

ONLINE SUPPLEMENTARY DATA 2

1. Literature search: Choosing Wisely HLA-B27 rapid review.

Results sent to: Tristan Boyd

Search date: November 30, 2013

Databases searched: OVID MEDLINE, MEDLINE In-Process and Other Non-Indexed Citations, Embase, All EBM Databases (see below)

Q: Do not order an HLA-B27 unless spondyloarthritis is suspected

Limits: 2000-current; English

Filters: Meta-analyses, systematic reviews, health technology assessments, randomized controlled trials and guidelines

Database: Ovid MEDLINE(R) 1946 to November Week 3 2013, Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations November 27, 2013

Search Strategy:

#	Searches	Results
1	expSpondylarthritis/	19201
2	((ankylosingadj (spondylitis or spondylarthritis or spondyloarthritis)) or spinal arthritis or bechterew* or mariestruempell* or rheumatoid spondylitis or spondylarthritisankylopoietica or monoarticular* or oligoarticular* or dactylitis or enthesitis or uveitis).ti,ab.	24884
3	exp Arthritis/	204519
4	exp Inflammatory Bowel Diseases/	60566
5	3 and 4	1876
6	((inflammatory bowel disease or IBD) adj2 arthriti*).ti,ab.	524
7	or/1-2,5-6	36586
8	exp HLA-B27 Antigen/	3132
9	(HLA B27 or (histocompatibility antigen* adj2 B27) or (human leukocyte antigen* adj2 B27)).mp.	4733
10	or/8-9	4733
11	7 and 10	3202
12	(Meta Analysis or Controlled Clinical Trial or Randomized Controlled Trial).pt.	528241
13	Meta-Analysis/ use mesz or exp Technology Assessment, Biomedical/ use mesz	61456
14	(meta analy* or metaanaly* or pooled analysis or (systematic* adj2 review*) or published studies or published literature or medline or embase or data synthesis or data extraction or cochrane or ((health technolog* or biomedical technolog*) adj2 assess*).ti,ab.	175514
15	exp Random Allocation/ use mesz or exp Double-Blind Method/ use mesz or exp Control Groups/ use mesz or exp Placebos/ use mesz	226069
16	(random* or RCT or placebo* or sham* or (control* adj2 clinical trial*).ti,ab.	869406
17	exp Standard of Care/ use mesz or exp Guideline/ use mesz or exp Guidelines as Topic/ use mesz	140181
18	(guideline* or guidance or consensus statement* or standard or standards).ti.	109873
19	or/12-18	1385594
20	11 and 19	141
21	limit 20 to (english language and yr="2000 -Current")	85

Database: Embase 1980 to 2013 Week 47

Search Strategy:

#	Searches	Results
1	expSpondylarthritis/	1271
2	expSpondyloarthropathy/ or expSpondylosis/ or expAnkylosing spondylitis/ or exp reactive arthritis/ or exp psoriatic arthritis/	34985
3	((ankylosingadj (spondylitis or spondylarthritis or spondyloarthritis)) or spinal arthritis or bechterew* or mariestruempell* or rheumatoid spondylitis or spondylarthritisankylopoietica or monoarticular* or oligoarticular* or dactylitis or enthesitis or uveitis).ti,ab.	30192
4	exp Arthritis/	319754
5	exp enteritis/	190172
6	4 and 5	11321
7	((inflammatory bowel disease or IBD) adj2 arthriti*).ti,ab.	659
8	or/1-3,6-7	60976
9	exp HLA-B27 Antigen/	5282
10	(HLA B27 or (histocompatibility antigen* adj2 B27) or (human leukocyte antigen* adj2 B27)).mp.	7084
11	or/9-10	7084
12	8 and 11	4910
13	8 and 12	4910
14	Meta Analysis/ use emez or Biomedical Technology Assessment/ use emez	89190
15	(meta analy* or metaanaly* or pooled analysis or (systematic* adj2 review*) or published studies or published literature or medline or embase or data synthesis or data extraction or cochrane or ((health technolog* or biomedical technolog*) adj2 assess*).ti,ab.	197891
16	Randomized Controlled Trial/ use emez or exp Randomization/ use emez or exp RANDOM SAMPLE/ use emez or Double Blind Procedure/ use emez or exp Triple Blind Procedure/ use emez or exp Control Group/ use emez or exp PLACEBO/ use emez	650265
17	(random* or RCT or placebo* or sham* or (control* adj2 clinical trial*).ti,ab.	1007995
18	exp Practice Guideline/ use emez or exp Professional Standard/ use emez	580693
19	(guideline* or guidance or consensus statement* or standard or standards).ti.	132787
20	or/14-19	1992075
21	13 and 20	341
22	limit 21 to (english language and yr="2000 -Current")	258

Database: EBM Reviews - Cochrane Database of Systematic Reviews <2005 to October 2013>, EBM Reviews - ACP Journal Club <1991 to November 2013>, EBM Reviews - Database of Abstracts of Reviews of Effects <4th Quarter 2013>, EBM Reviews - Cochrane Central Register of Controlled Trials <October 2013>, EBM Reviews - Cochrane Methodology Register <3rd Quarter 2012>, EBM Reviews - Health Technology Assessment <4th Quarter 2013>, EBM Reviews - NHS Economic Evaluation Database <4th Quarter 2013>

Search Strategy:

#	Searches	Results
1	expSpondylarthritis/	565
2	((ankylosingadj (spondylitis or spondylarthritis or spondyloarthritis)) or spinal arthritis or bechterew* or mariestruempell* or rheumatoid spondylitis or spondylarthritisankylopoietica or monoarticular* or oligoarticular* or dactylitis or enthesitis or uveitis).ti,ab.	829
3	exp Arthritis/	7425
4	exp Inflammatory Bowel Diseases/	1576
5	3 and 4	12

6	((inflammatory bowel disease or IBD) adj2 arthriti*).ti,ab.	8
7	or/1-2,5-6	1061
8	exp HLA-B27 Antigen/	15
9	(HLA B27 or (histocompatibility antigen* adj2 B27) or (human leukocyte antigen* adj2 B27)).mp.	30
10	or/8-9	30
11	7 and 10	26
12	Meta-Analysis/ or exp Technology Assessment, Biomedical/	465
13	(meta analy* or metaanaly* or pooled analysis or (systematic* adj2 review*) or published studies or published literature or medline or embase or data synthesis or data extraction or cochrane or ((health technolog* or biomedical technolog*) adj2 assess*).ti,ab.	36841
14	exp Random Allocation/ or exp Double-Blind Method/ or exp Control Groups/ or exp Placebos/	123600
15	(random* or RCT or placebo* or sham* or (control* adj2 clinical trial*).ti,ab.	389308
16	exp Standard of Care/ or exp Guideline/ or exp Guidelines as Topic/	1148
17	(guideline* or guidance or consensus statement* or standard or standards).ti.	7251
18	or/12-17	439300
19	11 and 18	17
20	limit 19 to english language [Limit not valid in CDSR,ACP Journal Club,DARE,CCTR,CLCMR; records were retained]	17
21	limit 20 to yr="2000 -Current" [Limit not valid in DARE; records were retained]	15

2. Choosing Wisely ANA search strategy.

Sent to: Zarnaz Bagheri

Search date: December 1, 2013

Databases searched: Ovid MEDLINE(R) 1946 to November Week 3 2013, Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations November 27, 2013

Q: Do not order ANA unless connective tissue disease suspected

Limits: 2000-current; English

Filters: Meta-analyses, systematic reviews, health technology assessments, randomized controlled trials and guidelines

Search Strategy:

#	Searches	Results
1	exp Antibodies, Antinuclear/	13335
2	expAutoantigens/	20386
3	exp Autoantibodies/	84486
4	Antigens, Nuclear/	3830
5	expRibonucleoproteins/	30937
6	exp DNA Topoisomerases, Type I/ or exp DNA Topoisomerases, Type II/	11258
7	(Anti-SSB* or anti-ssa* or anti-ro or (Anti?nuclear adj2 Antibod*) or ANA or Extractable Nuclear Antigen* or ENA or anti-RNP or anti?ribonucleoprotein* or anti-Sm or anti-Smith or anti-Scl-70 or anti?topoisomerase or anti-Jo-1 or anti-DS-DNA or anti-dsdna or anti-scl70 ort anti-jo1).ti,ab.	16684
8	"anti-Ro/ssa".mp.	451
9	or/1-8	147266
10	exp Arthralgia/	7750
11	exp Arthritis/	204519
12	exp Myositis/	16021
13	(arthritides or arthralgia* or (joint adj2 pain*) or ankylosing spondylitis or mariestruempell* or bechterew* or arthritis or pneumoconiosis or (felty* adj2 syndrome*) or caplan* syndrome* or spondyloarthritis or Sjogren* syndrome or Scleroderma or	179881

	inflammatorymyopath* or myositis or Dermatomyositis or Arthritis).ti,ab.	
14	or/10-13	283825
15	9 and 14	16913
16	exp lupus erythematosus, cutaneous/ or exp lupus erythematosus, systemic/	52782
17	lupus.ti,ab.	59028
18	or/16-17	69756
19	15 and 18	4082
20	(Meta Analysis or Controlled Clinical Trial or Randomized Controlled Trial).pt.	528241
21	Meta-Analysis/ or exp Technology Assessment, Biomedical/	61486
22	(meta analy* or metaanaly* or pooled analysis or (systematic* adj2 review*) or published studies or published literature or medline or embase or data synthesis or data extraction or cochrane or ((health technolog* or biomedical technolog*) adj2 assess*).ti,ab.	175514
23	exp Random Allocation/ or exp Double-Blind Method/ or exp Control Groups/ or exp Placebos/	226071
24	(random* or RCT or placebo* or sham* or (control* adj2 clinical trial*).ti,ab.	869406
25	exp Standard of Care/ or exp Guideline/ or exp Guidelines as Topic/	140220
26	(guideline* or guidance or consensus statement* or standard or standards).ti.	109873
27	or/20-26	1385604
28	19 and 27	104
29	limit 28 to (english language and yr="2003 -Current")	50

Database: Embase 1980 to 2013 Week 47

Search Strategy:

#	Searches	Results
1	exp antinuclear antibody/	17150
2	expautoantigen/	11388
3	exp autoantibody/	145288
4	exp cell nucleus antigen/	4009
5	expribonucleoprotein/	7817
6	exp DNA topoisomerase/	7589
7	(Anti-SSB* or anti-ssa* or anti-ro or (Anti?nuclear adj2 Antibod*) or ANA or Extractable Nuclear Antigen* or ENA or anti-RNP or anti?ribonucleoprotein* or anti-Sm or anti-Smith or anti-Scl-70 or anti?topoisomerase or anti-Jo-1 or anti-DS-DNA or anti-dsna or anti-scl70 ort anti-jo1).ti,ab.	22167
8	"anti-Ro/ssa".mp.	594
9	or/1-8	178670
10	exp Arthralgia/	34252
11	exp Arthritis/	319754
12	exp Myositis/	25237
13	exp scleroderma/ or expdermatomyositis/ or expankylosing spondylitis/ or expSjogren syndrome/ or exp pneumoconiosis/	75664
14	(arthritides or arthralgia* or (joint adj2 pain*) or ankylosing spondylitis or mariestruempell* or bechterew* or arthritis or pneumoconiosis or (felty* adj2 syndrome*) or caplan* syndrome* or spondyloarthritis or Sjogren* syndrome or Scleroderma or inflammatorymyopath* or myositis or Dermatomyositis or Arthritis).ti,ab.	217777
15	or/10-14	435454
16	9 and 15	25384
17	exp lupus erythematosus, cutaneous/ or exp lupus erythematosus, systemic/	66033
18	exp lupus erythematosus/	75997
19	lupus.ti,ab.	68891
20	or/17-19	90350
21	16 and 20	7250
22	Meta Analysis/ use emez or Biomedical Technology Assessment/ use emez	89190

23	(meta analy* or metaanaly* or pooled analysis or (systematic* adj2 review*) or published studies or published literature or medline or embase or data synthesis or data extraction or cochrane or ((health technolog* or biomedical technolog*) adj2 assess*).ti,ab.	197891
24	Randomized Controlled Trial/ use emez or exp Randomization/ use emez or exp RANDOM SAMPLE/ use emez or Double Blind Procedure/ use emez or exp Triple Blind Procedure/ use emez or exp Control Group/ use emez or exp PLACEBO/ use emez	650265
25	(random* or RCT or placebo* or sham* or (control* adj2 clinical trial*).ti,ab.	1007995
26	exp Practice Guideline/ use emez or exp Professional Standard/ use emez	580693
27	(guideline* or guidance or consensus statement* or standard or standards).ti.	132787
28	or/22-27	1992075
29	21 and 28	574
30	limit 29 to (english language and yr="2003 -Current")	456

Databases: EBM Reviews - Cochrane Database of Systematic Reviews 2005 to October 2013, EBM Reviews - ACP Journal Club 1991 to November 2013, EBM Reviews - Database of Abstracts of Reviews of Effects 4th Quarter 2013, EBM Reviews - Cochrane Central Register of Controlled Trials October 2013, EBM Reviews - Cochrane Methodology Register 3rd Quarter 2012, EBM Reviews - Health Technology Assessment 4th Quarter 2013, EBM Reviews - NHS Economic Evaluation Database 4th Quarter 2013
Search strategy:

#	Searches	Results
1	exp Antibodies, Antinuclear/	85
2	exp Autoantigens/	62
3	exp Autoantibodies/	801
4	Antigens, Nuclear/	10
5	exp Ribonucleoproteins/	36
6	exp DNA Topoisomerases, Type I/ or exp DNA Topoisomerases, Type II/	25
7	(Anti-SSB* or anti-ssa* or anti-ro or (Anti?nuclear adj2 Antibod*) or ANA or Extractable Nuclear Antigen* or ENA or anti-RNP or anti?ribonucleoprotein* or anti-Sm or anti-Smith or anti-Scl-70 or anti?topoisomerase or anti-Jo-1 or anti-DS-DNA or anti-dsdna or anti-scl70 ort anti-jo1).ti,ab.	241
8	"anti-Ro/ssa".mp.	0
9	or/1-8	1083
10	exp Arthralgia/	635
11	exp Arthritis/	7425
12	exp Myositis/	70
13	(arthritides or arthralgia* or (joint adj2 pain*) or ankylosing spondylitis or mariestruempell* or bechterew* or arthritis or pneumoconiosis or (felty* adj2 syndrome*) or caplan* syndrome* or spondyloarthritis or Sjogren* syndrome or Scleroderma or inflammatorymyopath* or myositis or Dermatomyositis or Arthritis).ti,ab.	8129
14	or/10-13	11528
15	9 and 14	159
16	exp lupus erythematosus, cutaneous/ or exp lupus erythematosus, systemic/	451
17	lupus.ti,ab.	823
18	or/16-17	858
19	15 and 18	18
20	(Meta Analysis or Controlled Clinical Trial or Randomized Controlled Trial).pt.	402848
21	Meta-Analysis/ or exp Technology Assessment, Biomedical/	465
22	(meta analy* or metaanaly* or pooled analysis or (systematic* adj2 review*) or published studies or published literature or medline or embase or data synthesis or data extraction or cochrane or ((health technolog* or biomedical technolog*) adj2 assess*).ti,ab.	36841
23	exp Random Allocation/ or exp Double-Blind Method/ or exp Control Groups/ or exp Placebos/	123600

24	(random* or RCT or placebo* or sham* or (control* adj2 clinical trial*)).ti,ab.	389308
25	exp Standard of Care/ or exp Guideline/ or exp Guidelines as Topic/	1148
26	(guideline* or guidance or consensus statement* or standard or standards).ti.	7251
27	or/20-26	547128
28	19 and 27	18
29	limit 28 to (english language and yr="2003 -Current") [Limit not valid in CDSR,ACP Journal Club,DARE,CCTR,CLCMR; records were retained]	5

3. Search Strategy for Choosing Wisely Bone density tests.

Search date: December 11, 2013

Databases searched: Ovid MEDLINE(R) 1946 to November Week 3 2013, Embase, CDSR, CCRCT

Q: Best frequency of completing bone density tests

Limits: 2003-current; English, human, adult

Filters: Meta-analyses, systematic reviews, health technology assessments, randomized controlled trials and guidelines

Medline:

Ovid Technologies, Inc. Email Service ----- Search for: limit 12 to (english language and humans and yr="2003 -Current" and "all adult (19 plus years)" and (guideline or meta analysis or randomized controlled trial or systematic reviews or technical report)) Results: 405

Database: Ovid MEDLINE(R) <1996 to Present> Search Strategy:

1 exp Osteoporosis/ (30034)
2 osteopenia.mp. (4814)
3 1 or 2 (32910)
4 exp Bone Density/ (32814)
5 (Dual X-ray absorptiometry or dual energy X-ray absorptiometry or DXA or DEXA).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept, rare disease supplementary concept, unique identifier] (14862)
6 exp Absorptiometry, Photon/ (13069)
7 5 or 6 (19597)
8 3 and 7 (6668)
9 limit 8 to (case reports or comment or congresses or editorial or letter) (385)
10 8 not 9 (6283)
11 limit 10 to (english language and humans and yr="2003 -Current" and "all adult (19 plus years)" and (guideline or meta analysis or randomized controlled trial or systematic reviews or technical report)) (405)

EmBase

Ovid Technologies, Inc. Email Service

Search for: from 12 [limit 8 to (english language and yr="2003 -Current")] keep 3-7,12,14-16,18-26,28-29,31,34,36-38

Results: 25

Database: Embase <1974 to 2013 Week 49>

Search Strategy:

1 (frequency and bone density test*).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword] (12)
2 exp osteoporosis/ or exp osteopenia/ (93919)
3 exp dual energy X ray absorptiometry/ (19674)
4 2 and 3 (7765)
5 limit 4 to (english language and yr="2003 -Current" and adult <18 to 64 years>) (2537)

- 6 "reimbursement"/ (36033)
- 7 4 and 6 (34)
- 8 1 or 7 (45)
- 9 limit 8 to (english language and yr="2003 -Current" and (adult <18 to 64 years> or aged <65+ years>)) (11)
- 10 limit 9 to ((meta analysis or "systematic review") and randomized controlled trial and article) (0)
- 11 limit 9 to ((controlled clinical trial or multicenter study or phase 1 clinical trial or phase 2 clinical trial or phase 3 clinical trial or phase 4 clinical trial) and (book or book series or conference abstract or conference paper or conference proceeding or "conference review" or editorial or erratum or journal or letter or note or report or short survey or trade journal)) (0)
- 12 limit 8 to (english language and yr="2003 -Current") (38)
- 13 from 12 keep 3-7,12,14-16,18-26,28-29,31,34,36-38 (25)

CDSR

Ovid Technologies, Inc. Email Service ----- Search for: limit 5 to last 10 years Results: 32

Database: EBM Reviews - Cochrane Database of Systematic Reviews <2005 to October 2013> Search Strategy:

-
- 1 (osteopenia or osteoporosis).mp. [mp=title, short title, abstract, full text, keywords, caption text] (358)
 - 2 (Dual X-ray absorptiometry or dual energy X-ray absorptiometry or DXA or DEXA).mp. [mp=title, short title, abstract, full text, keywords, caption text] (86)
 - 3 "bone density test".mp. [mp=title, short title, abstract, full text, keywords, caption text] (0)
 - 4 adult*.mp. (4612)
 - 5 1 and 2 and 4 (34)
 - 6 limit 5 to last 10 years (32)

4. Literature search: Choosing Wisely bisphosphonate rapid review.

Results sent to: Michelle Jung

Search date: November 30, 2013

Databases searched: OVID MEDLINE, MEDLINE In-Process and Other Non-Indexed Citations, Embase, All EBM Databases (see below)

Q: What is the evidence from the literature recommending against the use of bisphosphonates in patients at low risk of fracture?

Limits: 2008-current; English

Filters: Meta-analyses, systematic reviews, health technology assessments and guidelines. Randomized controlled trials from 2012 to 2013 only

Database: Ovid MEDLINE(R) 1946 to November Week 3 2013, Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations November 27, 2013

Search Strategy:

#	Searches	Results
1	exp Hip Fractures/	17827
2	exp Spinal Fractures/	10474
3	((hip* or femur* or femoral* or trochant* or petrochant* or intertrochant* or subtrochant* or intracapsular* or extracapsular*) adj4 fracture*).ti,ab.	27962
4	((hip* or ((femur* or femoral*) adj3 (head or neck or proximal))) adj4 fracture*).ti,ab.	19295
5	((vertebra* or spinal) adj2 fracture*).ti,ab.	9243
6	or/1-5	46319

7	expDiphosphonates/	21384
8	(bisphosphonate* or diphosphonate* or diphosphonic acid derivative*).ti,ab.	14879
9	or/7-8	25873
10	6 and 9	2546
11	Meta Analysis.pt.	52243
12	Meta-Analysis/ use mesz or exp Technology Assessment, Biomedical/ use mesz	61456
13	(meta analy* or metaanaly* or pooled analysis or (systematic* adj2 review*) or published studies or published literature or medline or embase or data synthesis or data extraction or cochrane).ti,ab.	174188
14	((health technolog* or biomedical technolog*) adj2 assess*).ti,ab.	2109
15	exp Standard of Care/ use mesz or exp Guideline/ use mesz or exp Guidelines as Topic/ use mesz	140181
16	(guideline* or guidance or consensus statement* or standard or standards).ti.	109873
17	(guideline or practice guideline).pt.	25427
18	validat*.mp.	306756
19	or/11-18	685766
20	10 and 19	330
21	limit 20 to (english language and yr="2008 -Current")	136
22	Randomized Controlled Trial.pt.	391413
23	exp Random Allocation/ or exp Double-Blind Method/ or exp Control Groups/ or exp Placebos/	226071
24	(random* or RCT or placebo* or sham* or (control* adj2 clinical trial*)).ti,ab.	869406
25	or/22-24	1016059
26	10 and 25	751
27	limit 26 to (english language and yr="2012 -Current")	84

Database: Embase 1980 to 2013 Week 47

Search Strategy:

#	Searches	Results
1	exp Hip Fracture/	28585
2	exp spine fracture/	13518
3	((hip* or femur* or femoral* or trochant* or petrochant* or intertrochant* or subtrochant* or intracapsular* or extracapsular*) adj4 fracture*).ti,ab.	33296
4	((hip* or ((femur* or femoral*) adj3 (head or neck or proximal))) adj4 fracture*).ti,ab.	23212
5	((vertebra* or spinal) adj2 fracture*).ti,ab.	11943
6	or/1-5	61325
7	expbisphosphonic acid derivative/	43480
8	(bisphosphonate* or diphosphonate* or diphosphonic acid derivative*).ti,ab.	18894
9	or/7-8	46795
10	6 and 9	5368
11	Meta Analysis/ or Biomedical Technology Assessment/	89190
12	(meta analy* or metaanaly* or pooled analysis or (systematic* adj2 review*) or published studies or published literature or medline or embase or data synthesis or data extraction or cochrane or ((health technolog* or biomedical technolog*) adj2 assess*).ti,ab.	197891
13	exp Practice Guideline/ or exp Professional Standard/	580693
14	(guideline* or guidance or consensus statement* or standard or standards).ti.	132787
15	validat*.mp.	377810
16	or/11-15	1221793
17	10 and 16	920
18	limit 17 to (english language and yr="2008 -Current")	464
19	Randomized Controlled Trial/ or exp Randomization/ or exp RANDOM SAMPLE/ or Double Blind Procedure/ or exp Triple Blind Procedure/ or exp Control Group/ or exp	650265

	PLACEBO/	
20	(random* or RCT or placebo* or sham* or (control* adj2 clinical trial*)).ti,ab.	1007995
21	or/19-20	1247411
22	10 and 21	1854
23	limit 22 to (english language and yr="2012 -Current")	297

Database: EBM Reviews - Cochrane Database of Systematic Reviews <2005 to October 2013>, EBM Reviews - ACP Journal Club <1991 to November 2013>, EBM Reviews - Database of Abstracts of Reviews of Effects <4th Quarter 2013>, EBM Reviews - Cochrane Central Register of Controlled Trials <October 2013>, EBM Reviews - Cochrane Methodology Register <3rd Quarter 2012>, EBM Reviews - Health Technology Assessment <4th Quarter 2013>, EBM Reviews - NHS Economic Evaluation Database <4th Quarter 2013>

Search Strategy:

#	Searches	Results
1	exp Hip Fractures/	903
2	exp Spinal Fractures/	503
3	((hip* or femur* or femoral* or trochant* or petrochant* or intertrochant* or subtrochant* or intracapsular* or extracapsular*) adj4 fracture*).ti,ab.	2356
4	((hip* or ((femur* or femoral*) adj3 (head or neck or proximal))) adj4 fracture*).ti,ab.	1932
5	((vertebra* or spinal) adj2 fracture*).ti,ab.	899
6	or/1-5	3353
7	expDiphosphonates/	1656
8	(bisphosphonate* or diphosphonate* or diphosphonic acid derivative*).ti,ab.	948
9	or/7-8	1942
10	6 and 9	362
11	Meta Analysis.pt.	488
12	[Meta-Analysis/ use mesz or exp Technology Assessment, Biomedical/ use mesz]	0
13	(meta analy* or metaanaly* or pooled analysis or (systematic* adj2 review*) or published studies or published literature or medline or embase or data synthesis or data extraction or cochrane).ti,ab.	36433
14	((health technolog* or biomedical technolog*) adj2 assess*).ti,ab.	623
15	[exp Standard of Care/ use mesz or exp Guideline/ use mesz or exp Guidelines as Topic/ use mesz]	0
16	(guideline* or guidance or consensus statement* or standard or standards).ti.	7251
17	(guideline or practice guideline).pt.	30
18	validat*.mp.	12981
19	or/11-18	53259
20	10 and 19	26
21	limit 20 to (english language and yr="2008 -Current") [Limit not valid in CDSR,ACP Journal Club,DARE,CCTR,CLCMR; records were retained]	9
22	Randomized Controlled Trial.pt.	325102
23	exp Random Allocation/ or exp Double-Blind Method/ or exp Control Groups/ or exp Placebos/	123600
24	(random* or RCT or placebo* or sham* or (control* adj2 clinical trial*)).ti,ab.	389308
25	or/22-24	471448
26	10 and 25	323
27	limit 26 to (english language and yr="2012 -Current") [Limit not valid in CDSR,ACP Journal Club,DARE,CCTR,CLCMR; records were retained]	9

5. Literature search: Choosing Wisely bone scans rapid review.

Results sent to: Damian Frackowick

Search date: December 1, 2013

Databases searched: OVID MEDLINE, MEDLINE In-Process and Other Non-Indexed Citations, Embase, All EBM Databases (see below)

Q: What is the role of total body bone scan to diagnosis and monitor axial or peripheral inflammatory arthritis?

Limits: 2000-current; English

Filters: Meta-analyses, systematic reviews, health technology assessments, randomized controlled trials and guidelines.

Databases: Ovid MEDLINE(R) 1946 to November Week 3 2013, Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations November 27, 2013

Search Strategy:

#	Searches	Results
1	exp Arthritis, Rheumatoid/	102046
2	expankylosing spondylitis/	11804
3	expSpondylarthritis/	19201
4	or/1-3	117296
5	exp Arthritis/	204519
6	exp Inflammatory Bowel Diseases/	60566
7	5 and 6	1876
8	(ankylosing spondylitis or mariestruempell* or bechterew* or arthritis or pneumoconiosis or (felty* adj2 syndrome*) or caplan* syndrome* or spondyloarthritis).ti,ab.	140464
9	or/4,7-8	180153
10	exp Radionuclide Imaging/ or exp Technetium/	126251
11	(bone* adj2 (scan* or scintigraphy or radionuclide or gamma camera or radioisotope)).ti,ab.	11872
12	or/10-11	135140
13	9 and 12	1302
14	(Meta Analysis or Controlled Clinical Trial or Randomized Controlled Trial).pt.	528241
15	Meta-Analysis/ or exp Technology Assessment, Biomedical/	61456
16	(meta analy* or metaanaly* or pooled analysis or (systematic* adj2 review*) or published studies or published literature or medline or embase or data synthesis or data extraction or cochrane or ((health technolog* or biomedical technolog*) adj2 assess*).ti,ab.	175514
17	exp Random Allocation/ or exp Double-Blind Method/ or exp Control Groups/ or exp Placebos/	226069
18	(random* or RCT or placebo* or sham* or (control* adj2 clinical trial*)).ti,ab.	869406
19	exp Standard of Care/ or exp Guideline/ orexp Guidelines as Topic/	140181
20	(guideline* or guidance or consensus statement* or standard or standards).ti.	109873
21	or/14-20	1385594
22	13 and 21	53
23	limit 22 to english language	51
24	limit 23 to yr="2000 -Current"	30

Database: Embase 1980 to 2013 Week 47

Search Strategy:

#	Searches	Results
1	exp rheumatoid arthritis/	138781
2	expankylosing spondylitis/	17821
3	exp pneumoconiosis/	6691
4	expSpondylarthritis/	1271
5	or/1-4	158030
6	exp Arthritis/	319754
7	exp enteritis/	190172
8	6 and 7	11321
9	(ankylosing spondylitis or mariestruempell* or bechterew* or arthritis or pneumoconiosis or (felty* adj2 syndrome*) or caplan* syndrome* or spondyloarthritis).ti,ab.	169794
10	5 or 8 or 9	223105
11	exp Technetium/	9157
12	exp bone scintiscanning/	19339
13	(bone* adj2 (scan* or scintigraphy or radionuclide or gamma camera or radioisotope)).ti,ab.	15145
14	or/11-13	34257
15	10 and 14	1338
16	Meta Analysis/ use emez or Biomedical Technology Assessment/ use emez	89190
17	(meta analy* or metaanaly* or pooled analysis or (systematic* adj2 review*) or published studies or published literature or medline or embase or data synthesis or data extraction or cochrane or ((health technolog* or biomedical technolog*) adj2 assess*).ti,ab.	197891
18	Randomized Controlled Trial/ use emez or exp Randomization/ use emez or exp RANDOM SAMPLE/ use emez or Double Blind Procedure/ use emez or exp Triple Blind Procedure/ use emez or exp Control Group/ use emez or exp PLACEBO/ use emez	650265
19	(random* or RCT or placebo* or sham* or (control* adj2 clinical trial*).ti,ab.	1007995
20	exp Practice Guideline/ use emez or exp Professional Standard/ use emez	580693
21	(guideline* or guidance or consensus statement* or standard or standards).ti.	132787
22	or/16-21	1992075
23	15 and 22	60
24	limit 23 to (english language and yr="2000 -Current")	41

Database: EBM Reviews - Cochrane Database of Systematic Reviews 2005 to October 2013, EBM Reviews - ACP Journal Club 1991 to November 2013, EBM Reviews - Database of Abstracts of Reviews of Effects 4th Quarter 2013, EBM Reviews - Cochrane Central Register of Controlled Trials October 2013, EBM Reviews - Cochrane Methodology Register 3rd Quarter 2012, EBM Reviews - Health Technology Assessment 4th Quarter 2013, EBM Reviews - NHS Economic Evaluation Database 4th Quarter 2013
Search Strategy:

#	Searches	Results
1	exp Arthritis, Rheumatoid/	3785
2	expankylosing spondylitis/	373
3	expSpondylarthritis/	565
4	or/1-3	4253
5	exp Arthritis/	7425
6	exp Inflammatory Bowel Diseases/	1576
7	5 and 6	12
8	(ankylosing spondylitis or mariestruempell* or bechterew* or arthritis or pneumoconiosis or (felty* adj2 syndrome*) or caplan* syndrome* or spondyloarthritis).ti,ab.	6757
9	or/4,7-8	7291

10	exp Radionuclide Imaging/ or exp Technetium/	2936
11	(bone* adj2 (scan* or scintigraphy or radionuclide or gamma camera or radioisotope)).ti,ab.	271
12	or/10-11	3167
13	9 and 12	28
14	(Meta Analysis or Controlled Clinical Trial or Randomized Controlled Trial).pt.	402848
15	Meta-Analysis/ or exp Technology Assessment, Biomedical/	465
16	(meta analy* or metaanaly* or pooled analysis or (systematic* adj2 review*) or published studies or published literature or medline or embase or data synthesis or data extraction or cochrane or ((health technolog* or biomedical technolog*) adj2 assess*).ti,ab.	36841
17	exp Random Allocation/ or exp Double-Blind Method/ or exp Control Groups/ or exp Placebos/	123600
18	(random* or RCT or placebo* or sham* or (control* adj2 clinical trial*).ti,ab.	389308
19	exp Standard of Care/ or exp Guideline/ or exp Guidelines as Topic/	1148
20	(guideline* or guidance or consensus statement* or standard or standards).ti.	7251
21	or/14-20	547128
22	13 and 21	28
23	limit 22 to english language [Limit not valid in CDSR,ACP Journal Club,DARE,CCTR,CLCMR; records were retained]	28
24	limit 23 to yr="2000 -Current" [Limit not valid in DARE; records were retained]	11

Comments from the survey of CRA members on the items:

Comments were received from 29 members (17%) responding to the survey. One of the common themes was the target audience of these statements. Many participating in the review felt that some decisions by clinicians resulted in excessive use/ additional costs or burden. One commenter said “I don't think rheumatologists are doing these things... referring GPs (family doctors) should be questioned/taught about this...hopefully rheumatologists don't work this way.”

Many agreed with these statements but would reword them and also highlighted the importance of clinical judgment in making these decisions. Another colleague asked, “Is this item high impact based on its prevalence, cost, or potential to reduce harm - challenging to answer as not all components are relevant to each scenario presented.”

Finally, others felt that that the comments were not generalizable because of difference in the investigation testing at different facilities. “ANA and sub-serology results are so variable and unreliable between the different private labs that community based physicians need some leeway here. For example, negative ANA and positive anti-dsDNA checked at university lab with anti-dsDNA correct and in another example with incorrectly positive anti-dsDNA at a different lab. I've got a drawer full of these.” Based on these comments some of the statements were reworded.