

Providing cancer biospecimens to researchers in industry and academia



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Background

The Victorian Cancer Biobank (the Biobank) is an initiative, funded by the State Government of Victoria to establish a large-scale tissue-banking facility.

The Biobank is built on the expertise of four founding member tissue banks that formed a Consortium in 2006.

Objectives

- To provide researchers in the commercial and academic sectors with high quality clinically annotated tissue samples to facilitate the discovery of improved cancer prevention and treatment strategies.
- To streamline the process for researchers to access biospecimens.
- Provide a system for Victorian hospitals to integrate tissue-based molecular pathology research and services that facilitate the development of targeted therapies.
- To link with national and international tissue banks and clinical trial activities.



Operations Model

- A "hub and spokes" collection system where private and public sector hospitals form the spokes
- Processing and storage at four sites
- Centrally managed application process that streamlines access to researchers

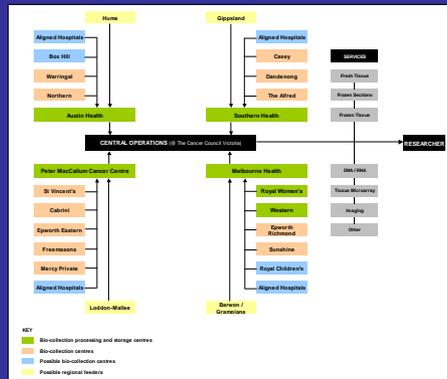


Figure 1. Operations model of the Biobank.

Collection

- Pre-operative and/or post-operative blood
- Cancer and matched adjacent normal tissue
- Non-cancer tissue (where possible)
- Project specific collections (clinical trials or academic research projects)

Since October 2006, more than 3000 donors have contributed tissue all tumour groups.

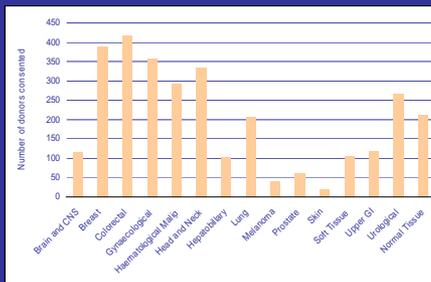


Figure 2. Tissue collection by tumour group – Oct 2006 to Dec 2007.

Quality & Management

Standardised procedures and protocols

- PIS and Consent Forms
- Processing, handling and storage
- Biospecimen preparation
- Distribution system

Operations and management complies with

- ISBER / NCI Best Practices for Repositories
- ISO 9001 and ISO 17025 requirements ensuring high quality biospecimens.

Products

- Snap frozen tissue
- Tissue sections, paraffin and OCT embedded
- Frozen sections
- Serum
- Plasma

Services

- Leukocyte or tissue derived genomic DNA
- Leukocyte or tissue derived RNA
- Tissue array
- Immunohistochemistry



Future Directions

- Balance the collection to meet researcher needs
- Develop an IT platform that supports operations
 - Centralised, web-based informatics system
 - BioGrid Australia for clinical followup
 - Integrated logistics and e-commerce software
- Increase value added reagents and services
 - Digital imaging of sections, TMAs, IHC
 - Link with clinical trials groups
- Expand to regional sites
- Cost recovery and funding for sustainability