CAR19-iNKT
✓	VAXINIA	MAST: IV Arm - 1st Patient Dosed
✓	HER-Vaxx	nextHERIZON: Phase 2 - 1st Patient Dosed
✓	HER-Vaxx	HERIZON: Phase 2 Final OS readout



FINANCIAL SUMMARY

IMUGENE
Developing Cancer Immunotherapies

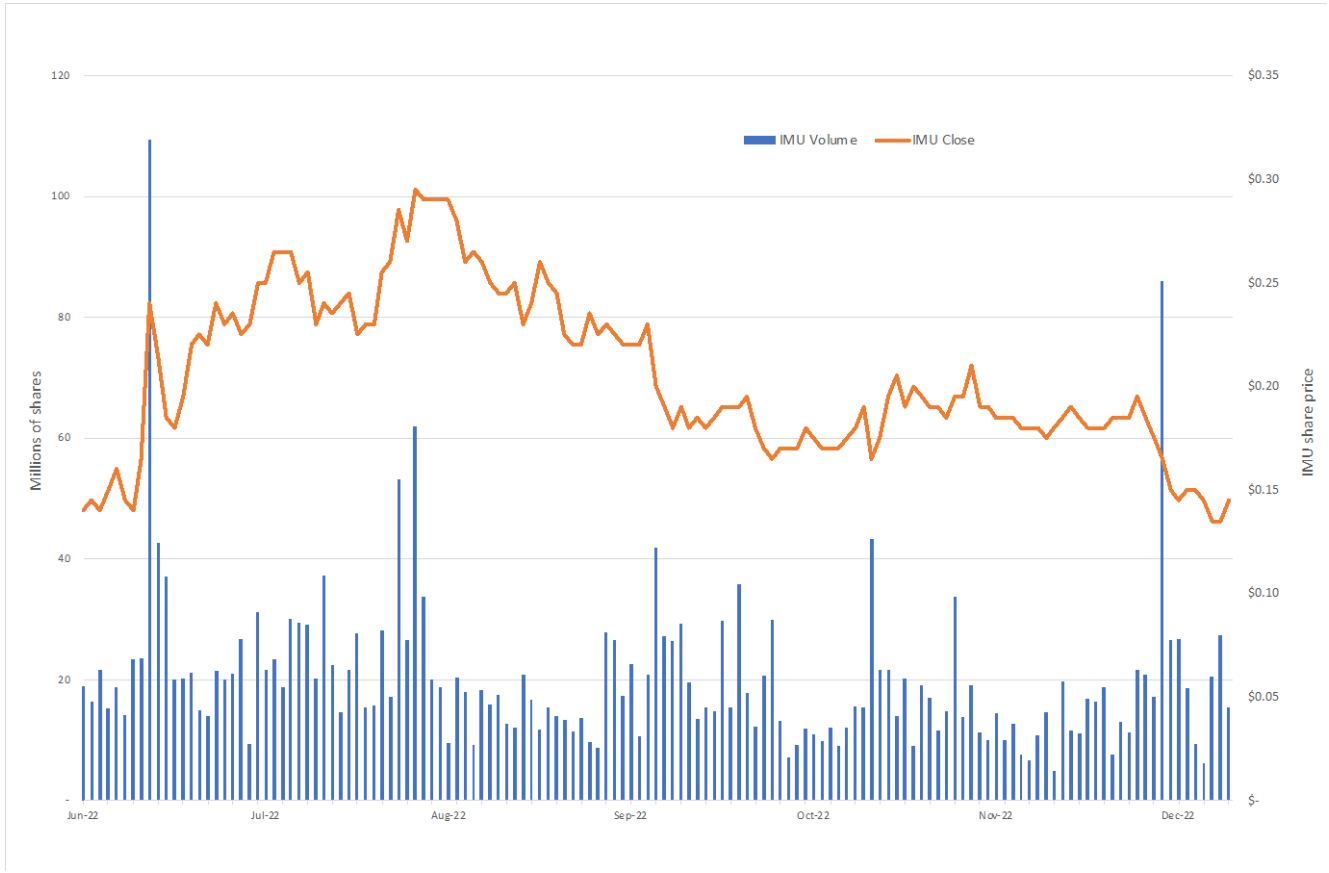
PUBLIC MARKET OVERVIEW (January 4, 2023)

Share Price	A$0.155
52 week range	$0.13 - $0.43
Market Capitalisation[1]	A$995M
Cash equivalents (30 September '22)	A$164M
Enterprise Value	A$831M

TOP 5 SHAREHOLDERS (as at January 4, 2023)

JP Morgan Nominees Australia Pty Limited	9.24%
HSBC Custody Nominees (Australia) Limited	5.69%
Paul Hopper	4.94%
Mann Family	4.60%
Citicorp Nominees Pty Limited	4.58%

SHARE PRICE PERFORMANCE



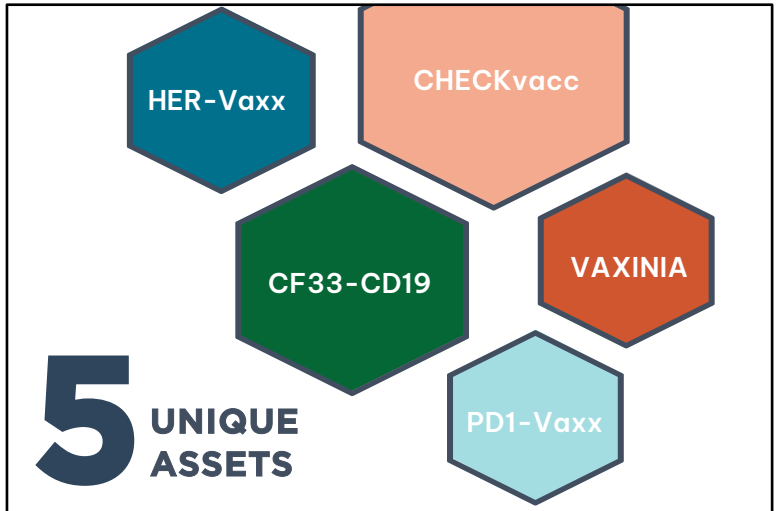
Note:
1. Market capitalisation calculations based on ordinary shares (6.422 bn) only and excludes the dilutive impact of options outstanding (0.477 bn)

INVESTMENT HIGHLIGHTS

IMUGENE
Developing Cancer Immunotherapies

MARKET CAPITALISATION 4th Jan 2023 A$995M

CASH AS OF 30th Sep 2022 A$164M



5 UNIQUE ASSETS

*Multiple potential platform targets: CF33-CD20, LAG3-Vaxx, CTLA4-Vaxx, TIGIT-Vaxx, PDL1-Vaxx, TIM3-Vaxx

CF33 Oncolytic Virus | onCARlytics | B-Cell Immunotherapies

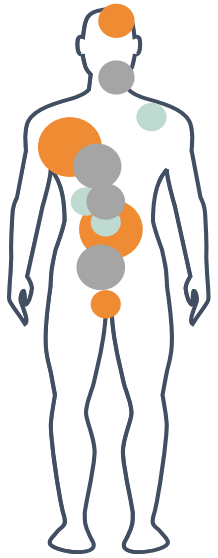
3 PLATFORM TECHNOLOGIES

Celularity | Eureka | Arovella

3 SCIENTIFIC COLLABORATIONS

DISEASE AREAS

- Breast (TNBC)
- Lung (NSCLC)
- Gastric
- Gastroesophageal
- Colorectal (CRC)
- Melanoma
- Head and Neck
- Hepatocellular
- Pancreatic
- Glioblastoma (GBM)



9 CLINICAL STUDIES

HERIZON: Ph1b/2 First line Gastric Cancer
IMPRINTER: Ph1 NSCLC (FDA IND)
CHECKvacc COH IST: Ph1 TNBC (FDA IND)
neoHERIZON: Ph 2 Neoadjuvant Gastric Cancer
nextHERIZON: Ph2 Metastatic Gastric Cancer (FDA IND)
MAST: Ph1 Solid Tumors (FDA IND)
DOMINICA: Ph1 TNBC (FDA IND)
onCARlytics: Ph1 Solid Tumors (FDA IND)
neoPolem IST: Ph1 CRC

2 SUPPLY AGREEMENTS

Merck KGaA/Pfizer | Roche

Contact

shareholderenquiries@imugene.com
www.imugene.com

IMUGENE
Developing Cancer Immunotherapies

ASX: IMU