

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 Paul Chin

Department - UOC &/or CDHB (if applicable): UOC, Department of Medicine, Clinical Pharmacology

First Supervisors Phone: 033640640 extension 89671

First Supervisors Email: paul.chin@otago.ac.nz

First Supervisors Mailing Address: Department of Medicine, UOC, PO Box 4145, Christchurch 8140

Co-Supervisors Name and Title(s):

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

Clinical

Laboratory

Community

Project Title (20 words MAXIMUM):

How are dabigatran concentration monitoring and idarucizumab being used?

Project Description:

Introduction:

Dabigatran is an oral anticoagulant that is routinely used without feedback from coagulation tests or dabigatran concentrations. However, it is increasingly recognised that such feedback is useful in some circumstances e.g. patient presenting with clots or bleeds while taking dabigatran. The Canterbury District Health Board (CDHB) is one of the first health organisations in Australasia to provide a dabigatran concentration lab test to clinicians outside the research setting. How this test is being used, and the impact on patient management, is unclear in Canterbury.

The antidote to dabigatran, idarucizumab (\$4000/dose), has been subsidised by Pharmac since mid-2016 with criteria restricting its use. This is 5 years after Pharmac subsidised dabigatran. It is unclear how idarucizumab is being used in Canterbury.

Aim:

- 1) To describe the use of the dabigatran concentration lab test in the CDHB in terms of indication and subsequent decisions (e.g. change dabigatran dose, repeat test)
- 2) To evaluate the use of idarucizumab in the CDHB in terms of the Pharmac criteria and patient outcomes

Possible impact (in lay terms):

Information about the use of the dabigatran concentration lab test will inform how it is written into local guidance for doctors. It is also of substantial interest as few places in Australasia currently have this test. Describing the impact of this test on decisions made by doctors in Canterbury will provide a stimulus for the uptake of this test at other places, and potentially improve patient outcomes.

Information about idarucizumab use will inform whether local guidance for doctors needs to be revised. As it is a relatively new medicine, **there is little published information about its use in the 'real world'**.

Method:

Dabigatran concentration test data will be generated from Canterbury Health Laboratories databases for 2017. The health records of patients with dabigatran concentrations will be reviewed. Analysis will include descriptive statistics of indications for, and decisions following, the test.

Idarucizumab prescriptions will be extracted from MedChart™, the electronic prescribing and administration software that has been used at Christchurch Hospital since October 2016. The health records of patients with idarucizumab prescriptions will be reviewed. Analysis will include descriptive statistics of indications for use, appropriateness of use, and patient outcomes.

Microsoft Excel and GraphPad Prism will be used for 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) No

If Yes: Please provide name of the funder _____

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.

CDHB, UOC, CMRF _____

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):

Paul Chin

Date:

30/6/2017

- 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)
Paul Chin (acting)

Date:

30/6/2017