Vitamin D and Bone Health: A Practical Clinical Guideline for Patient Management

National Osteoporosis Society

The quick guide *(for use in conjunction with full guideline www.nos.org.uk/professionals/publications)*

TEST

- Patients with diseases with outcomes that may be improved with vitamin D treatment e.g. confirmed osteomalacia, osteoporosis
- Patients with symptoms that could be attributed to vitamin D deficiency e.g. suspected osteomalacia, chronic widespread pain
- Before starting patients on a potent antiresorptive agent

INTERPRET

25OH vitamin D (nmol/L)

>50

Maintain vitamin D through safe sun exposure and diet

30-50

If one or more of following applies:

- Fragility fracture/osteoporosis/ high fracture risk
- Drug treatment for bone disease
- Symptoms suggestive of vitamin D deficiency
- Increased risk of developing vitamin D deficiency e.g.
  - Reduced UV exposure
  - Raised PTH
  - Treatment with anticonvulsants or glucocorticoids
  - Malabsorption

Treat

<30

Treat

TREAT

HOW TO TREAT VITAMIN D DEFICIENCY

Rapid correction if:

- Symptoms of vitamin D deficiency
- About to start treatment with potent antiresorptive agent (zoledronate or denosumab)

- **Approximately** 300,000 IU vitamin D3 (or D2) by mouth in divided doses over 6-10 weeks
- Commence maintenance vitamin D 4 weeks after loading as per elective correction*

***Elective correction** in all other instances

- When co-prescribing vitamin D supplements with an oral antiresorptive agent, maintenance therapy may be started without the use of loading doses.

- 800-2000 IU vitamin D3 daily or intermittently at higher equivalent dose

FOLLOW UP

CAUTION

- Check serum adjusted calcium 4 weeks after treating with loading doses of vitamin D. Vitamin D repletion may unmask primary hyperparathyroidism

- Routine repeat vitamin D testing is not required