



BISPHOSPHONATE LENGTH OF TREATMENT GUIDELINES

The need for continued bisphosphonate treatment should be reviewed regularly due to concerns over the adverse effects associated with long-term treatment (e.g. atypical femoral fractures).

Check patient adherence to oral therapy. Monitor renal function, calcium and vitamin D levels every 3 months. However GPs may use their discretion regarding frequency of monitoring as a patient's condition changes. Where possible, correct any abnormalities or refer to Bone Health Clinic. Perform baseline DXA scan and consider stopping treatment after:
• 5 years for oral bisphosphonate
• 3 years for intravenous zoledronic acid

Assess fracture risk (clinical risk factors for osteoporosis (such as calcium and vitamin D levels, exercise, smoking and alcohol consumption), FRAX and DXA scan results) and consider either continuing treatment or a bisphosphonate 'holiday' (see below) based on whether there is a high or low fracture risk

HIGH RISK patients, e.g. those with:
• Post treatment T-score ≤ -2.5 with history of fragility fractures
• History of hip/vertebral or multiple fragility fractures
Continuing oral glucocorticoid therapy (equivalent to ≥7.5mg/day prednisolone)
• Continuing high risk (frailty, frequent falls, age ≥75)

LOW RISK patients, e.g. those with:
• Post treatment T-score > -2.5
• No history of hip / vertebral / or multiple fragility fractures
• No fracture during therapy
• Age <75 years
• Stable or improved BMD

➤ Continue treatment for further 5 years (3 for zoledronic acid)
➤ Monitor for proximal leg pains (sub-trochanteric stress fractures) regularly X-ray or refer to Rheumatology/ Orthopaedics/ Bone Health Clinic as appropriate)
➤ Review oral health/need for dental work at outset

CONSIDER BISPHOSPHONATE 'HOLIDAY' (i.e. a break in treatment for a defined period of time)
➤ For 1-2 years if patient taking risedronate;
➤ For 2-3 years if patient taking alendronate;
➤ For 3 years if patient on zoledronic acid;
➤ Patients can continue calcium and vitamin-D
➤ Re-assess fracture risk after a new fracture or after 2 years if no new fracture occurs

Re-assess (review risk factors and perform DXA scan to determine if risk remains high or low and then proceed as above)

FOR PATIENTS WHO HAVE A FRACTURE WHILST ON TREATMENT
• If the fracture is during the first 2 years of treatment:
o check adherence
o assess if risk is high or low and treat accordingly
o if high risk refer to Bone Health clinic for consideration of alternative treatment, e.g. denosumab
• If the fracture is during year 3-5 of treatment or if there are multiple fragility fractures:
o check adherence
o refer for DXA scan

Key

- BMD = Bone mineral density
DXA/DEXA = Dual energy X-ray absorptiometry
FRAX = Fracture risk assessment tool