NHS
North West Coast
Strategic Clinical Networks

Chemotherapy Protocol

Drug Regimen
Zoledronic acid (for adjuvant breast)

Indications for use
For use in adjuvant breast cancer in postmenopausal women or premenopausal women also treated with a GNRH analogue
For patients with sufficient risk of relapse to benefit from this adjuvant treatment (consider in all node positive, ER negative and /or HER2 positive as well as high risk ER positive)

Regimen
Zoledronic acid 4mg in 100ml 0.9% sodium chloride over 15 minutes

The zoledronic acid can either be started alongside chemotherapy or start after chemotherapy (or when chemotherapy is not being given)

Regime 1 (started alongside chemotherapy)
3 doses given 6 weekly during chemotherapy and thereafter 6 monthly for 3 years (at 6,12,18,24,30 and 36 months)

Regime 2 (given after chemotherapy or without chemotherapy)
Given 6 monthly for 3 years (at 0,6,12,18,24,30 and 36 months)

Investigations prior to initiating treatment
All patients should sign written consent for this treatment
Patients should have a dental check prior to commencing treatment
U&Es, Calcium – within 3 weeks prior to treatment commencing

Investigations and consultations prior to each cycle
U&Es, calcium – within 2 weeks prior to treatment
Review as to whether any dental problems
Will not routinely see a doctor prior to treatment – referral to prescribing consultant if any problems with the blood tests/ dental concerns

Acceptable levels for treatment to proceed (If outside these limits contact consultant)
CrCl >60ml/min
Calcium >2.15
Any concern re dentition – withhold treatment and discuss with prescribing oncologist

Side effects
Flu like symptoms
Palpitations (rare)
Sore eyes (rare)
Hypocalcaemia
Renal impairment
Osteonecrosis of the jaw
Osteonecrosis of auditory canal (very rare)
Stress fracture of thigh bone (very rare)

Dose modification criteria

Dose reductions for impaired renal function:

Baseline CrCl (ml/min)	Zoledronic Acid recommended dose
>60	4.0mg
50-60	3.5mg
40-49	3.3mg
30-39	3.0mg

Not recommended if CrCl is <30ml/min

Specific information on administration

All patients will receive a calcium and vitamin D supplement for the first 4 weeks after each zoledronic acid dose

Clinician to assess that patient's diet is otherwise sufficiently high in calcium

Patients are recommended to have over the counter Vitamin D supplement for the remainder of the time if vitamin D levels are low.

This protocol has been written by Dr Sarah Moon, Medical Oncologist

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