PROGRESS REPORT TO AUSTRALIAN LIONS CHILDHOOD CANCER RESEARCH FOUNDATION
DFMO PHASE I/II TRIAL IN RELAPSED/PRIMARY RESISTANT NEUROBLASTOMA
Managed by: Kids Cancer Centre
27th August 2014

Funding Initiative:	DFMO Phase I/II Trial in relapsed/primary resistant neuroblastoma
Purpose:	The goal with this Phase I study is to save the lives of children with relapsed neuroblastoma in the immediate future, by developing a new, more effective, and less toxic treatment.
Output:	**1.** Devise and determine the recommended Phase II dose of DFMO in combination with chemotherapy **2.** To evaluate the efficacy of combining DFMO with chemotherapy
Total amount donated:	$125,000
Total expended:	$125,000
Total period of funding:	2 years
Report period:	Year 1: January 2014 – August 2014
Overall report number:	#2
Study coordination site:	Sydney Children's Hospital, Randwick
Principal Investigator:	Dr David Ziegler
Other Investigator:	Prof. Glenn Marshall & Prof. Michelle Haber AM

Key outcomes achieved to date:

- Data safety review occurred and signed off
- U.S. Food and Drug Administration (FDA) approved the production of the drug Invited presentation to the American Association for Cancer Research (AACR) which was well received
- DFMO drug has been purchased and drug company has completed the manufacturing of enough of the product for the trial to proceed
- Manufacturing of DFMO concluded in December 2013
- Patient enrolments have commenced
- The study is now open in all North American NANT sites (n=15), as well as in Sydney Children's Hospital in Australia.
- Dr Michael Hogarty from Children's Hospital of Philadelphia is the study chair, with Dr David Ziegler of Sydney Children's Hospital and Dr Araz Marachelian of Children's Hospital of Los Angeles as study co-chairs.
- The trial is a multicentre project, with patients enrolled internationally, co-ordinated by the New Advances in Neuroblastoma Therapy (NANT) Consortium and supported by the US National Cancer Institute.

Progress Report:

- July 2014: Final approval received from the SCH ethics committee to allow us to begin recruitment
- Study information provided to all paediatric oncology centres in Australia.
- Enquiries about participation in the study are being received from around Australia. Eligibility assessments are taking place.
- Three patients have undergone pre-screening at SCH to assess eligibility for enrolment

- This is the first ever Phase I trial where the American NANT trials group has enrolled outside of the US
- 5 patients have been enrolled in the US
- 5 patients treated so far, a great result considering the trail has only been open for 7 months
- Second dose level has already been reached
- We expect on average 10 kids per year to sign up for the trial, made up of children from here and the US.

Long term outcomes to be achieved:

- Improve tumour control and decrease growth of tumours
- Ensure quality of life for all patients enrolled in the trial, and for patients with neuroblatoma
- Cure patients, with minimal toxicity
- Improve survival rates overall

Summary:

- The science discovery was by Professor Michelle Haber and Dr David Zeigler is leading the international trail which includes 15 USA hospitals and SCH.
- This project has been over 5 years in the making, with the first experimental work taking place 7 years ago. At many stage throughout these years, it seemed as though the hard work that had been done would fall over and it was only through the generosity of the ALCCRF that we are here today at such an exciting stage of the project, with the trial now open in Australia and the US and children receiving this cutting edge treatment.

This is one of the most exciting developments in the treatment of children with relapsed Neuroblastoma that we have been involved in. It is because of the funding we received from the ALCCRF that we were able to have the drug manufactured, which we hope will lead us that one step closer to 100% survival rates for children with cancer.

The parents, children and clinicians of current and future patients thank the ALCCRF for helping to make this vital research possible.

Professor Glenn Marshall
Director, Centre for Children's Cancer & Blood Disorders
Sydney Children's Hospital, Randwick

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