

Inhibitors of apoptosis for the treatment of ischemia reperfusion injuries and neurodegenerative conditions

The Problem

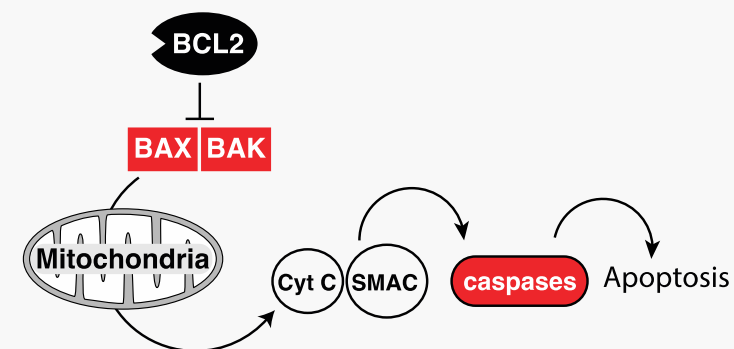
- Inhibitors of apoptosis have broad therapeutic potential. This includes neurodegenerative disorders, e.g. Parkinson's, motor neuron disease and cardiac ischemic/ reperfusion injury.
- Apoptotic cell death requires BAX or BAX & BAK.

The Solution

- The BCL2 proteins BAX and BAK act upstream of caspase inhibitors to permeabilise mitochondria, irreversibly committing cells to die.
- Blocking BAX and/or BAK will be the gold-standard approach for preventing apoptotic cell death.

Our Program

- Team with demonstrated success in generation of small molecule protein-protein interaction inhibitors, i.e. Venetoclax.
- We have a target that will modulate BAX and BAK.
- Multiple screening campaigns to identify hits.



BAX and BAK

- Activated by cellular stress & damage
- Permeabilise mitochondria and irreversibly commit cells to die
- Act *upstream* of caspase activation

Our Team

Prof Guillaume Lessene, Chemical Biology
Prof Peter Czabotar, Structural Biology
Dr Mark van Delft, Blood Cells and Blood Cancer
A/Prof Grant Dewson, Ubiquitin Signalling
Leo Lui, Business Development Manager, lui.l@wehi.edu.au