

Table S1: Level of Evidence

	Categories of evidence
1A	From meta-analysis of randomised controlled trials
1B	From at least one randomised controlled trial
2A	From at least one controlled study without randomisation
2B	From at least one type of quasi- experimental study
3	From descriptive studies, such as comparative studies, correlation studies, or case-control studies
4	From expert committee reports or opinions and/or clinical experience of respected authorities

Table S2: Strength of recommendations

	Strength of recommendations
A	Category I evidence
B	Category II evidence, or extrapolated recommendations from category I evidence
C	Category III evidence, or extrapolated recommendation from category I or II evidence
D	Category IV evidence or extrapolated recommendation from category II or III evidence

Table S3. Search strategy

Research Question	Sources and keywords	No of hits	With filter*	Relevant articles
1. What is the necessary preoperative assessment/preparation and the optimal timing of the operation of patients 50 years and over with a clinical fracture?	<u>Pubmed:</u> preoperative AND fracture (hip OR wrist OR vertebra)	2458	20	3
	<u>Cochrane library:</u> preoperative AND fracture (hip OR wrist OR vertebra)	1	1	1
	<u>Pubmed:</u> comorbidities AND fracture (hip OR wrist OR vertebra)	1508	9	3
	<u>Cochrane library:</u> comorbidities AND fracture (hip OR wrist OR vertebra)	1	1	1
	<u>Pubmed:</u> pain management AND fracture (hip OR wrist OR vertebra)	1213	30	3
	<u>Cochrane library:</u> pain management AND fracture (hip OR wrist OR vertebra)	9	3	3
	<u>Pubmed:</u> (fluid OR dehydration) AND fracture (hip OR wrist OR vertebra)	504	4	3
	<u>Cochrane library:</u> (fluid OR dehydration) AND fracture (hip OR wrist OR vertebra)	2	1	1
	<u>Pubmed:</u> ("time to surgery" OR "timing of surgery" OR delay) AND fracture (hip OR wrist OR vertebra)	829	25	6
	<u>Cochrane library:</u> ("time to surgery" OR delay) AND fracture (hip OR wrist OR vertebra)	6	3	3
	<u>Pubmed:</u>			

	transfusion AND fracture (hip OR wrist OR vertebra)	417	17	4
	<u>Cochrane library:</u>			
	transfusion AND fracture (hip OR wrist OR vertebra)	5	5	1

2. What is the evidence of the recommended treatment options for hip, radius and vertebral fracture?	<u>Pubmed</u> : hip fracture AND (treatment OR surgery)	16634	299	28
	<u>Cochrane library</u> : hip fracture AND (treatment OR surgery)	41	11	9
	<u>Pubmed</u> : (wrist OR radius OR radial) fracture AND (treatment OR surgery)	13260	77	9
	<u>Cochrane library</u> : (wrist OR radius OR radial) fracture AND (treatment OR surgery)	26	12	8
	<u>Pubmed</u> : vertebral fracture AND (treatment OR surgery) AND (osteoporosis OR fragility)	4966	105	13
	<u>Cochrane library</u> : (wrist OR radius OR radial) fracture AND (treatment OR surgery)	7	1	1
3. How can postoperative complications be prevented?	<u>Pubmed</u> : “orthogeriatric AND fracture” + related articles and references in relevant articles	135	7	6
	<u>Cochrane library</u> : “orthogeriatric AND fracture”	1	1	1
	<u>Pubmed</u> : “delirium AND fracture” + related articles and references in relevant articles	408	7	5
	<u>Cochrane library</u> : “delirium AND fracture” + related articles and references in relevant articles	1	1	1
	<u>Pubmed</u> : “deep venous thrombosis AND fracture” + related articles and references in relevant articles	1342	23	11
	<u>Cochrane library</u> : “deep venous thrombosis AND fracture” + related articles and references in relevant articles	5	2	2
	<u>Pubmed</u> : “pressure sores AND fracture” + related articles and references in relevant articles	129	2	2
	<u>Cochrane library</u> : “pressure sores AND fracture” + related articles and references in relevant articles	2	1	1
	<u>Pubmed</u> : “malnutrition AND fracture” + related articles and references in relevant articles	2347	21	6
	<u>Cochrane library</u> : “malnutrition AND fracture” + related articles and	1	1	1

	references in relevant articles			
4. Is a Fracture Liaison Service model the most reliable mechanism for delivering secondary prevention during the long term follow up after fragility fractures in patients 50 years and over?	Pubmed: "Fracture liaison service" Cochrane library: "Fracture liaison service"	87 0	48 0	5 0
5. What are the diagnostic procedures that are recommended for risk assessment in the context of prevention of subsequent fractures in patients 50 years and over after a fragility fracture	<u>Pubmed</u> : "Fracture AND DXA" + related articles and references in relevant articles <u>Cochrane library</u> : "Fracture AND DXA"	2253 1	26 1	3 0
	<u>Pubmed</u> : "Fracture AND vertebral fracture assessment" + related articles and references in relevant articles <u>Cochrane library</u> : "Fracture AND vertebral fracture assessment"	2048 4	73 4	5 0
	<u>Pubmed</u> : "fracture AND fall risk evaluation" + related articles and references in relevant articles <u>Cochrane library</u> : "fracture AND fall risk evaluation"	296 4	23 4	5 0
	<u>Pubmed</u> : "fracture AND risk factors for secondary osteoporosis" + related articles and references in relevant articles <u>Cochrane library</u> : "fracture AND secondary osteoporosis"	653 11	19 11	3 0
	Pubmed: "Fracture and FRAX evaluation"	105	36	5
	6. How can guidelines for patients 50 years and over with a fracture being implemented best?	<u>Pubmed</u> : "guidelines AND recent fracture" + related articles and references in relevant articles <u>Cochrane library</u> : "guidelines AND recent fracture"	327 1	27 1
<u>Pubmed</u> : "guidelines AND fracture prevention AND implementation" + related articles and references in relevant articles <u>Cochrane library</u> : "Fracture AND fracture prevention AND implementation"		48 1	7 1	6 0
<u>Pubmed</u> : "guidelines AND fracture prevention AND outcome criteria" + related articles and references in relevant articles <u>Cochrane library</u> : "guidelines AND fracture prevention AND outcome criteria"		45 2	10 2	2 2

7. What kind of interventions should rehabilitation in patients 50 years and over with a fragility fracture involve?	<p><u>Pubmed</u>: “rehabilitation AND fracture (hip OR wrist OR vertebra)” + related articles and references in relevant articles</p> <p><u>Cochrane library</u>: “rehabilitation AND fracture (hip OR wrist OR vertebra)”</p>	4679	51	11
		12	9	9
8. What content should be included in patient education to prevent fractures?	<p><u>Pubmed</u>: “recent fracture AND patient education” + related articles and references in relevant articles</p> <p><u>Cochrane library</u>: “recent fracture AND patient education”</p>	18	7	7
		4	4	1
9. What is the evidence of non-pharmacological treatment (e.g. calcium and vitamin D supplements, stop smoking and lower or stop alcohol intake, and exercise programs/fall prevention programs) for the prevention of subsequent fractures?	<p><u>Pubmed</u>: “Fracture AND Calcium” + related articles and references in relevant articles</p> <p><u>Cochrane library</u>: “Calcium AND Fracture”</p> <p><u>Pubmed</u>: “Fracture AND Vitamin D” + related articles and references in relevant articles</p> <p><u>Cochrane library</u>: “Vitamin D AND Fracture”</p> <p><u>Pubmed</u>: “(smoking OR cigarette OR nicotine OR tobacco) AND (fracture OR bone)” + related articles and references in relevant articles</p> <p><u>Pubmed</u>: “Alcohol AND (fracture OR bone)” + related articles and references in relevant articles</p>	7741	96	6
		27	1	1
		4414	96	15
		24	8	8
		1388	63	5
		12101	37	3
10. What is the evidence of anti-osteoporotic drugs for the prevention of subsequent fractures?	<p><u>Pubmed</u>: “fracture prevention” + related articles and references in relevant articles</p> <p><u>Cochrane library</u>: “fracture prevention”</p> <p><u>Pubmed</u>: “bisphosphonate atypical femur fracture”</p> <p><u>Pubmed</u>: “bisphosphonate osteonecrosis jaw”</p> <p><u>Pubmed</u>: “fracture AND follow up AND drugs”</p>	19268	54	13
		37	37	3
		290	3	3
		1396	11	1
		441	4	0

* With filters for English language, humans, only systematic reviews and meta-analyses, and published between 2008-2014