ASX:**ALA**

arovella THERAPEUTICS

Extraordinary General Meeting

May

2024

Arovella's strengths

Off-the-Shelf iNKT Cell Platform

Developing off-the-shelf iNKT cell therapies to target blood cancers and solid tumour cancers

Lead Product Advancing to Clinic

ALA-101, potential treatment for CD19-expressing blood cancers, progressing to Phase 1 clinical trials, expected to commence in 2024

Addressing Key Unmet Need

Our iNKT cell platform is well positioned to solve key challenges that hamper the cell therapy sector

Strong Leadership Group

Leadership team and Board have proven experience in drug development, particularly cell therapies

Strategic Acquisitions

Focused on acquiring innovative technologies that strengthen its cell therapy platform and align with its focus areas

Unique Value Proposition

Arovella is among few companies globally developing an iNKT cell therapy platform

Financial overview

Financial Snapshot

ASX CODE	ALA
Market capitalisation[1]	$115.5 million
Shares on issue	1,050.1 million
52-week low / high[1]	$0.042 / $0.185
Cash Balance (Mar 31 2024)[2]	$15.31 million

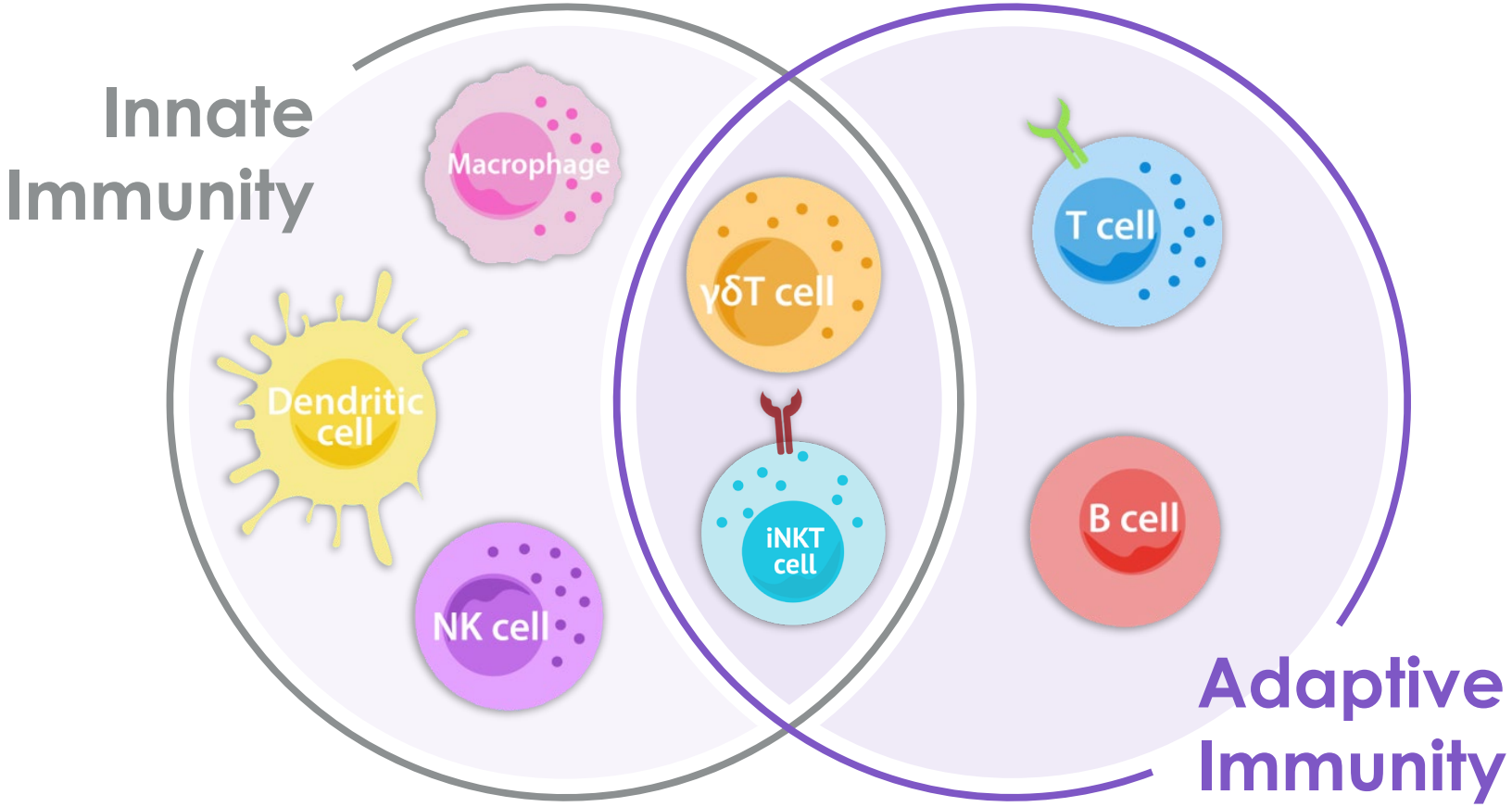
Major Shareholders

Shareholder	Ownership (%) [1]
RICHARD JOHN MANN	64,458, 288 (6.17%)
MERCHANT FUNDS MANAGEMENT	62,996,544 (6.03%)
MB INVESTMENT CAPITAL PTY LTD	26,087,615 (2.50%)
UBS NOMINEES PTY LTD	25,620,196 (2.45%)
MR JAMES EVAN HUGHES-MORRIS	21,769,196 (2.08%)

1. *As of 17 May 2024*
2. *Includes the proceeds of the Placement announced 26 March 2024*

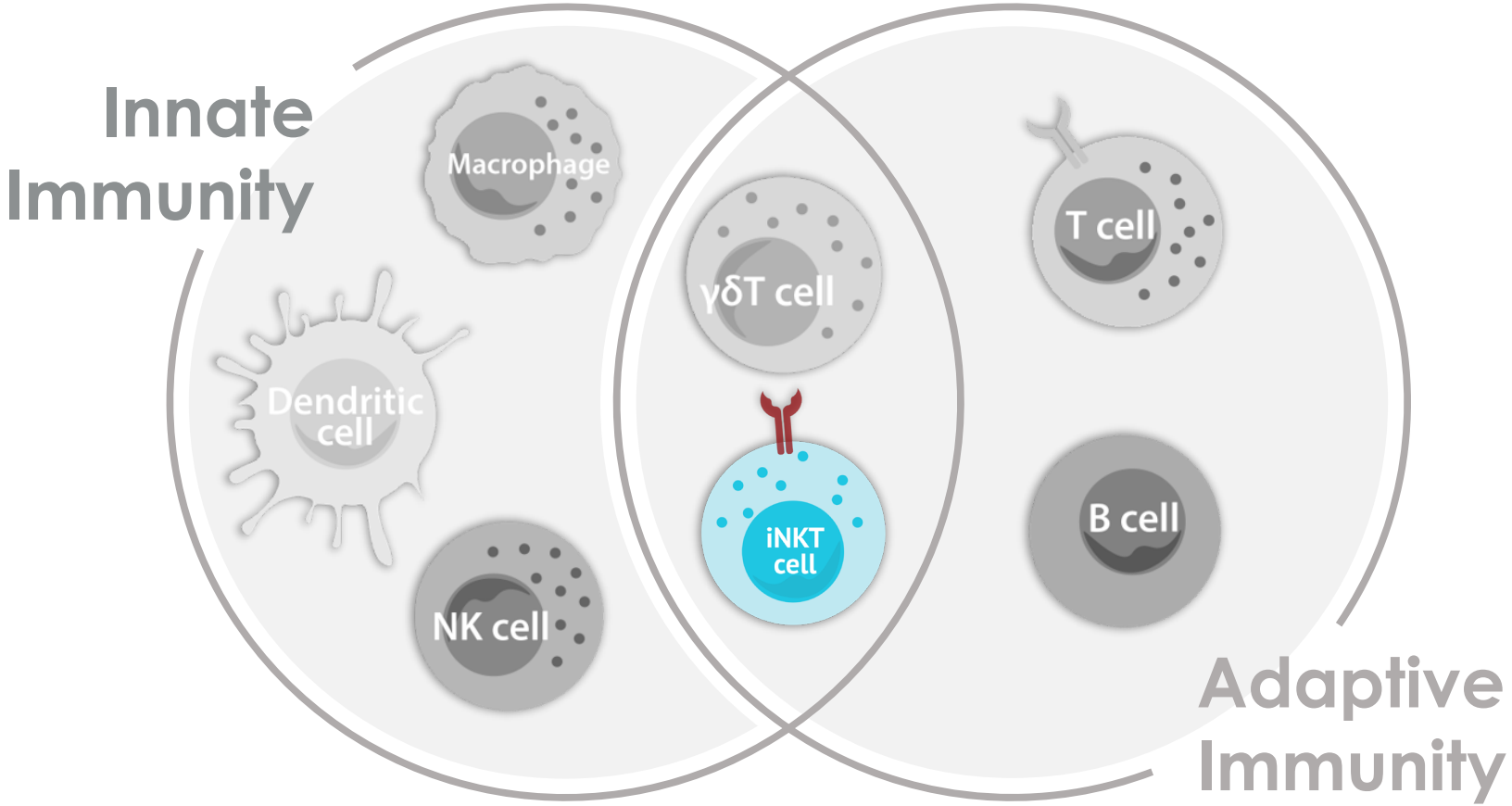
Introducing invariant Natural Killer T (iNKT) cells

Bridging the innate and adaptive immune system



iNKT cells represent a next-generation cell therapy

Properties make them ideal for use in cell therapy



Strong safety profile

- Don't cause graft versus host disease (GvHD)

Front line of the human immune system

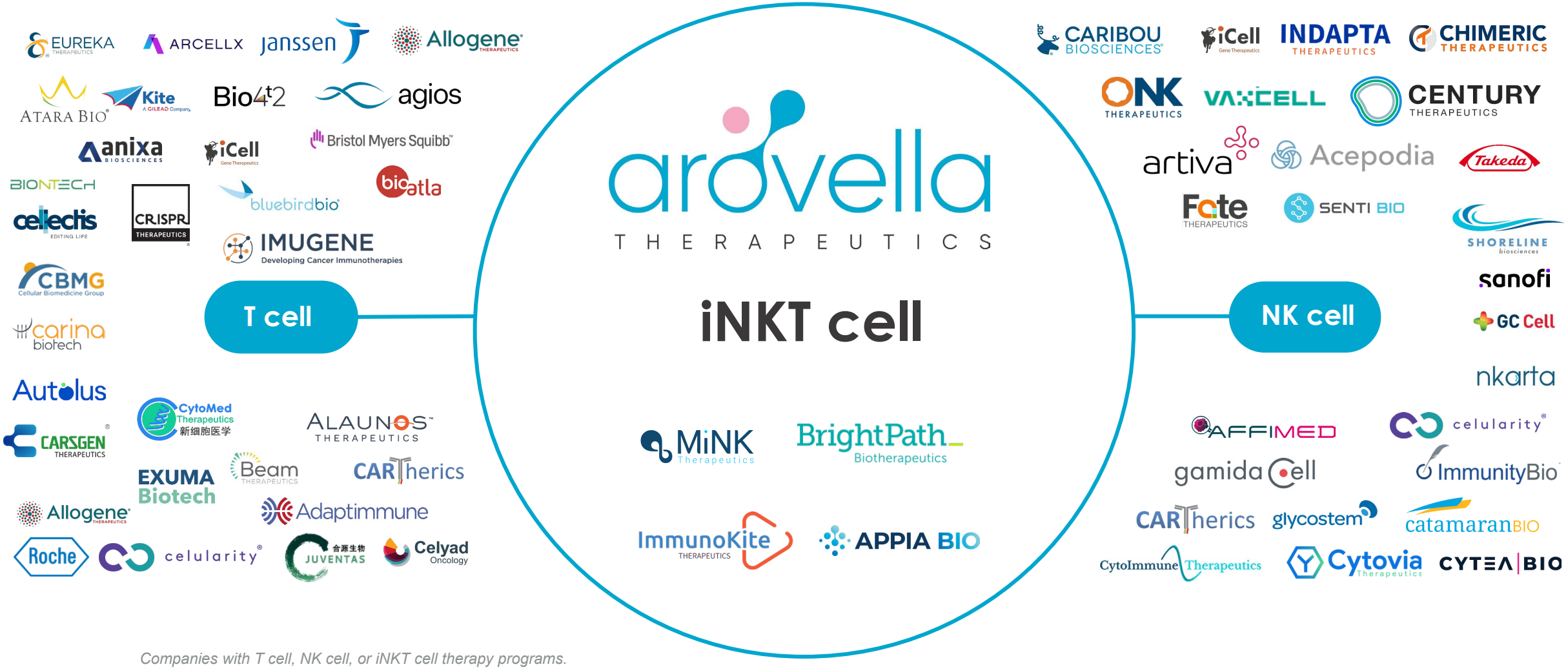
- Bridge innate & adaptive immune responses
- Contain both T cell & NK cell killing mechanisms
- Naturally target & kill cancers that express CD1d

Multiple anti-cancer properties

- Shape the tumour microenvironment by blocking/killing pro tumour cells (TAMs/MDSCs)
- Infiltrate tumours & secrete signaling molecules to activate other immune cells to kill tumour cells

A differentiated position

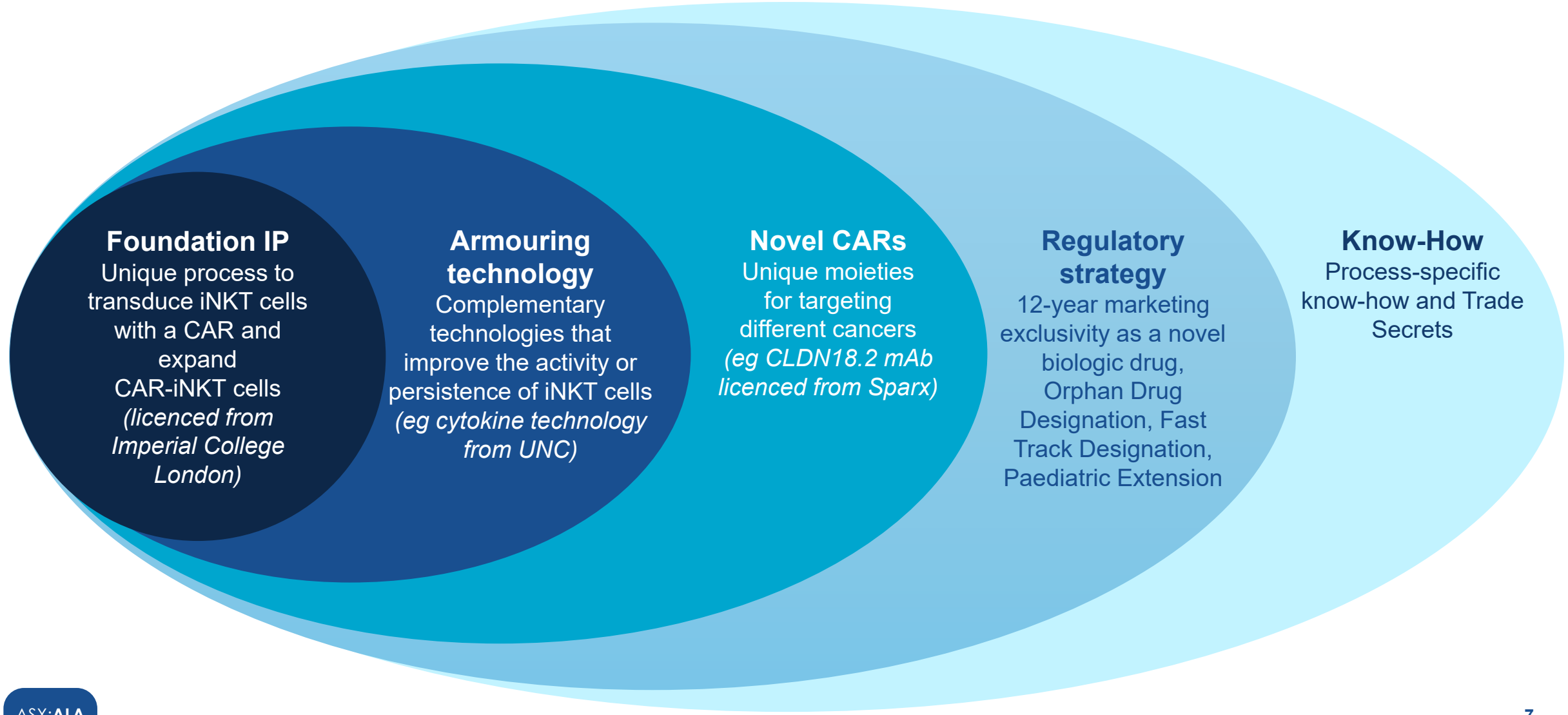
T cell and NK cell sectors are competitive



Companies with T cell, NK cell, or iNKT cell therapy programs.
Source: Company analysis based on public information

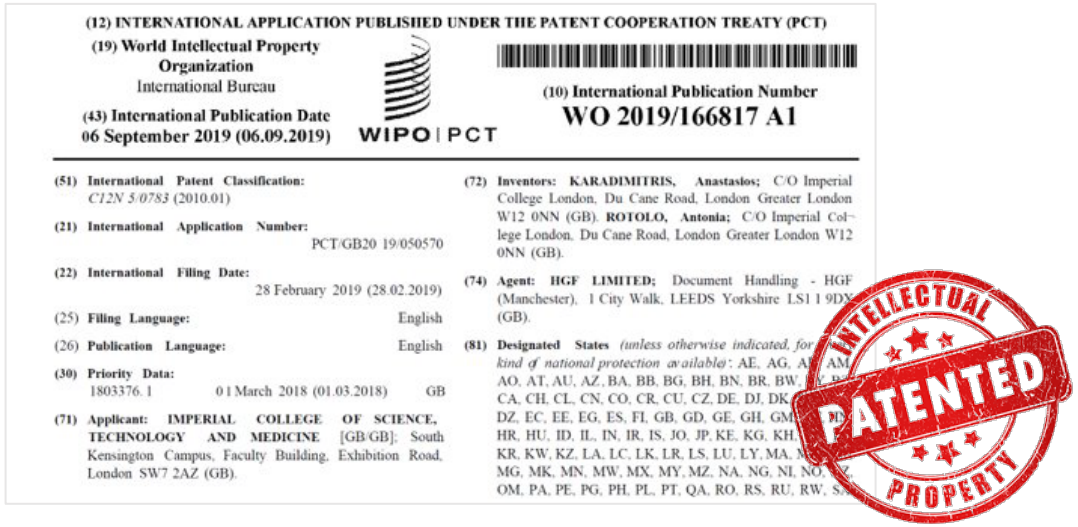
Arovella's iNKT cell strategy

Incorporating world class IP to target a range of tumour types



Exclusive worldwide rights to granted patents

Further patent claims and applications actively being pursued



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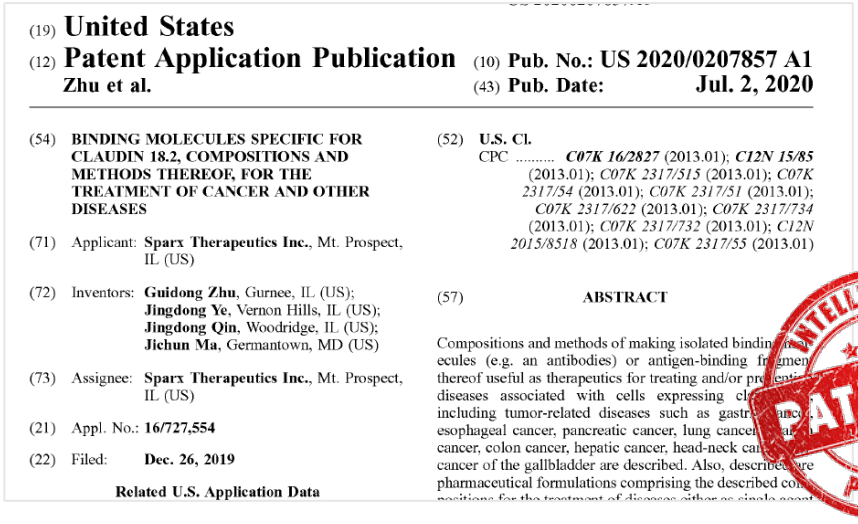
- **Transduction and Expansion of Cells**
- Patent life until 2038
- Method of manufacture, cell population claims
- Applicant: Imperial College of Science Technology and Medicine
- Granted in Europe, Canada, Hong Kong, and pending in the US, China and Australia
- Worldwide exclusive rights for human disease



(19) United States

(12) Patent Application Publication
Zhu et al.

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(43) Pub. Date: Jul. 2, 2020

(54) BINDING MOLECULES SPECIFIC FOR CLAUDIN 18.2, COMPOSITIONS AND METHODS THEREOF, FOR THE TREATMENT OF CANCER AND OTHER DISEASES

(71) Applicant: **Sparx Therapeutics Inc.**, Mt. Prospect, IL (US)

(72) Inventors: **Guidong Zhu**, Gurnee, IL (US); **Jingdong Ye**, Vernon Hills, IL (US); **Jingdong Qin**, Woodridge, IL (US); **Jichun Ma**, Germantown, MD (US)

(73) Assignee: **Sparx Therapeutics Inc.**, Mt. Prospect, IL (US)

(21) Appl. No.: **16/727,554**

(22) Filed: **Dec. 26, 2019**

Related U.S. Application Data

(52) U.S. Cl.
CPC *C07K 16/2827* (2013.01); *C12N 15/85* (2013.01); *C07K 2317/515* (2013.01); *C07K 2317/54* (2013.01); *C07K 2317/51* (2013.01); *C07K 2317/622* (2013.01); *C07K 2317/734* (2013.01); *C07K 2317/732* (2013.01); *C12N 2015/8518* (2013.01); *C07K 2317/55* (2013.01)

(57) **ABSTRACT**

Compositions and methods of making isolated binding molecules (e.g. an antibodies) or antigen-binding fragments thereof useful as therapeutics for treating and/or preventing diseases associated with cells expressing claudin, including tumor-related diseases such as gastric cancer, esophageal cancer, pancreatic cancer, lung cancer, ovarian cancer, colon cancer, hepatic cancer, head-neck cancer, cancer of the gallbladder are described. Also, described are pharmaceutical formulations comprising the described compositions for the treatment of diseases either as single agent

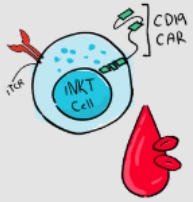
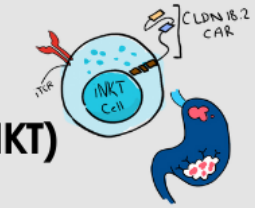
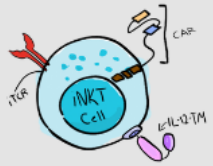
- **Binding Molecules Specific for Claudin 18.2**
- Patent life until 2038
- Composition of matter claims for a unique CLDN18.2 monoclonal antibody sequence
- Applicant: Sparx Therapeutics Inc.
- Granted in USA, pending in Europe, China, Japan and South Korea
- Worldwide exclusive rights for use in Cell Therapies

Recent cell therapy transactions[1]

Date	Type of deal	Acquirer/Licensee	Target/Licensor	Cell Type	Stage	Upfront (US$M)	Milestones (US$M)	Total deal value (US$M)
May-24	Research collaboration	Xyphos	Poseida Therapeutics	T cell	TBD	$50	$550	$600
Dec-23	Acquisition	AstraZeneca	Gracell	T Cell	Phase 1b	$1,000	$200	$1,200
Nov-23	Collaboration and investment[2]	AstraZeneca	cellectis	Not specified	Platform	$25	$70-220 per product	
Aug-23	Licence[3]	Imugene Developing Cancer Immunotherapies	Precision Biosciences	T Cell	Phase 1b	$21	$206	$227
Aug-23	Strategic investment (ROFR) [4]	astellas	Poseida Therapeutics	T Cell	Phase 1	$25	$0	$25
May-23	Licence	janssen	CBMG Cellular Biomedicine Group	T Cell	Phase 1b	$245	*undisclosed*	
Jan-23	Acquisition	AstraZeneca	neogene Therapeutics	T Cell	Phase 1	$200	$120	$320
Oct-22	Development collaboration[5]	Gilead	Arcellx	T Cell	Phase 2	$225	*undisclosed*	
Sep-22	Research collaboration	Genentech A Member of the Roche Group	ArsenalBio	T Cell	Preclinical	$70	*undisclosed*	
Aug-22	Licence & strategic collaboration	Roche	Poseida Therapeutics	T Cell	Phase 1	$110	$110	$220
Sep-21	Development collaboration	Genentech A Member of the Roche Group	Adaptimmune	T Cell	Preclinical	$150	$150	$300
Aug-21	Research collaboration	Gilead	APPIA BIO	iNKT Cell	Preclinical	*undisclosed*	*undisclosed*	$875
May-21	Acquisition	Athenex	kuur Therapeutics	iNKT Cell	Phase 1	$70	$115	$185
Jun-21	Acquisition	eterna	Novellus Therapeutics	Multiple	Preclinical	$125	$0	$125

1. *See the last slide for deal references*
2. *Cellectis will receive a US$220m equity investment from Astra Zeneca plus tiered royalties. Milestones are payable for 10 products*
3. *Precision is eligible for double digit royalties on net sales and $145 million in milestone payments and tiered royalties for additional programs*
4. *Poseida also received a US$25m equity investment from Astellas*
5. *Arcellx also received a US$100m equity investment from Gilead*

Arovella's expanding pipeline

PRODUCT	INDICATION	DISCOVERY	PRECLINICAL	PHASE 1
ALA-101 (CAR19-iNKT) 	CD19 Expressing cancers	CD19 Expressing Lymphoma		
ALA-105 (CLDN18.2-iNKT) 	CLDN18.2 positive solid tumours	Gastric & Pancreatic Cancers		
IL-12-TM 	Solid Tumours	Solid Tumours		

Upcoming milestones for 2024

	January 2024	July 2024	December 2024
ALA-101 (CD19)	▪ Complete cGMP manufacture for Phase 1 clinical trials ▪ Complete preparatory activities for Phase 1 study, including preparation of regulatory dossier, engagement with clinical sites and KOLs	▪ Commence Phase 1 for ALA-101 targeting CD19+ lymphoma and leukemia	
ALA-105 (CLDN18.2)	▪ Initiate proof-of-concept testing for CLDN18.2-iNKT cells to expand iNKT platform for treatment of solid tumours ▪ Optimise the CAR construct for robust efficacy	▪ Generate animal data for CLDN18.2 targeting CAR-iNKT cells against gastric cancer and/or pancreatic cancer ▪ Commence activities to manufacture ALA-105 for clinic (e.g. lentiviral vector)	
IL-12-TM Integration	▪ Integrate IL-12-TM into solid tumour programs and test its efficacy in anti-tumour models ▪ Enter into a Sponsored Research Agreement (SRA) with Professor Gianpietro Dotti's research group		

Expect to advance ALA-101 to Phase 1 first-in-human clinical trial during 2024

Dose escalation Phase 1 study in patients with CD19+ blood cancers

cGMP – Current Good Manufacturing Practice; KOLs – key opinion leaders

ASX:**ALA**

arovella
THERAPEUTICS

Thank You

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CEO & Managing Director

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Cell therapy deal references

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