

# Targeting c-REL to treat inflammatory diseases

## The Problem

Autoimmune disease market: Large, chronic and commercially attractive (>\$ 200b)

Unmet need:

- No cures and non-durable efficacy — lifelong disease management
- Safety trade-offs, slow onset of action and poor patient experience
- Economic burden on healthcare systems
- Incidence is increasing year-on-year
- Targeted therapies are dominated by biologics

## The Solution

A first-in-class, multi-indication-applicable, orally bioavailable c-REL degrader

- Human genetic data implicate c-REL as a causal driver of inflammatory disease risk
- High expression in human B, T and innate myeloid cells drives inflammatory disease
- Genetic loss prevents/alleviates immunological disease in translational mouse models
- Inherited c-REL loss-of-function in humans mirrors clinically tolerated immunosuppression
- Immune-lineage restricted expression allows for a safe window for NF- $\kappa$ B targeting

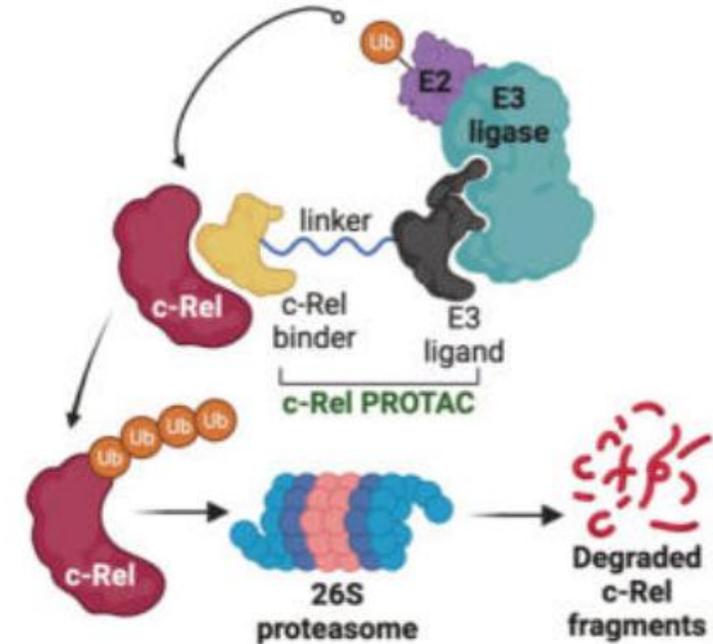
## Our Program

An integrated team — world-class c-Rel and NF- $\kappa$ B biology, structural and degradation chemistry expertise, and clinical rheumatology insight

Progress: WEHI Ventures pre-seed fund enabled c-Rel crystallography and a preliminary fragment screen with hits currently being validated.

Next steps: c-Rel ligand development, preliminary safety and interventional efficacy, and position the program for degrader development

Seeking **funding and partnerships** for degrader development or out-licensing



## Our Team

Prof. John Silke, NF- $\kappa$ B signalling, PROTACs

Dr. Lorraine O'Reilly, NF- $\kappa$ B signalling, Mouse models

Prof. Ian Wicks, Clinical rheumatologist, Patient samples

Prof. Peter Czabotar, Structural biology

Prof. Guillaume Lessene, Medicinal Chemistry

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