# Intercepting inflammation with RIPK2 inhibitors

The opportunity

- RIPK2 is a key driver of inflammation

- Potent and specific RIPK2 inhibitor developed

- Established enzyme assays and models for *in vitro* and *in vivo* testing

Receptor-interacting serine/threonine kinase 2 (RIPK2) signalling drives expression of proinflammatory cytokines and type I interferon. Hyperactivation of the NOD2:RIPK2 pathway is a key driver of inflammatory bowel disease (IBD) and RIPK2 inhibitors show efficacy in preclinical models of IBD. To date, no RIPK2-specific inhibitors have advanced to clinical trials, and as such, there is a first-in-class opportunity to address these significant unmet.

- [Download the printable flyer](#)
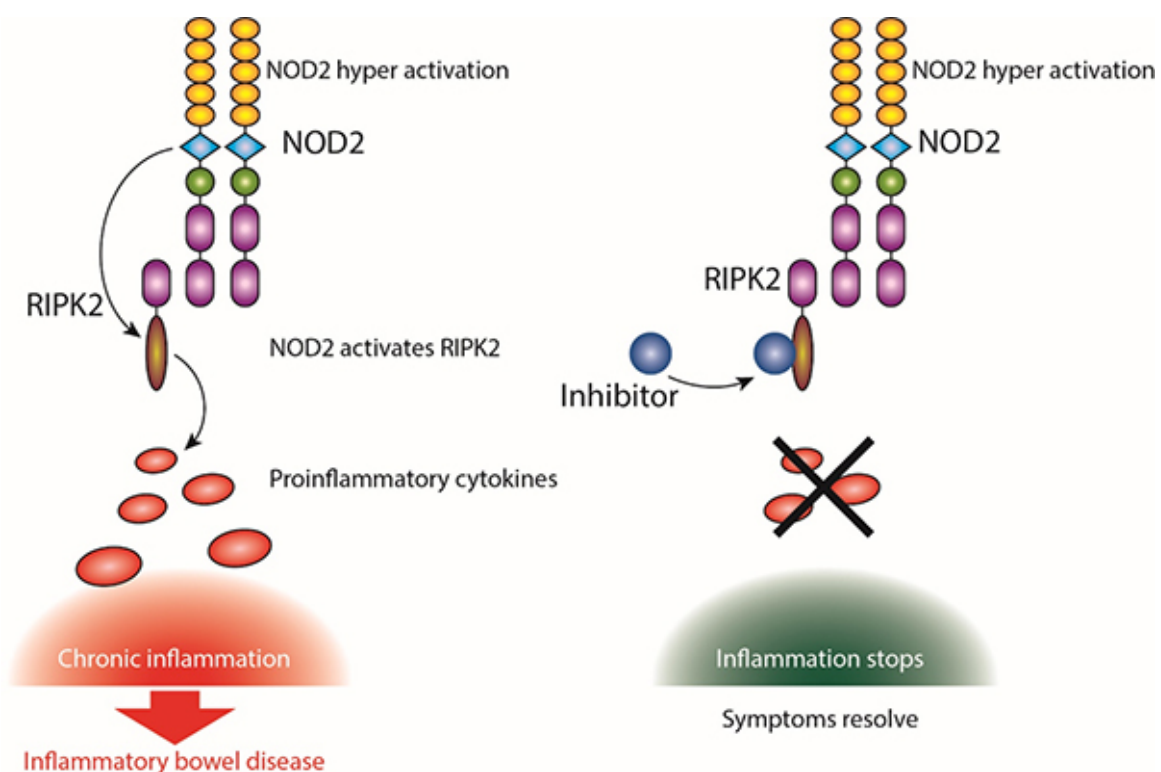
The technology

We have developed a small molecule inhibitor of RIPK2, WEHI-345, that has potent anti-RIPK2 activity, high specificity for RIPK2 and good in vitro and in vivo efficacy. WEHI-345 demonstrated bioavailability in mice and there was no pathology or changes to white blood cells observed at the maximum tolerated.

Opportunities for partnership

We are seeking a co-development partner for our structure enabled drug discovery program to generate a potent, specific RIPK2 inhibitor.

We have:

- a lead compound, validated enzyme assays and comprehensive in vitro and in vivo models for inhibitor validation

- granted patent for the RIPK2 inhibition as a method of treatment for inflammatory conditions, Crohn's Disease and other diseases

- comprehensive expertise in lead optimisation including medicinal chemistry and structural biology

We are seeking investment to complete:

- lead optimisation and medicinal chemistry

- preclinical validation

Scientific team

Associate Professor Guillaume Lessene - Leader, New Medicines and Advanced Technologies research theme; Laboratory Head, Chemical Biology division

Dr Ueli Nachbur - Senior Postdoctoral Fellow, Inflammation division

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