Principles of treating secondary breast cancer

Emma Pennery
Clinical Director
Not all (secondary) breast cancers are the same

considerable heterogeneity:

- rapidly progressing, metastasizes to multiple vital organs
- and/or
- indolent disease, slow progression alternating with long periods of stability
<table>
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<td>A day in the life (SM37)</td>
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<td>Secondary breast cancer in the bone (BCC30)</td>
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<td>Support for people living with secondary breast cancer (SM25)</td>
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Aims of treatment

• reducing growth of the cancer
• delaying or preventing further spread
• improving symptoms
• and quality of life
Selecting treatment is a balancing act

- Symptoms of disease
- Likelihood of success
- Side effects of treatment
- Side effects of treatment
Treating secondary breast

• What are the underlying principles?
• What determines which treatments are recommended?
Partial response
Progressive disease
Progressive disease?
Response, then progression
Stable disease is a good outcome
the patient & their biology

previous treatment

the cancer biology

the cancer anatomy
the patient and their biology

(Age)
Performance Status
Co-morbidities (e.g. anaemia, hypertension, heart disease, renal failure)
Pre or post menopause
Organ function (e.g. LFTs)
Choice
Hormone (ER, PgR) receptors
HER-2 receptors
No receptors (triple negative)
Rate of progression
Disease-free interval
(Type of cancer)

Re-biopsy?
HER2 discordance in 5–10% (8%)
ER (20%) or PR (33%) discordance in 5–30%
Criscitiello et al 2014,
Aurilio et al 2013, Curtit et al 2013
previous treatment

How long ago?
Cumulative toxicities
Drug resistance “Re-challenge”
<table>
<thead>
<tr>
<th>Site(s)</th>
<th>Extent/ size</th>
<th>Pattern</th>
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the cancer anatomy
TNBC, 1st site of metastases, bone less likely

52% v 23%
40% v 20%
18% v 2%
30% v 10%
23% v 47%
10% v 40%

If there’s a target, HIT IT!
# I have secondary breast cancer

Talk to others whose breast cancer has spread to another part of the body. Discuss the different treatment options available as well as specific medical issues facing those with a secondary diagnosis. Arrange meet ups and talk to others who understand how you feel.

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<td>End of life</td>
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**Related pages**
- Secondary breast cancer services and information
- Treating secondary breast cancer - types of therapy
- Making decisions: secondary breast cancer and you

**Unanswered threads**
- Symptoms of bone mets
- The Breast Cancer Question Time events
- GLASGOW - NEW evening Living with Secondary Breast Cancer service
- Living with Secondary Breast Cancer GLASGOW Overview Day - 15th April

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**Breast Cancer Care Helpline**

0808 800 6000

**Secondary live chat:**

every Tuesday, 8.30-9.30pm

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**Latest Posts**

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Symptoms of bone mets
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**Related pages**

Secondary breast cancer services and information
- Treating secondary breast cancer - types of therapy
- Making decisions: secondary breast cancer and you

**Unanswered threads**

A chance to have a voice!
- Talk Together - Monday to Friday 12.30 to 1.30pm
- Lung Mets and transfer of treatment??
- Meningiomas
  - hello

**Talk together**

A private space for you to talk to forum
Hormone Therapy – guiding principles...

- around two thirds of all breast cancers are hormone receptor positive (ER+) (60% ER+ pre menopausal, 80% ER+ post menopausal)
- the first treatment given in ER+ mbc unless life threatening visceral disease, rapid progression/very short disease free interval or multiple sites
- patients can have more than one type
- response to one drug partially predicts response to another (evaluate response every 2-4 months)
- systemic - treats whole body
- side effects.....
meta-analyses of RCTs of zoladex plus tamoxifen versus zoladex alone - benefits with a combination for first line in premenopausal, ER+ ABC
Faslodex binds to the ER, rapidly degrading it, resulting in loss of cellular ER.

SABCS 2014
• Phase II, FIRST (Fulvestrant fIrst-line Study comparing endocrine Treatments) trial
• IM fulvestrant on days 0, 14, 28, then every 28 days) with continuous anastrozole 1mg (orally daily) in postmenopausal women with ER+ mbc who had not received any prior endocrine therapy for advanced disease
• fulvestrant improved OS by nearly six months (54.1 months vs. 48.4 months respectively).
Chemotherapy – guiding principles...

- used in HR- disease or after progressing on hormone therapy
- visceral disease (less likely if bone is the only site)
- usually quicker response (possible tumour flare initially) but less duration
- more than one type (single drugs or combinations) (previously used drugs and how long ago)
- can be effective in treating symptoms
- systemic - treats whole body
- side effects... response rate versus toxicity
Chemotherapy – guiding principles...

- DFS < 12 months since tx for primary breast cancer implies resistance to that regime and influences choice of first-line chemotherapy in advanced disease.
- Tumour response rates are better if patients have previously received one or no prior chemotherapy but decline as they reach third line.
- Lack of response to first-line chemo associated with a much lower likelihood of subsequent response to second or third time chemotherapy.
- Duration and no. of regimes are tailored to the individual – continue to progression or unacceptable toxicity.
Some examples...

- Capecitabine (Xeloda)
- Docetaxel (Taxotere)
- Paclitaxel (Taxol)
- Abraxane
- Vinorelbine (Navelbine)
- Doxorubicin (Adriamycin)
- Carboplatin
- Cisplatin
- Gemcitabine (Gemzar)
- Eribulin (Halaven)
- Epirubicin (Pharmorubicin)
- Ixabepilone

Little compelling data that one chemotherapy regimen or agent is markedly superior to another
Combination vs. Single Drugs

- Higher response rate: Combination
- Less toxicity: Single drug

Rapid progression and rapid symptom control favor combination therapy, while quality of life is better with a single drug.
Radiotherapy – guiding principles...

- symptom relief and/or ‘shrinking’ the disease
- short duration of treatment (single dose or given over a few days)
- benefits seen quite quickly
- local treatment
- there may be a pain ‘flare’ initially
- greater precision with stereotactic radiotherapy
- side effects... depend on method, area being treated and what’s near the target area
Bisphosphonates – guiding principles...

- used for secondary breast cancer in the bone
- reduce bone destruction
- effective at relieving pain
- reduce the risk of SREs
- several different drugs (some oral and some intravenous)
- side effects...
Some examples

- Sodium clodronate (Bonefos) - oral
- Disodium pamidronate (Aredia) - intravenous
- Ibandronic acid/ibandronate (Bondronate) - intravenous & oral
- Zoledronic acid (Zometa) - intravenous
- Denosumab (Xgeva), a targeted therapy for the bones – subcutaneous
Targeted (biological) therapies – guiding principles...

- mainly for people with HER-2 positive breast cancer
- drugs work differently but all block ways that cancer cells divide and grow
- systemic - treats whole body
- side effects...
Some examples

• Trastuzumab (Herceptin)
• Pertuzumab (Perjeta) CDF
• T-DM1 (Kadcyla) CDF
• Everolimus (Afinitor) CDF
• Bevacizumab (Avastin) CDF
• Lapatinib (Tyverb) (de-listed)

• Denosumab (Xgeva) NICE
Surgery – guiding principles...

- not often used (not shown to improve survival)
- may be considered for small, isolated, ‘easy to reach’ areas of secondary breast cancer (‘buys time’ without systemic effects)
- or as supportive care such as fixing bones
- potential complications..
Other treatments

• Novel
• Limited access
• Not NHS available

• Stereotactic radiosurgery
• Radiofrequency/microwave ablation
Tumour Markers (‘liquid biopsies’) 

- substances found in blood, urine, or in the tumour
- produced by the tumour or the body in response to cancer
- may help plan and monitor treatment
- used with other medical tests

- not reliable in isolation, shouldn’t be used alone to initiate a change in treatment
- may be elevated for lots of other reasons other than cancer or the cancer is growing
- results may not be consistent over time
- not yet found to improve outcomes
- anxiety from results and further tests
- cost?
analyses of circulating tumour cells (CTCs) or plasma DNA - a promising biomarker?

increased CTC numbers (five or more per 7.5 ml of whole blood), in patients with mbc associated with a worse prognosis

but substantial numbers of patients have low CTC counts

circulating plasma DNA (released by tumour cells) is found in 90% of patients; and a high burden correlates with a worse prognosis and changes in tumour burden

Cristofanilli et al JCO 2005

Rack et al JNCI 2014
Some examples

- oestrogen receptor (ER) and progesterone receptor (PR)
- human epidermal growth factor receptor 2 (HER2)
- cancer antigen 15-3 (CA 15-3) cancer antigen 27.29 (CA 27.29) cancer antigen 125 (CA 125)
- carcinoembryonic antigen (CEA)
• Pain relief (analgesics)
• Anti-sickness (anti-emetics)
• Antibiotics
• Antifungals
• Anti-epileptics
• Steroids
• Anti-anxiolytics and anti-depressants
• Stents
Live Chat

We know that sometimes it can be difficult to talk with someone face-to-face or over the phone about breast cancer. Live Chat is a private chat room where you can talk to others in a similar situation about the challenges you’re facing.

All our Live Chat sessions are overseen by an experienced moderator and a specialist nurse who are on hand to answer any questions you may have.

**When can I use Live Chat?**

Once you’ve registered, join us for the Live Chat session that is most suitable for you. You can even use Live Chat on your mobile phone or tablet. We run two Live Chat sessions each week.

**Secondary breast cancer Live Chat:** Join us every **Tuesday 8.30-9.30pm**. This session is only open to people with a diagnosis of secondary breast cancer, which is when the cancer has spread to another part of the body.

**The General Live chat service is currently suspended whilst being under review.** In the meantime, we will be consulting with both users and staff members as part of the review process to ensure that any service we provide meets the requirements and needs of our users. If you have any questions in relation to this, please contact the Forum team at Moderator@breastcancercare.org.uk

If you don’t have a breast cancer diagnosis but are worried about an upcoming appointment with your doctor or a specialist clinic, please call our helpline or use our forums for support.

**How do I use Live Chat?**

To use Live Chat you’ll need to register** with us first.

- Complete our registration form to set your username and password for Live
And many other issues….

- Making decisions
- Symptoms (pain, fatigue, insomnia, menopausal, disease related)
- Navigating the system
- Employment
- Finances
- Travel
- Childcare & talking with children
- Access to drugs…
#hiddeneffects

PAIN

A diagnosis of secondary breast cancer means that the cancer can be treated but it can't be cured. This year for Secondary Breast Cancer Awareness Day on 13 October we're highlighting the #hiddeneffects of pain for people living with secondary breast cancer.

90%

of people living with secondary breast cancer said they'd been in pain because of their cancer during the past month.

78%

said their pain had stopped them doing everyday activities such as their job, childcare, hobbies, socialising, housework.

29%

of people living with secondary breast cancer had never reported their pain to their doctor or nurse.

41%

had never been offered a referral to a palliative care team.

28%

hadn't asked for a referral to a palliative care team or had declined one when offered. Lack of awareness of and stigma about palliative care services might be responsible.

70%

of people first thought palliative care was only to be used at the very end of life.

Sign and share our petition to make secondary breast cancer a priority

www.breastcancercare.org.uk/painpetition
Understanding NICE guidance
Information for people who use NHS services

Advanced breast cancer

This booklet is about the care and treatment of patients with advanced breast cancer in the NHS in England and Wales. It explains guidance (advice) from NICE (the National Institute for Health and Clinical Excellence). It is written for patients with advanced breast cancer but it may also be useful for their families, carers or for anyone with an interest in the condition.

The booklet aims to help you understand the care and treatment options that should be available in the NHS. It describes what NICE has said about the care you should be offered and what this means for you. It does not explain advanced breast cancer or its treatment in detail, neither does it describe every aspect of diagnosis, treatment and care. Your specialist and your healthcare team should discuss these with you. The organisations listed on page 15 can give you, your family and carers general information about advanced breast cancer. There are examples of questions you could ask throughout this booklet to help you.

Information about NICE clinical guideline 81
Issue date: February 2009
Dear Colleagues and members of the breast cancer global community,

The International Consensus Conference for Advanced Breast Cancer (ABC) has established itself as a major international breast cancer conference. Its primary aim is the development of international consensus guidelines for the management of ABC patients. More...

ABC1 Consensus guidelines
ABC2 Consensus guidelines
Clinical Trials
Fear and uncertainty

Appropriate psycho-social, and supportive care from diagnosis of secondary breast cancer diagnosis
(Advanced breast cancer 1\textsuperscript{st} consensus statement 2012)

Assess and re-assess individual preference for level and type of information and offer consistent and relevant information and opportunities to ask questions
(Advanced breast cancer clinical guideline NICE 2009)
Living with Secondary Breast Cancer

Living with Secondary Breast Cancer has been designed to give you the opportunity to meet other people living with a secondary diagnosis and get relevant information and support.

In each area where Living with Secondary Breast Cancer runs there are regular (usually monthly) meet-ups where you can chat and share experiences with others with a secondary diagnosis.

You’ll be able to talk openly with people who understand what it means to live with secondary breast cancer. It’s also a unique opportunity to increase your knowledge as we run longer sessions with guest expert speakers every other month.

Topics include pain management, fatigue, benefits, and side effects sessions— we also welcome suggestions for topics you would like to cover.

You can attend as few or as many sessions as you like. Refreshments are provided, including lunch at longer day-time sessions. All sessions are facilitated by a counsellor and questions and discussions are welcome.

Once a year we run an ‘overview of secondary breast cancer’ day. This provides an update on available treatments, information on fatigue, details of additional support and the chance to participate in a relaxation session.
Times and locations

**Birmingham**
11am third Tuesday of each month

**Bristol**
11am second Wednesday of each month

**Cardiff**
11am third Friday of each month

**Derby**
11am first Monday of each month (from May onwards)

**Edinburgh**
6pm first Monday of each month

**Forth Valley**
11am second Wednesday of each month

**Glasgow**
11am on the third Wednesday of each month

**Halifax/Huddersfield**
11 am on the second Wednesday of each month

**Lanarkshire**
11 am on the last Wednesday of each month

**Leeds**
11am first Friday of each month

**Liverpool**
11am fourth Tuesday of each month

**Llandudno**
THE END

thank you for listening

NO, I HAVEN'T HAD MY COFFEE YET...

www.breastcancercare.org.uk
Free confidential Helpline 0808 800 6000