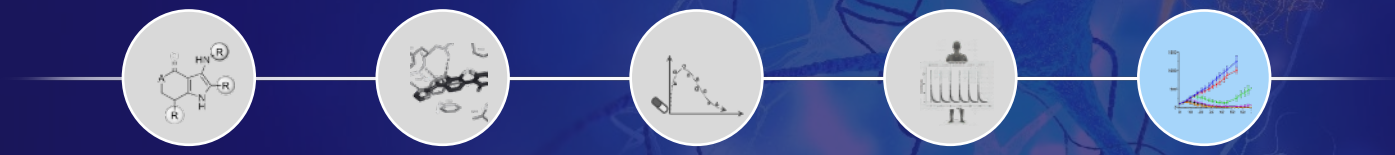
康龙化成 PHARMARON

Integrated Drug Discovery

Biology Consultancy



Chemistry | CADD | DMPK | Modelling | Biology

Our experienced team provides **comprehensive Biology Consultancy** by combining **scientific expertise** coupled with **extensive experience** in drug discovery across therapeutic areas and modalities. Our biology team focuses on the right experiments at the right time enabling **fast decisions** and **project delivery**.

Target Strategy

- Target selection
- Target validation
- Target-indication positioning
- Modality selection

Translational & PK/PD Strategy

- *in vitro* to *in vivo* Translation
- Biomarker and PK/PD strategy
- Translating preclinical findings into human outcomes
- Clinical hypothesis formulation

Strategic Guidance through Mechanistic and Translational Biology for Confident Drug Discovery Decisions

Mechanistic Strategy

- Screening cascade design
- Mechanism of action
- Biological differentiation
- *in vitro* Proof-of-concept

Milestone Strategy

- Interpret data across different assays
- Target-compound-disease biology understanding
- *in vivo* Proof-of-concept
- Governance quality data package

Receive Comprehensive Biology Support from Idea to IND Filing

bd@pharmaron.com www.pharmaron.com

How Do we Provide Strategic Guidance?

Example 1: Reduce Risks through Gap Assessment for Preclinical Candidate Selection

Goal:

Identify gaps in biological rationale to reduce risk of failure in later stages

Identify risks:

- Review data package in context of literature and clinical indications
- Evaluate how well the drug's mechanism of action (MoA) connects to the intended indication and associated disease mechanisms:
  - ✓ Correlation of target activity with phenotypic response
  - ✓ Cross-species reactivity
  - ✓ *in vitro* - *in vivo* translation

Establish mitigation plan to address the risks :

- Design strategic experiments to clarify MoA
- Recommend *in vitro* / *in vivo* models and biomarkers to strengthen biological rationale
- Create a translational roadmap aligned with intended clinical indication

Example 2: Increase Confidence through Reverse Translation of Clinical Data

Goal:

Develop a screening cascade and PK/PD strategy utilizing existing competitor clinical and preclinical data.

Approach:

- Leverage Clinical Insights and build reverse translation strategy through partnering with DMPK
- Mine published Phase I/II data and preclinical literature to build PK/PD understanding
- Design experimental models to test hypothesis and confirm PD/biomarker readouts

Benefits of this strategy:

- Rapid identification of molecules for progression
- Streamlined screening cascade and reduced timelines
- Enhanced understanding of *in vitro-in vivo* translation, PK/PD dynamics and PD-efficacy relationships

Example 3: Understanding the Mechanistic Effects of Lead Compound

Goal:

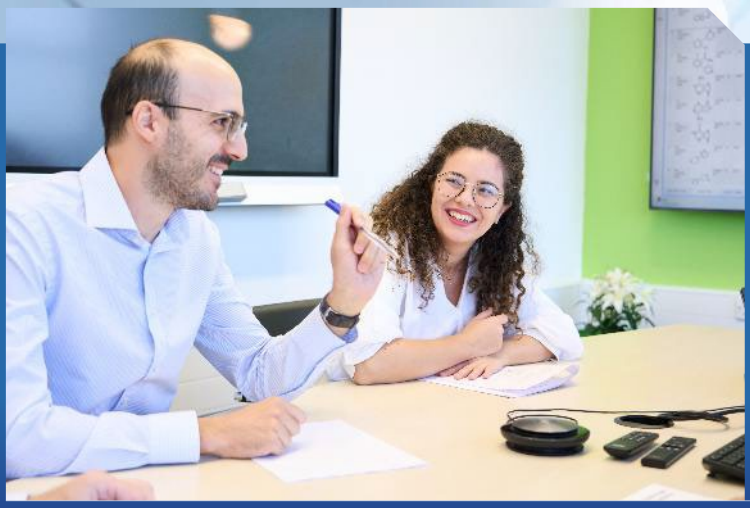
Determine how the compound's mechanism of action translates to the desired biological profile and downstream readouts

Approach:

- Review biological literature associated with target and indication of interest
- Develop and validate bespoke assay(s) to support mode of action and downstream biological mechanism including PD and biomarkers
- Profile key molecule exemplars / new therapeutic entities across assays and readouts, followed by interpretation and integration of the data

Benefits of this strategy:

- Validate mode of action and associated biological mechanism
- Enhanced understanding to support *in vitro-in vivo* translation
- Supportive data package for human dose predictions



How can we help you succeed?

Consultancy services can be booked as a standalone offering or combined with Pharmaron's wet lab services. The latter approach allows you to fully leverage Pharmaron's lab capabilities while we provide hands-on project management and strategic guidance to drive your project forward.

Book an initial conversation to explore how we can support your drug discovery journey.

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Laboratory Services

Chemistry, Manufacturing & Control

Clinical Development

Biologics & CGT

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