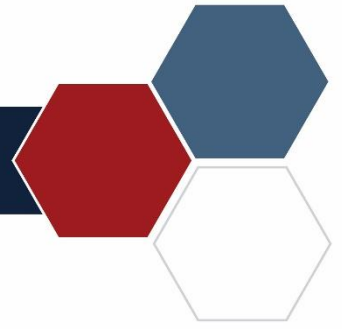


Medical Research

Future Fund



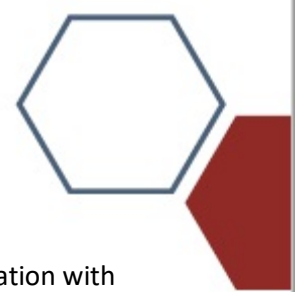
Australian Brain Cancer Mission

Implementation Plan

Consultation version

November 2024

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Background

The Australian Brain Cancer Mission is an initiative of the Australian Government in collaboration with Funding Partners. The Mission is investing \$126.40 million over 10 years from 2017-18 to support research into brain cancer. This consists of \$50 million from the Australian Government through the Medical Research Future Fund (MRFF) and \$76.40 million to date in commitments from the Funding Partners.

The Mission's goal is for transformative improvement to the quality and length of life of people with brain cancer, with the longer term aim of defeating brain cancer.

To date, the Mission has provided:

- \$33.24 million from the Australian Government (see Appendix A), and
- \$73.97 million from Funding Partner investments (see Appendix B).

A further \$12.07 million in Australian Government funding through the MRFF has been invested in brain cancer research to date. Additionally, up to \$20 million will also be invested through the MRFF's Emerging Priorities and Consumer-Driven Research Initiative's 2024 Paediatric Brain Cancer Research Grant Opportunity.

These investments were informed by the priority areas in the Mission's first [roadmap](#) (published on 11 July 2019) and advice and guidance of the former Mission Strategic Advisory Group.

A review assessed the Mission's progress against its goals and the impact of the Mission. The [Review of the Australian Brain Cancer Mission Final Report](#) details the findings of this evaluation and was published on 19 December 2023.

The Mission's Expert Advisory Panel (the Panel) was appointed on 29 April 2024. The Panel's role was to provide advice on the strategic priorities for the remainder of the Mission, by revising the existing roadmap and developing this plan. As part of this process, the Panel considered the findings from the review and ensured that the priority-setting approach aligned with the approach used by the other MRFF Missions.

This plan supports the implementation of the Mission's roadmap and establishes a strategic plan to address the Mission's goals for the remainder of its funded period within the context of the [MRFF 3rd 10-year plan](#). This implementation plan should be read in the context of the Mission roadmap, which describes the Mission's scope, goals and principles.

The Department of Health and Aged Care and Cancer Australia work in collaboration with Funding Partners to deliver the Mission. A second group of experts will be appointed following the publication of the revised Roadmap and this plan. This group will provide strategic advice and guidance on achieving the Mission Roadmap and Implementation Plan, including ensuring the identified priorities for investment are meeting the Mission aims and providing advice on emerging issues nationally and internationally to inform the work of the Mission.

Overview

To target activities to achieve the objectives of the Mission within its duration, the following aims and priority areas for research investment have been identified.

Aim	Priority areas for investment
1. Improve understanding of brain cancer biology	1.1 Understanding the factors associated with the aetiology of brain cancer.
	1.2 Understanding factors associated with the mechanisms of treatment resistance.
2. Improve survival for children and adults with brain cancer	2.1 Identifying and developing new therapeutic strategies for brain cancer.
	2.2 Improving diagnostic strategies for disease identification and treatment monitoring.
3. Improve quality of life for people affected by brain cancer	3.1 Creating and evaluating innovative approaches for improving the quality of life of people affected by brain cancer and/or their carers.

Implementation Strategy

The implementation strategy has been developed to guide research investment over the remaining duration of the Mission. The implementation strategy is intended to make the research purpose and direction transparent, and provide certainty to stakeholders. It also establishes how the outcomes of each focus area will be evaluated in terms of benefit to Australian patients, which will help to clarify the intended outcome and facilitate tracking of the Mission's progress towards its objectives.

Research activities

Priority areas for investment are allocated across short, medium and long-term timeframes.

Research activities will be, or contribute to, programs of work of national strategic importance that are informed by the key priority areas outlined in this implementation plan. Research activities will be both small and large scale, with the aim to concentrate research efforts into areas of critical importance and areas not already targeted through existing initiatives.

Mission monitoring and evaluation

To support the Mission, the [MRFF Monitoring, evaluation and learning strategy](#) provides an overarching framework for assessing the performance of the MRFF, focused on individual grants, grant opportunities, initiatives (e.g. the Australian Brain Cancer Mission) and the entire program.

The strategy sets out the principles and approach used to monitor and evaluate the MRFF. It outlines the need for evaluations to be independent and impartial. The strategy aims to be transparent in process and outcomes, and agile to the needs of the MRFF, its consumers and stakeholders (such as the health and medical research industry). The Mission and grants funded under it will be evaluated against the strategy.

AIM 1

Improve understanding of brain cancer biology

Priority area 1.1

Understanding the factors associated with the aetiology of brain cancer.

Priority area 1.2

Understanding factors associated with the mechanisms of treatment resistance.

Refer to [Appendix B](#) for research already funded in these priority areas.

Starting around	Priorities for investment (objective, outcome, and funding)
2025	<p>Objective: Conduct innovative, interdisciplinary, collaborative and translational preclinical brain cancer research projects that advance knowledge in at least one of these areas:</p> <ul style="list-style-type: none">• Aetiology of brain cancer;• Identification and validation of new therapeutic strategies for brain cancer; and/or• Development of new therapies for brain cancer. <p>Applicants should propose research that:</p> <ul style="list-style-type: none">• adopts innovative approaches to brain cancer research that may include development or adoption of new technologies, novel methodologies, and/or unique experimental models;• empowers and champions Early- and Mid-Career Researchers (EMCRs), ensuring their meaningful involvement and robust support; and• where appropriate involves health care services, including rural and remote health care services. <p>The intended outcome of the research funded by this grant opportunity is to improve the health and wellbeing of Australians by demonstrating innovative approaches to addressing challenges in brain cancer that have high translational potential, forming interdisciplinary collaborations, and building critical mass in the Australian brain cancer research workforce.</p> <p>Funding: \$6 million. Minimum of \$1 million and maximum of \$3 million per project. 30% or more of the Chief Investigator team must be Early to Mid-Career Researchers.</p> <p>Grant Model: Targeted Call for Research</p> <p>Grant Duration: up to 5 years</p>

2027

Objective: Conduct innovative, interdisciplinary, collaborative and translational pre-clinical and/or early stage clinical brain cancer research projects that advance knowledge in at least two of these areas:

- Aetiology of brain cancer;
- Identification and validation of new therapeutic strategies for brain cancer; and/or
- Development of new therapies for brain cancer.

Applicants should propose research that:

- adopts innovative approaches to brain cancer research that may include development or adoption of new technologies, novel methodologies or platforms, and/or unique experimental models;
- where relevant, creates a linkage between pre-clinical research and early stage clinical research that includes evaluating the feasibility and patient acceptability of novel therapeutic strategies/therapies to ensure there is a positive reinforcement loop between all stages of research
- empowers and champions Early- and Mid-Career Researchers (EMCRs), ensuring their meaningful involvement and robust support; and
- where possible involves health care services, including rural and remote health care services.

The intended outcome of the research funded by this grant opportunity is to improve the health and wellbeing of Australians by demonstrating innovative approaches to addressing challenges in brain cancer that have high translational potential, forming interdisciplinary collaborations, and building of critical mass in the Australian brain cancer research workforce.

Funding: \$6 million. Minimum of \$1 million and maximum of \$3 million per project. 30% or more of the Chief Investigator team must be Early to Mid-Career Researchers.

Grant Model: Targeted Call for Research

Grant Duration: up to 5 years

A note on the funding amounts: the total funding amounts per priority are indicative and may change depending on the number and quality of applications submitted in response to the advertised grant opportunities.

AIM 2

Improve survival for children and adults with brain cancer

Priority area 2.1

Identifying and developing new therapeutic strategies for brain cancer.

Priority area 2.2

Improving diagnostic strategies for disease identification and treatment monitoring.

Refer to [Appendix A](#) and [Appendix B](#) for research already funded in these priority areas.

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AIM 3

Improve quality of life for people affected by brain cancer

Priority area 3.1

Creating and evaluating innovative approaches for improving the quality of life of people affected by brain cancer and/or their carers.

Refer to [Appendix A](#) and [Appendix B](#) for research already funded in this priority area.

Starting around	Priorities for investment (objective, outcome, and funding)
2026	<p>Objective: Develop novel approaches to reduce treatment toxicity and adverse effects of brain cancer treatment for patients, to minimise the short- and/or long-term negative impacts for patients and carers.</p> <p>Applicants should propose research that:</p> <ul style="list-style-type: none">• measures the negative impacts of brain cancer treatments.• aims to improve the quality of life for people affected by brain cancer.• is innovative, interdisciplinary, collaborative and translational.• empowers and champions Early- and Mid-Career Researchers (EMCRs), ensuring their meaningful involvement and robust support; and• where possible involves health care services, including rural and remote health care services. <p>The intended outcome of the research funded by this grant opportunity is to improve the health and wellbeing of Australians by reducing the burden caused by brain cancer treatments and improving quality of life for people affected by brain cancer, including their carers.</p> <p>Funding: \$4.75 million. Maximum of \$2 million per project. 30% or more of the CI team must be Early to Mid-Career Researchers.</p> <p>Grant Model: Targeted Call for Research</p> <p>Grant Duration: 5 years</p>

A note on the funding amounts: the total funding amounts per priority are indicative and may change depending on the number and quality of applications submitted in response to the advertised grant opportunities.

Evaluation approach and measures

- New treatments and interventions that improve outcomes (including but not limited to survival, quality of life and care experiences) are identified for people with brain cancer across Australia.
- A greater proportion of people have access to effective brain cancer care, including in regional and remote areas.
- National resources (including but not limited to research platforms and technologies) that facilitate brain cancer research are expanded, accessible and well supported.
- Stronger partnerships between academia, industry, health services, community and charities exist to support brain cancer research and clinical care, including an expanded and diversified workforce.

Opportunities to use **additional investment** and **other research** to support the priority areas include, but are not limited to, the following:

- Mission Funding Partner investments
- MRFF initiatives, Missions and grant opportunities (such as the Emerging Priorities and Consumer-Driven Research Initiative's 2024 Paediatric Brain Cancer Research Grant Opportunity, Genomics Health Futures Mission, Clinical Trials Activity initiative, and the Early to Mid-Career Researchers initiative)
- The Australian Government through:
 - the National Health and Medical Research Council (NHMRC)
 - the Australian Research Council
 - Cancer Australia
 - other government investment
- State and territory governments
- Corporate, philanthropic and investment funds
- International research bodies and foundations

Activities required to **support the research** and **facilitate implementation** include, but are not limited to, the following:

- Initiatives that allocate time, resources and support for clinicians to enable their participation in research
- Initiatives to provide further support and mentorship to Early- and Mid-Career Researchers
- Initiatives to foster greater international collaborations including international placements for researchers
- Enhanced partnerships between academia and industry (such as biotechnology and pharmaceutical companies) for brain cancer drug discovery research
- Initiatives to foster greater consumer involvement in research
- Ongoing support for Collaborative Cancer Clinical Trials Groups (CCTGs) - such as the Australian & New Zealand Children's Haematology/Oncology Group (ANZCHOG) and the Cooperative Trials Group for Neuro-Oncology (COGNO)
- Ongoing support for genomic and data integration efforts – such as the ZERO childhood Cancer program