

## 2015/2016 Summer Studentship Project Application Form

Send to: Research Office, University of Otago Christchurch, PO Box 4345, Christchurch, by 5pm on **3 July 2015**

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

Supervisor's Name and Title(s): Bridget Robinson, Birgit Dijkstra, Val Davey

Department: Medicine UOC, ( Oncology and Surgery, CDHB)

Institution: UOC or CDHB

Phone: 0274677519

E-mail: [bridget.robinson@cdhb.health.nz](mailto:bridget.robinson@cdhb.health.nz)

Mailing Address: Oncology Service, Christchurch Hospital

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

**Clinical \***

**Laboratory**

**Community**

### Project Title (20 words MAXIMUM):

**Adjuvant endocrine therapy for early breast cancer**

Introduction: New Zealand cancer survival was reported to lag behind Australia, and for breast cancer, the gap widens with the number of years since diagnosis( Aye, Elwood, Stevanovic, NZ Med J 2014, 127: 1407). This has been interpreted to reflect similar rates of early diagnosis and mammographic screening, but probable differences in adjuvant chemotherapy and hormonal treatment. Lack of adherence to adjuvant endocrine therapy is common , with reports of rates of filling prescriptions of 80% or less for women who stated they were still taking the medication (Ziller et al, Ann Oncol, 2009, 20:431.) The Waikato Breast Cancer Register has reported >80% compliance in 70% of women at 1 years, falling to 59% by 4 years; lower compliance in Maori, and poorer outcome for poor adherence (Seneviratne et al, Breast, 2015, 24: 62.).

### Aims:

Establish rates of initiation of endocrine therapy for women with ER-positive cancers, related to estimated risk of recurrence and mortality.

Establish number of women continuing endocrine therapy at 12, 24, 36, 48 and 60 months, from medical records, and also from pharmacy prescription records where possible.

Review number assessed for bone mineral density (BMD) and/or commenced on bone protection therapy

### Methods:

All women diagnosed with breast cancer in the Christchurch region have been entered on the Christchurch Breast Cancer Patient Register (CBCR) since 2009. The data of all those with ER-positive tumours, with no distant metastases at diagnosis will be retrieved and supplemented by new data fields. Risk of recurrence will be determined using adjuvantonline or a similar risk calculator, and uptake of adjuvant hormonal therapy and chemotherapy assessed against level of risk. Any changes or interruptions in endocrine therapy, and reasons for this, whether temporary or permanent, will be recorded from medical records. The electronic community pharmacy record will be accessed for the patients accrued in the last 2-3 years, since records were available, to determine when prescriptions were filled. The earliest patients will have 5 years follow-up, but the most recent just one year. (This will also allow comparison of prescription presentation with patient statement of use of therapy.) Adherence at each 12 month anniversary will be determined, based on medical records and on pharmacy evidence. Disease status at last followup will be recorded.

There are more than 1000 women with ER-positive cancers on the CBCR to date. Data about BMD and commencement of bone protecting therapies will be recorded from the medical records.

The data will be analysed to address the aims, and will be developed into a publication. Statistical advice will be sourced from the Department of Medicine.

Ethical approval and Maori consultation will be completed prior to study commencement, and the student will be expected to familiarize themselves with the existing database, help develop the study-specific database, undertake a brief literature review to ensure all potentially relevant data is abstracted, search for the additional data required, and then undertake the analysis. This will be supported on a day-to-day basis by the data-manager of the Register.

**Student Prerequisites (eg. Medical Student) if applicable:**

**Medical student**