



PENAO is an experimental anti-cancer drug invented by Professor Philip Hogg. Professor Philip Hogg is Director, Australian Cancer Research Foundation (ACRF) Centenary Cancer Research Centre, Centenary Institute.

PENAO has recently completed a Phase I clinical trial in patients with solid tumours at three hospitals in Australia. It inhibits an enzyme central to sugar metabolism in tumour cells called mTOR, and combines very well with another mTOR inhibitor, everolimus. Everolimus is an approved cancer drug. Together, these drugs deplete cancer cells of mTOR.

A Phase I/II trial of PENAO in **youths and adults with sarcomas** that have an activated mTOR pathway based on mutation analysis is being planned.

mTOR pathway aberrations include PIK3CA mutation, biallelic PTEN loss, TSC2 mutation, Akt mutation, etc. The Phase I component is 2 x IV PENAO dosing per week to define the Phase II dose. The Phase II component is PENAO + oral everolimus.

ACRF funding helped establish a world class Centre for Basic and Translational Cancer Research on the Royal Prince Alfred Hospital site. This state-of-the-art facility houses the basic and translational research components of a Comprehensive Cancer Centre (only the second in Australia). The new centre extended the reach of basic biological research on cancer and its translation into cancer prevention and control.

The Centre was officially opened in March 2016.

Grant applications to ACRF this year will include:

- a. 2018 \$10M Major grant
- b. 2018 Annual grant