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**BISPHOSPHONATES IN THE PREVENTION AND TREATMENT OF
OSTEOPOROSIS**

Abstract

Bisphosphonates (BP) are most frequently used in the prevention and treatment of osteoporosis. Their main activity on bone is the inhibition of bone resorption. Histological assessments showed no adverse effects on bone. Bone formed during BP treatment is of normal quality. Concomitant use with HRT is not contraindicated. BP increase bone mass reduce bone turnover, reduce vertebral fractures, reduce non-vertebral fractures (including hip) and improve quality of life. Some adverse events especially upper gastrointestinal disorders such as dysphagia, esophagitis, and esophageal or gastric ulcer are possible and dosing is not always patient friendly. Contraindications for use of BP are hypocalcaemia, known hypersensitivity to any component of BP and inability to stand or sit upright for at least 30 minutes. BP is not recommended for use in patients with severe renal impairment (creatinine clearance <30ml/min). The daily dosing with several bisphosphonates has been shown to reduce the risk of fractures. Once weekly dosing is to be equivalent to daily dosing. Intravenous dosing of a potent bisphosphonate with high affinity for bone has recently shown promise.