## Combination targeted therapies for melanoma

## **Research Topic:**

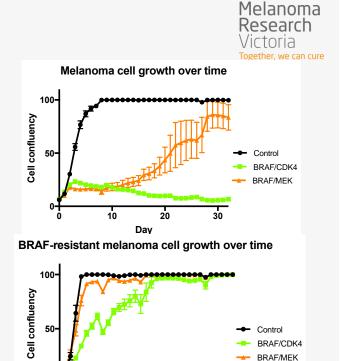
Combining **CDK4 and BRAF inhibitors** to inhibit tumour growth and prevent development of drug resistance in BRAF-mutant melanoma

## **Progress:**

- Combination therapy with CDK4/BRAF or CDK4/MEK inhibitors is more effective at inhibiting growth of melanoma cells than current standard of care BRAF/MEK
- 2. Combination CDK4/BRAF therapy causes tumour regression in mouse models, and prevents outgrowth of drug-resistant tumours
- 3. BRAFi-resistant cells are still sensitive to CDK4 inhibition, but the synergystic effect of the combination is lost

## **Future Implications for Patients:**

Upfront combination of BRAF inhibitors with CDK4 inhibitors may be an effective therapy that prevents development of resistance. However, patients that have previously developed resistance to BRAF inhibitors are less likely to have subsequent favourable responses to combination therapy with CDK4 inhibitors.



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