

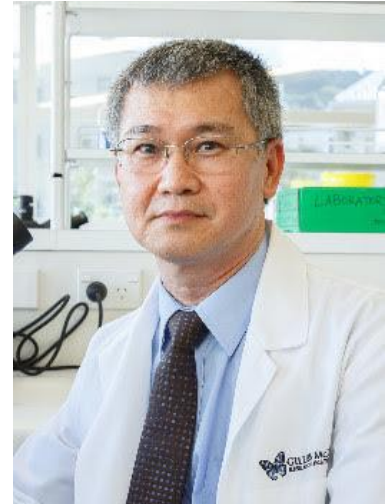


GILLIES McINDOE
RESEARCH INSTITUTE
Pioneering future treatment of cancer

New opportunities and big challenges

This year has brought new opportunities and big challenges. We're thankful to be able to continue our research seeking to transform cancer treatment. And while our need for support continues, it's very gratifying to see so many ways our team is contributing to world-leading biomedical research. The results of our phase I glioblastoma clinical trial have been published. We're also securing funding for new research into tongue cancer.

Our phase I glioblastoma clinical trial shows that our new cancer treatment is safe and well-tolerated, and may improve life-expectancy. We have now secured regulatory approval to begin a phase II clinical trial, which will enrol 75 New Zealanders. Our new cancer treatment will be instituted early in the course of the disease. We will start the trial once we've secured the \$4.8 million funding we need.



If the phase II clinical trial confirms our treatment is effective, it will help patients affected by this devastating form of brain cancer, and will be a significant improvement in how glioblastoma is treated.

We're very pleased that our philanthropic advisor, Margie Beattie, is assisting our fundraising efforts. She's working hard, engaging with individuals, families, trusts, and other organisations to secure funding and support the GMRI's future. She is sharing our story and, more importantly, the stories of our ambassadors and others who have supported us over the years.

We've said farewell to our former Chief Scientist Dr Sean Hall, who has recently returned to the United States. We wish him well in the new stage of his career and look forward to learning of his future achievements. We thank Sean for his invaluable contribution since he joined our team. His work developing the organoid systems is showing exciting preliminary results.

We're fortunate to have been able to keep working with few interruptions with the challenge of dealing with Covid-19 and focus on the positives of the promising results from our phase I glioblastoma clinical trial. However, every bit of support is vital to our mission, so we urge you to jump on board again, or contribute for the first time. Make a donation that you'll be proud of and know that your gift will make a difference. Thank you!

A handwritten signature in black ink, appearing to read 'Swee Tan'.

Dr Swee Tan ONZM, MBBS FRACS PhD
Executive Director

Results of our phase I glioblastoma clinical trial



The results of our phase I glioblastoma clinical trial have been published, and we're excited to share them with the world.

The findings of our phase I glioblastoma clinical trial have been published in the international Journal of Clinical Neuroscience. The results of the trial show that the treatment is safe, well-tolerated and may improve the life expectancy of patients with glioblastoma.

Glioblastoma is a severe form of brain cancer with a median overall survival of 14.6 months after diagnosis, despite intensive treatment with surgery, radiotherapy, and chemotherapy.

Results of our glioblastoma clinical trial using the GMRI treatment show that patients maintain their quality of life and performance status during treatment. They experienced very few side effects and had an overall median survival of 19.9 months. While the increase in survival is encouraging, it is not statistically significant because of the small number of participants in the trial.

[Read the paper in the Journal of Clinical Neuroscience](#)

We treated patients with recurrent glioblastoma

Our phase I glioblastoma clinical trial was hosted by Hutt Hospital and recruited patients with recurrent glioblastoma following conventional treatment, for whom no further treatment options were available.

How our treatment works

The trial tested the GMRI's new cancer treatment that targets the renin-angiotensin system expressed by cancer stem cells in glioblastoma. It used commonly available low-cost, off-patent, oral medications that are safe with minimal side-effects.

Starting a phase II clinical trial for more robust results

We have approval from the Standing Committee on Therapeutic Trials and the Health and Disability Ethics Committee to undertake a phase II clinical trial. We need dedicated funding to begin the trial.

If the phase II clinical trial confirms the increase in life expectancy we observed in our phase I trial, it will be a significant milestone for cancer treatment. The most recent significant improvement for treating glioblastoma occurred over 15 years ago, with a new chemotherapy drug that improves life expectancy by two months.

[Read about our phase II glioblastoma clinical trial.](#)

Our phase I glioblastoma clinical trial is completed — let's start our phase II clinical trial!



Image by Ildigo / Pixabay license

Our phase II glioblastoma clinical trial will recruit 75 New Zealanders.

We've now received approval from the Standing Committee on Therapeutic Trials and the Health and Disability Ethics Committee to begin a phase II glioblastoma clinical trial. Now we need the funding to begin the trial.

Our phase II clinical trial will treat 75 New Zealanders affected by glioblastoma, and will take four years to complete.

Our mission is to reduce the human and financial cost of cancer and improve treatment outcomes. Results of our phase I glioblastoma clinical trial show our treatment is safe and well tolerated, and may extend the life expectancy of patients with glioblastoma.

In the phase II clinical trial, we will start our new cancer treatment earlier after diagnosis, instead of after the cancer has relapsed following conventional treatment. It will allow us to assess the effectiveness of the treatment.

The GMRI treatment consists of a combination of commonly prescribed low-cost, off-patent, oral medications. These medications modulate the renin-angiotensin system expressed by cancer stem cells in glioblastoma.

Once funding is secured, we can begin!

Our phase II glioblastoma clinical trial will cost \$4.8 million over four years. We've secured the necessary approvals, and can begin the trial as soon as funding is secured.

We want to set up a separate fund to assist with the travel costs of patients in the phase II clinical trial

Many of our patients will likely need to travel long distances to attend clinic appointments for the clinical trial. Some patients may need to stay overnight. We're seeking to set up a separate fund to help participants who need financial support.

How you can help

If you're interested in discussing the above, please contact Margie Beattie:
021 457 281 or margie.beattie@gmri.org.nz

[You can also donate to the GMRI](#)

We're thankful to every person, family, trust, and organisation who has helped us on our journey. We still have a long path to travel, which is only possible with the continuing support of donors.

A clinical trial for four-legged friends using our new cancer treatment



Professor John Munday (centre) is looking for cats and dogs for a study which involves giving a combination of oral medications that aim at slowing cancer progression. Holding Obi the cat is senior clinician Thomas Odom and project co-leader Keren Dittmer (left).

We're partnering with a research team led by Professor John Munday at the School of Veterinary Science at Massey University, to trial our new cancer treatment for cats and dogs. If you know of cats with mouth or skin cancer, or dogs with mouth or bone cancer, please get in touch with Professor Munday. They could be eligible for the free trial.

Cancer is a common cause of death in dogs and cats. While there has been progress in treating cancer in animals, options can be limited for certain cancer types. Some cancer treatments are also expensive or dangerous to administer.

Massey's researchers will test our treatment without exposing pets to the harsh side effects of chemotherapy or radiotherapy.

If successful, the approach could be a breakthrough in treating cancer in pets as it's comparatively cheap, safe, and easy to administer. This clinical trial may also provide evidence to support further trials for humans.

[Read the news article about this trial on Stuff](#)

Our treatment uses a combination of oral medications that target cancer stem cells, the proposed origin of cancer, and are thought to control the growth and spread of cancers.

'Our initial study has two aims,' says Professor Munday. 'We want to prove whether the treatment is safe, and it slows down or halts the cancer's progression.'

'The medications we're trialling are used to treat other diseases in dogs and cats, and are safe when used on their own. Previously, these medications have not been used together in treatment.'

How our treatment works

We recently completed a phase I clinical trial to treat patients with glioblastoma, a severe brain cancer. Our treatment used off-patent, low-cost, oral medications. This trial showed that the treatment and is safe and well tolerated, and may improve survival.

[Read the results for our phase I glioblastoma clinical trial](#)

The clinical trial at Massey University will use a similar combination of medications to treat cats with mouth or skin squamous cell carcinoma (mouth or skin cancer), and dogs with mouth melanoma or bone osteosarcoma (mouth or bone cancer).

Do you know of a cat or dog that could join the clinical trial?

Professor Munday's team can only treat pets that conventional therapies cannot help. The study will monitor the animals through examinations and blood tests.

What owners will need to do

Owners will need to take their pet to Palmerston North six times during the first eight weeks of therapy. Their pet will need to be given the medication by mouth at home, once a day.

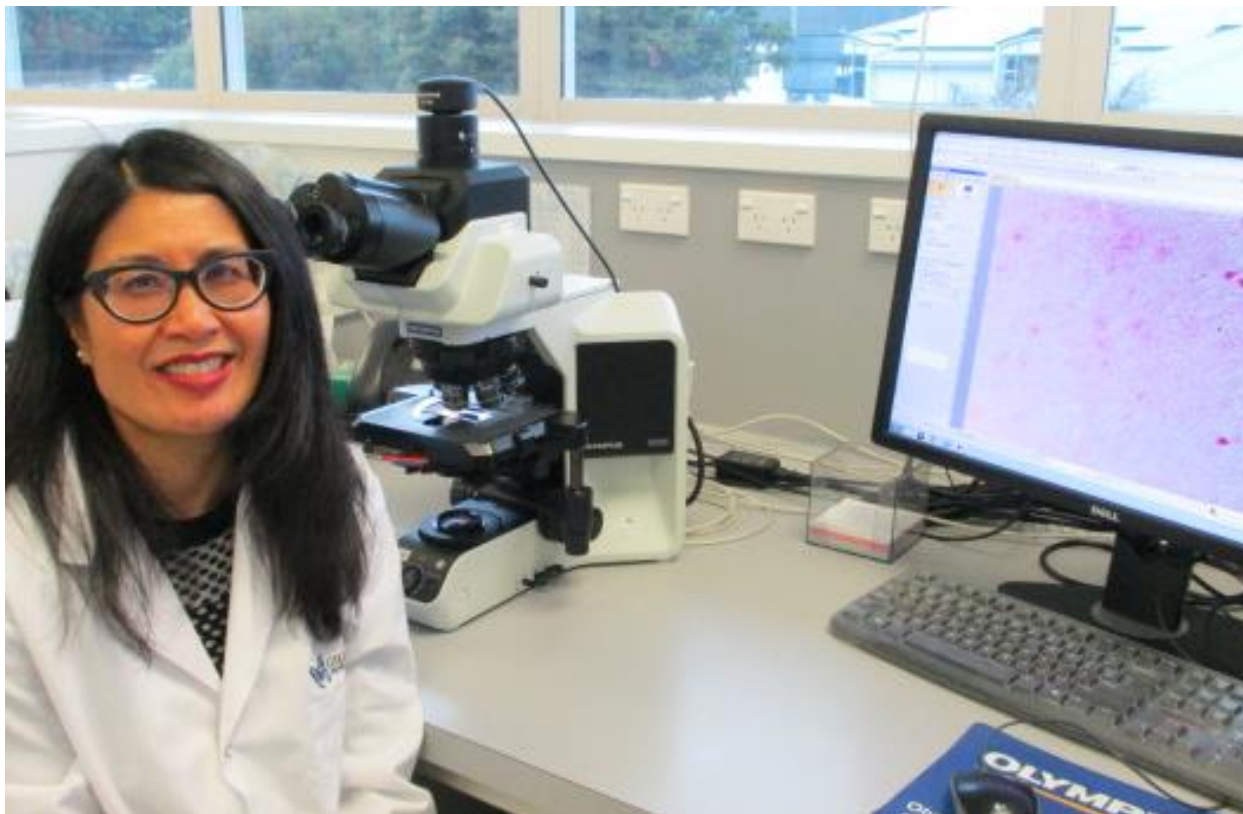
Joining the clinical trial is free because the consultation, testing, and treatments are funded by Massey University and Healthy Pets New Zealand.

[Read about Healthy Pets New Zealand](#)

Please get in touch

For more information or to take part in the study, contact Professor John Munday at j.munday@massey.ac.nz

Researching tongue cancer



Meet our Research Fellow Dr Bridget Chang-McDonald, who's investigating tongue cancer to better understand how it develops and spreads.

Dr Bridget Chang-McDonald, who trained as an anatomical pathologist, is leading a project on tongue cancer — an aggressive cancer. The team will study how the genes in tongue cancer behave. We'll use spatial transcriptomic analysis, a cutting-edge technology that helps researchers understand diseases. We would like to thank the [Head and Neck Cancer Foundation Aotearoa](#) and [Research For Life](#) for their grants, making this research project possible.

The human cost of head and neck cancer

Head and neck cancer is the sixth most common cancer in the world. It's more common in men and in people over 50 years old. It affects the front two-thirds of the tongue, and is one of the common forms of head and neck cancer.

Conventional treatment for head and neck cancer can impact patients' quality of life more severely than many other cancer types. Currently, patients with cancer affecting the front two-thirds of the tongue are treated using surgery and radiotherapy, and sometimes chemotherapy. Removing the tumour by surgery can result in loss of function and disfigurement. Despite this intensive treatment, 50% of patients die within five years following treatment.

This study is small, but lays a foundation for big things

We have funding to analyse tongue cancer tissue samples from eight patients. We're analysing these samples using spatial transcriptomics to see how the cancer develops and spreads.

With more funding, we can extend our study to investigate further samples for more robust results. So far, we've received \$15,000 from each of the grant funders, which means we can start with a small number of samples.

Our long-term goal is to create a tool to predict the cancer's behaviour and prognosis more accurately, and to tailor treatments to achieve the best outcome.

How we'll analyse tissue samples of tongue cancer

We're using spatial transcriptomics to measure and map the gene activity of different types of cells in each tongue cancer tissue sample. This will help us understand how genes behave in this cancer, and the ways they interact with each other. With this technology we can map where these behaviours and interactions occur.

Our research team will examine glass slides of tongue cancer tissue samples under the microscope. Each slide will have special stains that identify key cellular elements that we wish to study using spatial transcriptomics.

Then, we'll send these samples to highly specialised facilities overseas so they can analyse the tissue sections using spatial transcriptomics techniques currently unavailable in New Zealand. Depending on the results from this analysis, we'll do further work using the techniques we routinely use in our lab.

The tissue samples we'll use come from the GMRI tissue bank donated by patients treated at the Wellington Regional Plastic Surgery Unit at Hutt Hospital.

[Read more about how our tissue bank helps researchers](#)

Transforming lives for a brighter future



Our journey from research to transforming lives is a long one. Here's the team behind the scenes who are helping to make this possible: Cindy Naresh, Margie Beattie, and Ruth Watson-Black.

Every person we've met through our work at the GMRI has a story. Many of their stories have become part of our quest to transform lives through pioneering future treatment for cancer. One such person is Margie Beattie, who joined the team to work closely with our supporters to tell their stories — and our story too.

Margie, one of our leading ambassadors, joined the GMRI team in 2020 as our Philanthropy Advisor, to focus on building our funding resources. Her work is supported by two key people in the team, Cindy Naresh, our Executive Assistant, and Ruth Watson-Black, our Clinical Trial Coordinator.

Margie is a valued people connector and funding problem-solver. She's been working hard talking to individuals, families, foundations, trusts, and other potential donors throughout New Zealand and overseas. She's spreading the word about who we are, what we do, and why we need support. Margie also works closely with many of our existing donors and supporters.

Like many people, she's lost family members to cancers that could not be treated effectively.

Your stories contribute to our journey

Margie's story is one example of how our supporters become our ambassadors. Some people support us through donations, while others find creative ways to share our story and inspire others to support us.

For instance, one of our newest ambassadors, Andrea Skews, approached us about generously donating a percentage of her real estate commission to the GMRI. Each time she sells a property she donates some of her commission and asks her clients if they want to support us too.

[Find out how Andrea supports our work](#)

Other ambassadors help us by organising fundraising events, gala dinners, and other events in the community and at their work. Some also become regular donors, joining others to collectively make a difference.

Your support helps us achieve many things

Each year, around \$2 million is needed to cover the cost of running our laboratories to support our research programme. This covers a range of research projects, the cost of staff and students, summer studentships, publications, and maintaining our tissue bank.

[Learn more about our tissue bank and how it helps our research](#)

Every clinical trial requires considerable time and involves significant additional resources — your support enables us to continue testing the effectiveness of our new cancer treatment. We're focusing on securing funding for our phase II glioblastoma clinical trial. We'll cherish the day we can run more than one clinical trial at a time. Your collective help can get us there.

[Read more about what we need to start the phase II glioblastoma trial](#)

Your support empowers us to extend our research and influence. We've furthered exciting new research projects such as glioblastoma, brain, lung, and colon organoids, and spatial transcriptomics for tongue cancer. We've also been working with other organisations in New Zealand and overseas, such as the School of Veterinary Science at Massey University.

[Learn more about our work with Massey University](#)

Your support can help us make the most of a unique funding opportunity

We're very grateful for a recent substantial uplift to our funding provided by a generous trust. This trust has also offered to match each dollar we receive from future donations up to \$500,000 each year for the next three years. This not only motivates us in our conversations with donors and new supporters, but also makes a significant difference to our future and, potentially, the future of our clinical trials.

If you're considering donating to the GMRI, now may be the time to stand alongside us. We would also be very grateful if you could consider making your gift a regular donation for at least three years, to make the most of this unique opportunity.

You're helping us transform lives and give hope

Our supporters aren't just enabling us to give hope to people affected by cancer. By funding our pioneering research into future cancer treatments you're also helping us change how cancer is treated. Your generosity underlies all our work, especially as we continue to seek support from the Government and its agencies.

How you can connect with us

If you're interested in discussing supporting the GMRI in any way, please contact Margie on 021 457 281 or at margie.beattie@gmri.org.nz