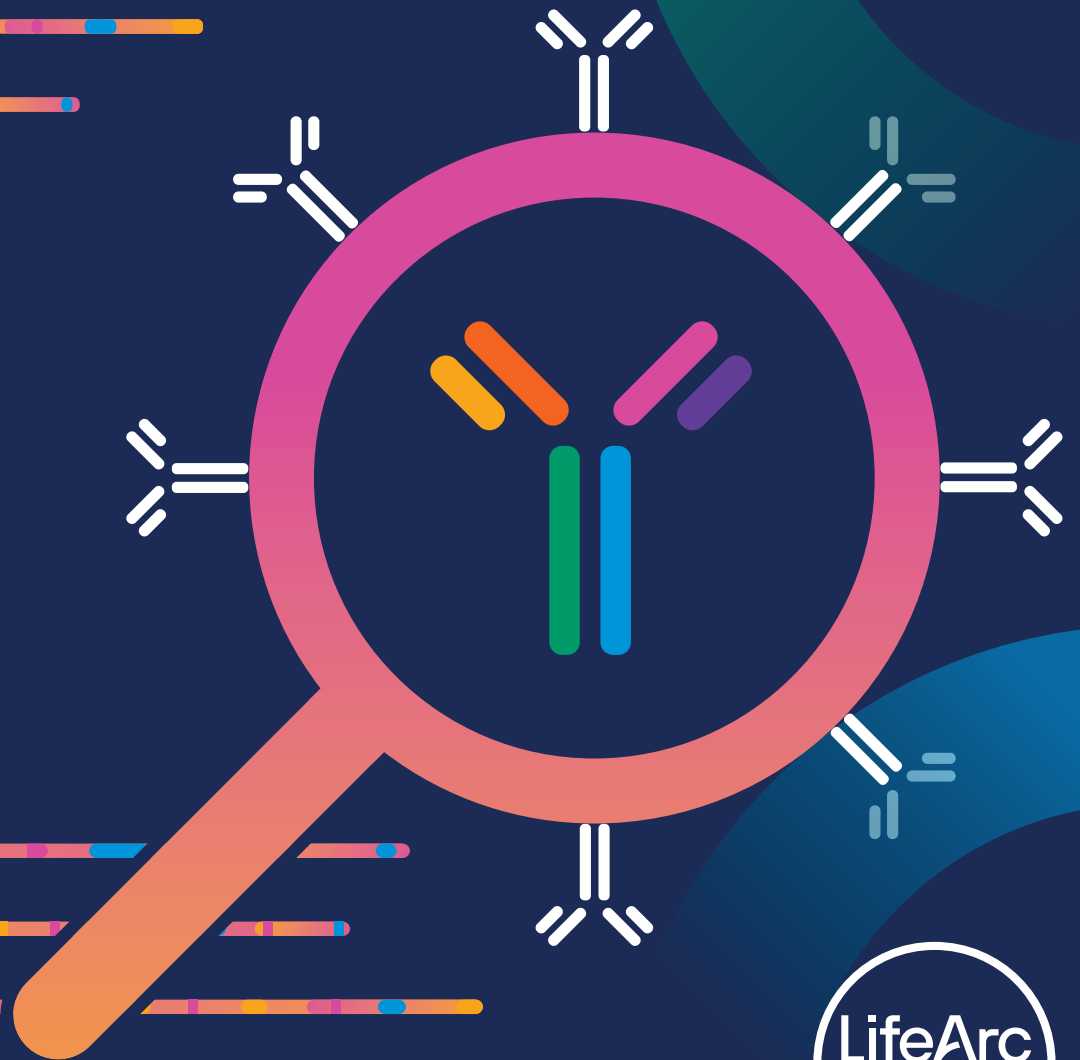


**Your partner
for antibody
discovery and
humanisation**



“ We wanted to work with a reputable partner to humanise our antibody – so we thought, ‘why not go to the best?’ We decided to partner with LifeArc because of their history, expertise and reputation, with some serious blockbuster antibodies under their belt.”



Gordon Ngan
VP Business Development
KisoJi Biotechnology

We help promising antibody projects reach the next phase of development

30

years' experience



94

antibodies humanised



5

drugs on the market:

- Keytruda®**
for several types of cancer
- Tysabri®**
for multiple sclerosis
- Entyvio®**
for ulcerative colitis
- Actemra®**
for rheumatoid arthritis
- Leqembi®**
for Alzheimer's disease

51

companies worldwide



98%

success rate



Partnering with innovators around the world

Wherever you're based, if you're looking for a truly collaborative partnership, you've found it.

We fund the entirety of projects with strong scientific rationale, clear commercial routes, and patient impact potential.

Work with us to give your research the best chance of success – without taking on any financial risk.

We work with:



Academics



Research institutes



Startups



Biotech companies

We've worked with
51
companies worldwide

Our partners are spread across
13
countries

What you'll get from partnering with us



Progress your project at no cost

We take on the financial risk and fund projects with strong scientific rationale and clear routes to market.

Our business models include small downstream royalties*.



Retain your intellectual property

You retain IP ownership and commercialisation control after the project ends. We can provide post-delivery guidance, including patent support.



Stay involved at every step

Expect open dialogue and regular sample sharing throughout the project.



Agnostic

We consider any target, modality or therapeutic indication. For humanisation projects, we can work with any parent species.

*certain antibody discovery projects could have tailored fees and royalty payments, based on the scope of the work.

Keytruda®: the best-selling drug that nearly wasn't

We saw potential in the antibody that would become Keytruda®, at a time when success in immuno-oncology was far from certain.

When our collaborators at Organon first discovered PD109.A, the molecule that would lead to Keytruda®, there was much scepticism around immuno-oncology – fuelled by years of failed attempts to harness the immune system against cancer.

Despite this uncertainty, we saw great promise in Organon's discovery and decided to pursue it. Together, we humanised their mouse antibody, transforming it into pembrolizumab – a highly potent, selective molecule that targets the human PD1 checkpoint inhibitor – later marketed as Keytruda®.

Keytruda® entered the market in 2014, with the exact same sequence as the molecule that left our laboratory 6 years earlier. Its emergence marked a turning point in the way we treat some types of cancer and, by 2023, Keytruda® became the world's top-selling drug, having treated its millionth patient.

We remain committed to backing projects with the potential to change lives, even those that may otherwise be overlooked due to their complexity or high-risk nature. We fund the entirety of our humanisation projects, taking on the financial risk so our partners don't have to – helping promising antibody projects like Organon's PD109. A move one step closer to the clinic.



Approved for 40 indications
by the FDA



Keytruda® has been involved
in over 1,000 clinical trials

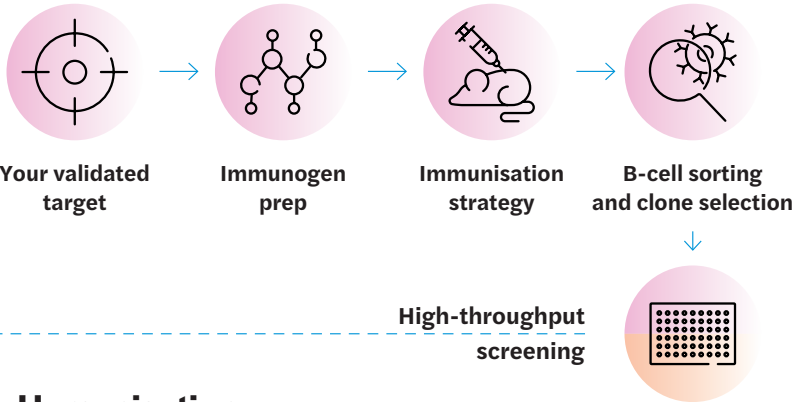


Expected to treat
2 million cancer patients
by the end of 2024

Your one-stop shop for antibody discovery and humanisation

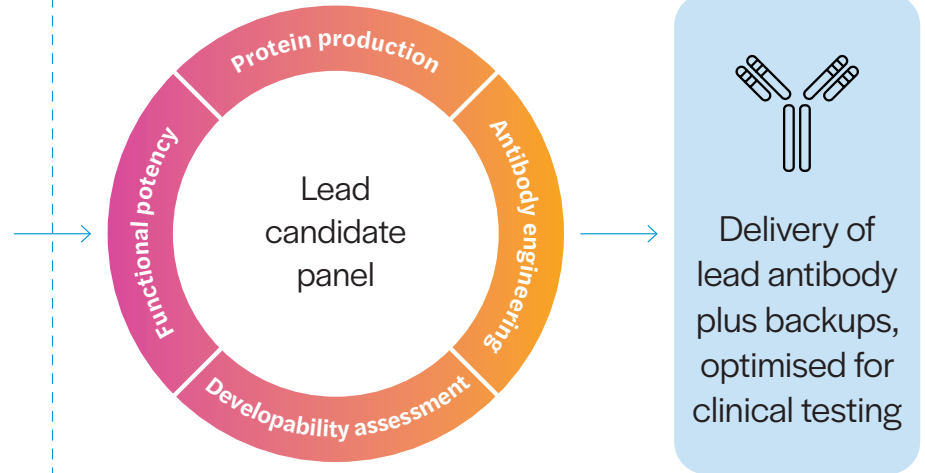
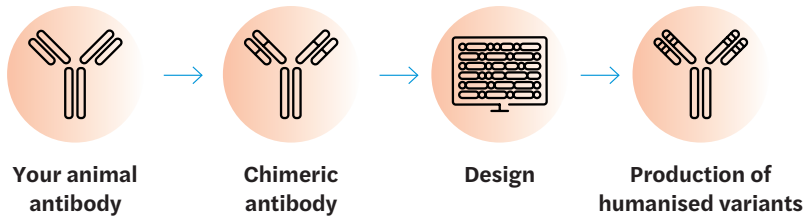
Discovery

innovative B-cell selection technologies and transgenic animal platforms to generate fully human antibodies



Humanisation

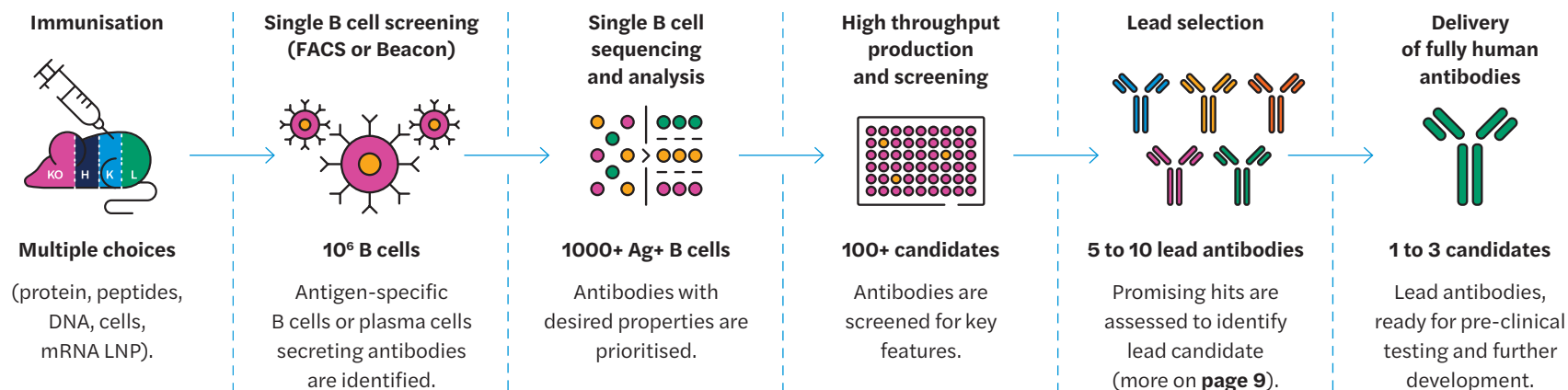
comprehensive design and production of human-like antibodies, based on parent molecules from a range of species



Antibody discovery B-SMArT™ platform

B cell Screening Method for Antibody Therapeutics

Fully human antibodies for almost any viable target, ready for preclinical testing



Our discovery platform can produce fully human antibodies for almost any target – bypassing the need for humanisation.

Find out more about partnering with us on **pages 3 and 4**.

Immunisation strategy and immunogen prep design

Once you've validated your target, we offer multiple immunisation strategies, immunogen design and reagent generation – ensuring immunogen quality is as high as possible.

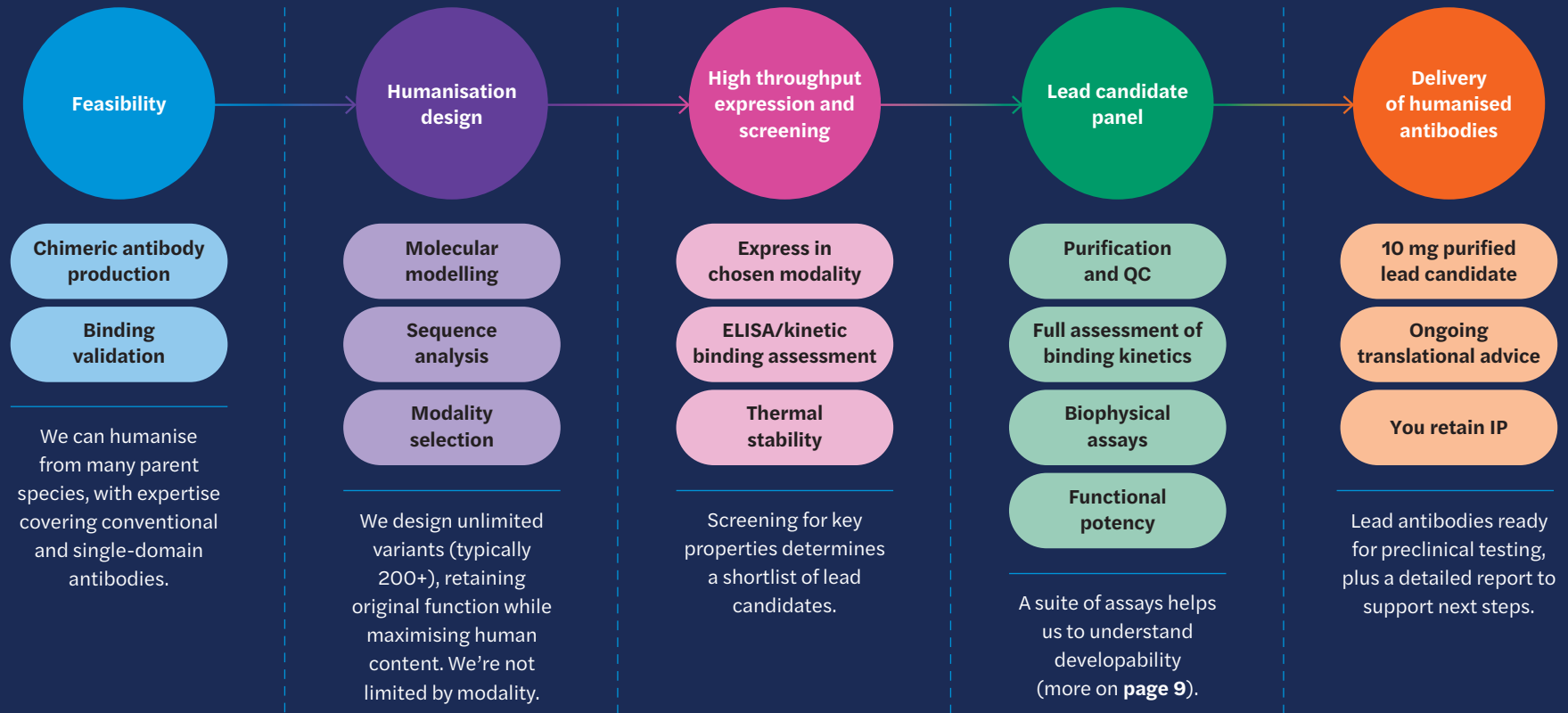
Clinically validated transgenic animal platform

Mice engineered with the complete repertoire of human V-regions produce diverse, affinity-matured, fully human antibodies.

Innovative memory B cell and plasma cell technology

We can identify and isolate promising antibodies using single memory B cell screening (FACS) and / or plasma cell screening (Beacon® Optofluidic System).

Antibody humanisation



Find out more about partnering with us on [pages 3 and 4](#).

Giving your drug the best chance of downstream success

Lead candidate antibodies undergo high quality preparation and rigorous evaluation.

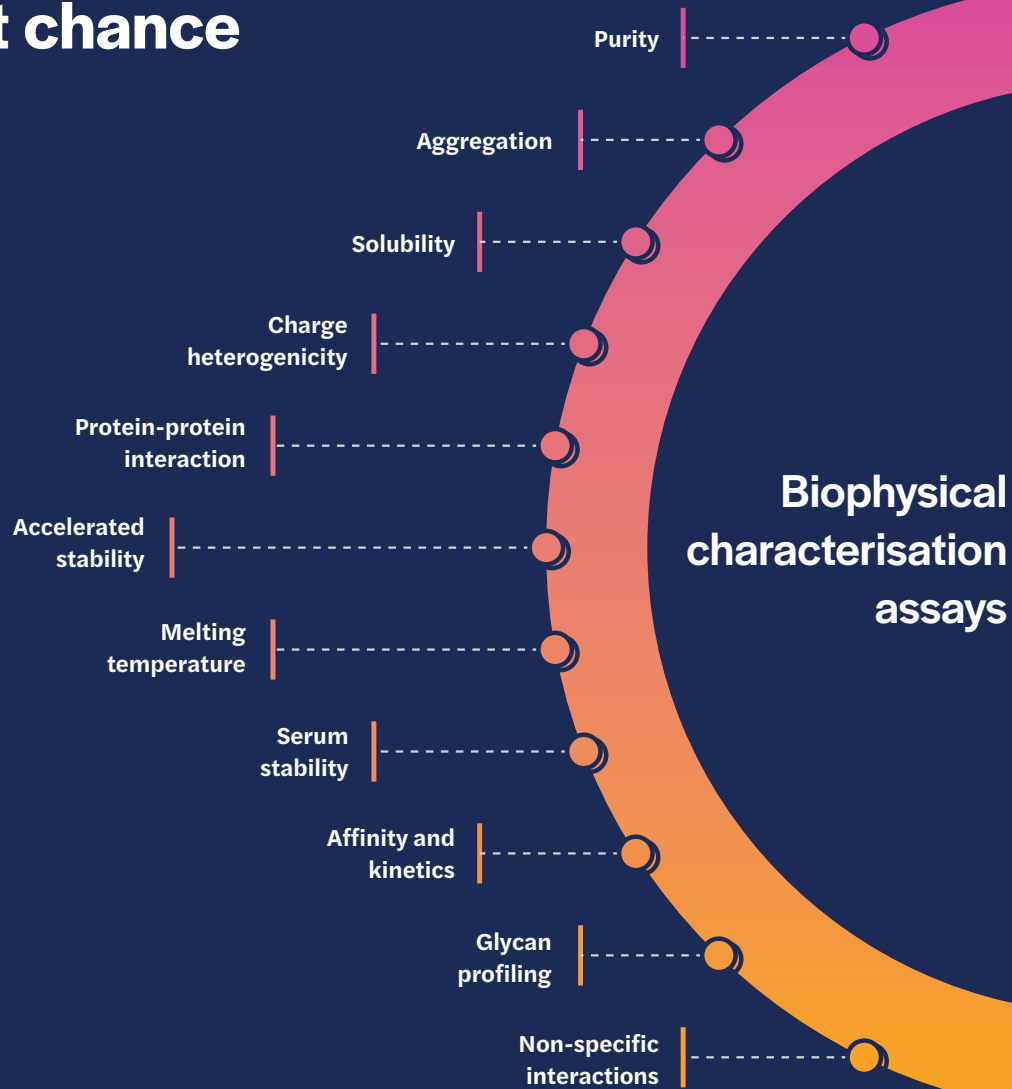
Core assays

Our comprehensive suite of assays helps to understand biophysical properties like binding affinity, potency and developability.

We also carefully assess antibodies for binding kinetic profiles, selectivity and specificity, including cross-reactive binding against target orthologues in other species.

For your discovery project we can perform epitope binning to assess epitope diversity.

You receive up to 100 mg of the antibody with optimal properties, plus back-up candidates and a detailed, pharma-standard report to support downstream development and testing.



Get in touch to work together

We'd like to hear more about your project

LifeArc Therapeutic Platform team | platforms@lifearc.org | lifearc.org



Discovery

Early research

Translation

Development

Market approval



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info@lifearc.org
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