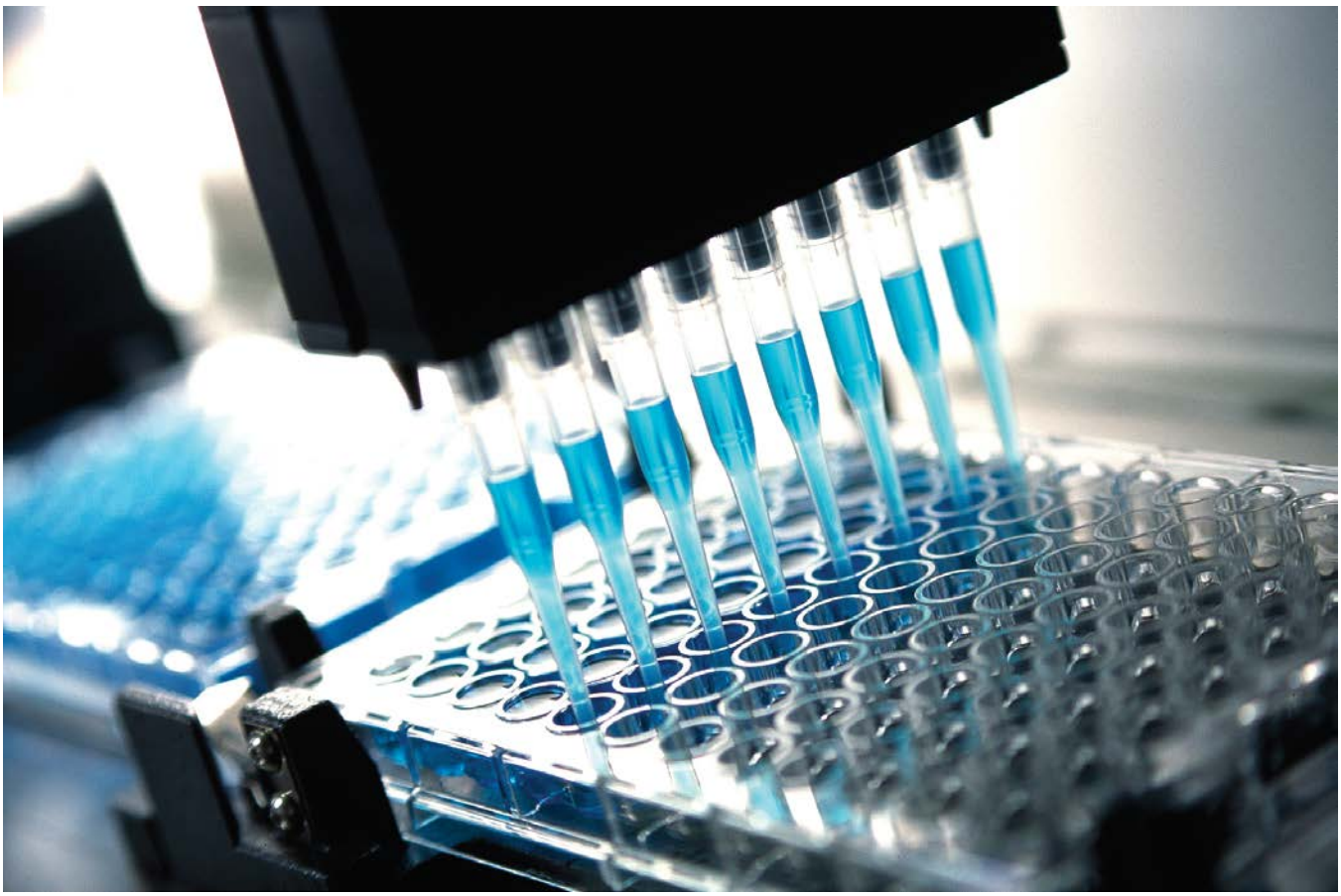
Cancer Therapeutics CRC



Annual Report

FY 2017-2018

CEO STATEMENT

The 2017-18 year has been one of significant change for CTx. Much of the change has been part of our planned transition as we move closer to the end of our time as a CRC. Our plan to become a self-sustaining oncology drug development organisation was stated in the 2013 CRC application and we are now doing the work necessary to make it a reality. We are well placed to achieve this goal; over the last 11 years we have built the human capital and the end to end drug discovery and early development capabilities that has seen us deliver several licensing deals (and there are more to come) and the Board, Senior Management and our highly skilled team of scientists are all aligned with this vision.

After a year as COO I stepped into the role as CEO at the beginning of April 2018. Along with the privilege of leading CTx, I now have the responsibility of making sure that the transition to our future is as smooth as possible. Within the CTx team we have established plans for succession and promotion and the ability to fill many roles through promotion of internal team members is a credit to the team that has been built and nurtured over the past years. Mark Devlin, previously Director of Translational Biology, moved into the role of COO in June and this is one example of the career development opportunities that CTx is working with its partners to deliver for its staff, in this case with Peter MacCallum.

A very large part of my focus has been on the commercialisation of our pipeline. The MSD (Merck) licence and research collaborations have continued to be a very important part of our current activity and our future plans. Merck is a great partner and collaborator and the significant contributions that we continue to make to the PRMT5 program through our collaborations has led to some of the original research plans being expanded. Around the time this report is made public I am hopeful that we will have announced another major licensing partnership. This has been developing over the past year and has demanded considerable attention from myself and the management team, especially over the last six months. Partnerships of this nature and size do not happen quickly and need strong relationships to be built at the scientific and business level. The credibility of the CTx team, including our scientific advisers, has been essential in building the momentum for what I hope to be our next big success.

In June 2018 we moved to our new offices within the Victorian Comprehensive Cancer Centre building in Melbourne. We are fortunate to have a modern office space in a great environment with enhanced opportunities for interaction and collaboration. This move would not have been possible without the support of both the VCCC and the Peter MacCallum.

CTx was the founding investor in the personalised medicine program for children and it continues to fund this program as part of the groups commitment to paediatric cancer. Under the leadership of the Children's Cancer Institute and their director Michelle Haber, the program is making considerable progress and is ahead of schedule. Now branded as Zero Childhood Cancer, the program is a fully integrated national program that is having a positive impact on the lives of children with cancer.

Bionomics Limited, a Participant within CTx, resigned from the partnership early in the 2017-18 year. Their strategic focus shifted, and oncology is no longer a key part of their business. Bionomics had been a CRC partner since 2007 and made significant contributions to many CRC projects and other aspects of the CRC over the past 10 years. Their CEO, Deborah Rathjen, was a CTx Board Director for much of that time and was a major contributor to successful governance of the CRC.

Two CRC assets that were developed in the first partnership were licensed to a Melbourne headquartered company, Amplia Therapeutics, this year. The focal adhesion kinase drug candidates were originally licensed to, CRT UK, and subsequently on to another company for development. As their development was not being progressed CTx helped orchestrate their return to Australia under a license from CRT UK. A share of any commercial revenue from successful development of the assets will return to the Trust established for the first partnership and on to beneficiaries of that Trust.

CTx continues to do well because of the strength of the partnership and the commitment to collaboration. This is supported by focused attention to sound principles of project management and

CEO STATEMENT

underpinned by a suite of tools and platforms allowing real time interaction between our team of scientists located on more than seven sites. Led by our founding CSO, Ian Street, we have persisted in aiming our efforts at very novel areas of science. While this increases the risk of failure it also increases the quantum of the reward when we are successful.

I have been impressed by the team of very talented scientists that work across our projects and the fact that they work as one CTx team, not a group of individuals from disparate organisations. Moving from academia to drug development requires commitment to a new world where personal and organisational success are driven by scientific originality and commercial attractiveness to potential partners. Our Scientific Advisors and Board are key in providing experience, support and guidance from a scientific and business governance perspective. The Board had the opportunity to get to know me for a year before asking me to step into the CEO role, I am grateful for their trust and support. My predecessor, Warwick Tong, had built the basis for our success over more than six years as CEO. Warwick was a great mentor to me and credit for much of the organisations current and future success can be laid at his feet. Myself and the CTx team continue to benefit from Warwick's wisdom as he remains involved with CTx in an advisory role and is Board Chair of the CTx Participant company, CTxONE.

Commercial success is at the core of our future but it is our team that has built the projects that provide the opportunity for that success. My focus over the next two years is on building the next era of CTx. The legacy of the CRC, including its scientific rigor, established business practices and mostly fantastic talent, will be the foundation for that future, a future where Australian research is translated into great drugs for children and adults worldwide.

Brett Carter, October 2018

CEO

Cancer Therapeutics CRC

TABLE OF CONTENTS

Contents

TABLE OF CONTENTS

TABLE OF CONTENTS

Executive Summary

HIGHLIGHTS

- Brett Carter appointed as CEO of CTx CRC Ltd from 2 April 2018.
- CTx CRC Ltd, management company of Cancer Therapeutics CRC moved into new offices at the Victorian Comprehensive Cancer Centre, Melbourne on 4 June 2018.
- The multi-million dollar research collaborations with MSD (Merck) have been extended to encompass additional research over a longer period of time.
- The Zero Childhood Cancer (ZCC) Program led by CCI with significant initial and ongoing support from CTx has received increased funding from a number of sources and the clinical trial in children with cancer is well ahead of recruitment and timing milestones
- Mark Devlin, formerly Director of Translation Biology was appointed Chief Operating Officer on 1 June 2018

ACHIEVEMENTS

Research and Collaboration

- Significant commercial interest in the portfolio
- Two projects promoted to Lead Generation
- Three projects added to the portfolio
- One project reinstated to the pipeline

Commercialisation and Utilisation

The PRMT5 Project, licensed to MSD in 2016, continued to be highly resourced by the licensee in the 2017-18 year. The two associated research collaborations are continuing with additional expansion in some areas. Considerable ongoing investment by the licensee has supported research activities and capabilities in Victoria and New South Wales. The anticipated milestone expected in the 2017-18 year has been delayed and is now expected in the 2018-19 year.

Discussions that were initiated at the Technology Transfer Summit (TTS) in mid 2017 to commercialise a suite of projects from the CTx Pipeline have made steady progress. Since the January 2018 JP Morgan meeting in San Francisco these discussions progressed to agreement on financial terms and at the end of the period (June 2018) CTx had entered formal contract negotiations.

The STING project has also attracted considerable interest and discussions initiated early in 2018 with two potential pharma partners continue to progress. In addition, CTx is working collaboratively with a USA-based company on novel delivery technologies for the project.

Education and Training

- Eight undergraduate students received Summer Vacation scholarships to conduct research at Monash Institute of Pharmaceutical Sciences (MIPS), the Peter MacCallum Cancer Centre (PMCC) and the Griffith Institute for Drug Discovery.

EXECUTIVE SUMMARY

- Eight students who had completed Honours in 2017 were supported by CTx to attend and present their work at the 30th Lorne Cancer Conference in February 2018.
- Four PhD students were awarded extensions for their CTx Top Up scholarships relevant to Research Program 1.
- Five International Travel Scholarships were awarded to CTx Affiliate PhD students.
- Students once again joined the annual CTx Retreat where they took part in a careers workshop and presented their work to CTx scientists.

RISKS AND IMPEDIMENTS

CTx has an established Risk Management Plan (RMP) and Risk Register, this is regularly reviewed by the Audit & Risk Committee and the CTx Board.

The RMP is monitored by CTx management and updated as changes in risk are identified.

Global Markets

CTx is active in the international pharmaceutical and biomedical industry, and as such is exposed to global market conditions and changes in scientific focus in cancer research. Currently cancer research is overwhelmingly dominated by new approaches and modalities to direct the immune system against cancer.

Competition and fluctuation in currency exchange are two major influencers on potential licensing and profitability from offshore clients. To offset these impacts, CTx is investigating changes to its overseas contracts and hedging strategies and where possible maintains as many contractual relationships in Australian currency.

Loss of Participant

The importance of this risk has again been highlighted by the retirement of a Commercial End User Participant, Bionomics, early in the 2017-18 year. At this time-point in the CRC funding period, efforts to attract new commercial Participants have not been activated. The financial impact of such loss has been largely mitigated by commercial revenue from the 2015-16 commercialisation event and the significant level of reinvestment from more than 50% of Participants.

Resourcing

CTx operates a lean business model, leveraging the infrastructure, capabilities and capacity of its partners. Indirectly, resourcing changes within our partner organisations may have a detrimental impact on project progress. CTx mitigates against this through regular operational and project meetings, comprising scientific leads who in addition to driving best practices and capability development, also have the ability to manage resourcing.

Intellectual Property

The loss, disclosure or security breach of sensitive intellectual property (IP) is a high impact risk. CTx has implemented a range of process, policy, protocols and disaster recovery steps to limit the opportunity and impact of exposure. Routine inductions, security testing and policy reviews are undertaken throughout the year to keep CTx up to date with best practice and standards.

EXECUTIVE SUMMARY

Commercial Relevance

Central to the success of CTx is the commercial relevance of its discovery pipeline. We are commercially led through the input from our commercial end-user Participants who have representation at Pipeline Review Meetings to ensure that CTx drug discovery projects have sound commercial input in addition to scientific rigour. Though CTx has a track record of having commercialised 6 compounds since inception in 2007, there is a risk that new projects may fail to be commercialised or that commercialised projects will fail to progress and deliver commercial returns. The CRC remains focussed on maintaining a pipeline addressing a range of relevant targets. Oversight by the independent SAB and Board ensures that hard decisions are taken with respect to inclusion and removal of projects in the pipeline.

End-user environment

The end-user environment for new cancer drugs is dynamic. New science can quickly drive the global focus into new areas and immuno-oncology has become a major focus over the last five years. Like most cancer therapy, the approach is requiring combination regimens to provide the best clinical results. The field has been significantly driven by biologics but relevant small molecule targets are increasingly being recognised as important augmenters of immune responses.

Our commercial end-user partners recognise the importance of this trend and their input has helped shape the direction of the entry of new projects to the CTx pipeline in addition to the input from management and the SAB.

In addition to our commercial end-user partners, CTx management has interactions with major pharmaceutical companies and with a wide range of biotech companies. By engaging with potential end-user partners outside of existing Participants, CTx ensures that it receives additional input into its research direction to shape target product profiles and that opportunities for research and commercial collaborations are fully explored. The commercial potential for novel small molecules directed at novel targets is currently very strong especially if the scope encompasses areas such as immuno-oncology and epigenetics. Deals are being signed for pre-clinical molecules with upfront payments in double-digit millions of dollars with total potential downstream payments in the hundreds of millions. For Research Program 2 (RP2), the end-user environment is broad but key at the early stage is the engagement of major regulatory authorities. There is a strong drive to improve cancer therapy outcomes but these authorities need to accept that the focus needs to move significantly from the treatment of late stage metastatic cancer to the treatment / prevention of the progression of very early metastatic spread. Early buy-in to this major change in strategic direction will only be facilitated by the full involvement of such authorities. The cancer drug development paradigm is resistant to change.

EXECUTIVE SUMMARY

IMPACTS

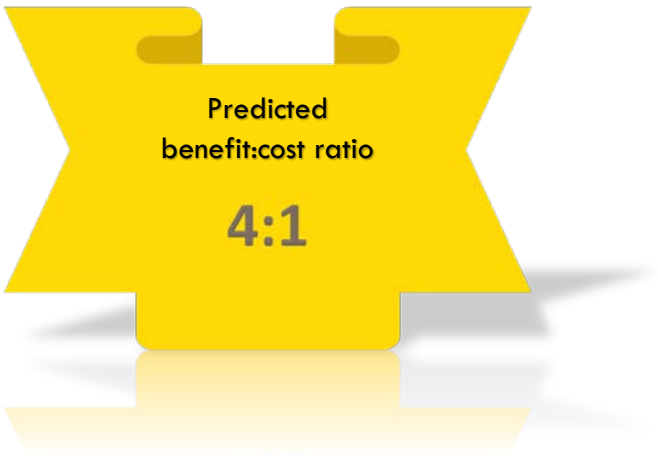
The Impact Tool provided in the 2013 application has been updated to provide an estimate of risk-adjusted valuation of the Outputs from each of the CRC's three research programs at 30th June 2018.

This update has encompassed only project progress and achievement of milestones, changes to timing of future milestones and probabilities of Output generation, Utilisation or Impact (where reasonably assessable). It did not encompass changes to assumptions and variables associated with the broader industry-operating environment, thus enabling a like-for-like comparison of CRC performance.

Overall Benefit

The risk-adjusted benefit ascribed to all three research programs in 2013 at the time of the Extension Bid, was $510,127,300, with a benefit:cost ratio of 3.27:1.

After the update, the risk adjusted benefit currently ascribed to all three research programs has increased to $797,520,153 with a predicted benefit:cost ratio of 4.01:1.



Research

HIGHLIGHTS

- Significant commercial interest in the portfolio
- Two projects promoted to Lead Generation
- Three projects added to the portfolio
- One project reinstated to the pipeline

RESEARCH PROGRAM 1: NEW DRUGS FOR PREVENTING CANCER RECURRENCE AND PROGRESSION AND RESEARCH PROGRAM 3: NEW DRUGS FOR TREATING PAEDIATRIC CANCER

Programme Leader: Dr Ian Street (CSO)

Pipeline Priorities and Industry Interest

This year we have been actively promoting CTx projects at national (AusBio Oct 2017) and international meetings (JP Morgan, San Francisco Jan 2018, AACR Chicago, April 2018) and this effort has resulted in significant industry interest. Accordingly, the projects attracting the most external interest have been given higher priority with regard to resource allocation in order to speed development and maximise the potential of realising further deals. The high priority projects within the portfolio are:

1. Tip60 (Lead Generation)
2. HBO1 (Lead Generation)
3. MOZ (Lead Generation)
4. STING (Lead Generation)

In the latter half of 2017, the potential of the CTx pipeline to deliver novel first-in-class cancer therapeutics generated wide industry interest and commercial discussions were initiated with a licensing team from a major pharma company for two of our targets. Also, in late 2017 new information appeared in the scientific literature describing a role for MOZ in promoting therapy resistance in oestrogen-dependent breast cancer, and on the basis of this new information and strong industry interest, CTx agreed to increase resources on the MOZ project at the December SAB meeting.

Building on the strong foundation of CTx's preceding work and the new biology for both MOZ and HBO1, we rapidly progressed chemistry delivering high quality selective inhibitors of MOZ in under 6 months. Work on producing HBO1 selective compounds was also progressing well at the end of the reporting period.

Immunotherapy has been lauded as a breakthrough in cancer treatment and accordingly is now an area of almost frenzied commercial interest and intense industry competition. In keeping with this industry trend, CTx has introduced several novel immunotherapy targets into our portfolio over the past two years, and our small molecule STING activator project represents the vanguard of CTx's immunotherapy portfolio.

PERFORMANCE AGAINST ACTIVITIES

Our "next generation" small molecule STING activators have the potential to solve a number of problems highlighted by first generation agents now in clinical trials, and consequently this project is attracting high levels of interest from potential commercial partners. We are resourcing this project strongly and pushing it forward towards proof-of-concept studies with all possible speed.

CTx has continued to bring additional projects through the early and mid-stages of our pipeline, and a number of these early stage projects are now generating positive results. These projects are as follows:

1. ENPP1 (RP3 Hit Identification)
2. HCK (RP1 Lead Generation)
3. MRP1 (RP3 Lead Generation)

At the December SAB meeting, ENPP1 was introduced into the portfolio. This project is a spin-off from the STING project and potentially represents an alternative route for activation of the STING pathway. ENPP1 is a natural suppressor of STING activation, thus inhibiting ENPP1 will generally increase levels of STING activation, but this effect is likely to be most pronounced in and around tumours. This approach could have advantages over direct STING activators, where the main challenge is targeting delivery of the agent to the tumour to avoid systemic toxicity.

HCK is another project in our immunotherapy pipeline, and like STING and ENPP1 it represents a different approach to address one of the main challenges in this area; activation of immune cold tumours. HCK is continuing to progress and we have addressed some key biological and chemical challenges over the last 12 months. However, the key question that still must be answered before this project can progress further is one of competitive advantage; how well does HCK compare to the other approaches that are being pursued in this fiercely competitive area.

MRP1 represents our most advanced project in RP3 and over the last 12 months the chemistry team has delivered good tool compounds as well as two proprietary lead series. The project team is therefore in the fortuitous position of possessing the necessary tools to assess therapeutic proof of concept before the project transitions to Candidate Generation. This is highly unusual and is due to great progress by the chemistry team. We anticipated that the key experiments will be completed before the end of 2018.

Two early stage projects (hit generation), CMTM6 and IMPK have been added to the portfolio this year and are progressing well.

The early stage projects, glucocorticoid sensitisers, MYCN, and Antizyme remain active in the portfolio. The MLL project was terminated.

RESEARCH PROGRAM 2: NEW CLINICAL TRIAL DESIGNS FOR THE RAPID ADVANCEMENT OF NEW ONCOLOGY DRUGS

Program Leader: Mr Mark Sullivan (Medicines Development Ltd)

The objective of RP2 is to establish new, evidence-based preclinical and clinical models that enable efficient evaluation of treatments (alone and in novel combinations) to prevent metastatic spread and disease progression in both adults and children. The models will constitute a new regulatory framework (for example, as FDA "Guidance for Industry") for product development, and will be constructed to enable prospective data collection for formal assessment of the clinical and economic benefits that arise from addressing these major gaps in cancer therapy. These trial models will allow more efficient development of new oncology treatments in two areas: screening and evaluation of treatments with the potential to affect metastatic spread; and paediatric development. This will enhance the early stage cancer clinical trial environment in Australia for local and international drug development.

The strategic approach of PR2 is to focus on two areas of drug development where new compounds are not efficiently developed or used:

- Drugs to prevent or limit the spread of metastatic cancers, and
- Paediatric dosing guidance for new, targeted molecular drugs.

Development of new drugs to prevent or limit the spread of metastatic cancers is hampered by the high cost and complexity of conducting clinical trials based on endpoints involving patient survival. Unlike cytotoxic drugs or immunotherapies where reduction of tumour burden may be evident within months, prevention of new metastases may not impact patient survival for many years. These long time frames are unattractive to drug developers, and this is evident in the lack of drugs being developed or registered to prevent or limit the spread of metastatic disease. The RP2 team have identified that the FDA Accelerated Access and Breakthrough Designation programs may provide faster and cheaper routes to registration for anti-metastatic drugs based on regulatory approval using surrogate endpoints. The RP2 program is now enacting a pre-competitive strategy of engaging with clinicians and scientists from academia, industry and regulatory agencies to identify and validate biomarkers and preclinical models as surrogate endpoints appropriate for approval of anti-metastatic agents.

Key to establishing a new framework for the development of "adjuvant-by-design" drugs targeting early stage metastasis is the firm engagement of regulatory authorities. Our ongoing interactions with the FDA continued through the Accelerating Anti-cancer Agent Development and Validation (AAADV) meeting in May 2017. The enthusiasm and momentum for the development of immune drugs for cancer has deflected the FDA interest in early metastasis. There is no doubt, however, that as these new immune-oncology drugs become established, the interest in early stage metastasis will increase as tissue-agnostic approvals become more common. The AAADV meeting has been endorsed as the most productive avenue for continued engagement with the FDA.

Progress on RP2 has been slowed through key personnel changing employment and also by the inability to recruit suitable PhD candidates to work under the supervision of Professor Carl Kirkpatrick, head of the Department of Pharmacy Practice and co-director of the Centre of Medicine Use and Safety at Monash Institute of Pharmaceutical Sciences. The acceptance of the joint early-metastasis review by Nature Review Clinical Oncology in the 2017-18 year will see its publication in the 2018-19 year. This journal is prestigious and the review will reach a global audience

PERFORMANCE AGAINST ACTIVITIES

RESEARCH PROGRAM 3: TAILORED TREATMENT FOR CHILDREN WITH CANCER

Development of the RP3 Tailored Treatment Program continues to track ahead of RP3 milestones.

RP3 Update - Zero Childhood Cancer Human National Multicentre Prospective Clinical Trial - PReclSion Medicine for Paediatric Oncology Patients (PRISM)

Seven out of eight sites are open at 30 June 2018. Women's and Children's Hospital, Adelaide remain in final stages of their Site-Specific Approval (SSA) requests with local governance. The national trial is ahead of RP3 milestones.

90 eligible patients have been enrolled on the study to date as of 15 June 2018. The PRISM study is **consistently delivering treatment recommendations** back to the treating clinicians within our clinically relevant timeframe of 12 weeks (average 9.5 weeks).

Program highlights

- ***TARGET Study (ZCC Pilot Feasibility Study)*** - final analysis of TARGET study results is ongoing. There are 10 manuscripts in progress and final in vitro and in vivo experiments are being conducted early in 2018-19 to complete the datasets in preparation for publication.
- **Quality Management System (QMS)** – Integrum, a web based QMS continues to be customised and implemented. This will facilitate the development and management of clinical standard quality measures to support the clinical translation of ZCC.
- **Resourcing** – A number of positions are under recruitment within the preclinical drug testing core team, 'Omics core team, central molecular support team, and program management.
- **The Program Project Plan** continues to be managed at a granular level including tasks, timeline, resource assignment and progress-to-date. The ongoing ZCC Live plan continues to facilitate the monitoring of all details of the program and generation of detailed status reports including issues, risks, key milestones, variances in timelines, research projects, publication plans and accomplishments. This report is tabled at each ZCC Steering Committee meeting.
- **The ZCC Scientific Advisory Committee** met on March 14 2018 to review ZCC Program progress and discuss future strategic program and research directions. The draft report has been received. The Scientific Advisory Committee consists of Grant McArthur (PeterMac, VCCC), Andrew Roberts (WEHI), and Stefan Pfister (DKFZ, Germany). Additional input from Olaf Witt (DKFZ, Germany) was welcomed this year given our strengthening ties and collaborations with DKFZ through INFORM2 adaptive combination therapy trial/s and the ITCC P4 PDX drug response modelling initiative.

PERFORMANCE AGAINST ACTIVITIES

The Scientific Advisory Committee's overall impression is as follows:

The ZERO Childhood Cancer Initiative is maturing as a research and clinical platform and overall the advisory committee consider progress to be excellent. The initiative is of high quality by international standards and easily equal to similar programs in the United States, France, Germany, the United Kingdom and the Netherlands. The committee highlight the following achievements that make Zero stand out amongst the similar international efforts:

1. *In vitro* drug testing where good quality data is being generated
2. The inclusion of an excellent psycho-social research program
3. The integration of PDX data with other data, noting that completion of PDX analysis has long lead time but nonetheless is of high scientific interest and potentially of high clinical impact
4. The inclusion of health economic analyses

Presentations / Posters March 2018

- ZCC research output has been presented at the American Association for Cancer Research (AACR) in April 2018, and Advances in Neuroblastoma Research (ANR) in May 2018; and was showcased in a plenary session of the Australian & New Zealand Children's Haematology/Oncology (ANZCHOG) conference on June 15 2018.

2018 Current Areas of focus are:

- Recruitment of all open positions
- Completion of the pilot feasibility study experiments and all associated biological data curated to enable the progression and submission of manuscripts,
- Continuously working with our PRISM sites to ensure smooth registration, sample delivery and enrolment of patients,
- Completion of Quality Management System customisation and configuration, implementation, and roll out,
- Continuation of planning for the Zero Childhood Cancer research framework for the future

Education and Training

CTx continues its strong support of careers in drug discovery and translation at undergraduate, PhD, staff and end-user levels. CTx Medicinal Chemistry and Cancer Biology Project Leaders continue to provide on-the-job training for staff involved in drug discovery and development projects. Industry relevance and partnering opportunities are regularly tested at project reviews attended by highly respected national and international biotechnology industry experts.

The Education program is focussed on four groups essential to fostering the cancer drug development industry in Australia.

UNDERGRADUATES

CTx aims to attract top undergraduates to cancer related laboratory research, drug discovery and development by supporting students with scholarships to partake in a research project during their summer vacation. In 2017-18, CTx awarded eight summer vacation scholarships at $1,000 apiece.

HONOURS STUDENTS

CTx supported eight Honours students in 2018 to attend the 30th Lorne Cancer Conference from 8 - 10 February 2018. All students presented posters of their work, as detailed in Table 4.

In addition, the students attended a mentoring dinner with the CTx CEO, Deputy CSO, COO and Scientific Directors as well as a number of conference speakers to learn about and discuss their fields of interest, tips for developing their careers and future opportunities.

Sheryl Ding (WEHI), received the prestigious Lorne Cancer Conference poster prize for her poster titled Interrogating the effects of Keap1 inactivation on the metabolism of Kras-mutant lung adeno carcinomas.

MASTERS PROGRAM

In collaboration with the Victorian Comprehensive Cancer Centre (VCCC), CTx will co-develop a subject in the University of Melbourne's new Masters of Cancer Sciences. CTx will contribute to the content and delivery of the elective module, "Drug development - discovery to commercialisation" which will be available from 2020. The Masters of Cancer Sciences course will be wholly online, delivered part time over two years, comprise elective subjects, and include a compulsory capstone research subject.

PHD STUDENTS

CTx postgraduates are supported in their PhD training as either CTx Top Up Scholarship or CTx Affiliate Students. Both postgraduate schemes support students to complete research related to cancer drug discovery and development and equip them with additional non-research skills to facilitate their employment in cancer-related fields.

CTx PhD Top Up scholarships are awarded to existing students for up to three years, with the bulk of the funding going directly to the student and an additional amount of $3,000 going to supervisor(s) as a grant to support the student in travel to conferences or to help defray costs of the student's project.

In addition, CTx is committed to providing opportunities for clinicians to develop and sustain a career in cancer research, and have a instituted a new award for Clinician Researcher PhD students. This scholarship is awarded for a maximum of three years, with a total value of $20,000 per annum. Of

this, $17,000 will be awarded to the student and $3,000 will be awarded to the supervisor(s) as a grant to support the student in conference travel or to defray costs of the student's project.

During 2017-8:

- Four (1 clinician scientist and 3 scientific) PhD students were awarded extensions for their CTx Top Up scholarships for projects relevant to Research Program 1.

To date, CTx has supported 36 Scientific and 13 Clinician Scientist students conducting research projects in all areas of drug discovery from early target validation through to translational clinical research, across all three Research Programmes. At 30 June 2018, 20 students have successfully completed their PhD.

A full list of Top Up PhD students can be found in Appendix 2.

In addition, CTx mentors 79 Affiliate PhD students, who are enrolled with our Participants and are eligible for skills development programs and competitive travel scholarships to allow presentation of their research at overseas conferences and laboratories. Affiliates are also able to participate in the annual CTx Higher Degree Research Symposium.

PHD TRAVEL SCHOLARSHIPS

During the reporting period, 5 PhD students were awarded International Travel Scholarships.

EDUCATION AND TRAINING

POSTDOCTORAL FELLOWS/EARLY CAREER RESEARCHERS

Oncology Drug Development in Practice (ODDP)

The course in 2018 has been delayed until October 2018. A major full day symposium will be held in collaboration with MSD (Merck) and the VCCC focused on the immuno-oncology area. This is being held in conjunction with the MSD visit to Melbourne for partnership collaboration meetings and AusBiotech. Anticipated attendance is in excess of 135. Key presenters will include local and internation leaders in the field.

Professional development /Training

CTx continues to support the development of its staff by providing in-house tailored training, or by supporting staff attendance at relevant workshops, courses, programs, and conferences nationally and internationally.

The newly appointed COO at CTx, Dr Mark Devlin, is being co-funded by CTx and PMCC to study for an MBA at University of Melbourne.

CTx is at the forefront of driving greater awareness of new approaches to finding cures for cancers. Key presentations and discussions at national and international arenas such as the AACR are elevating CTx's profile as a centre of excellence and leader in novel cancer drug development and new approaches to metastatic disease.

COMMERCIALISATION

SME Engagement

BIONOMICS LTD.

The Australian SME, Bionomics (BNO), had been a strong Participant in CTx since 2007 and had been a very active commercial end research partner. Following changes in the company's internal priorities, BNO relinquished their interest in MELK in mid 2017. The CEO of Bionomics, Dr Deborah Rathjen, was a member of the CTx Board for more than six years. She resigned from the Board in May 2017. Bionomics retired as a Participant in CTx in July 2017

SYNTHESIS RESEARCH PTY LTD

SYNthesis Research Pty Ltd is a privately held Australian company specialising in drug discovery. They have worked collaboratively with CTxONE on the the latest commercialisation activity which is expected to be completed in October 2018. They are also working again in collaboration with CTxONE on additional commercialisation initiatives planned to be executed in the 2018-19 year. The CEO of SYNthesis Research, Dr Andrew Wilks, joins with the CTx Scientific Advisory Board to review CTx projects at the six-monthly Pipeline Review meetings.

CLINICAL GENOMICS PTY LTD.

Clinical Genomics is a privately held Australian company, founded in 2006. This Sydney-based biotechnology company, developing next generation products for colorectal cancer diagnosis, currently holds a portfolio of more than 20 patents and patents pending. They contribute to clinical development planning within CTx, and are likely to benefit by having access to potential prognostic and/or diagnostic targets currently being worked on as a component of CTx projects. Their current focus has been largely on commercialisation of their colorectal cancer monitoring and diagnostic testing products in the USA. Their achievement has exemplified the path that can be established for liquid biopsy tests of required sensitivity and specificity as will be required in the future development of adjuvant by design drugs for the management of early stage metastasis (RP2).

SYNEOS HEALTH (INC RESEARCH AUSTRALIA)

In August 2017 INC Research acquired another major Clinical Research Organisation, and was renamed Syneos Health. The Australian subsidiary has supported the attendance of CTx-funded Postdoctoral Fellows to attend the Congress by design course, Oncology Drug Development in Practice in Amsterdam up until 2017. Through their Australian-based SVP of Clinical Development David Fuller, they have brought their expertise to clinical development planning for the more advanced CTx projects and in addition contributed to the development of other CTx education initiatives in the drug development and clinical trials.

CTXONE

CTxONE is a privately held Australian company, founded in 2007. The Melbourne-based biotechnology company, specialises in the commercialisation of early stage cancer therapies. It has taken the lead on the commercialisation of CTx pipeline assets and may play a key role in creating sustainable opportunities for the CTx team post 30 June 2020.

COMMERCIALISATION

COMMERCIALISATION ACTIVITIES

Following exclusive global license of the PRMT5 inhibitor project to MSD (known as Merck in the USA and Canada), there have been two major research collaborations funded by MSD through CTxONE in support of the commercialisation. The two research collaborations supporting this licence were active throughout the 2017-18 reporting period and resulted in research funding in excess of $1 million. The majority of the funding was used within the CTx existing partnership with some funding going to an NHMRC-funded specialist facility in NSW. The licence agreement with MSD requires regular meetings between CTx and MSD. There are six-monthly face-to-face meetings held alternately in Boston and Melbourne as well as monthly project meetings by teleconference for each of the two research collaborations.

CTx continues to be involved in extensive discussions with a significant number of potential commercial partners, many of these are international companies of similar size and stature to MSD. The nature of the CTx Pipeline means that major pharmaceutical companies are often the most appropriate partner. Attendance at conferences and meetings where these potential partners, with a focus on early phase oncology assets, are available is a key component of the CTx commercialisation strategy. These discussions develop over months and years. As an example the potential commercialisation foreshadowed in the CEO report began in the 2016-17 year. The JP Morgan meeting in San Francisco in January is one of the key meetings that CTx targets for such interactions.

Meetings with additional potential partners were held at the American Association of Cancer Research in Chicago in April 2018. As of 30 June 2018 CTx was in active confidential (under CDA) discussions with seven major potential partners. In five of these cases the potential partner is one of the top twenty pharmaceutical companies globally.

Having completed four years of the current six-year funding period CTx is well on track to complete further utilisation of the outputs from its major Research Program (RP1), and with potential commercial opportunities for the other CRC funded projects becoming ever clearer, the CRC is well on track to make further commercial transactions in the future.

CTxONE has worked closely with CRT over the past year to relaunch the FAK assets. Licensed to CRT in the first CRC Partnership they had been on-licensed to a company that, as the result of the failure of a separate project, did not have the resources to progress the FAK assets. CTxONE worked to establish a private company, Amplia Therapeutics which then licensed the FAK assets from CRT. In May 2018 Amplia was sold to an ASX listed company, Innnate Immunotherapeutics in an all scrip deal. The deal structure has resulted in CTxT Pty Ltd (the trustee company for the CRC) being the largest individual shareholder in Innate (renamed Amplia Therapeutics in August 2018). Amplia is investing in the development of the FAK assets in immuno-oncology and if its efforts are successful in generating a commercial return then benefits will flow to the Participants of the first CTx Participants Agreement.

COMMERCIALISATION / END USER OUTPUTS

During 2017-18, CTxONE, in collaboration with Synthesis Research, has been focused on executing a licensing deal and additional research collaboration on a novel platform from the CTx pipeline. In addition, CTxONE, in collaboration with CTx, has been managing the research collaborations with MSD. Modifications of the research collaborations have required significant commercial input to ensure efficient use of resources and benefits for CTx and its partners

COMMERCIALISATION

STATUS/CURRENT PERFORMANCE OF EXISTING SPIN OFF COMPANIES

Under the current Participants agreement, CTxONE has been appointed as a nominated commercialisation agent for the CRC and continues discussions with potential funding bodies and investors. CTxONE has also been working with PMCC to finalise another spinout company (Marvel Therapeutics) focused on the CMTM6 project.

Intellectual Property Management

Due to the long and risky development path of any human therapeutic medicine, particularly new cancer drugs, extensive and expert intellectual property (IP) protection is essential to successful commercialisation and development to the human healthcare market.

At the CRC, a framework of legal agreements covering IP gives CTx the required rights for commercialisation.

The terms of the Background IP License agreements have been pre-approved via inclusion in the Participants agreement as Schedule 4 and this ensures that any additional Background Licenses that may be required are easily obtained.

The CRC also prepares and executes Commercialisation License Agreements as required once Projects mature to a commercially relevant stage. These grant the CRC's commercialisation partners the rights to commercialise project IP and associated background IP rights.

The substantive terms of the above two agreements were included in the Participants agreement and this lowers the administrative effort required to ensure that the CRC can access the rights it requires in order allow for the commercialisation of CRC Projects.

The CRC owns the rights to the relevant Project IP generated from each approved Project, and has the authority to file and prosecute patent applications emerging from these projects and to assign each application from the inventor/employee, through their employers (the Project Participants) to the CRC confirming ownership either through the Trust or CTxONE (as the case may be) as the owner of the IP. This Centre IP model ensures efficient due diligence during commercial interactions.

Communications

CTx's main stakeholders are the pharmaceutical and biotechnology industry, our research partners and workforce, and the Australian Federal and State governments.

EXTERNAL COMMUNICATIONS

CTx's external communication strategy, though modest, has been devised to enlist partnering and licensing opportunities, attract promising small-molecule drug targets, and to promote Australia's innovative research, capabilities and facilities. The CRC has a solid group of followers on its Twitter accounts, @cancercrc and @ceoctx, and communicates regularly via this platform.

INTERNAL COMMUNICATIONS

CTx staff at participant sites are kept abreast of all CTx news and information through a number of different avenues.

- A new SharePoint Intranet site, CTxchange, was launched in July 2017. This site provides a platform for communicating announcements, sharing project and team information, and storing documents.
- CTx newsletters are sent out quarterly by email and are uploaded to CTxchange.
- There are regular meetings across different levels of the organisation – whole organisation "Town Hall" meetings, project meetings, project leader and manager meetings, CTx operations group meetings. These meetings provide an opportunity for two way communication between staff and different leadership groups.
- There was the annual CTx Retreat coinciding with the Scientific Advisory Board (SAB) review of scientific projects in December 2017. This brings together the staff from geographically disparate sites and gives them an opportunity to meet each other away from the bench.
- This year the mid-year SAB review that usually occurs in June was cancelled due to commercial discussions surrounding a number of projects, and therefore a solid understanding of the direction required to advance the projects in the right direction. Instead, the current projects were presented to the Board and local members of the SAB to bring them up to speed on the current status. A summary of this meeting will be sent out to all staff in July 2018.

Technology

ELECTRONIC RESEARCH PLATFORM

The CTx technology environment continues to underpin the research and operations activities of the CRC and provides a globally accessible, secure platform to share information and collaborate with participants. During the past year, the focus has been on optimising the existing systems and applications to ensure that these investments continue to deliver value to the organization and meet the requirements of the CRC.

The Dotmatics suite of products continues to be at the center of the CRC's research data management applications with 65 participants recording data in the Electronic Laboratory Notebook. This suite of informatics products enables participants to query, analyse and report on data across research disciplines. These activities are essential to progress research projects through the discovery pipeline. The CTx intranet and document management system is built on SharePoint and is the primary repository of information within the CRC. This platform has evolved over the past year to fulfill the organisations' needs and facilitate various methods of sharing and communicating information with CRC participants and collaborators. The CTx technology environment is scrutinised on a regular basis to ensure that the activity and utilisation of our servers and applications is optimal. Regular monitoring enables us to pro-actively identify issues or limitations and respond immediately to ensure compliance of data management standards.

BUSINESS CONTINUITY STRATEGY

Over the past 12 months, CTx has further developed their business continuity strategy, which aims to provide contingency and recovery of critical systems and data, in the event of a technical threat or disaster, while minimising disruption to business processes. A number of infrastructure upgrades were required to advance this strategy, which consists of a hybrid approach to device backups, an industry best practice approach to server backups and a cold disaster recovery plan.

PRIVACY AND SECURITY

CTx continues to take a proactive approach to cybersecurity and information privacy. In preparation for the changes to privacy legislation in February 2018, CTx implemented a number of physical, system and device security measures to minimise the risk of a data breach. Periodic security audits are also scheduled to ensure that CTx retains a secure technology environment despite developments in attack techniques and system vulnerabilities.

Governance

CTx is governed by an independent skills-based Board and led by a highly experienced management team. This collaborative research and business model allows innovative approaches to drug discovery as well as commercialisation of the research pipeline.

MANAGEMENT STRUCTURE

A new company, CTx CRC Ltd (CTx2), was constituted in April 2014 to be the managing entity for the second round of the CRC from 1 July 2014. CTx2 is limited by guarantee and was granted Not for Profit and Charitable Status in March 2015.

The managing company for the previous funding period (up to 30 June 2014, CTx1) was Cancer Therapeutics CRC Pty Ltd. This company has been maintained, as CTxONE, and is a commercialising entity for CRC assets. CTxONE is an Essential Participant in the CRC.

In addition, CTxT Pty Ltd was created as the legal owner and trustee for intellectual property and two trusts were created to hold the intellectual property from the two partnerships associated with the two funding periods.

BOARD

During the reporting period:

- Mr Paul Scroope was appointed to the Board on 27 February 2018
- Dr Warwick Tong resigned from the Board on 24 April 2018

Board members

Dr Tony Evans PhD, MAICD - Board Chair (Independent)

Key skills: Specialist in managing collaborative research and industry drug development.

Dr Evans has also been a director of Biolayer Corporation, Neurodiscovery, Coridon, Dendright, Promics, Q-Pharm and Spinifex. From 1988 to 1997 he worked in California, USA at Genentech then Onyx Pharmaceuticals. On returning to Australia, he was appointed CEO and director of the CRC for Diagnostic Technologies and later, CEO and director of Xenome. From 2008 to October 2011, he was CEO of Cancer Therapeutics CRC. Dr Evans holds a BSc from the University of Sheffield, UK, a PhD from the Australian National University, and was Queen Elizabeth II Research Fellow in the Heidelberg Department of Medicine, Victoria, Alberta Heritage Post Doctoral Research Fellow at the University of Calgary and a Post Doctoral Research Fellow at The University of North Carolina.

Dr George Morstyn MBBS, BMedSci, PhD, FRACP, MAICD - Director (Independent)

Key skills: Specialist in translational and clinical oncology

Dr Morstyn has extensive experience in drug development and biotechnology. He was head of the clinical program at the Ludwig Institute for Cancer Research in Melbourne and Principal Investigator on the earliest clinical studies of haemopoietic growth factors. He is Chair of the Investment Advisory Committee of GBS Bioventures, Chair of Biomedical Research Victoria, board member and chair of the scientific advisory board of Symbio (Japan), board member of ANZBCTG. He is a member of the commercialisation committee at the Walter and Eliza Hall Institute and Deputy Chair of the Health Forum of the ATSE.

A/Professor Nicholas Gough PhD, FTSE, MAICD - Director (Independent)

Key Skills: Biomedical research, cancer biology, biotechnology industry, CRC Programme

Dr Gough is the inventor of technologies underpinning a number of biopharmaceuticals and biotechnology products, including GM-CSF (sargramostim), one of the first based on Australian science and IP, Mavrilimumab, and ESGRO™. Nick is Honarary Associate Professor in the Department of Medicine, University of Melbourne and Chair of the Research Advisory Committee Wound Management Innovation CRC. Key past appointments include: Head, Molecular Haematology Laboratory, WEHI; Research Director, AMRAD Corporation Limited; CEO, Cerylid Biosciences Limited; CEO, CRC for Genes for Common Human Diseases; Director, Molecular and Genomic Discovery ES Cell International Pte Ltd (Singapore); Chair, Scientific Advisory Board Innovative Dairy Products CRC; Chair, Scientific Advisory Board LactoPharma (New Zealand).

Ms Jenni Lightowlers LLM, LLB – Director (Independent)

Key skills: Legal and Commercialisation, CRC Programme.

Ms Lightowlers is a founding partner of the boutique technology law firm, Francis Abourizk Lightowlers. She provides legal advice to a large number of Cooperative Research Centres (particularly in the health and mining sectors) and their participants. The advice canvasses structuring, corporate management, directors' duties, general commercial matters, R&D taxation, spin-off companies and venture capital funding in addition to intellectual property development, protection, management and commercialisation. Ms Lightowlers is a Vice Chancellor's Fellow at Deakin University and Chair of the University Legislation Committee and was awarded an honorary doctorate by the University in 2016. She is a member of both the Innovation and Investment Committee and the Law School Advisory Committee as well as being a board member of several public and private companies.

Mr Paul Scroope – FCPA, FCIMA, MOS, MAICD - Director (Independent) from 22 February 2017

Key skills: Finance, Risk Management

Mr Scroope is a senior finance executive with over 30 years' experience in the commercial and not-for-profit sectors including executive positions with the Red Cross Blood Service, the CSIRO, Fujitsu Australia and GBC Scientific Equipment. He is board member of Melbourne City Mission and of the Hester Hornbrook Academy and previous CFO and company secretary for Therapeutic Innovations Australia.

Mr Scroope is a Fellow of CPA Australia and of the Chartered Institute of Management Accountants UK. He is a Member of the Australian Institute of Company Directors and holds a degree in accounting and a Masters in Organisational Systems.

COMMITTEES

Audit and Risk Committee

The Audit and Risk Committee reviews and oversees the operation of systems of risk management and internal compliance and control, codes of ethics and conduct, and legal and regulatory compliance.

Mr Paul Scroope became Chair of the Committee from his Board appointment on 27 February 2018.

The Audit and Risk Committee met 3 times during the reporting period.

Table 1: CTx Audit and Risk Committee 2017-18

Name	Role	Key skills	Org

Mr Paul Scroope	Chair (from 27 February 2018)	Expertise in research, business development and licensing	Independent
Dr Tony Evans	CTx Board Chair	Managing collaborative research, industry drug development	Independent
A/Prof Nicholas Gough	To represent the Board, Chair from 4 May 2017	Expertise in research, business development and licensing	Independent
Ms Lisa Dube	Business Manager / Company Secretary (Invitee)	Financial Management	CTx
Mr Brett Carter	To represent CTx Management (Invitee)	CEO. Expertise in managing collaborative research and industry drug development	CTx

CTx Operational Group

The CTx Operational Group (COG) includes CTx management, Project Leaders, and key leaders of the platforms required for all phases of drug discovery, from Hit Discovery through Lead Generation to Candidate Generation.

The COG met 10 times during the reporting period.

Table 2: CTx Operational Group

Name	Role	Org
Dr Rhiannon Jones - Chair (from Feb 2018)	Manager, Operations	CTx
Dr Alexandra Stupple - Chair (until Aug 2017)	Acting Manager, Operations	CTx
Dr Warwick Tong	CEO / Advisor from April 2018	CTx
Dr Ian Street	CSO	CTx
Ms Lisa Dube (from Feb 2018)	Business Manager / Company Secretary	CTx
Mr Brett Carter	COO / CEO from April 2018	CTx
Ms Verity McDonald (until 31 Dec 2017)	Company Secretary / Business Manager	CTx
Dr Cathy Drinkwater (until 10 Nov 2017)	Director, Research and Education	CTx
Mr Michael Vovos (until 19 January 2018)	Contracts and IP Manager	CTx
Ms Rebecca Moss	Manager, Research Technologies	CTx
Dr Nicole Haynes	Immuno-Oncology	PMCC
Dr Greg Arndt	Drug Discovery Centre Manager	CCI
Dr Tom Peat	Protein Production & Structural Biology	CSIRO
Dr Vicky Avery	High Throughput Screening	GU
Prof Sue Charman	Drug Metabolism / Pharmacokinetics (DMPK)	MIPS
Dr Michelle Zajac	Director, Research & Alliance Management	CTx
Dr Brendon Monahan	Deputy CSO	WEHI
Dr Graeme Stevenson	Director, Computational Chemistry	CTx
Dr Mark Devlin	Director, Translational Biology / COO from June 2018	PMCC

GOVERNANCE

Name	Role	Org
Dr Paul Stupple	Director, Medicinal Chemistry	MIPS
Dr Hendrik Falk	Director, Discovery Technologies	WEHI

GOVERNANCE

Scientific Advisory Board

The CTx Scientific Advisory Board (SAB) oversees, consults and reviews all project activities.

The SAB reviews the progress of all CTx projects, and has extended meetings twice yearly in alignment with the mid-year Pipeline Review and at the end-of-year Retreat. Generally the meetings are held face-to-face.

Through the course of 2017-18 there was significant refreshment of the SAB. This is essential to ensure that new insights and experience is being brought to the projects and providing challenge and support to the CTx scientific researchers and management. In the reporting period the SAB showed their

Table 3: CTx Scientific Advisory Board 2017-18

Name	Role	Key skills	Org
Professor Grant McArthur (Chair)	Head, Translational Research & Head, Molecular Oncology	Translational and clinical oncology	VCCC
Professor Sue Charman	Professor, Pharmaceutics & Director, Centre for Drug Candidate Optimisation	Drug Metabolism and Pharmacokinetics	MIPS
Dr Donald Ogilvie	Head of Cancer Research UK Drug Discovery Unit, Paterson Institute	Biochemistry, cancer drug discovery and early clinical development	Independent
Professor Mark Dawson	Consultant Haematologist, Head, Translational Haematology Program and Head, Cancer Epigenetics Laboratory	Epigenetics, translational and clinical oncology	PMCC
Professor Simon Ward	Professor in Translational Drug Discovery, Director Medicines Discovery Institute Cardiff University	Medicinal chemistry, drug discovery	Independent
Professor Mike Waring	Chair of Medicinal Chemistry, School of Chemistry & Northern Institute for Cancer Research, Newcastle University	Medicinal chemistry, drug discovery	Independent

Education Advisory Committee

Members of the CTx Education Advisory Committee include representatives from the majority of CTx Research and University Participants.

The committee aids in coordination of the CTx Education Program and provides valuable advice on career development strategies and activities for undergraduate and post-graduate students, post-doctoral researchers, staff and end users.

The Education Committee met 3 times in 2017-18.

Table 4: CTx Education Advisory Committee 2017-18

Name	Org	Role
Dr Cathy Drinkwater (Chair)	CTx	Director, Research + Education
Dr Ian Street	CTx	CSO and advisor to the committee
Dr Amanda Philp	CCI	Careers and Strategy Manager
Ms Angela Hillsdon	GU	Administrative Assistant
Dr Caroline Owen	PMCC	Education & Communication Coordinator (Research)
Dr Colin Pouton	MIPS	Head of Pharmaceutical Biology
Dr Karen McConalogue	MIPS	Manager, Research Programs
Dr Keely Bumsted-O'Brien	WEHI	Scientific Education Officer
Ms Michelle Barrett	VCCC	Head, Education and Training Development
Dr Timothy Adams	CSIRO	Research Program Leader (Biosciences)

GOVERNANCE

KEY STAFF

During the reporting period, the following changes occurred in the CTx Management team:

- Dr Warwick Tong resigned as CEO on 2 April 2018
- Mr Brett Carter was promoted to CEO of CTx on 2 April 2018
- Dr Mark Devlin was promoted to COO on 1 June 2018
- Dr Cathy Drinkwater resigned as Projects, Alliance and Education Manager in November 2017
- Ms Verity McDonald resigned as Business Manager in January 2018
- Ms Lisa Dube appointed Business Manager and Company Secretary from February 2018
- Mr Michael Vovos resigned as Contracts and IP Manager in January 2018
- Dr Michelle Zajac appointed Director Research & Alliance Management in December 2017
- Dr Rhiannon Jones returned from parental leave in February 2018
- Dr Alexandra Stupple commenced parental leave in September 2017

Table 5: CTx Management 2017-18

Name	Org	CRC Position / Role	Time
Mr Brett Carter	CTx	CEO	100%
Dr Ian Street	CTx	CSO and RP1, RP3 Programme leader	90%
Dr Brendon Monahan	WEHI	Deputy CSO	100%
Ms Lisa Dube	CTx	Company Secretary / Business Manager	80%
Dr Mark Devlin (1 June 2018)	CTx	COO	100%
Dr Warwick Tong	CTx	Advisor	60%
Mr Mark Sullivan	MDL	Prgramme Leader, RP2	45%
Dr Michelle Zajac	CTx	Director, Research & Alliance Management	80%
Ms Rebecca Moss	CTx	Manager, Research Technologies	80%
Dr Rhiannon Jones	CTx	Manager, Operations	60%
Dr Alexandra Stupple	MIPS	Acting Manager, Operations	60%
Dr Paul Stupple	MIPS	Director, Medicinal Chemistry	100%
Dr Hendrik Falk	WEHI	Director, Discovery Technologies	100%
Dr Graeme Stevenson	CTx	Director, Computational Chemistry	100%

Participants

All CTx Participants are Essential. Bionomics Limited resigned from the CRC Partnership in July 2017. INC Research (Australia) changed its name to Syneos Health in January 2018

Table 6: Essential Participants in CTx

Participant Name	ABN or ACN	Organisation Type	Role
Cancer Council Victoria	61 426 486 715	Other	Research Provider
CTxONE (Cancer Therapeutics CRC Pty Ltd)	69 125 693 003	Industry / Private Sector / SME	End User
Cancer Trials Australia	21 105 748 605	Other	Research Provider
Children's Cancer Institute	41 072 279 559	Other	Research Provider
Clinical Genomics Pty Ltd	88 119 063 222	Industry/ Private Sector/ SME	End User & Research Provider
CSIRO	41 687 119 230	Australian Government	Research Provider
Griffith University	78 106 094 461	University	Research Provider
INCResearch Australia Pty Ltd (now Syneos Health)	67 080 425 387	Industry / Private Sector	Research Provider
Medicines Development Limited	79 116 977 523	Industry / Private Sector / SME	Research Provider
Melbourne Health	73 802 706 972	State Government (Victoria)	Research Provider
Monash University	12 377 614 012	University	Research Provider
National Cancer Centre Singapore	N/A	International Research Institute	Research Provider
Peter MacCallum Cancer Centre	42 100 504 883	Other/Research Institute	Research Provider
SYNthesis Research Ltd	28 159 666 314	Industry/ Private Sector/ SME	End User & Research Provider
Victorian Comprehensive Cancer Centre Limited	84 140 233 790	Other/ Research Institute	Research Provider
Walter & Eliza Hall Institute of Medical Research	12 004 251 423	Other/ Research Institute	Research Provider

Financial Management

FINANCIAL MANAGEMENT

CTx continued to deliver on its strategy to invest heavily in its cancer drug pipeline and use its strong cash position to maximise its portfolio. CTx invested $11.4M in R&D over the financial year contributing to an overall loss of $2.4M for 2017/18.

PARTICIPANT CONTRIBUTIONS

A variation was made to the Commonwealth Agreement to acknowledge the departure of Bionomics as a Participant at the beginning of the year. All projected cash contributions for 2017/18 were received from the Participants. Synthesis contributions were reduced in line with changes to project lead optimisation.

THIRD PARTY CASH

In addition to Participant contributions, CTx CRC Ltd received $840k as consortium lead to the Australian Library ID Consortium (ALIDC). This consortium of four institutes with the support of MTP Connect will develop a fit for purpose drug screening library over the three years. ALIDC consortium members include Children's Cancer Institute Australia, Griffith University, Walter & Eliza Hall Institute and UniQuest Pty Ltd.

INKIND REVIEW

In response to in-kind inconsistencies and in anticipation of an upcoming Participant distribution of commercial income, the Board requested an in-kind review to audit the CTx equity data and review the appropriateness of in-kind claims from 2015/16 to 2017/18. The review was initially conducted internally and then confirmed externally by an independent auditor. As a result of the review, some Participant in-kind claims were brought in-line with that budgeted in the Commonwealth Agreement and a few errors, mostly minor formula errors, were corrected. Overall, resultant equity figures did not shift significantly for any Participant.

CRC Future Plans and Transition Arrangements

RP1

The Board of CTx CRC Ltd has determined that the organisation will continue post Commonwealth Funding (1 July 2020) as an oncology drug discovery and development organisation. Plans are advancing to create the business entities and structures necessary to enable this transition. The successful commercialisation activities of CTx will provide the initial funds needed to underpin this transition and a number of the current research partners will be involved in what will be a non-CRC, CRC-like model. Further details of this plan will be presented to Participants at the CTx CRC Ltd AGM in November 2018.

A key feature of the Transition Plan is to create an organisation that can support and provide career paths and a future in drug development for the scientific and management team that has been developed over the 13 years of CRC funding. This team has shown their capability to translate excellent Australian research and produce highly valued commercial assets. The next step will be to progress assets further through the value creation lifecycle here in Australia by taking drugs into early clinical trials.

The beneficial interests of Participants from both the 2007 Funding Partnership and the 2014 Funding Partnership will be preserved via the two existing trusts (Trust 2007 and Trust 2014). IP of value that has not been commercialised at the end of the CRC funding period will be licensed to the new organisation and any future revenue streams from commercialisation activity will be directed to Participant Beneficiaries.

RP2 & RP3

Key outputs from RP3 will be preserved through completion of the transfer of control of the program to CCI and its partners in Zero Childhood Cancer. Key outputs from RP2 will be preserved in the published literature and some ongoing research interests that have been established.

Performance Review

The January 2018 review letter received from the CRC Program was very positive regarding the commercial success and the strong collaborations between participants and non-participant groups.

The letter specifically a requirement for adequate commentary on cash balances. Our new Business Manager has ensured that the quarterly reports contain this detail.

Other Activities

MTPCONNECT, THE MEDICAL TECHNOLOGIES AND PHARMACEUTICAL INDUSTRY GROWTH CENTRE

See ALIDC below.

ALID CONSORTIUM

This consortium, led by CTx and including UniQuest/Queensland Emory Drug Discovery Initiative (QEDDI), WEHI, CCI, and Griffith University/Compounds Australia, has established a national framework to provide Australian drug discovery organisations access to a comprehensive Hit ID platform that includes, a fit for purpose drug discovery library (up to 300,000 compounds), an ultra-high throughput screening facility, fragment based drug design capability, and a state of the art software platform for *in silic*o drug discovery. The consortium was funded through a MTPConnect grant of $1.1 million and Industry contributions of $1.38 million. The project to assemble the library and associated technology is scheduled to run from August 2017 until June 2019.

PRMT5I/MSD COLLABORATION

The collaboration with Merck, Sharp & Dohme (MSD, known as Merck & Co., Inc. in the USA and Canada) has continued through 2017-18. The collaboration is dynamic with changes occurring over the year in response to data generation and new scientific knowledge. The Haemoglobinopathies Research Collaboration has had significant change and has now been running for 36 months, The two collaborations are manged through monthly teleconferences between the team members, both CTX and local collaborators. Key researchers and management meet six-monthly face-to-face alternately in Boston and Melbourne form formal JRC and JAC meetings. The collaboration has developed a major symposium on immuno-oncology which will be held in Melbourne at the VCCC in the latter half of 2018. The speakers will include key leaders from Merck along with local reserachers and CTx staff.

The timing of first clinical trials in this project has been delayed by Merck until early 2019.

Glossary

AAADV	Accelerating Anti-Cancer Agent Development and Validation
AACR	American Association for Cancer Research
ALIDC	Australian Lead Identification Consortium
ALL	Acute Lymphoblastic Leukaemia
AML	Acute Myeloid Leukaemia
BCN	Breast Cancer Network
BioMedVic	Biomedical Research Victoria
BMP4	Bone Morphogenetic Protein 4
CCI	Children's Cancer Institute
CDCO	Centre for Drug Candidate Optimisation
CDA	Confidentiality Disclosure Agreement
CLA	Commercialisation Licence Agreement
COG	CTx Operational Group
COO	Chief Operating Officer
CRC	Cooperative Research Centre
CRCA	CRC Association
CRT	Cancer Research Technology Ltd
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CSO	Chief Scientific Officer
CTx	Cancer Therapeutics CRC
CTxONE	Cancer Therapeutics CRC Pty Ltd (Commercialisation Company)

GLOSSARY

CTx2	CTx CRC Ltd (Management Company and signatory to new Commonwealth Agreement)
CTxT	CTxT Pty Ltd (legal owner and trustee for intellectual property)
DKFZ	German Cancer Research Centre
DMPK	Drug Metabolism and Pharmacokinetics
DoV	Deed of Variation
ELN	Electronic Laboratory Notebook
EMP	Epithelial Mesenchymal Plasticity
FAK	Focal Adhesion Kinase
FDA	Food and Drug Administration (USA)
FTE	Full time equivalent
GSK	GlaxoSmithKline
GU	Griffith University
HBO1	Human acetylase binding to ORC1
IPMK	Inositol Polyphosphate Multikinase
IP	Intellectual Property
IT	Information Technology
MDL	Medicines Development Limited (Medicines Development for Global Health)
MHRA	Medicines and Healthcare products Regulatory Agency (UK)
MIPS	Monash Institute of Pharmaceutical Sciences
MLL	Mixed Lineage Leukaemia
MOZ	Monocytic leukaemia zinc finger protein

GLOSSARY

MRP	Multidrug resistant protein
MSD	Merck, Sharp & Dohme (known as Merck & Co., Inc. in the USA and Canada)
MTPConnect	The Medical Technologies and Pharmaceuticals Industry Growth Centre
MYCN	v-myc avian myelocytomatosis viral oncogene neuroblastoma derived homolog
MYST	Subfamily of Histone acetylases containing MOZ, Ybf2, Sas2 and Tip60
NCCS	National Cancer Centre of Singapore
NIH	National Institute of Health (USA)
ONJCRI	Olivia Newton-John Cancer Research Institute
PCT	Patent Cooperation Treaty
PMCC	Peter MacCallum Cancer Centre
PRISM	PReclSion Medicine for Paediatric Oncology Patients
PRMT	Protein arginine methyltransferase
QEDDI	Queensland Emory Drug Discovery Initiative
R&D	Research and Development
RMP	Risk Management Plan
SAB	Scientific Advisory Board
SME	Small to Medium Enterprise
STEMM	Science, Technology, Engineering, Maths and Medicine
STING	Stimulator of interferon genes
TGA	Therapeutic Goods Australia
Tip60	60 kilodalton Tat-interactive protein
UoM	University of Melbourne

GLOSSARY

VCCC	Victorian Comprehensive Cancer Centre
VEGFR	Vascular Endothelial Growth Factor Receptor
WDR5	WD Repeat Domain 5
WEHI	Walter and Eliza Hall Institute of Medical Research
ZCC	Zero Childhood Cancer

Publications and Presentations

Leaver D, Cleary B, Nuyen N, Chung M, Sheikh B, Falk H, Voss A, Thomas T, Baell J. Development and optimization of a selective MYST histone acetyltransferase inhibitor that induces cellular senescence. In: *Abstracts of Papers, 254th ACS National Meeting*. Washington DC, USA; 2017:MEDI-16.

Tsoli, M, Wadham, C, Pinese, M, Failes, T, Joshi, S, Mould, E, Yin, J, Gayevskiy, V, Kumar, A, Kaplan, W, Ekert, PG, Franshaw, L, Gifford, A, Weber, M, Rodriguez, M, Cohn, RJ, Arndt, GM, Tyrrell, V, Haber, M, Trahair, T, Marshall, GM, McDonald, K, Cowley, MJ, Ziegler, DS. Integration of genomics, high throughput drug screening, and personalized xenograft models as a novel precision medicine paradigm for high risk pediatric cancer. *Cancer Biol Ther*. 2018;19(1 Pt 3):1-10. doi:10.1080/15384047.2018.1491498

Ziegler DS, Wong M, Mayoh C, Kumar ATsoli M, Mould E, Tyrrell V, Khuong-Quang D, Pinese M, Gayevskiy V, Cohn RJ, Lau LMS, Reynolds M, Cox MC, Gifford A, Rodriguez M, Cowley MJ, Ekert PG, Marshall GM, Haber M. Brief Report: Potent clinical and radiological response to larotrectinib in TRK fusion-driven high-grade glioma. *Br J Cancer*. 2018. doi:10.1038/s41416-018-0251-2

STAFF ORAL PRESENTATIONS

Falk H, Translating Research into New Medicines, Canberra Symposium – on Cell Biology, Immunology, Cancer and Drug Discovery, 25 May 2018, Canberra, Australia

Arndt GM. ACRF Drug Discovery Centre. Progressing the Pipeline: Developing Therapeutics in Australia. 4th National Translational Research Capability Forum, December 2017, Melbourne, Australia

Mould E, Translating Clinical Research into Healthcare. Zero Childhood Cancer Program. Australasian Biospecimen Network Association, October 12, 2017

Mould E. The TARGET pilot study of a comprehensive precision medicine platform for children with high-risk cancer. EMBL Cancer Genomics conference, Heidelberg, November 5-8, 2017

Haber M. Zero Childhood Cancer Australian National Paediatric Precision Medicine Program. Innovative Therapies for Children with Cancer in Europe (ITCC) closed meeting, November 8-9, 2017

Tyrrell V. RP3 Paediatric Personalised Medicine Update. Cancer Therapeutics CRC annual scientific retreat, December 7, 2017

Tyrrell V. Zero Childhood Cancer. Accelerating translation of experimental oncology: Better matching drug to target. Royal College of Pathologists of Australasia (RCPA) Pathology Update annual conference, March 2-4 2018

Haber M. Zero Childhood Cancer National Personalised Medicine Program for children with high-risk cancer. 2nd Pediatric Precision Medicine Conference, Scottsdale, AZ, USA, March 4-7 2018

STAFF POSTER PRESENTATIONS

Arndt GM, Failes TW, Mariana A, Khoo PS, Joshi S, Revalde J, Chow S, Mercado K, Toscan C, Tsoli M, Kamili A, Xie A, Fletcher J, Ziegler D, Lock R, Marshall G, Norris M and Haber M. Drug discovery and development using the ACRF Drug Discovery Centre. 30th Lorne Cancer Conference 2018, Lorne, Australia

Failes TW, Chow S, Trahair T, Mould E, Fletcher J, Kamli A, Tsoli M, Ziegler D, Lock R, Xie A, Norris M, Haber M and Arndt GM. An in vitro drug sensitivity testing platform for identifying personalised drug treatments for high risk childhood cancer patients. 30th Lorne Cancer Conference 2018, Lorne, Australia

Lau L, Arndt GM, Barahona P, Byrne J, Cowley M, Ekert P, Failes T, Fletcher J, Gifford A, Haber M, Kamili A, Khuong-Quang DA, Kumar A, Lock R, Marshall G, Mayoh C, McCowage G, Mead S, Mould E, Norris M, Saletta F, Trahair T, Tsoli M, Tyrrell V, Wong M, Xie J, and Ziegler, D. Comprehensive precision medicine platform for children with high-risk cancer. 2nd Pediatric Precision Oncology Conference, 4-7 March 2018, Scottsdale, AZ, USA

Kamili A, Eden G, Xie, J, Mould E, Barahona P, Chow S, Failes TW, Gifford AJ, Cowley M, Ekert P, Mayoh C, Kumar A, Norris MD, Haber M, Tyrell V, Marshall G, Ziegler D, Lau LL, Arndt GM, Trahair TN, and Fletcher JI. Initial results from the Zero Childhood Cancer Pilot Feasibility Study for high-risk neuroblastoma patients. 2nd Pediatric Precision Oncology Conference, 4-7 March 2018, Scottsdale, AZ, USA

Wharby M. The TARGET pilot study initial results: A model for informing the PRISM Precision Medicine Trial in Paediatric Cancer. KConFab, Familial Aspects of Cancer: Research and Practice, August 29, 2017

Falk H, deSilva M, Connor T, Allan E, Lagiakos HR, Leaver DJ, Cleary BE, Nguyen N, Wang B, Chung M, Hermans S, Parker MW, Dolezal OD, Senzo NL, Parisot JP, Peat TS, Street IP, Monahan BJ, Baell JB, Voss AK, Thomas T. Discovery Platform for Selective MYST Lysine Acetyltransferase Inhibitors. Society for Laboratory Automation and Screening Conference (SLAS), 3-7 February 2018, San Diego, USA

Lau L. Comprehensive precision medicine platform for children with high-risk cancer. 2nd Pediatric Precision Medicine Conference, Scottsdale, AZ, USA, March 4-7 2018

Kamili A. Initial results from the Zero Childhood Cancer Pilot Feasibility Study for high-risk neuroblastoma patients. 2nd Pediatric Precision Medicine Conference, Scottsdale, AZ, USA, March 4-7 2018

Xie A. Development of a predictive clofarabine-based preclinical treatment regimen for the personalised treatment of acute lymphoblastic leukaemia. 2nd Pediatric Precision Medicine Conference, Scottsdale, AZ, USA, March 4-7 2018

Xie A. Development of a predictive clofarabine-based preclinical treatment regimen for the personalised treatment of acute lymphoblastic leukaemia. New Directions in Leukaemia Research Meeting, Brisbane. March 25-28 2018

Mould E. Zero Childhood Cancer: A comprehensive precision medicine platform for children with high-risk cancer. AACR Annual Meeting Chicago, USA. April 14-18 2018

Tsoli M. Integrated genomics – drug screening and personalised xenograft development approach to identify precision treatments for aggressive paediatric brain tumours. AACR Annual Meeting Chicago, USA. April 14-18 2018

Fletcher J. Initial results from the Zero Childhood Cancer Pilot Feasibility Study for high-risk neuroblastoma patients. Advances in Neuroblastoma Research (ANR) Conference, San Francisco, CA, USA. May 9-12 2018

Haber M. Zero Childhood Cancer: A comprehensive precision medicine platform for children with high-risk cancer. Advances in Neuroblastoma Research (ANR) Conference, San Francisco, CA, USA. May 9-12 2018

Tyrrell V and Ziegler D. Zero Childhood Cancer Program Update. ANZCHOG Conference, Sydney, Australia. June 14-16 2018

Vetsch J. The PRISM-IMPACT study: What are the hopes and expectations of families and health care professionals enrolling in a personalised medicine trial for high risk childhood cancers? European Society of Human Genetics. Milan, Spain. June 16-19 2018

STUDENT PUBLICATIONS

Zivanovic Bujak A and Dawson S-J. Circulating Tumor DNA Guides Prognosis in Metastatic Triple-Negative Breast Cancer. *J Clin Oncol*. 2018;36(6):523-524. doi:10.1200/JCO.2017.76.5461

Brouwer JM, Lan P, Cowan AD, **Bernardini JP**, Birkinshaw RW, van Delft MF, Sleebs BE, Robin AY, Wardak A, Tan IK, Reljic B, Lee EF, Fairlie WD, Call MJ, Smith BJ, Dewson G, Lessene G, Colman PM, Czabotar PE. Conversion of Bim-BH3 from Activator to Inhibitor of Bak through Structure-Based Design. *Mol Cell*. 2017;68(4):659-672. doi:10.1016/j.molcel.2017.11.001

Stafford CA, Lawlor KE, Heim VJ, Bankovacki A, **Bernardini JP**, Silke J, Nachbur U. IAPs Regulate Distinct Innate Immune Pathways to Co-ordinate the Response to Bacterial Peptidoglycans. *Cell Rep*. 2018;22(6):1496-1508. doi:10.1016/j.celrep.2018.01.024

Pleines I, Lebois M, Gangatirkar P, Au AE, Lane RM, Henley KJ, Kauppi M, Corbin J, Cannon P, **Bernardini J**, Alwis I, Jarman KE, Ellis S, Metcalf D, Jackson SP, Schoenwaelder SM, Kile BT, Josefsson EC. Intrinsic apoptosis circumvents the functional decline of circulating platelets but does not cause the storage lesion. *Blood*. 2018;132(2):197-209. doi:10.1182/blood-2017-11-816355

Kondrashova O, Nyugen M, Artin-Shield K, Harrell M, Kuiper M, **Ho G**, Barker H, Jasin M, Prakash R, Kass E, Sullivan M, Brunette G, Bernstein K, Coleman R, Floquet A, Friedlander M, Kichnadess G, O'Malley D, Oza A, Sun J, Robillard L, Maloney L, Bowtell D, Giordano H, Wakefield M, Kaufmann S, Simmons A, Harding D, Raponi M, McNeish I, Swisher E, Lin K, Scott C. Secondary Somatic Mutations Restoring RAD51C and RAD51D Associated with Acquired Resistance to the PARP Inhibitor Rucaparib in High-Grade Ovarian Carcinoma. *Cancer Discov*. 2017;7(9):984-998. doi:10.1158/2159-8290.CD-17-0419

Kondrashova O, Topp M, Nesic K, Lieschke E, **Ho G**, Harrell M, Zapparoli G, Hadley A, Holian R, Boehm E, Heong V, Sanij E, Pearson R, Krai J, Johnson N, McNally O, Ananda S, Alsop K, Hutt K, Kaufmann S, Lin K, Harding T, Traficante N, Australian Ovarian Cancer Study, DeFazio A, McNeish I, Bowtell D, Swisher E, Dobrovic A, Wakefield M, Scott C. Methylation of all BRCA1 copies predicts response to the PARP inhibitor rucaparib in ovarian carcinoma. *Nat Commun*. 2018;9(1):3970. doi:10.1038/s41467-018-05564-z

STUDENT PRESENTATIONS (ORAL)

Wang M, 2018 Digestive Disease Week, June 2018, Washington DC, United States

Wang M, 7th Australasian Vaccines & Immunotherapeutics Development meeting, May 2018, Melbourne, Australia

Wang M, The Immunology group of Victoria (IgV) annual meeting, September 2017, Melbourne, Australia

Behrenbruch C, Mechanisms of Resistance Following Neo-adjuvant Chemotherapy for Colorectal Liver Metastasis. FOLFOX, Cetuximab and the Combination, ACPGBI Annual Conference, July 8 2018, Birmingham, UK

Bernardini JP, Brouwer J, Czabotar P, Lazarou M, Dewson G. Parkin-mediated ubiquitination of the pro-apoptotic protein BAK. EMBO Conference on Ubiquitin and SUMO, September 2017, Cavtat, Croatia

Bernardini JP, Brouwer J, Czabotar P, Lazarou M, Dewson G. Parkin-mediated ubiquitination of the pro-apoptotic protein BAK. Keystone Symposium on Mitochondrial Biology and Autophagy, April 2018, Kyoto, Japan

Ho GY, Shield-Artin K, Murine fallopian tube organoids and human tumour and PDX organoids. ALOA Workshop on Organoid Biology, 20 December 2017, WEHI, Melbourne, Victoria

Ho GY, Kyran E, Lieschke E, Barber K, Kondrashova O, Vandenberg C, McNally O, Hamilton A, Barker H, Shield-Artin K, Drapkin R, Bowtell D, Wakefield M, Scott C. Eribulin as a novel treatment candidate for ovarian and fallopian tube derived carcinosarcoma (O/FTCS). Australia New Zealand Gynaecological Oncology Group (ANZGOG), Annual Scientific Meeting, 2018, 4-7 April 2018, Brisbane, Queensland, Australia

Ho GY, Kondrashova O, Vanderberg C, Kyran E, Lieschke E, Heong V, Milevskiy M, Papenfuss T, Weroha J, Dawson M, Bowtell D, Barker H, Wakefield M, Scott C. Targeting MYCN over-expression with BRD4 inhibition in the proliferative C5 subtype of high grade serous ovarian cancer (HGSOC). International Gynaecologic Cancer Society (IGCS), Biennial Meeting 2018, 14-16 September 2018, Kyoto, Japan

STUDENT PRESENTATIONS (POSTER)

AbuHammad S, Cullinane C, Bacolas Z, Martin C, Ward T, Kirby L, Kleinschmidt M, Ardley K, Devlin M, Stupple P, Falk H, Street I, Tong W, McArthur GA, Sheppard KE. Inhibition of the protein arginine methyltransferase PRMT5 overcomes resistance to CDK4-inhibition in melanoma. CTx Student Retreat, 6-8 December 2017, Queenscliff, Australia

Clapper E, Tonissen KF, Di Trapani G. Targeting the Thioredoxin System to Overcome Hypoxia-Induced and Acquired Imatinib Resistance in Chronic Myeloid Leukaemia. 30th Lorne Cancer Conference, Lorne, Victoria, Australia, February 8 – 10, 2018

Ding S, Best SA, Reljic B, Kersbergen A, Sutherland KD. Interrogating the effects of Keap1 inactivation on the metabolism of Kras-mutant lung adenocarcinomas. 30th Lorne Cancer Conference, Lorne, Victoria, Australia, February 8 – 10, 2018

Delconte R. Targeting Regulators of Natural Killer Homeostasis in Cancer Immunotherapy. CTx Student Retreat, 6-8 December 2017, Queenscliff, Australia.

Elliott MJ, Sakthianandeswaren A, Mouradov D, Sieber OM. Illuminating the role of caspase 3 deletions in human colorectal cancer. 30th Lorne Cancer Conference, Lorne, Victoria, Australia, February 8 – 10, 2018.

Fordham A. *In Vitro* and *in Vivo* Models for Pre-Clinical Evaluation of Novel Therapeutic Approaches for the treatment of Paediatric Inflammatory Myofibroblastic Tumour. Connective Tissue Oncology Society meeting, 8 – 11 November 2017, Maui, USA.

Fujihara KM, Phillips WA, Clemons NJ. Deciphering the mechanisms of suppression of SLC7A11 by wild type and mutant p53. 30th Lorne Cancer Conference, Lorne, Victoria, Australia, February 8 – 10, 2018.

Guerra G. Exploring the predictive power of the immune infiltrate in anal SCC. CTx Student Retreat, 6-8 December 2017, Queenscliff, Australia

Hilko D, Lovitt C, Avery V and Poulsen S. Design, Synthesis and Biological Evaluation of Chemical Probes for Visualising DNA Synthesis in Proliferating Cells. CTx Student Retreat, 6-8 December 2017, Queenscliff, Australia

Ho GY, Kyran E, Lieschke E, Barber K, Kondrashova O, Vandenberg C, McNally O, Hamilton A, Barker H, Shield-Artin K, Drapkin R, Bowtell D, Wakefield M and Scott C. Genetically engineered mouse and patient-derived xenograft pre-clinical models support microtubule-inhibition as a potential therapeutic strategy in the treatment of fallopian-tube/ovarian carcinosarcoma. CTx Student Retreat, 6-8 December 2017, Queenscliff, Australia

Jones C. New Trek Acute Lymphoblastic Leukaemia in Children. 30th Lorne Cancer Conference, Lorne, Victoria, Australia, February 8 – 10, 2018

Lee J, Schembri LS, Drinkwater N, Charman SA, McGown S and Scammells PJ. Discovery of Potent APN Inhibitors and New Approaches for their Synthesis. CTx Student Retreat, 6-8 December 2017, Queenscliff, Australia

Lelliott E, Cullinane C, Martin C, Walker R, Oliaro J, Haynes N, McArthur G and Sheppard K. A preclinical platform for evaluating targeted therapy and immunotherapy combinations in BRAFV600E melanoma. CTx Student Retreat, 6-8 December 2017, Queenscliff, Australia.

Maclachlan K. Novel Combination Therapies with the RNA Polymerase Inhibitor CX-5461 Significantly Improve Efficacy in Multiple Myeloma. American Society of Hematology Annual Meeting, 9 – 12 December 2017, Atlanta, USA

Narasimhan V. Organoid models to investigate novel treatment options for peritoneal metastases from colorectal cancer. PIPAC (Pressurised Intraperitoneal Aerosolised Chemotherapy) Symposium, 6-7 October 2017, Tubingen, Germany.

Parsons M. MACROD2 Haploinsufficiency Impairs PARP1 Activity and Promotes Aneuploidy and Growth of Intestinal Tumors. CTx Student Retreat, 6-8 December 2017, Queenscliff, Australia

Salmi T & Cox AG. C –Myc and Metabollic Reprogramming in Liver Cancer. 30th Lorne Cancer Conference, Lorne, Victoria, Australia, February 8 – 10, 2018.

Tang A. Development of Novel Prodrug Designs Activated by Nitroreductase. EFMC International Symposium on Advances in Synthetic and Medicinal Chemistry, 27 August - 1 September 2017, Vienna, Austria

Wang M. Investigating the T cell landscape in gastric cancer microenvironment. CTx Student Retreat, 6-8 December 2017, Queenscliff, Australia

Wang M. Investigating the T cell landscape in gastric cancer microenvironment. The Australian Society for Immunology Annual Meeting, November 2018, Brisbane, Australia

Wang S, Sze JH, Lu Y, Zhang Y, Woods K, Di Trapani G and Tonissen K. Investigating cellular responses in blood cancers when targeting the thioredoxin system with a gold compound. 30th Lorne Cancer Conference, Lorne, Victoria, Australia, February 8 – 10, 2018.

Wassiti H. Signals, twists, and turns: Towards novel designs of non-viral gene therapy. CTx Student Retreat, 6-8 December 2017, Queenscliff, Australia

Zivanovic A and Dawson S-J. Circulating Tumour DNA Analysis to Study Treatment Resistance in Cancer. CTx Student Retreat, 6-8 December 2017, Queenscliff, Australia

Zheng D. Hit-to-lead optimisation using REFiL workflow and fragment linking approach. Cambridge Healthtech Institute's Discovery on Target conference, 24-29 September 2017, Boston, USA.

Zhang Y, Clarke F, Di Trapani G, Tonissen K. Investigating thioredoxin dimer formation as a regulatory mechanism for its reductase activity. 30th Lorne Cancer Conference, Lorne, Victoria, Australia, February 8 – 10, 2018.

Ho GY, Kyran E, Lieschke E, Barber K, Kondrashova O, Vandenberg C, McNally O, Hamilton A, Barker H, Shield-Artin K, Drapkin R, Bowtell D, Wakefield M, Scott C. Genetically engineered mouse and patient-derived xenograft pre-clinical models support microtubule-inhibition as a therapeutic strategy in the treatment of fallopian-tube/ovarian carcinosarcoma. Centre for Cancer Biology, Cell Signaling in Cancer Medicine, 8th Barossa Meeting 2017, 14-17 November, 2017, Barossa Valley, Australia

Ho GY, Kyran E, Lieschke E, Barber K, Kondrashova O, Vandenberg C, McNally O, Hamilton A, Barker H, Shield-Artin K, Drapkin R, Bowtell D, Wakefield M, Scott C. Targeting microtubule dynamics with eribulin as a potential therapeutic strategy in the treatment of fallopian-tube/ovarian carcinosarcoma, Lorne Cancer Conference, 2018, 8-11 February 2018, Lorne, Victoria

Lara-Gonzalez LE, Loi S, Ferrari D, Papenfuss A and Goode D. Reconstructing the Evolutionary Paths of BIG 1-98, The 2017 San Antonio Breast Cancer Symposium, December 5-9 2017, San Antonio, TX, USA.