



CSL

CSL

# 2025 Research Acceleration Initiative

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Research Innovation Europe

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# AGENDA



Overview of CSL



CSL Research  
Acceleration Initiative



Benefits of  
collaborating with CSL



CSL's core  
Therapeutic Areas



Areas of interest for  
collaboration



Questions

## Overview of CSL





# Our Businesses

**CSL**

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graph TD; CSL[CSL] --- CSL_Behring[CSL Behring]; CSL --- CSL_Seqirus[CSL Seqirus]; CSL --- CSL_Vifor[CSL Vifor];
```

**CSL Behring**

Biotherapies & Rare Disease

**CSL Seqirus**

Vaccines

**CSL Vifor**

Iron Deficiency & Nephrology

**Driven by Our Promise**

\* CSL will follow the required legal processes of formally changing the names for Vifor Pharma and Seqirus entities in due course.

# CSL at a Glance

**Global #1**

in plasma protein therapies  
~\$38 billion industry

**Global #2**

in influenza vaccines  
~\$7 billion industry

**Global #1**

in iron therapies  
~\$5 billion industry

**US\$2.64**

dividend per share for 2024

**US\$14.8bn**

in annual revenue

**110 million**

Influenza doses distributed in 2024

**US\$5.8bn**

In R&D investments in the last 5 years  
to advance CSL's product pipeline

**100+**

countries that CSL provides  
lifesaving products to patients

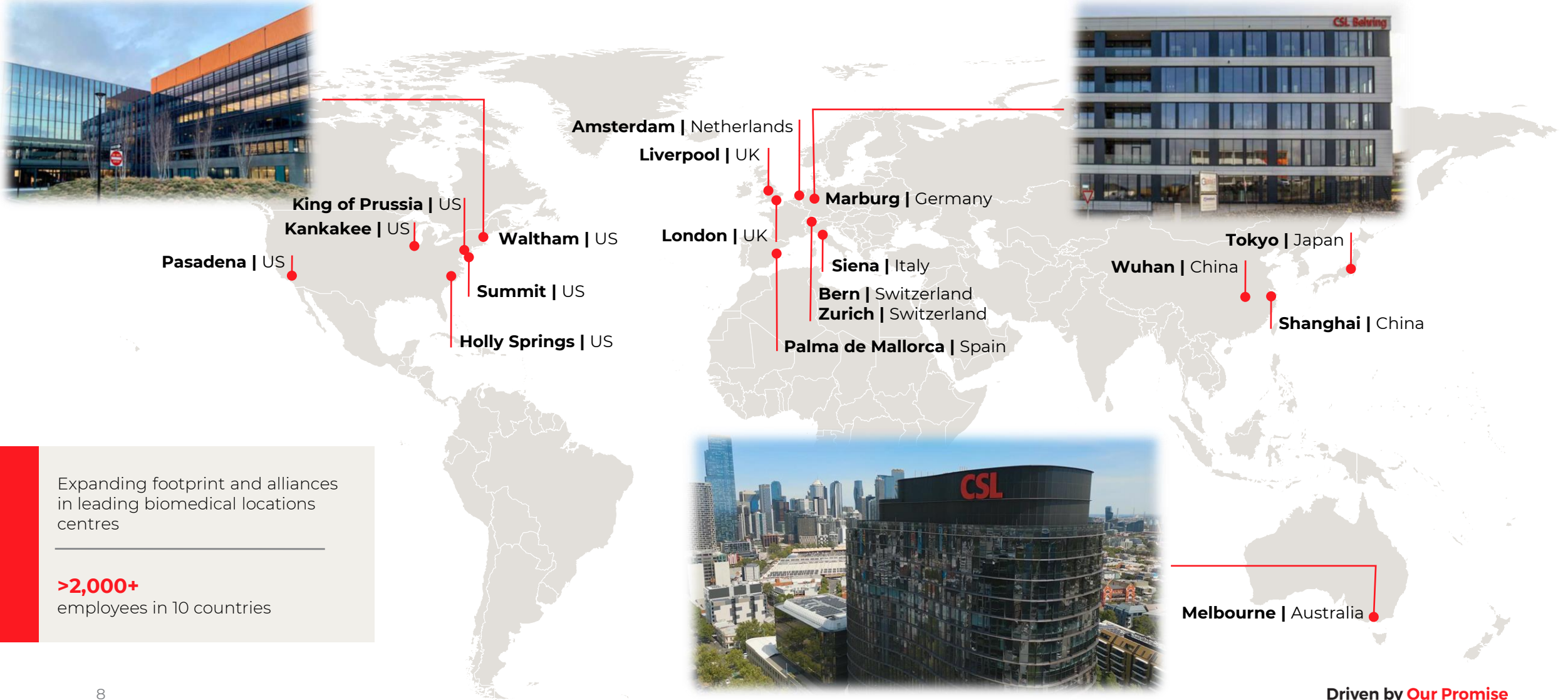
**349**

plasma collection centres across  
China, Europe and North America

# Top 25 Biotech Companies of 2024

Rank	Company	Ticker Symbol	Market Cap (US\$ Billion)
1	Novo Nordisk	NOVO-B (CPH)	430.96
2	Thermo Fisher Scientific	TMO (NASD)	189.20
3	Amgen	AMGN (NASD)	143.98
4	Gilead Sciences Inc	GILD (NASD)	98.41
5	Regeneron Pharmaceuticals	REGN (NASD)	91.51
6	Vertex Pharmaceuticals	VRTX (NASD)	90.24
<b>7</b>	<b>CSL Ltd</b>	<b>CSL (ASX)</b>	<b>84.82</b>
8	Chugai Pharmaceutical	4519 (TOKYO SE)	60.86
9	Daiichi Sankyo	4568 (TOKYO SE)	54.33
10	Seagan	SGEN (NASD)	41.31
11	Jiangsu Hengrui Medicine Co Ltd	600276 (SHSE)	40.59
12	Samsung Biologics	207940 (KRX KE)	38.31
13	Agilent Technologies	A (NYSE)	37.16
14	Sun Pharmaceutical Industries	SUNPHARMA (NSE)	35.54
15	Biogen	BIIB (NASD)	34.68
16	WuXi App Tec	603259 (SSEC)	31.46
17	Moderna	MRAN (NASD)	30.61
18	Lonza	LONN (SWX)	27.77
19	Argenx	ARGX (NASD ENX)	26.79
20	BioNTech	BNTX (NASD)	24.79

# CSL's Key Global R&D Locations



Expanding footprint and alliances  
in leading biomedical locations  
centres

**>2,000+**  
employees in 10 countries



# CSL's Global Strategic Partnerships for Innovation



## Investment

Providing investment to  
create more opportunities  
for growth



## Connections

Engaging with local hubs  
to foster relationships with  
innovative companies



## Infrastructure

Developing people and  
skills through  
infrastructure and support

# Research Acceleration Initiative



# CSL's Research Acceleration Initiative

**Objective:** to build relationships with entrepreneurial researchers and fast-track discovery of innovative medicines that address unmet needs

**Why?** Early collaborations with high quality academic partners are key to building a sustainable pipeline

CSL's RAI provides a differentiated approach to partnering:

- ✓ Up to USD \$400,000 funding over 2 years
- ✓ CSL scientific champion assigned to each project
- ✓ Focused on early-stage projects
- ✓ Simple and fast 300-word initial application
- ✓ Clear and transparent timelines



## CSL Research Acceleration Initiative

Seeking Expressions of Interest from Research Organizations

CSL is a leading global biotech company that develops and delivers innovative biotherapies to help people living with life-threatening medical conditions live full lives.

CSL's **Research Acceleration Initiative** aims to fast-track discovery of innovative biotherapies through partnerships between CSL and global research organizations. These partnerships provide funding and access to industry experts for scientists working on novel biotherapeutic strategies in CSL's therapeutic areas.

**Expressions of interest** are sought from Business Development / Commercialization representatives across global research organizations that wish to participate in the 2025 CSL Research Acceleration Initiative.

The 2025 Research Acceleration Initiative will focus on innovative research projects that address unmet medical needs and are aligned with the following **Therapeutic Areas** and scientific **Platforms**:

Therapeutic Areas	Platforms
 Antibody	 Plasma Protein Technology
 Viral Vector	 Recombinant Technology
 Gene Therapy	 Cell and Gene Therapy
 Cell-based	 Adjuvant
 Egg-based	 mRNA

To register your research organisation please email [RAI@csl.com.au](mailto:RAI@csl.com.au) by **13<sup>th</sup> December 2024**

# CSL has invested in 30+ RAI partnerships since 2019

"We had a **stellar experience participating in the CSL RAI process**. The information material, informational webinars, and access to the program team for Q&A was well received by our faculty..."

RAI 2023 participant  
University of Pittsburgh

"It has been a great pleasure to collaborate with our colleagues at CSL. The Research Acceleration Initiative (RAI) is an **outstanding platform that helps bridge the academic world with industry.**"

RAI 2021 awardee  
Justus-Liebig-Universität Giessen

"**CSL has proven to be an exceptional collaborator**, fostering a scientifically focused partnership marked by open scientific exchange and generosity. Their extensive research expertise has consistently enriched our collaborative efforts making the interaction with CSL an indispensable asset to our joint projects"

RAI 2021 awardee  
Klinikum der Universität München (KUM)

"Peerless experience – **timely, transparent, actionable communication.**"

RAI 2023 participant  
University of British Columbia

"Well-designed, easy and clear process. **Highly engaged and highly responsive to all questions** and provided well-contemplated and customised feedback."

RAI 2023 participant  
University of Toronto

"...the webinar session was very useful because it **clearly indicated which areas CSL was interested in funding**, thereby allowing me to focus my thoughts on them."

RAI 2022 awardee  
Nanyang Technological University

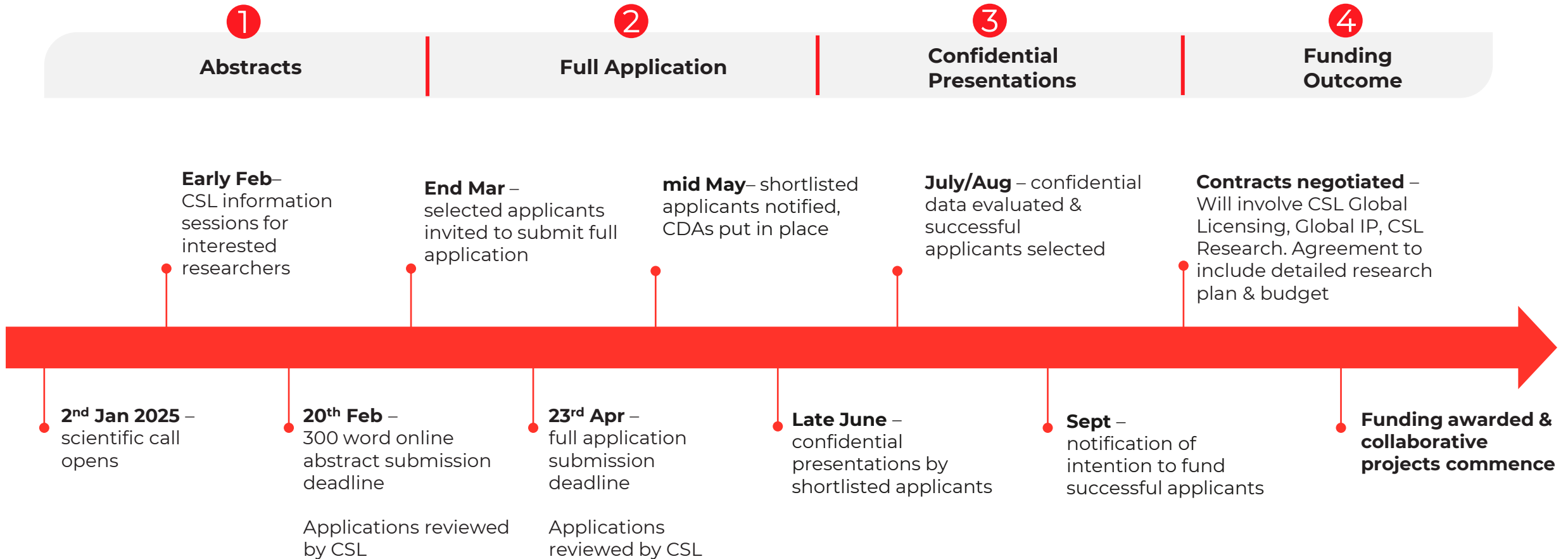
"...the opportunity to address **feedback from CSL and to refine the project was particularly valuable**"

RAI 2023 participant  
The University of Adelaide

"The types of projects CSL were looking for was made very clear, the process of submitting an **application was easy and did not require excessive time or effort.**"

RAI 2023 participant  
Auckland UniServices Ltd

# CSL 2025 Research Acceleration Initiative Process



*No obligation for registered organizations to submit applications*

*No limitation on number of abstracts each registered organization can submit*



# Agreement Guidance



Separate collaboration agreements will be negotiated for each project which reflect the nature of the project, nature of funding and support, and the contributions of both parties



Under these negotiated agreements, CSL will be granted certain rights of interest to the program results for further R&D and/or commercialization



Collaboration agreements will typically include the following terms (although CSL may propose other conditions depending on the nature of the project):

- *Research organization will generally own results arising under the project*
  - CSL would typically own any results which relate to proprietary CSL products or materials contributed to the project or may seek joint-ownership of results to which it has made a significant contribution (e.g. protein or antibody discovery and engineering activities).
  - The RAI is designed to accelerate the translation of novel discoveries made by research scientists – for proposals outside this scope, we may propose that projects be progressed outside the RAI
- *CSL will be granted an exclusive option to negotiate an exclusive, worldwide licence*
- *CSL supports publication of research outcomes*

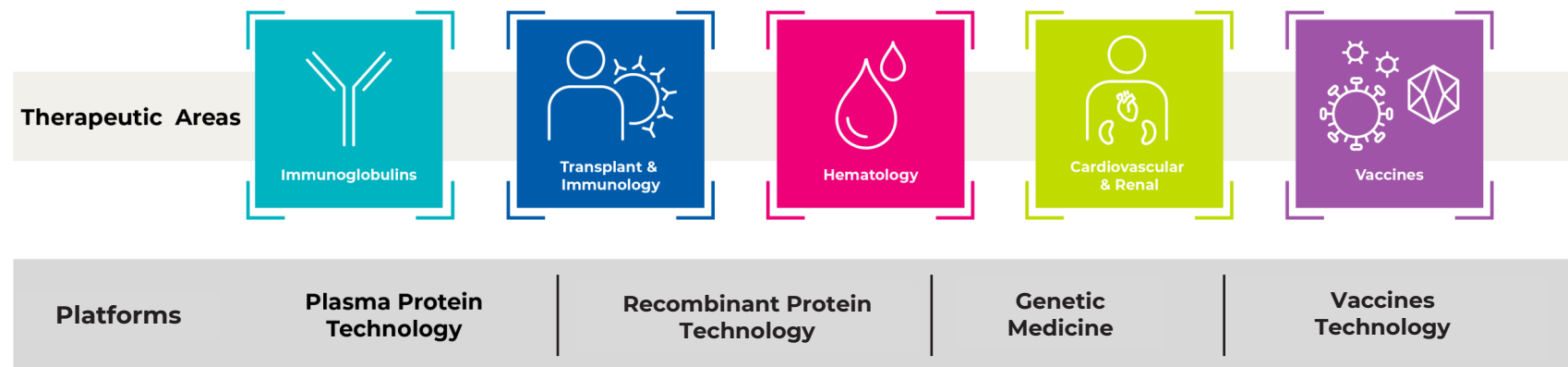


Further details on agreement terms can be provided on request

# Eligibility

To be eligible to apply, researchers/clinicians must satisfy the following 2 conditions:

1. Be employed by a research organization registered to participate in the 2024 Research Acceleration Initiative
2. Submit a 300-word online abstract that is aligned with CSL's Therapeutic Areas and scientific Platforms:



*Specific indications of focus within each TA are provided on slides 28-33.*

# Abstract submission via online portal

## Step 1/2 - Lead Investigator Information

Applications for the 2023 CSL Research Acceleration Initiative open 3rd January 2023 and close 23rd February 2023. Applications received outside these dates (before or after) will not be reviewed.

Fields with \* are mandatory

First Name *	Salutation
<input type="text"/>	<input type="text"/>
Last Name *	Job Title *
<input type="text"/>	<input type="text"/>
Organization *	Phone
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Email *	Confirm Email *
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Address	
<input type="text"/>	
City	Zip/Postcode
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Country *	Geographical region *
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Are you an existing collaborator, or have you previously collaborated with CSL (including CSL Behring, CSL Seqirus or CSL Vifor)?

☐ Yes ☐ No

CONTINUE






## Step 2/2 - Describe your opportunity and confirm submission

Please describe and categorize your opportunity.






Fields with \* are mandatory

Proposal Title \*

Primary Therapeutic Area \*

 Immunoglobulins	 Transplant & Immunology	 Hematology	 Cardiovascular & Renal	 Vaccines	Not specific to a Therapeutic Area (e.g. platform technology)
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Secondary Therapeutic Area

 Immunoglobulins	 Transplant & Immunology	 Hematology	 Cardiovascular & Renal	 Vaccines	Not specific to a Therapeutic Area (e.g. platform technology)
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Indications \*

Modality \*

Cell therapy	Extracellular vesicles	Gene therapy
Oligonucleotide (siRNA, asRNA, ncRNA)	Peptide	Plasma
Recombinant (incl. antibodies)	Small molecule	Other modality

Opportunity Type \*

Biomarker	New use for CSL product or pipeline candidate	Novel target or therapeutic candidate
Research Tool	Target Discovery	
Vaccines - mRNA/lipid nanoparticle platform improvements		
Vaccines - influenza virus antigen purity/yield enhancements		
Vaccines - utilizing MF599 adjuvant		
Other		


Project Description (max. 300 words) \*

Example of what to include in Project Description: "We have discovered a novel target expressed on X cells. We have generated data in X assay(s) and/or X model(s). We have shown the mechanism of action is mediated via X pathway(s). Inhibition of this target could be used to treat X indication(s). This novel strategy could address an important unmet need for patients and be superior to standard of care and other therapeutics in development for reasons X, Y and Z."

☐ I have read the privacy policy and agree with it. [Read more...](#) \*

☐ I hereby confirm that my submission does not contain any confidential information. \*

☐ I'm not a robot



BACK

SUBMIT

Driven by **Our Promise**

# What is involved for participating research organizations?



## Abstracts

- Internal promotion of initiative (CSL to provide flyer)
- Promotion of CSL information sessions/webinars for interested researchers
- Provide abstract submission portal link to researchers
- Discuss proposals with interested scientists ahead of 300-word abstract submission deadline



## Full Application

- Support shortlisted researchers with preparation of full proposal via CSL RAI application form
- Ensure no disclosure of confidential information prior to submission of applications to CSL



## Confidential Presentations

- Facilitation of CDA
- Assist with scheduling of confidential presentations to CSL



## Funding Outcome

- Contract negotiation
- Preparation of detailed research plan and budget in partnership with CSL

Connect CSL with the appropriate internal contact(s) for each stage of the process

# What makes for a competitive proposal?

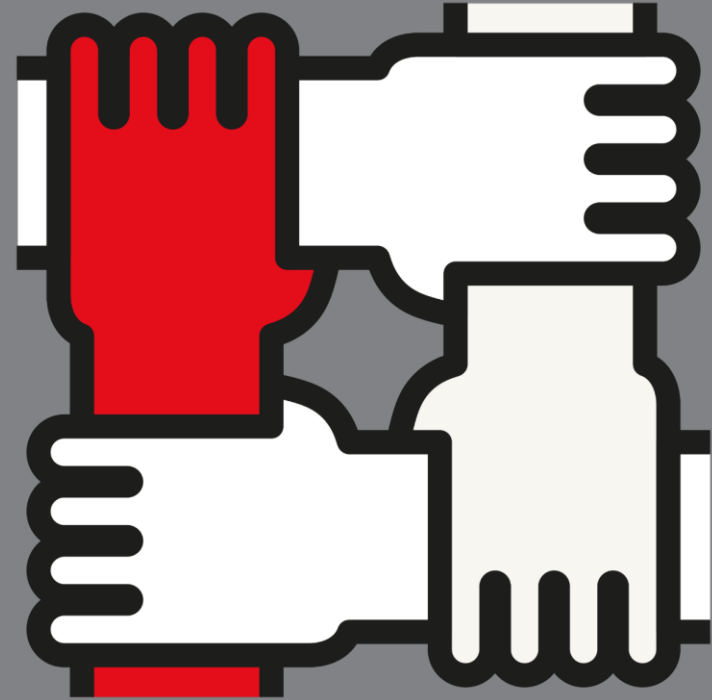
- Aligned with our focus areas and modalities (slides 28-33)
- Project is clearly defined (as opposed to a general overview of the applicant's research interests)
- Focused on a novel target or therapeutic candidate
- Clear differentiation of approach from competitors and current standard of care
- Research team has capacity and expertise to complete the bulk of the experimental work over the course of the program (with CSL guidance and support)
- If third party IP is required, ensure your research organization has secured all necessary rights to grant CSL an exclusive option to negotiate an exclusive, worldwide licence



# Examples of activities funded in previous RAI partnerships

- Human target validation and translational studies using patient samples
- Mechanism of action studies for therapeutic candidates
- Benchmarking to provide proof-of-concept for the differentiation of novel therapeutics to standard-of-care or competing therapeutics in development
- Target validation using genetic knock-out/knock-in or tool compounds in preclinical disease models
- Characterization of therapeutic candidates (e.g. affinity, potency, selectivity, and developability)

## Benefits of collaborating with CSL



# Benefits of CSL's Research Acceleration Initiative



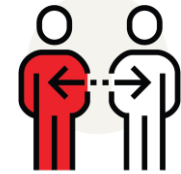
**Collaborate**  
with one of the world's  
leading biotech  
companies



**Publish with CSL**  
270+ publications with  
our collaborators  
since 2020



**Funding**  
of up to  
\$400,000 USD  
over 2 years



**Access expertise**  
CSL scientific champion  
assigned to provide you  
with industry guidance



**Recognition**  
Awardees may use title  
"CSL Research Acceleration  
Initiative Fellow"



**Accelerate**  
the translation of  
your research into  
new therapies

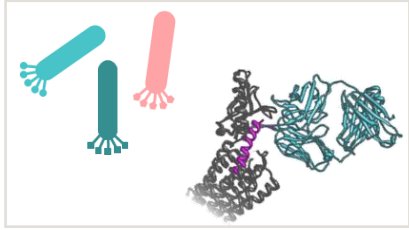


**Access global capabilities**  
in R&D, clinical, intellectual  
property, manufacturing  
and commercial

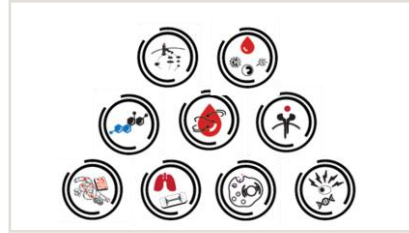


**Demonstrate impact**  
of your research to  
funding bodies via  
industry collaboration

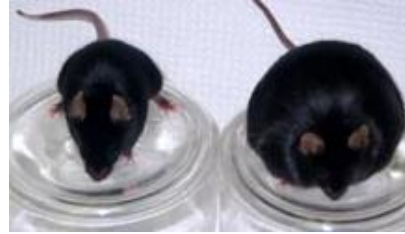
# Capabilities from Discovery to Patients



Antibody Discovery and Protein Engineering



In vitro pharmacology



Animal Models of Disease



Toxicology & Product Development



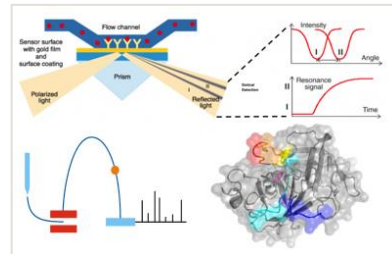
Patients

## R&D CAPABILITIES

## CLINICAL CAPABILITIES



Protein production and purification



Analytical Biochemistry



Translational Medicine & Data Science



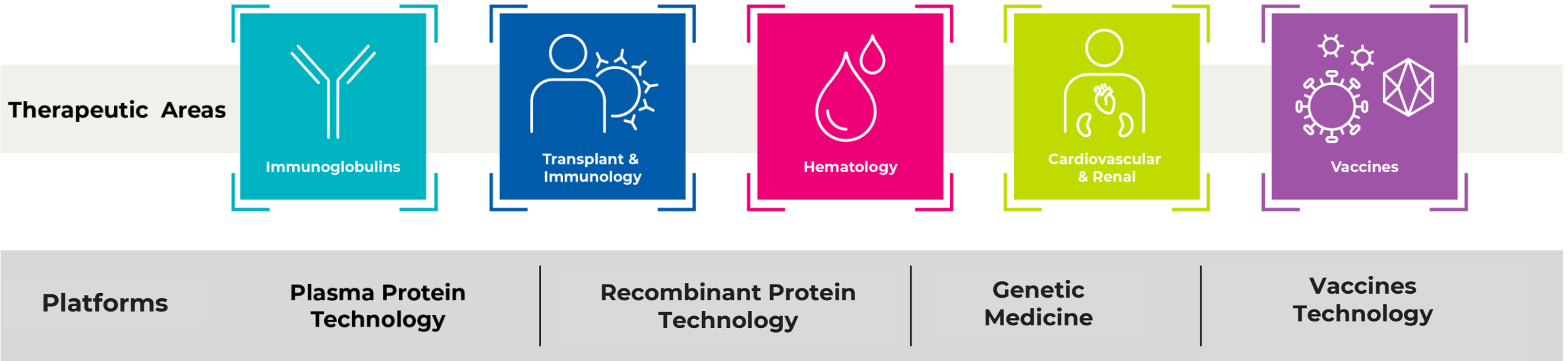
Phase I-III/Launch Manufacturing

# CSL's core Therapeutic Areas

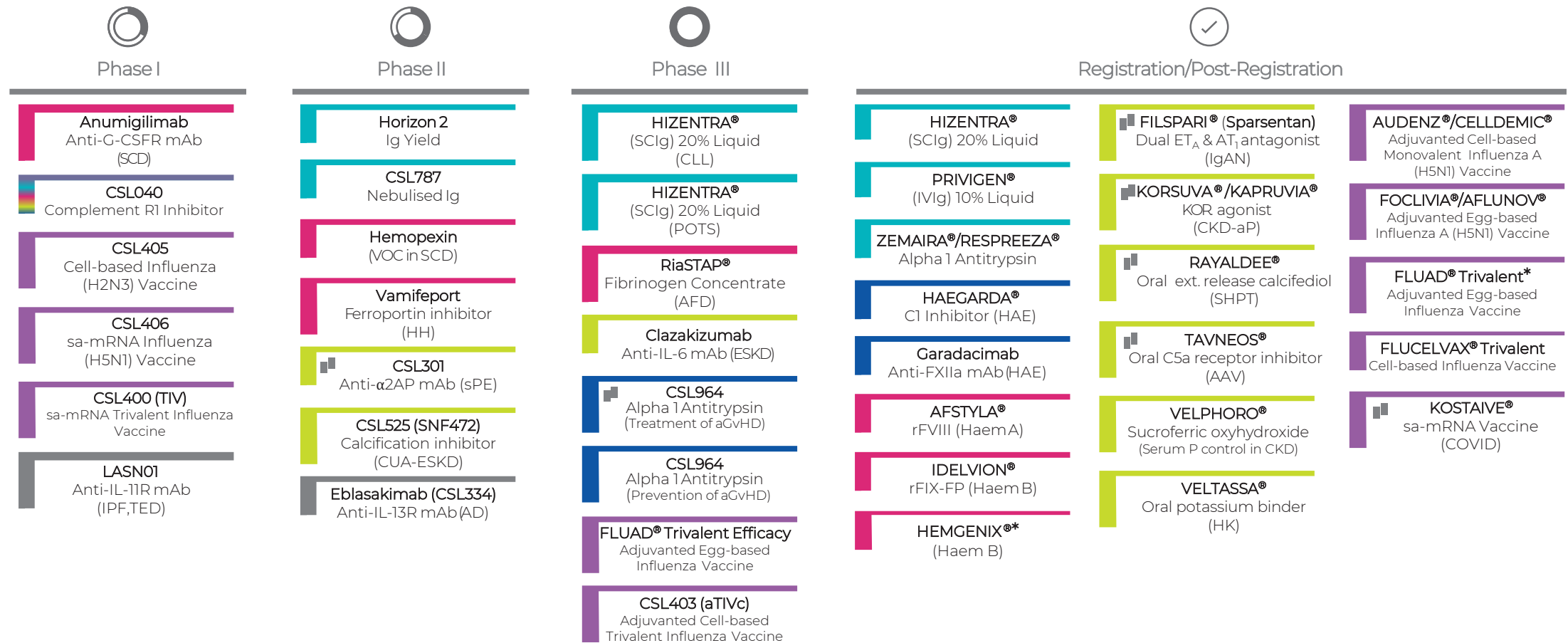




# CSL's Core Therapeutic Areas & Platforms



# CSL R&D Portfolio – FY25



\* Ongoing Post-Marketing Studies



# CSL Forward Looking Portfolio – FY25



## Immunoglobulins

- HIZENTRA® POTS
  - Phase III first patient in
- HIZENTRA® PFS 50mL
  - JP submission
  - EU approval
- CSL787 (Neb Ig) Phase IIb first patient in
- Horizon 2
  - Toxicology package complete
  - Process robustness package complete



## Cardiovascular & Renal

- Clazakizumab (MACE in ESKD)
  - Phase III 50% enrolment
- FILSPARI® (Sparsentan) IgAN Full EU approval
- VELTASSA®
  - US launch patients 12-<18yrs
  - Phase II Paeds 0-<12 yrs first patient in



## Haematology

- HEMGENIX® Japan Phase III last patient in
- AFSTYLA® China Phase III first patient in
- RiaSTAP® AFD
  - Phase III first patient in
  - US submission
- CSL889 (Hemopexin) VOC in SCD Phase II first patient in
- Anumigilimab SCD Phase II first patient in



## Transplant & Immunology

- Garadacimab (Anti-FXIIa) HAE
  - EU, US & JP approvals
- CSL964 (Treatment of aGvHD)
  - Data presentation
  - FDA interaction
- CSL040 (Complement R1 Inhibitor) Phase I complete

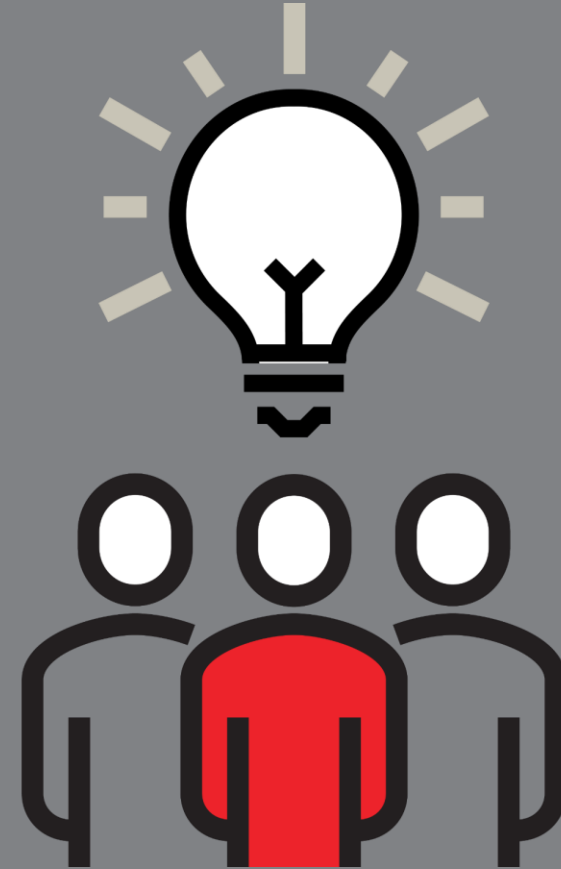


## Vaccines

- CSL403 (aTIVc; Adjuvanted Cell-based Trivalent Influenza Vaccine)
  - 12 mo data
  - HA interactions
- aQIV to aTIV Transition EU approval
- KOSTAIVE® sa-mRNA (COVID)
  - EU approval
  - US submission
  - JP launch
- CSL400 (ARCT2138) sa-mRNA Quad Flu
  - Phase I complete
- CSL406 sa-mRNA (H5N1) Flu
  - Phase I complete

**Abbreviations:** AFD – Acquired Fibrinogen Deficiency; aGvHD – Acute Graft versus Host Disease; aTIVc- Adjuvanted Cell-Based Trivalent Influenza Vaccine; aQIV – Adjuvanted Quadrivalent Influenza Vaccine; ESKD – End Stage Kidney Disease; EU – Europe; HA – Health Authorities; HAE – Hereditary Angioedema; JP – Japan; IgAN – Immunoglobulin A Nephropathy; MACE – Major Adverse Cardiac Events; Neb Ig – Nebulised Ig; PFS – Pre-Filled Syringe; POTS – Postural Orthostatic Tachycardia Syndrome; sa-mRNA – Self-Amplifying messenger RNA; RNA – Ribonucleic Acid; SCD – Sickle Cell Disease; US – United States; VOC – Vaso-occlusive Crisis

# Areas of interest for collaboration





## Transplant & Immunology



## Core interests for early stage partnering

### Pathomechanisms of interest

#### Inhibition of B and T cell responses

Costimulatory blockade, cell depletion modalities

#### Novel therapies for targeting inflammation

Multi-pathway inhibitors, recombinant mAb, other modalities to modulate and reduce inflammatory pathways (ie DAMP signaling, cytokine pathways, others)

#### Strategies to induce tolerance for Transplantation and Autoimmune diseases.

Novel biologic therapies for the induction of tolerance

### Indications of interest

#### Novel biologic therapies for the treatment and prevention of:

- cGVHD, AMR, CLAD
- primary Sjögren's Syndrome, Idiopathic Myopathies and Systemic Sclerosis



## Hematology



## Core interests for early stage partnering

### Acute thrombotic conditions (macro- and micro-circulation)

- Targeted thrombolysis in acute thrombosis (ischemic stroke, pulmonary embolism, high-risk deep vein thrombosis (DVT))
- Novel biologic therapies applicable to a broad spectrum of thrombotic microangiopathies (TMAs; pan-treatment)

### Acute hemorrhage control and Patient Blood Management (PBM)

- Novel pro-hemostatic therapies for the “universal” treatment of acute bleeds (Direct Oral Anticoagulants (DOACs) AND anti-platelet agent-associated hemorrhage)

### Non-viral in vivo gene therapy

- Next generation non-AAV-based gene therapy for Hemophilia A
- In vivo HSC-targeted gene therapy for sickle cell disease

### Iron metabolism

- Novel therapies to treat iron overload conditions
- Novel approaches for treating iron deficiency anemia including novel formulation approaches (oral iron supplementation)



## Cardiovascular and Renal



## Core interests for early stage partnering

### **Atherosclerotic plaque stabilization in high-risk patient groups**

Novel targets or biologic therapies to prevent atherosclerotic plaque rupture/erosion and Major Adverse Cardiovascular Events (MACE)

### **Homozygous familial hypercholesterolemia**

Gene therapy approaches

### **Immune checkpoint inhibitor myocarditis and inflammatory cardiomyopathies**

Novel targets or biologic therapies  
Biomarker approaches for patient stratification

### **Autosomal dominant polycystic kidney disease (ADPKD)**

Novel targets or biologic and genetic medicine therapies

### **Autoimmune glomerulonephritis indications**

Novel targets or biologic therapies for e.g. membranous nephropathy (pMN) and primary FSGS

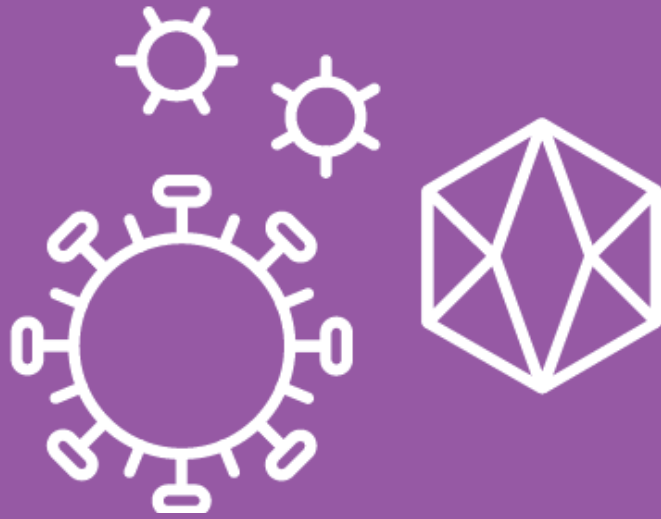
### **Podocyte health**

Pharmacological intervention to restore podocyte health in rare kidney diseases

### **Kidney-targeted drug delivery**

Novel ways to target podocytes, glomerular endothelial cells, mesangial cells, parietal cells, and renal tubular epithelial cells





# Vaccines



## Core interests for early stage partnering

### New infectious disease vaccine targets

1. Respiratory pathogens a priority
2. New antigenic vaccine targets without current treatments
3. Methods (e.g. AI/machine learning) to predict viral evolution/pathogenicity to inform vaccine development
4. New approaches to routes of administration
5. New ambient stability technology for vaccines (protein)

### RNA delivery

1. RNA delivery, enhanced stability, route of administration and/or expression strategies
2. mRNA cellular targeting technologies

### Immune mechanisms and delivery

1. Modulating innate and/or adaptive responses to vaccines



# Genetic Medicine



## Core interests for early stage partnering

### Gene Editing

1. Improve large insertional editing efficiencies *in vivo*
2. Technologies / assays to improve genome editing safety
3. Large nucleic acid template delivery

### Gene Expression

1. Tissue/cell-specific or controllable expression of Gene of Interest (GOI)
2. Genetic elements enhancing regulation of cells of the immune system
3. RNA/DNA vectors that achieve durable expression of GOI
4. RNA modifications (base modification, Cap, poly A-tail)

### *In vivo* Gene Delivery

1. Nanoparticles (LNP or other) achieving:
  - Tissue-specific delivery (liver, blood, kidney, others)
  - Low reactogenicity with potential for re-dosing
2. Targeting moiety for immune cells
3. Novel route or device of administration

### Areas not of interest

1. Oncology (including hematological malignancies)
2. *Ex vivo* cell therapy
3. Viral vectors



## Plasma Protein Research



## Core interests for early stage partnering

### **Novel therapeutic candidates derived from human plasma**

Novel therapeutic proteins targeting diseases aligned with CSL Therapeutic Areas. CSL will support the planning and execution of pre-clinical testing, including providing plasma-derived proteins.







### **Plasma protein formulation & delivery**

High-concentration formulation and delivery methods for plasma protein therapeutics.

### **Engineered affinity binders for plasma protein purification**

Methods that enable engineering of affinity binders for selective protein purification from blood plasma. Particular interest in transformative methods (including *in silico* engineering) that allow generation of many selective binders in parallel.

# Checklist for 2025 Research Acceleration Initiative

-  Register your research organization by **13<sup>th</sup> Dec 2024** by emailing [RAI@csl.com.au](mailto:RAI@csl.com.au) (NB: 2024 participants are automatically re-enrolled)
-  Update your organization's primary contact details if required
-  CSL will provide flyer with primary contact details for promotion within your research organizations
-  CSL will provide the link to the online abstract submission portal
-  CSL will provide you with invitations to information webinars to share with interested researchers – webinars will be held in **Feb 2025**
-  Online portal opens for abstract submissions by researchers on **2<sup>nd</sup> Jan 2025** and closes on **20<sup>th</sup> Feb 2025**

# Questions



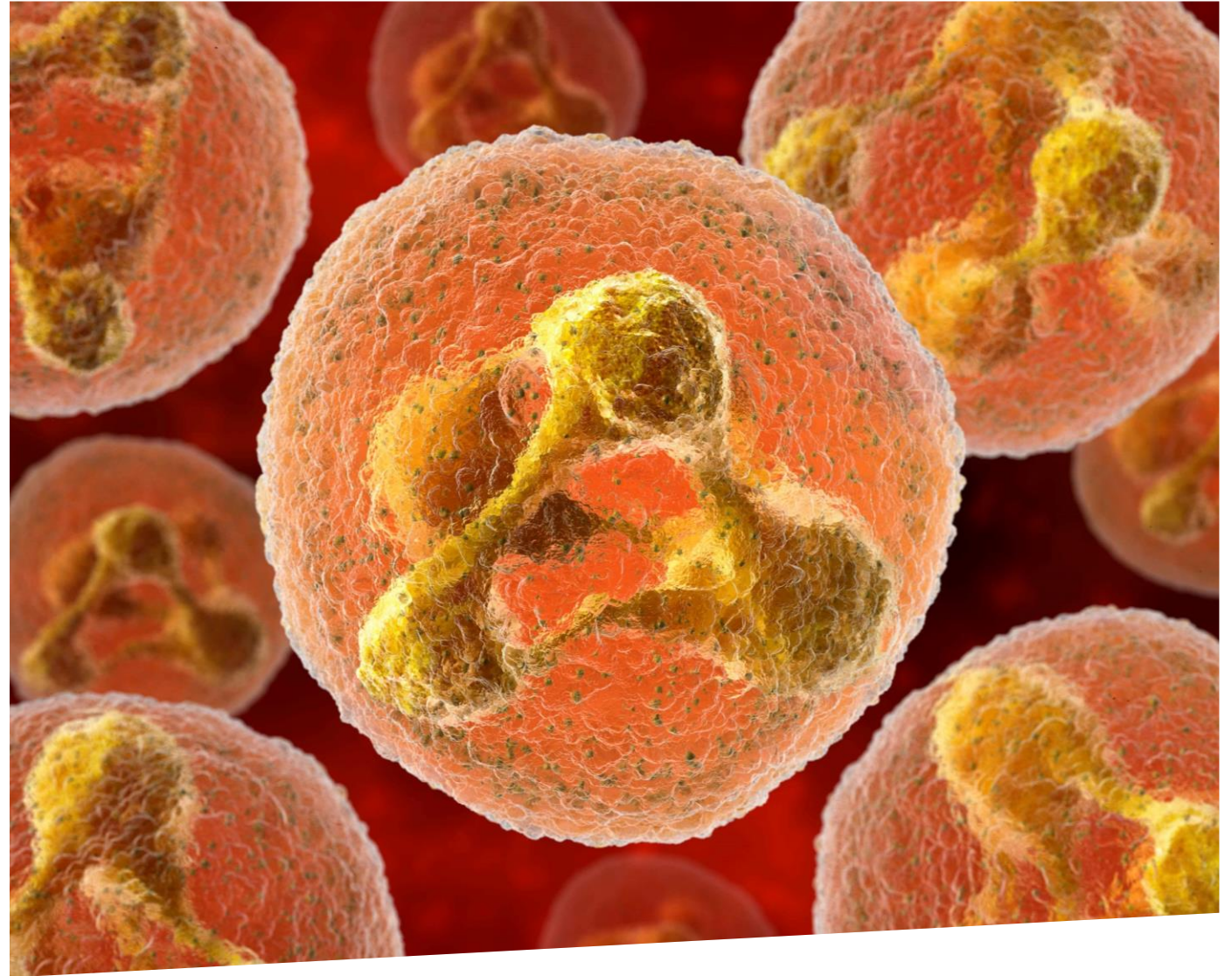
# THANK YOU

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*Senior Manager,  
Research Innovation Europe*

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[RAI@csl.com.au](mailto:RAI@csl.com.au)

[csl.com/csl-rai](https://www.csl.com/csl-rai)





# Terms and Conditions for Research Acceleration Initiative Portal ("RAI Portal")

1. This RAI Portal is an online portal operated by CSL Innovation Pty Ltd ("CSL") for the purpose of allowing individuals to submit scientific proposals for consideration by CSL for its Research Acceleration Initiative ("RAI") program. By using this website and the RAI Portal, and by providing your submission and personal information to CSL, you are agreeing to abide by these terms and conditions. If you do not agree to abide by these terms and conditions, CSL will be unable to consider your proposal for its RAI program.
2. You acknowledge and agree that CSL has no obligations of confidentiality or non-use in relation to the submission provided. You warrant that your submission does not contain confidential information of any kind. Further, you acknowledge that notwithstanding the existence of any confidentiality agreements previously entered into between you and CSL, the terms of such agreements will not apply with respect to any information submitted by you through the RAI Portal.
3. You further represent and warrant that:
  - a. you have the legal right and authority to submit an application to the RAI Portal and to accept the terms and conditions set out herein;
  - b. where relevant, you have consulted with and/or obtained permission from all relevant commercialisation or technology transfer offices in respect of your application;
  - c. you are an employee of or are otherwise affiliated with an organisation authorised by CSL to submit an application to the RAI Portal; and
  - d. to the best of your knowledge, the information provided in your submission (and CSL's use of that information in connection with the RAI program) shall not infringe the intellectual property rights of any third party.
4. CSL may disclose personal information collected in connection with your use of this website or the RAI Portal to your employer, university, public research institute or other affiliated organisation (if applicable) solely for the purpose of reviewing and determining your application. CSL will ensure that any personal information collected, used or disclosed in connection with your use of this website or the RAI Portal is handled in accordance with all relevant privacy legislation and with CSL's privacy policy, a copy of which is available at <https://www.csl.com/privacy-policy>.
5. CSL is under no obligation to respond to any individual application submitted to the RAI Portal, and may in its sole discretion choose not to progress an application further for any reason without any further communication with you.