



# Welcome to the BCRC-WA

## June 2013 Newsletter

C/o - Suite 42  
146 Mounts Bay Road  
Perth, WA, 6000

### Prof. Arlene Chan

Director,  
Breast Clinical  
Trials Unit,

Vice-Chair,  
Breast Cancer  
Research Centre WA



BCRC-WA research update by  
Professor Arlene Chan

Breast cancer – understanding  
“hormones”, “hormone receptors”,  
“hormone treatment” and “endocrine  
treatment”.

First let me define some terms –  
**‘hormones’** are molecules which occur  
naturally in women and men and are  
responsible for distinguishing females  
(oestrogen and progesterone  
hormones) from men (testosterone or  
androgen hormones); **‘endocrine  
treatment’** refers to drugs which are  
used to treat breast cancer by blocking  
oestrogen-stimulating growth of breast  
cancer cells; **‘hormone treatment’** is a  
term which is sometimes used to mean  
the same as ‘endocrine treatment’, but  
can also be used in the context of ‘HRT  
or hormone replacement therapy’ which  
is not a treatment for breast cancer, but  
rather the administration of oestrogen-

like drugs to lessen unwanted  
symptoms of menopause (such as hot  
flushes and sweats, mood changes etc.).  
So for the sake of clarity, ‘endocrine  
treatment’ is the current preferred term  
when discussing drugs which treat  
breast cancer. It is also important to  
note that not all breast cancers are  
suitable for treatment with endocrine  
treatment. Only those cancers which  
have oestrogen (ER) or progesterone  
receptors (PR) – **“hormone receptors”** -  
on the cancer’s surface (see figure) will

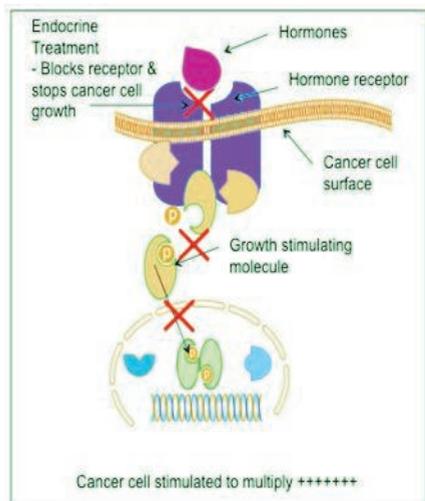


Diagram depicting Endocrine treatment as it blocks receptor and stops cancer cell growth

# Understanding hormones

## Article By Professor Arlene Chan

...Continued benefit. In medical terms, we refer to these cancers as “hormone receptor positive” breast cancers.

Many in the community are aware that breast cancer is a disease which affects women far more frequently than men, the latter accounting for <1% of cases. Although there are many factors which impact on the development of breast cancer, a primary reason for higher rates in women is the significantly higher levels of naturally-occurring female hormones, oestrogen and progesterone, in the setting of breast tissue which can be influenced by these hormones.

Although these hormones have an important role in the development of breast cancer as a whole, not all cancers which ultimately develop will have ER and PR on the cancer surface. A general rule of thumb is that only those women whose cancers which have some degree of ER and/or PR will benefit from endocrine treatment. It is of interest that >90% of breast cancers which develop in men are hormone receptor positive.

From my explanation thus far, it becomes clear that when a patient is diagnosed with a breast cancer, it is important to determine the cancer’s hormone receptor status as this will determine whether endocrine treatment should be given. At this point I will mention a few common misconceptions:

**A patient’s body level of oestrogen determines whether endocrine treatment is necessary or not.** This is

incorrect as it is the *cancer cell’s hormone receptor* that determines the need for endocrine treatment.

**As food can contain derivatives which are chemically similar to oestrogen, by omitting certain foods after a diagnosis of breast cancer can reduce the chances of relapse of breast cancer.** This is strictly incorrect, as no studies have shown that omitting foods such as those which contain *phytoestrogens*, after a woman has already developed a breast cancer, can influence her chances of developing a breast cancer recurrence.

It is important to separate this from the situation where studies have shown that different dietary intakes can influence the rates of *developing* breast cancer. Communities which have a high intake of phytoestrogens and plant lignans (e.g. flaxseed) appear to have lower rates of breast cancer. It is also important to understand that dietary impact on breast cancer is a complex situation as high fat intake, diet and lifestyles which lead to obesity (which is commonly associated with low levels of exercise) – can be associated with higher rates of breast cancer development.

The benefit from endocrine treatment can occur for both patients diagnosed with early or metastatic breast cancer. The general principles of how endocrine treatment is used in these two patient groups, side effects and treatment of side effects will be the subject of articles in coming newsletters.

# Exercise and cancer related fatigue during radiation therapy

Cancer related fatigue (CRF) is one of the most common and debilitating side effects of cancer treatment. It is experienced both during and after chemotherapy and radiation therapy for breast cancer. It has been estimated that CRF may affect 70-100% of patients having cancer treatment. This persistent tiredness can adversely affect quality of life

The exact cause of CRF has yet to be found however, factors thought to be important in the development and severity of the condition include negative physiological (i.e. muscle strength, endurance, cardiorespiratory fitness), haematologic (i.e. inflammatory response, immune function), psychological (i.e. anxiety, depression, distress), behavioural (sleep, appetite) and social (social interaction, supports).

A patient's natural instinct to rest when experiencing CRF may not be an effective strategy to combat the symptoms due to the further detrimental effects on musculoskeletal and physical functioning. In contrast, exercise may be more effective as it has a positive effect on most of the factors thought to be important in the development of CRF.

There is an increase in the published research literature showing that exercise is emerging as an effective strategy for managing CRF and has been shown NOT to exacerbate CRF. Many of the research trials however, have not studied CRF as

the main outcome measure but have included it with a number of other outcomes measured. This can lead to some difficulty showing a positive effect with small clinical trials. Despite this, the majority of research projects studying exercise (during and after cancer treatment) and CRF as an outcome measure have shown a positive effect of exercise.



Dr Yvonne Zissiadis

The majority of trials have studied exercise in relation to chemotherapy. There is very little research examining the use of exercise during radiation therapy. Walking programs during radiation therapy have been effective in mitigating CRF in prostate cancer patients.

In addition to the benefits shown with aerobic exercise during and after cancer therapy, resistance exercises are thought to further enhance the benefits of exercise by improving muscle strength and endurance. Further research is required to determine the most effective type and timing of exercise for the relief of CRF.

At Genesis Cancer Care (Perth Radiation Oncology), in collaboration with the Health and Wellness Institute at Edith Cowan University, we are

...Continued

# Exercise and cancer related fatigue during radiation therapy

...Continued currently running a research trial assessing the impact of exercise on CRF in patients having radiation treatment for breast cancer. We are incorporating resistance exercises in addition to aerobic exercise (all home based) into the treatment programme.

*About Perth Radiation Oncology:  
Perth Radiation Oncology is located in Wembley and is part of Genesis Care. Genesis Care provides high quality specialist care to patients with cancer as well as cardiovascular disease. Genesis*

*Cancer Care are the largest providers of Radiation Therapy services in WA, with consulting rooms and treatment facilities in Wembley, Royal Perth Hospital, Joondalup, Bunbury and the Fiona Stanley Hospital, Murdoch (from 2014).*



## Many thanks...

Breast Cancer Research Centre — WA would like to recognise the many contributors of donations.

Through these donations, Breast Cancer Research Centre—WA (BCRC-WA) provide educational sessions to those soon to undergo chemotherapy treatment for breast cancer.

Through patient feedback we have recently received comments;

'I felt quite anxious and worried on hearing that I have breast cancer. After the Chemo Information Educational Session, I felt more informed and reassured. It's nice to know that this educational service is here for people

who are soon to undergo chemotherapy.'

Breast Cancer Research Centre —WA also provide valuable research which further improves the treatment given to breast cancer patients, as well as improving conditions for the future.

If you would like to donate to Breast Cancer Research Centre—WA (BCRC-WA) please see our website: <http://bcrc-wa.com.au> or phone Kathy on 93212354.

Breast Cancer Research Centre—WA 'striving to improve outcomes for patients with breast cancer'.

# Facing cancer with hope

Catherine Regan's choice of the name Hope for her much-loved King Charles spaniel sums up her take on life—she has hope for the future.

Ms Regan (48) is fighting metastatic breast cancer, which means that her original cancer diagnosed in 2008 has spread to the spine, pelvis and lungs.

But thanks to a regular chemotherapy regime, healthy lifestyle, support network and positive outlook, she has defied predictions in 2011 that she had “eight weeks or a bit longer” to live.

Ms Regan's test results are good and she has joined PYNKS (Positive, Young, Nurturing, Kid/Family focussed, Strength Giving) a support and information group set up by Prof Arlene Chan at the Mount Hospital.

Though Ms Regan was initially unsure of joining, she has embraced its benefits, which include positive fellow members, information about research trials, health

and dietary requirements, and leisure activities such as craft and relaxation.

“It was really surprising the amount of people that were there,” she said of her first meeting in January.

“You don't realise how extensive the (cancer) is but, on the good side, you are not the only one in that place—lots of

people are in the same spot as you.

“There is so much (treatment options) out there and so much hope that if that (one type of treatment) doesn't work, something else will and that's really positive”.

Catherine's “fight for life” began five years ago when

she received a stage-three breast cancer diagnosis after finding a small indent under her arm.

After a mastectomy, reconstruction of her left breast, chemotherapy and radiotherapy, doctors gave her a clean bill of health. But in 2011, tests revealed secondary breast cancer and a grim

...Continued



Catherine Regan and well loved companion 'Hope'. Article and photo courtesy of Joondalup Times.

# Facing cancer with hope

...Continued prognosis. Ms Regan sought a second opinion, started regular half hour chemotherapy sessions, kept herself fit and healthy and embraced her specialist's positivity.

"I've seen my two daughters married and I'm looking forward to a cruise, to a holiday in Europe and to grandkids," she said.

"I'm looking ahead and keeping occupied".

"There are blips along the way such as when I ended up in hospital with dehydration a few weeks ago. But I don't want to be tagged as that woman with cancer who is going to die—I am the woman who will keep on living life.

"It's the fight of my life but life is good and I'm happy."

PYNKS, which meets every two months, is for younger women or the "young at heart" whose breast cancer has spread to other parts of the body.

## DETAILS

WHAT: PYNKS Support/information group

FOR: Younger women or those "young at heart" with secondary breast cancer.

WHERE: Mount Hospital, Perth

WHEN: Fourth Saturday of every second month, 9.30am

CONTACT: Kathy, 93212354 or email [Kathy@bcrc-wa.com.au](mailto:Kathy@bcrc-wa.com.au)



A special recognition to the Hudson's coffee shop who have generously donated catering and coffee's at out PYNKS meetings as well as other various BCRC-WA functions.

# Rocking horse fundraiser

A Canning Vale doctor constructed a wooden rocking horse that was recently raffled to raise money for breast cancer research.

The horse, built by Canning Vale Medical Centre general practitioner Colin Lau, was raffled for \$579.

Ying Xiao won the raffle and gave the horse to her young son, who was delighted with the gift.

Dr Colin Lau first made a rocking horse for his daughter when she was two years of age. Dr Lau had developed his woodworking skills from an early age and enjoyed putting his skills to use once again.

Dr Lau found the rocking horse was such a success that he now has another rocking horse in his practice for visiting children to enjoy.

For more information on how to make a donation, see our website <http://bcrc-wa.com.au> , email [Kathy@bcrc-wa.com.au](mailto:Kathy@bcrc-wa.com.au) or telephone 93212354.



Toddler Lucas Feng on the horse built by Dr Colin Lau  
News article extract courtesy of the Canning Community News.



Barbara Burden and friend Gale

We are delighted with the recipe given to us by Barbara Burden.

Please see Barbara's recipe 'Roman Style Lamb' featuring on page 8.

# Roman style lamb

## Ingredients:

- 4 Boneless lean lamb leg steaks
- 1 small red chilli
- 2 cloves garlic
- ½ teaspoon oil
- 1 teaspoon dried rosemary leaves
- ½ cup white wine
- 1 teaspoon cider vinegar
- 3 medium tomatoes
- 1 medium onion
- Chopped parsley
- Low-joule salad dressing
- 200g snow peas



Seed and chop finely with garlic. Coat large frying pan with oil and heat on high. Add steaks, Cook 2-3 mins each side till browned. Remove steaks and take pan from heat.

Put chilli and garlic into hot pan, stir in rosemary, wine and vinegar. Return to heat.

Bring to the boil. Reduce heat, return lamb steaks to pan, simmer gently 5-6 mins, turning often.

Put water on to boil for snow peas. Arrange sliced tomatoes and onion in overlapping circles on plate

Sprinkle with parsley and salad dressing. Add peas to boiling water; cook 3-4 mins, drain.

Serve steaks with the sauce, snow peas and tomato salad.