

**Women's Health Forum**  
**Monash University**  
**December 1<sup>st</sup> 2005**

---

**Breast Cancer**  
**A/Professor Robin Bell**  
**Women's Health Program**  
**Department of Medicine (CECS)**  
**Monash University**

**This presentation is restricted to a discussion of:**

1. The extent of the problem of breast cancer in Australia
  2. Some issues about "risk" – the WHI study
  3. After Breast Cancer study - Women's Health Program, Monash University
- Breast cancer is the commonest cancer (29.1%) and the most common cause of cancer death in Australian women (16.3%)
  - 11,791 new cases and 2,594 deaths in 2001
  - Lifetime risk 1 in 11 (cumulative rate ~ 9%)
  - 5 year survival 85% 1994-1997 and survival is improving

The number of new cases diagnosed each year increased in the mid-1990's at the time that screening mammography was introduced. The incidence seems to have stabilised again. Mortality from breast cancer is continuing to decline, probably partly due to improved treatment and partly due to the fact that with the introduction of screening mammography, breast cancer is diagnosed earlier than it was in the past, so the prognosis is better.

- On average, of 11 young women, in the course of their lifetimes, 1 will get breast cancer and the other 10 will not
- The woman who does develop BC has a >50% chance of being diagnosed after the age of 60
- She will have a >50% chance of dying of a cause other than her BC

previous breast cancer or DCIS (Ductal Carcinoma In-Situ), age and family history. However there are other risk factors related to hormones and these include factors such as: age at menarche, age at menopause, age at first pregnancy, lactation etc

- Women who have early **menarche** are at increased risk RR <12y = 1.3 compared with > 15y
- RR Age >30 at first birth = 1.9 compared with **first birth < 18y**
- Age at **menarche** and age at **first birth** together explain 50% of variation in BC risk seen between different countries
- Women who have a late **menopause** are at increased risk RR per extra 5 years =1.2

Use of exogenous hormones: combined oral hormone replacement therapy (HRT) The best evidence we have about this issue comes from the Women's Health Initiative study (published in JAMA July 2002)

- Randomized Controlled Trial of combined HRT v placebo
- 16,600 women aged 50 –79 years recruited 1993-1998
- Hazard ratio for Breast Cancer for women on HRT compared with controls after a mean follow-up of 5.2 years was 1.26

Within a group of 1000 women followed from birth, 18 women would be expected to develop breast cancer by the age of 50 years. This number will have increased to 27 women by the age of 55 years. If the 1000 women were exposed to combined oral HRT between the ages of 50 and 55 years and then ceased their HRT, this would result in approximately an extra 3 breast cancers by the age of 55 ie 30 cancers instead of 27. This extra risk is very similar to that experienced by women who go through menopause naturally at the age of 55 compared with women who go through menopause at the age of 50 years.

We are running a study called the After Breast Cancer study concentrating on factors that determine quality of life for women after the diagnosis and treatment of breast cancer. There is information about this study on our website at:

<http://www.afterbreastcancerstudy.org.au/> and  
<http://womenshealth.med.monash.edu.au/breast-cancer.html>