# Management of Bone Health In Patients on Adjuvant Aromatase Inhibitors

**Descriptor:**

This audit will assess the management of bone health in women with early breast cancer commenced on aromatase inhibitors. The guidelines published by the UK expert Group will serve as standard against which performance is measured.

**Background:**

Breast cancer is the most common malignant disease in women, with an annual incidence of 40,000 cases in the UK. Oestrogen receptor positive breast cancer (65% of breast cancers) can be treated with adjuvant endocrine therapy. Aromatase inhibitors (AI’s) have been show to increase disease-free survival and time of recurrence in breast cancer compared with tamoxifen [1-2]. AI’s prevent the conversion of androgens to oestrogens, thus reducing the circulating levels of oestrogen in postmenopausal women [3]. This leads to an increased bone turnover, reduced bone mineral density (BMD) and increased risk of fracture in postmenopausal women [4-6].Several guidelines exist for management of AI induced bone loss one of which is the guidelines published by the UK Expert Group [1].

## The Cycle

**The standard:**

All patients commenced on adjuvant endocrine therapy with aromatase inhibitors should have a baseline assessment of bone density. All breast units should have a protocol for management of bone health in women on adjuvant aromatase inhibitors.

**Target:**

• 100% of patients should have baseline DXA scan. If this not done, reason should be stated in patient notes

• 100% should be informed of results

• 100% should be commenced on appropriate therapy based on departmental protocol

• Follow up DXA scan should happen in appropriate patients

## Assess local practice

**Indicators:**

• Proportion of patients commenced on aromatase inhibitors for early breast cancer

• Proportion of patients commenced on A.I who had a baseline DXA scan

• Proportion of patients informed of results

• Proportion of patients commenced on treatment as per protocol

• Proportion who had follow up DXA scan and results

**Data items to be collected:**

• Patient demographics including menopausal status

• Hormone receptor status of tumour

• Adjuvant treatment initiated

• Type of endocrine therapy

• Baseline DXA scan results

• Record that patient has been informed of results

• Treatment recommended

• Repeat DXA scan results

**Suggested number:**

All patients commenced on adjuvant AI in a breast unit over a one year period.

**Suggestions for change if target not met:**

• Identify obstacles in implementing the pathway

• May require review of follow up policy

• Work closely with primary care

**Resources:**

• Access to patient records and results

• Personnel to collect and analyse data

• Time

• Access to computer where data can be stored safely

**References:**

1. Guidance for the Management of Breast Cancer Treatment-Induced Bone Loss. A consensus position statement from a UK Expert Group. An abridged version of this paper was published in Cancer Treatment Reviews and is reproduced here with permission from Elsevier Ltd. Reid DM, Doughty J, Eastell R, Heys SD, Howell A, McCloskey EV, Powles T, Selby P, Coleman RE. Guidance for the management of breast cancer treatment-induced bone loss: a consensus position statement from a UK Expert Group. Cancer Treat Rev 2008;34:S1–S18

**Editor's comments:**

A simple audit of adherence to national guidance for the management of bone health in women with breast cancer taking AIs.

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