

Algorithm for medical management of men and women over 45 years of age who have or are at risk of Osteoporosis

Women < 45 years with multiple risk factors should be treated as women > 45 years. For men aged less than 65 years, specialist referral should be considered.

Major Risk Factors

(other than previous fragility fracture)

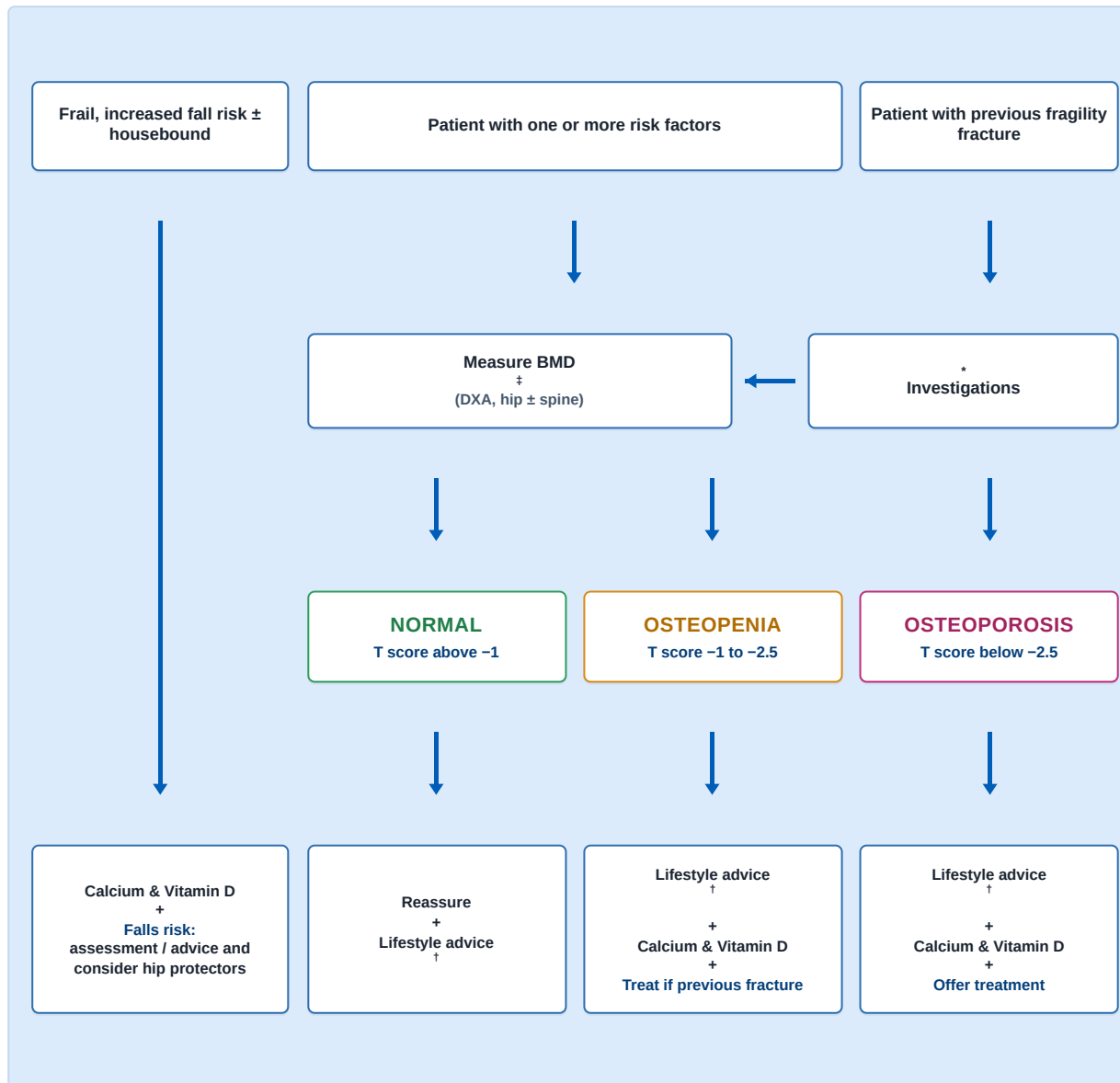
- Untreated hypogonadism (premature menopause, 2° amenorrhoea, 1° hypogonadism in women, 1° or 2° hypogonadism in men)
- Glucocorticoids (oral) (7.5 mg/day prednisolone for ≥ 3 months per year)
- Disease associated with increased prevalence of osteoporosis (e.g. GI disease, chronic liver disease, hyperparathyroidism, hyperthyroidism)
- Radiological osteopenia

Other Risk Factors in National and International guidelines include:

- Family History (especially maternal hip #)
- Low body weight
- Cigarette smoking
- Height loss
- Low bone mass as assessed by other techniques

‡BMD measurements

- DXA not necessary in women willing to take HRT or in frail / elderly patients, unless there are exceptional risk factors
- In patients with baseline BMD, repeat measurement every 1–3 years



Previous Fragility Fracture

Defined as a fracture from standing height or less & includes prevalent vertebral deformity. A previous fragility fracture is a strong independent risk for further fracture and may be regarded as an indication for treatment without the need for BMD measurement when the clinical history is unequivocal.

†Investigations

- FBC, ESR
- Bone & Liver function tests (Ca, P, Alk Phos, Albumin, AST, GGT)
- Serum Creatinine
- Serum TSH

and if indicated

- Lateral thoracic & lumbar spine x-rays
- Serum paraproteins & urine Bence Jones protein
- Isotope bone scan
- Serum FSH if hormonal status unclear (Women)
- Serum testosterone, LH & SHBG (men)

†Lifestyle advice

- Adequate nutrition, especially with Calcium & Vitamin D
- Regular weight-bearing exercise
- Avoidance of tobacco use & alcohol abuse