

2017/2018 Summer Studentship Project Application Form

Send to: Research Office, University of Otago Christchurch, PO Box 4345, Christchurch, by 5pm on 3 July 2017

Supervisor Information (First named supervisor will be the contact):

First **Supervisor's** Name and Title: Dr Sean MacPherson

Department – Pathology, UOC/Haematology, CDHB

First Supervisors Phone: 378 6481 / 021 946 905

First Supervisors Email: sean.macpherson@otago.ac.nz

First Supervisors Mailing Address: Pathology Department, UOC

Co-Supervisors Name and Title(s): Dr Peter Ganly, Dr Barry Hock, Dr Judy McKenzie

Research Category (Choose one category only – **to be used for judging the students' presentations**):

Clinical

Project Title (20 words MAXIMUM):

Retrospective analysis of outcomes in Christchurch myeloma patients following the introduction of new therapies.

Project Description:

Introduction: Multiple myeloma (MM) accounts for approximately 10% of all haematological malignancies and the incidence is increasing with the ageing of the NZ population. MM is incurable but treatment effectiveness and patient survival has improved significantly with the availability of novel agents. These novel agents (Thalidomide, Bortezomib and Lenalidomide) were initially used as second line treatments but are now used as part of both front line and second line therapies. Data on myeloma patient survival has been derived mainly from clinical trial data which is difficult to apply to a general hospital setting due to trial exclusion of patients with co-morbidities. In addition, many international studies introduce newly available types of novel agents which are not yet funded for use in NZ. Consequently, the impact that increased access to PHARMAC funded novel agents has had on the survival of MM patients in a NZ setting is unclear. The survival of Christchurch MM patients during a period in which novel agent usage was restricted to Thalidomide as second line treatment (2000-2010) was analysed and published as part of a previous summer student project. Those findings will provide the baseline data for the current study.

Aim: To determine the survival of MM patients who were diagnosed and received treatment in Christchurch Hospital following the funding of Bortezomib and Thalidomide as front line treatments (May, 2011). This data will then be compared with that obtained in the same department for patients diagnosed in the period 2000-2010.

Possible impact (in lay terms): This study will more accurately define the outcomes of Christchurch MM patients **treated with currently funded drugs. This "real life" information will allow both better assessment of the impact of these drugs and a better understanding of patient prognosis using these therapies.**

Method: This study will not involve the recruitment of participants as such, but rather a retrospective analysis of historical clinical data.

Multiple Myeloma patients referred to the Haematology Department at Christchurch Hospital from 2011-2017 will be identified using Department data bases. It is thought that between 250-300 patients with sufficient clinical data will be identified. The medical records of these patients will be accessed by the investigators in order to extract the following information

- (i) The basic clinical details of these patients such as age, sex
- (ii) The features of their MM such as diagnosis date, disease staging and prognostic data, dates of disease progression and treatment received.
- (iii) The date of last hospital contact and/or death
- (iii) Dates and types of second cancer occurrence (if any) and treatment side effects.

Data will be analysed (in collaboration with a biostatistician) to determine survival outcomes in relation to both treatment type and the presenting clinical and prognostic features. Data will also be compared with that obtained in a previous study of MM patients in the same department in order to determine what changes, if any, have occurred with respect to patient characteristics, treatment usage and survival.

It is intended that the findings of this study will be published.

The student would be exposed to aspects of clinical research involving leukaemia, cancer staging, data retrieval from patient records and data analysis.

Student Prerequisites (eg. Medical Student) if applicable:

Medical Student

Administration Details

1. Is ethical approval required? Yes

If Yes: please circle or tick one of the following:

- a) Applied for (provide application #)
- b) Approved (attach a copy of the letter of approval from the ethics committee or application #)
- c) To be done

2. Are you able to provide the funding for this project (ie. \$5,000 for the student, incidental expenses should be met from departmental or research funds) Yes

If Yes: Please provide name of the funder: The Bone Marrow Cancer Research Trust have agreed to fund this studentship.

If No: Please provide ideas of possible funding sources, including past funding agents and topics often associated with this research area, for the Research Office to contact.

If Yes: You will be sent a request for more information.

3. Medical Records or Decision Support accessed Yes

4. Health Connect South or other DHB records Yes

5. Signatures:

- I have read the 2017/2018 Summer Studentship programme handbook.
- I am prepared to supervise the project and will be available to the student during the studentship (including Christmas/New Year break if the student is working during this time).
- I agree to assume responsibility for the submission of the **student's reports to the Research Office** by the due date 29 January 2018.
- I agree that the project lay report may be available to local media for publicity purposes.

Signature of Project Supervisor(s):

Date:

- I understand that I am responsible for hosting the Summer Student chosen for this project and will meet any costs incurred. I agree that incidental expenses will be met from departmental or research funds.

Signature of Head of Department:
(Print Name)

Date:

Signature of Clinical Director: (if applicable)
(Print Name)

Date: