

Risk factors

Risk factors associated with fragility fracture which should prompt consideration of fracture-risk assessment

Risk category	Causative factor
Non-modifiable risk factors	previous fracture
	parental history of osteoporosis
	history of early menopause (below age of 45)
Modifiable risk factors	low BMI (<20 kg/m ²)
	smoking
	low bone mineral density
	alcohol intake
Coexisting diseases	diabetes
	inflammatory rheumatic diseases (RA or SLE)
	inflammatory bowel disease and malabsorption
	institutionalised patients with epilepsy
	human immunodeficiency virus
	primary hyperparathyroidism and endocrine diseases
	chronic liver disease
	neurological diseases (including Alzheimer's disease, Parkinson's disease, multiple sclerosis, stroke)
Drug therapy	moderate to severe chronic kidney disease
	asthma
	long-term antidepressants
	antiepileptics
	aromatase inhibitors
	long-term DMPA
	GnRH agonists (in men with prostate cancer)
PPIs	
oral glucocorticoids	
TZDs	

Recommendations associated with modifiable risk factors for fragility fractures

Risk category	Affected group	Recommendation
Alcohol	people who consume more than 3.5 units per day of alcohol	reduce alcohol intake to nationally recommended levels (<14 units per week).
Smoking	all smokers	stop smoking
Weight	people with low BMI (<20 kg/m ²)	achieve and maintain a BMI level of 20–25 kg/m ²

Sources of further information

Royal Osteoporosis Society

Camerton, Bath, BA2 0PJ

Helpline: 0808 800 0035

Helpline email: nurses@theros.org.uk

www.theros.org.uk

The Royal Osteoporosis Society is a UK charity dedicated to improving the diagnosis, prevention and treatment of osteoporosis. It runs a dedicated helpline (by phone, email and post) on weekdays between 9am and 5pm to answer medical queries relating to osteoporosis. The website provides a large volume of information and advice on living with the condition, current news and support groups.

Age Scotland

Causewayside House, 160 Causewayside, Edinburgh, EH9 1PR

Helpline: 0800 12 44 222

www.ageuk.org.uk/scotland

Email: helpline@agescotland.org.uk

Age Scotland is a charity which represents all older people in Scotland. It campaigns, commissions research and fundraises to support a better quality of life for everyone in later life. Age Scotland provides a wide range of confidential, impartial and simple information and promotes healthy living and active ageing. It also helps people to claim their entitlements and provides access to financial services targeted towards older people.

NHS Inform

www.nhsinform.scot

Tel: 0800 22 44 88

This is the national health and care information service for Scotland. It includes information and links to resources to support people with osteoporosis:

www.nhsinform.scot/illnesses-and-conditions/muscle-bone-and-joints/conditions/osteoporosis

SIGN142

Management of osteoporosis and the prevention of fragility fractures

Quick reference guide

First published March 2015

Revised June 2020

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This Quick Reference Guide provides a summary of the main recommendations in **SIGN 142 Management of osteoporosis and the prevention of fragility fractures**.

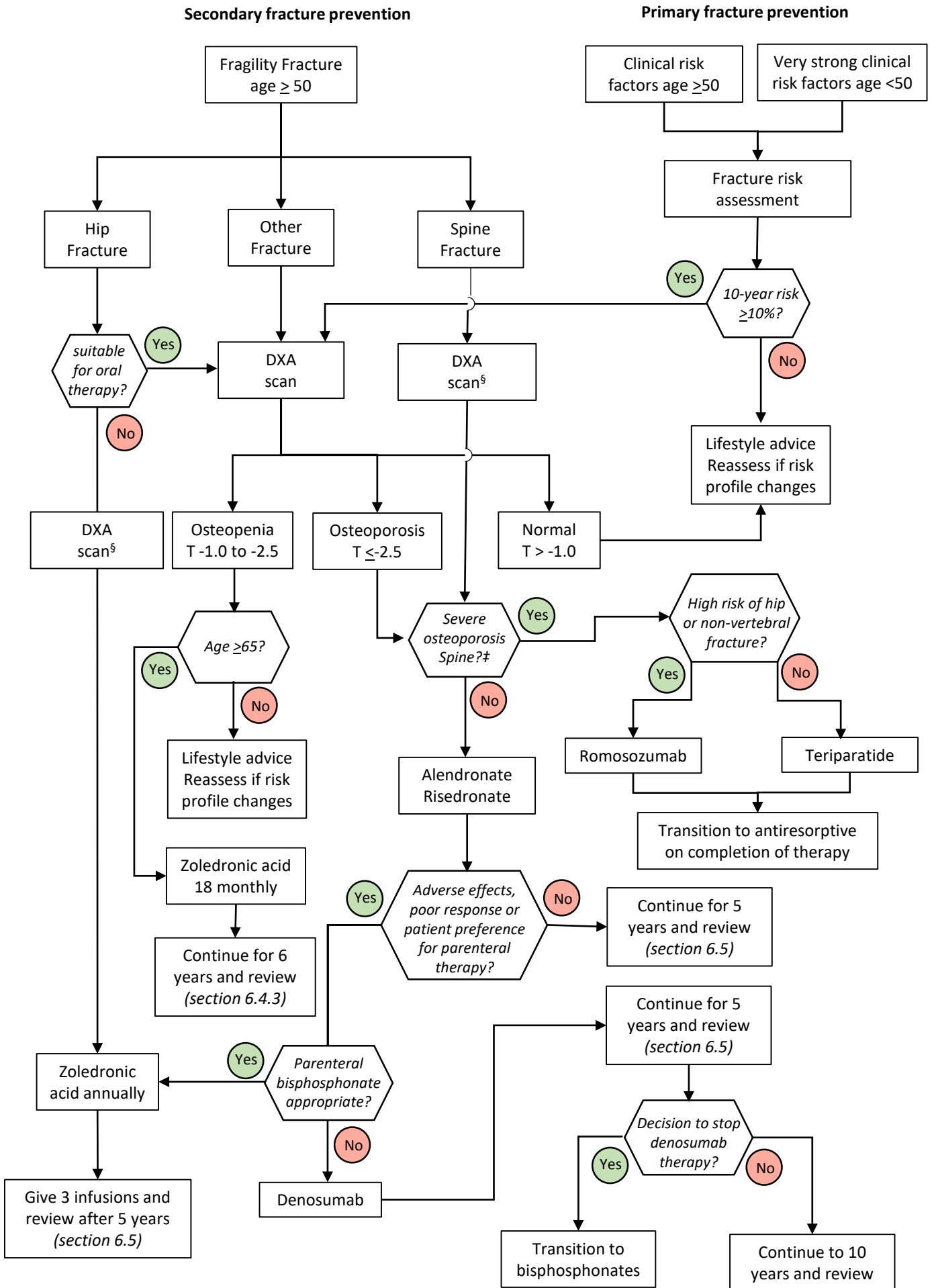
Recommendations **R** are worded to indicate the strength of the supporting evidence. Good practice points ✓ are provided where the guideline development group wishes to highlight specific aspects of accepted clinical practice.

This QRG is also available as part of the SIGN Guidelines app.

Details of the evidence supporting these recommendations can be found in the full guideline, available on the SIGN website: www.sign.ac.uk.

Treatment options should be discussed with the patient and their views and preferences taken into account.

This should include a discussion of the risks of fracture with and without treatment, using tools such as Qfracture and FRAX, the risks and benefits of treatment and the option not to have drug treatment.



[§] DXA scan advisable to obtain baseline BMD but not necessary to initiate treatment; [†] One severe or two or more moderate vertebral fractures on x-ray, and T-score < -1.5 at any site or spine T score < -4.0

Pharmacological treatment options for men

Tools for detection and assessment

- R** Risedronate may be considered for the treatment of osteoporosis in men.
- R** Zoledronic acid should be considered for the treatment of osteoporosis in men and the prevention of vertebral fractures.