Victorian Comprehensive Cancer Centre

Asia Pacific | Education | Health

The Victorian Comprehensive Cancer Centre is a purpose-built centre-of-excellence for cancer research, treatment, education and care.

It is home to cancer research, clinical services and educational facilities for Peter MacCallum Cancer Centre, Melbourne Health and the University of Melbourne.

Located in the prestigious Melbourne Biomedical Precinct the VCCC has realised its aim to become one of the top 10 facilities of its kind in the world.

In 2021, **Plenary completed a $400 million refinancing** of the Victorian Comprehensive Cancer Centre.

Project facts

Location
Melbourne, Victoria, Australia

Client
Victorian Government

Value (NPV)
A$1 billion

Our role
- Project sponsor
- Equity investor
- Financial arranger

Builder
Grocon / PCL Joint Venture

Service provider
Honeywell

Architects
Silver Thomas Hanley, Design Inc and McBride Charles Ryan

Financial close
December 2011

Completion date
June 2016

Contract terms
Design, build, finance and maintain for 25 years

Project website
www.viccompcancerctr.org

Awards
- Operator and Service Provider Excellence, 2022 National Infrastructure Awards

Awards

2022 awards

- Melbourne Achiever Award, Committee for Melbourne 2022 Melbourne Achiever Awards
- Operator and Service Provider Excellence, 2022 Infrastructure Partnerships Australia National Infrastructure Awards

2018 awards

- Landscape Architecture Award, 2018 Australian Institute of Landscape Architects National Landscape Awards

2017 awards

- Silver, Best Operational Project, 2017 PPP Awards
- National Commercial/Industrial Construction Award over $100 million, 2017 Master Builders Australia National Excellence in Building and Construction Awards
- Excellence in Construction of Commercial Buildings over $80 million, 2017 Master Builders Association of Victoria's Excellence in Construction Awards

2017 awards continued

- Victorian Architecture Medal, 2017 Victorian Architecture Awards
- William Wardell Award for Public Architecture, 2017 Victorian Architecture Awards
- Government Partnership Excellence, 2017 National Infrastructure Awards
- New Construction Project of the Year, 2017 Elevator World Project of the Year Awards

2016 awards

- Best Project, 2016 The Design 100 GOV Design Awards
- Architecture Gold, 2016 The Design 100 GOV Design Awards
- Interior Design Gold, 2016 The Design 100 GOV Design Awards
- Best Large Commercial Project, 2016 National Electrical and Communications Association Victorian Excellence Awards

2013 awards

- Best International Healthcare Project, 2013 World Finance Magazine Infrastructure Investment Awards

The 130,000-square-metre facility includes:

- 110 same-day beds;
- 96 overnight inpatient beds;
- 8 operating theatres;

- 8 radiation therapy bunkers;
- a dedicated clinical trials unit;
- accommodation for families of country patients;
- more than 20,000 square metres of dedicated research space for up to 1,200 researchers;
- education and training facilities;
- 8 gardens and terraces comprising low-allergenic plants and materials; and
- 3 bridge links to new facilities at The Royal Melbourne Hospital.

Design features

Architecture

The architecture is symbolic, representing the coming together of a number of significant healthcare partners and the creation of new networks and clusters of collaboration. The project is, at the same time, both a building and an image, one that expresses optimism and progress.

Function

The VCCC was designed to deliver maximum functional area with a blend of clinical, administrative, research and education facilities. It is easy to navigate due to its simple layout formed around a central atrium.This assists staff, patients and visitors navigate

their way through the building, and provides natural light and a point-or-reference for wayfinding throughout.

Innovations

Finance

Being largely reliant on bank debt for financing, the project achieved the longest tenure of bank debt of this volume in the Australian market since the GFC. And, in somewhat of a breakthrough, Plenary included local Australia superannuation funds across all levels of the capital structure.

Sustainability

Opportunities to increase energy efficiency and reduce greenhouse gas emissions have been incorporated in every stage of the design, and include:

- 'free cooling' air conditioning system to reduce energy consumption;
- innovative facade shading to reduce heat load impact and air-conditioning; and
- 350 spaces for bicycle parking

Master planning

As an innovative commercial solution to future planning, Plenary delivered significant integrated future expansion capacity upfront, at no additional cost to the State, to allow for future expansion by building partners.

Cutting-edge technology

In 2020, then Victorian Minister for Health Martin Foley unveiled the **$8 million gamma knife**, Victoria's first ever, at the Peter MacCallum Cancer Centre, located within the Victorian Comprehensive Cancer Centre.

The world-leading intra-cranial stereotactic radiosurgery and radiotherapy machine is only the third in Australia. It delivers high-intensity cobalt radiation therapy as a non-invasive way to treat lesions inside the skull.

The machine uses gamma rays to deliver a precise dose of radiation to the target in the brain to kill cancer cells and shrink tumours, while avoiding damaging healthy brain tissue.

Gamma knife radiosurgery and radiotherapy has revolutionised the management of patients who in the past had very limited treatment options and is widely accepted as the gold standard in radiosurgery for adults and children with brain tumours.

Victorian patients with brain tumours and cranial disorders will have a greater chance of survival and improved quality of life.

In 2023, the Cell and Gene Therapy Manufacturing Facility was launched at the Peter MacCallum Cancer Centre. Operated by Cell Therapies Pty Ltd, the new facility manufactures clinical trial products as well as cell and gene therapy products for cancer patients in Australia and abroad. It is the only biomedical manufacturing site in Australia where such cells and other living cancer therapies can be made at a commercial scale.