

Clinical Situation		Suggested Dose	Preparations	Comments
Deficiency	Osteomalacia Or Vitamin D <25nmol/L	50,000 units coleciferol weekly for 6 weeks, followed by 800-2000 units/day maintenance	Stexerol D3 [®] (coleciferol 25,000 units) tablets, 2 tablets weekly for 6 weeks followed by Stexerol D3 [®] (coleciferol 1000 unit) tablets, 1 tablet daily. Stexerol D3 [®] 25 000unit tablets can be used as 1 tablet per month as an alternative maintenance regimen in patients with good compliance. Intramuscular loading dose may also be considered (see below)	<ul style="list-style-type: none"> Assess serum calcium concentration 4 weeks after administration of last loading dose. In patients unable to swallow tablets or have poor absorption then InVita D3[®] (50,000 units/ml oral solution) is a suitable second line alternative. The loading dose is 1 ampoule weekly for 6-8 weeks followed by maintenance dose of 1 ampoule per month. Osteomalacia may be diagnosed in the presence of bone pain, proximal muscle weakness, low vitamin D, raised PTH (not routinely measured in this condition) and ALP. Serum calcium is not always low. A minimum of 1 year's treatment will be required. After 12 months many patients can revert to Scottish Government guidance, patients judged by a clinician to be at very high risk will need to continue with higher dose vitamin D. If patients are asymptomatic, and no anti-resorptive treatment is planned, a loading dose may not be necessary.
Deficiency	Only use in malabsorption, intolerance to oral therapy or for poor compliance	300 000 units intra muscular injection monthly for 3 months, then annually	Ergocalciferol 300 000units/ml injection OR Coleciferol 300 000units/ml injection (unlicensed, available from eg IDIS world medicines)	<ul style="list-style-type: none"> Note: Ergocalciferol is the licensed preparation. However, if supplies cannot be obtained, coleciferol injection may be used, and has been approved for this indication by the ADTC. Serum calcium concentration should be checked 4 weeks after the 3 loading doses.
Insufficiency	Vitamin D 25- 50 nmol/L	1000-2000units/day	Over the counter preparations should be used where available. Otherwise, Stexerol D3 [®] (coleciferol 1000 unit) tablets, 1 tablet daily	<ul style="list-style-type: none"> 1000 – 2000 units per day for 1 year, then revert to Scottish Government guidance http://www.gov.scot/Topics/Health/Healthy-Living/Food-Health/vitaminD
Other	Fracture/ Osteoporosis	A combined calcium & vitamin D preparation should be used.	See Joint Formulary section 9.6.4	<ul style="list-style-type: none"> Although serum calcium must be checked before starting treatment, there is no need to measure vitamin D. Serum calcium should be rechecked annually. For primary prevention of fractures see ADTC 143. For secondary prevention see ADTC 98