Cancers of Unmet Need: From unknown to treatment

An initiative providing rapid diagnostics and a gateway to better cancer care and targeted clinical trials for patients by integrating patients’ genomic data into routine clinical decision making for cancers of unmet need.

1. **Clinic**
   - Hospital clinician identifies a patient with a cancer that is challenging to treat, and a sample is taken.

2. **Lab**
   - Lab technicians extract DNA/RNA from the sample and undertake rapid whole genome sequencing – a comprehensive read of an individual’s genetic makeup.

3. **Bioinformatics**
   - Bioinformatics Platform compares sequencing reads between normal and tumour DNA, finding thousands of variants.

4. **Curation**
   - Curation scientists identify clinically relevant genetic variants through international literature and patient variant databases, and drafts report.

5. **Recommendations**
   - Report is presented to room of VCCC expert clinicians and scientists to discuss clinical implications of relevant variations and potential treatment options. Report is updated.

6. **Treatment**
   - Report delivered to patient’s clinician with targeted, personalised recommendations for treatment and clinical trial options.

CENTRE FOR CANCER RESEARCH
Driving innovation and implementation for clinical impact in cancer care

research.unimelb.edu.au/umccr