Survival times have been doubled in early testing of a powerful new drug combination for patients with advanced blood cancers.

With funding support from the Leukaemia Foundation, researchers at the Peter MacCallum Cancer Centre in Melbourne have been working on the development of a new drug, CX-5461, currently being evaluated in a world-first clinical trial for patients with advanced blood cancers.

Results from the trial have been promising, however the research team has found CX-5461 could be even more effective when used in combination with another drug, Everolimus, which is already used to treat other cancers.

The new combination of drugs has been shown to double survival times in pre-clinical laboratory models, effectively turbo charging the attack against cancer.

According to Professor Rick Pearson, Head of Peter Mac's Cancer Signalling Laboratory, the research findings significantly enhance our understanding of how to kill off cancer cells before they have the chance to become resistant to treatment.

“CX-5461 targets a particular process required for cancer cell survival. Our experiments show adding Everolimus synergistically strengthens this attack, more rapidly and more effectively eradicating the killer disease,” Professor Pearson explained.

“We know all cells rely on ribosomes, which act like a factory producing the proteins essential for their growth and survival.

“Peter Mac researchers have previously shown certain blood cancers are far more reliant on these proteins than normal cells, and eliminating the protein production capability of ribosomes leads to the rapid death of cancer cells, while normal cells stay viable.”
Most teenage girls wouldn’t dream of shaving their hair off, but most aren’t faced with their dad being diagnosed with a life-threatening blood cancer.

Carrie Hewett was only 11 years old when her 37-year-old dad, Jamie, was diagnosed with myeloma, a blood cancer that gradually erodes the bones.

“We were a very normal, happy family and you just don’t expect that cancer is going to turn your world upside down,” Carrie said.

“Dad was a crane driver when he started to get really bad back pain. After many visits to the doctor, he was diagnosed with myeloma in 2011.

“Dad started chemotherapy and radiation straight away, and was in hospital for a long time.

“Because he couldn’t work we had to sell the house we had just built in Fernvale. My Mum, my two younger brothers and I were upset about the change, but all we really cared about was Dad getting better.”

Last year, Carrie made the brave decision to shave her long, brown hair for the Leukaemia Foundation’s World’s Greatest Shave, raising an incredible $4,500 to help other families impacted by blood cancer.

“I now understand how blood cancer affects not only the patient but the whole family. I am so grateful for the work of the Leukaemia Foundation and I just wanted to do something to say thank you,” she said.

Carrie said Jamie is recovering well after his second stem cell transplant last October.

“The World’s Greatest Shave was such a great experience and I would really encourage other people to consider losing their hair to raise money and help patients like my dad.”

As a result of the breakthrough, 15 patients are currently involved in a phase one clinical trial of CX-5461 – a compound the research team is developing with pharmaceutical company Senhwa.

“This novel therapy works to inhibit the ribosomes’ protein production capability, effectively starving the cancer cells of a key ingredient they need to survive and proliferate,” Professor Pearson added.

“By adding Everolimus to this treatment, we have shown the potential for even more powerful results. A further study in collaboration with scientists at Monash University shows striking effects in the targeting of late-stage prostate cancer through a similar strategy indicating this approach may be generally applicable for a range of cancer types.”

More than 12,000 Australians are diagnosed with a blood cancer each year - accounting for approximately 10% of all cancers - and around 4,000 Australians lose their lives to these cancers each year.

Our CEO, Bill Petch, says the results were promising for people with advanced blood cancers who often had a poor prognosis.

“This is a critical area of research and I thank each and every one of our generous donors who help to make vital research projects like this possible,” he said.

Associate Professor Simon Harrison, Consultant Haematologist at Peter Mac and Principal Investigator on the CX-5461 first-in-human trial, says the new research provided further confidence researchers were on the right track.

“The prevalence and poor prognosis for people with advanced blood cancers demands the ongoing and intricate study of abnormal cell behaviour, which has been an indicator of cancer for over 100 years.

“With this new knowledge we can now work closely with pharmaceutical companies to potentially fast track the testing of this combination approach for the benefit of patients.”

The study was published in Cancer Discovery.

Donate Now

worldsgreatestshave.com
We support many blood cancer patients after their diagnosis and throughout lifesaving treatment but we also recognise this can often be just the start of a patient’s blood cancer survival story.

Whether they go into remission or require ongoing treatment, all patients face issues of adjustment and change as they transition back into their lives.

“ Surviving blood cancer brings its own set of challenges,” our Director of Support Services, Barbara Hartigan, said.

“Patients may need assistance in finding a new sense of ‘normal’. Some may be left with physical and emotional reminders of their disease, while others may require continuous treatment that they need to integrate into their day-to-day life.

“There is also the very real fear their illness could return.”

Through our dedicated survivorship program, funded by generous supporters from the community including the Sylvia and Charles Viertel Charitable Foundation, we’re continuing to address the physical and emotional needs of blood cancer patients as they adjust to life in the months and years following treatment.

Mrs Hartigan said while the topic of cancer survivorship had become more popular in recent years, the Leukaemia Foundation had supported survivorship research for the past two decades.

“Early collaborations with psychosocial researcher Dr Pam McGrath helped shape our patient services, providing huge leaps forward in understanding how we can help blood cancer patients move forward and find meaning in their lives after treatment,” she said.

“The continuous research we have funded in this area has given us a great foundation to build our support programs designed specifically for blood cancer survivors so they can get the best outcomes.

“A great example is our innovative Fit to Thrive exercise program that was developed to address fatigue and low energy levels faced by many patients during and following treatment.”

Other programs such as our It’s all about me and Relax, Breathe and Release look at the energising benefits of stretching and relaxation techniques, as well as tips for getting the most out of life through nutrition, wellbeing and activity.

Mrs Hartigan said our range of patient resources was also expanded to include sexuality and fertility in response to research findings that highlighted them as issues. And, for survivors considering a return to work, we continue to establish links with community organisations to aid and assist with re-training and re-entering the workforce.

“Looking forward, we await the conclusion of a three-year analysis of the financial and social impact of patients relocating for specialist treatment.” Mrs Hartigan added. “This research by Dr McGrath will build on previous studies and provide further insight into the needs of regional patients, which we can draw upon to expand our services.”

In a separate project, funded with community support, the Leukaemia Foundation is working to better understand how a cancer experience impacts the lives and outlook of adolescents and young adults (AYA), recognising leukaemia and lymphoma are among the most common cancers experienced by this age group.

PhD student Danielle Tindle, from QUT’s Institute of Health and Biomedical Innovation, recently completed international cross-cultural research to address ‘critical gaps in knowledge’ about the experiences of this growing population. As a researcher in the sociology of cancer and also a long-term AYA survivor of lymphoma, she hopes her findings lead to the development of post-treatment supportive care programs for young people that are more broadly representative of their everyday life experiences.

“As medical advances lead to an increase in blood cancer survival rates, it’s essential we investigate and understand survivorship issues so we’re able to continue to meet patients’ needs and provide more holistic cancer care from diagnosis, through treatment and beyond,” Mrs Hartigan said.
GENEROUS COUPLE LIVED THEIR LIVES HELPING OTHERS

We would like to acknowledge the incredible difference The Gordon and Jessie Gilmour Charitable Trust has made to thousands of blood cancer patients and their families, and honour this generous couple who spent their lives helping others.

Gordon and Jessie Gilmour came from humble beginnings; the couple married during the difficult Depression years and raised their three children during the war.

Following the war, Gordon, who originally worked in his father’s saw mill, built their two-bedroom home in Nundah, with Jessie laying the floors. They were quite a team according to their children.

Generosity was part of the pair’s make-up and it wasn’t long before they became more involved in supporting the work of a number of charities.

The couple were originally involved in the Freemasons and Rotary International. The canteen at the Freemasons’ home in Sandgate was named Jessie’s Place in recognition of Jessie’s tireless dedication. In 1972 Gordon was awarded an MBE for his work in the community.

The loss of one of their beloved granddaughters at the age of five to leukaemia sparked their life-long commitment to the work of the Leukaemia Foundation.

During their lifetime, Gordon and Jessie donated a life-changing $153,637 to support our work.

Jessie passed away from cancer in 1999, and when Gordon died in 2002, The Gordon and Jessie Gilmour Charitable Trust was established with the Leukaemia Foundation being one of the principal beneficiaries.

The Leukaemia Foundation received $303,500 income from the Trust, helping to fund vital blood cancer research and patient support. When the Trust was finalised last year a further $600,000 was donated to leukaemia research.

Our CEO, Bill Petch, said the couple’s generosity has undoubtedly helped save the lives of many blood cancer patients.

“We are truly grateful. The support of people like Gordon and Jessie allows us to continue to help patients and families and fund research to find cures,” he said.

“They knew first-hand the heartbreak of seeing a loved one lost to blood cancer and they used that experience to make a real difference to the lives of others.”

The Leukaemia Foundation’s Donor Liaison Officer Emma Quigley can help you if you would like to know more about leaving a gift in your Will. Please phone 3318 4459 or email equigley@leukaemia.org.au

TRUSTS AND FOUNDATIONS: HELPING TO BEAT BLOOD CANCER

The Leukaemia Foundation would like to thank the following Trusts and Foundations which last year helped us continue to increase patient survival rates and improve their quality of life.

<table>
<thead>
<tr>
<th>Trust/Foundation</th>
<th>Amount</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE CHRISTOPHER CHEE FOUNDATION</td>
<td>$1,200</td>
<td>General donation</td>
</tr>
<tr>
<td>THE CORY CHARITABLE FOUNDATION</td>
<td>$10,000</td>
<td>Replacement beds at Clem Jones - Sunland Leukaemia Foundation Village</td>
</tr>
<tr>
<td>THE SYLVIA AND CHARLES VIERTEL CHARITABLE FOUNDATION</td>
<td>$40,000</td>
<td>Funding for Fit to Thrive program</td>
</tr>
<tr>
<td>THE WILLIAM ANGLISS CHARITABLE FUND</td>
<td>$1,500</td>
<td>Funding for Bereaved Parents program</td>
</tr>
</tbody>
</table>
AGE NO BARRIER FOR DISTINGUISHED VOLUNTEER

It was a birthday to remember for one of our longest serving volunteers last month, marked by a congratulatory message from The Queen.

Chuck Younger generously volunteered his time with us for nearly 17 years and on 7 January he celebrated his 100th birthday with friends and family at his home in Pinjarra Hills.

The former Spitfire pilot and great grandfather served in the Middle East and Burma, and was awarded several medals including the Distinguished Flying Cross.

Chuck unexpectedly joined the Leukaemia Foundation’s volunteer team in 1997 when he helped out a friend with a delivery to our offices. He was offered a cup of tea and, as they say, the rest is history.

We would like to thank Chuck for his many years of volunteering – and congratulate him on such a special birthday!

If you are interested in volunteering for the Leukaemia Foundation phone our Branch & Volunteer Coordinator, Mary-Jane Diacopanagiotis, on 07 3318 4477 or visit leukaemiaqld.org.au/volunteer.

REGENERATION PROJECT

Young professionals from GHD have raised $4000 and generously donated their engineering and design skills - and 200 hours of their time - to create a cheerful and calming garden space for our volunteers, patients and staff.

The Regeneration Project was born out of the need to repurpose an uninviting outdoor space at our Brisbane offices. The name of the project reflects the treatment that follows a blood cancer diagnosis; as cells in the body regenerate during healing, visitors can ‘regenerate’ in a calm and comfortable garden setting.

Through a collaborative process, a beautiful multi-purpose space was designed that also allows for meetings and fundraising events. Low allergy plants, bench seating and moveable planter boxes make the area suitable for all, including patients, volunteers and other visitors. Floral wall murals painted by GHD employee and House Rules finalist Danielle and her husband, Ben, have added another vivid element to the garden.

The project not only brought some much-needed colour to a previously unused space but provided an opportunity for young professionals at GHD to further develop skills in client and job management and communication, while giving something back to their community.

CHUCK YOUNGER

(L-R) VICTORIA, JAYNE, DANIELLE, TIM
# What's On

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Time</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEBRUARY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20/30 Chat</td>
<td>Saturday 27</td>
<td>12.00 pm</td>
<td>Regatta Hotel, Toowong</td>
</tr>
<tr>
<td>MARCH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caring for the carer - group 1, week 3</td>
<td>Tuesday 1</td>
<td>2.00 pm</td>
<td>41 Peter Doherty Street, Dutton Park</td>
</tr>
<tr>
<td>Lymphoma coffee, cake &amp; chat</td>
<td>Wednesday 2</td>
<td>10.30 am</td>
<td>The Coffee Club, 209 Boundary Sreet, West End</td>
</tr>
<tr>
<td>Grief brunch</td>
<td>Saturday 5</td>
<td>9.30 am</td>
<td>41 Peter Doherty Street, Dutton Park</td>
</tr>
<tr>
<td>Caring for the carer – group 1, week 4</td>
<td>Tuesday 8</td>
<td>2.00 pm</td>
<td>41 Peter Doherty Street, Dutton Park</td>
</tr>
<tr>
<td>Gold Coast coffee, cake &amp; chat</td>
<td>Wednesday 16</td>
<td>10.00 am</td>
<td>Ross Evans Garden Centre, 300 Oxley Drive, Runaway Bay</td>
</tr>
<tr>
<td>APRIL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cairns carer morning tea</td>
<td>Tuesday 5</td>
<td>10.00 am</td>
<td>34 Buchan St, Cairns</td>
</tr>
<tr>
<td>MAY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto transplants</td>
<td>Wednesday 11</td>
<td>10.30 am</td>
<td>41 Peter Doherty Street, Dutton Park</td>
</tr>
<tr>
<td>MPN coffee, cake &amp; chat</td>
<td>Saturday 14</td>
<td>11.30 am</td>
<td>Jindalee Hotel, Sinnamon Road, Jindalee</td>
</tr>
<tr>
<td>National Myeloma Day</td>
<td>Wednesday 18</td>
<td>TBC</td>
<td>41 Peter Doherty Street, Dutton Park</td>
</tr>
<tr>
<td>Caring for the carer – group 2, week 1</td>
<td>Tuesday 24</td>
<td>2.00 pm</td>
<td>41 Peter Doherty Street, Dutton Park</td>
</tr>
<tr>
<td>CML coffee, cake &amp; chat</td>
<td>Saturday 28</td>
<td>2.00 pm</td>
<td>The Coffee Club, 209 Boundary Sreet, West End</td>
</tr>
<tr>
<td>Caring for the carer – group 2, week 2</td>
<td>Tuesday 31</td>
<td>2.00 pm</td>
<td>41 Peter Doherty Street, Dutton Park</td>
</tr>
<tr>
<td>JUNE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bereaved Parents’ Weekend</td>
<td>Friday 10 - Sunday 12</td>
<td></td>
<td>Maleny Homestead, Centenary Drive, Maleny</td>
</tr>
</tbody>
</table>

# Spreading Christmas Cheer

Families staying at our accommodation villages received a little Christmas cheer when they all received a special hamper filled with festive goodies.

Special thanks go to Chris’ IGA and our hard-working branches for continuing this wonderful tradition, helping patients and their families forced to spend Christmas away from their homes while they undergo treatment.

---

# A Mum’s Thanks

Thank you to everyone who supported the Christmas Appeal to help kids like my Mackenzie. It warmed my heart to know so many people care about improving the outcomes for blood cancer patients. Thank you for your support; you have helped to raise over $90,000!

Kerri-Ann (Mackenzie’s Mum)

---

# A Mum’s Thanks (Continued)

Natasha Christiansen I was overwhelmed with your continued generosity to my family during this Christmas season. To walk into my unit yesterday at Clem-Jones Village to discover this huge basket of goodies was enough to bring me to tears. Thank you for the abundance of presents and food for my children; it has made this difficult time just a little more special.

Michelle Walker I was a little teary when I walked into the room and found out each of the families were getting a hamper and gift voucher. Thank you Leukaemia Foundation and Chris’ Supa IGA. We are only at the beginning of our journey and the support we have received so far is gob smacking xo