

## Clinical effectiveness

### *Ovid MEDLINE 1948 to March week 5 2011*

1. exp Diphosphonates/
2. RANK Ligand/
3. (denosumab or bisphosphonate\* or ibandron\* or clodron\* or pamidron\* or zoledron\*).tw.
4. (radiation or radiotherapy or radionuclide\* or hormone therapy or strontium or samarium).ti.
5. or/1-4
6. exp Neoplasms/
7. (solid tumor or solid tumour\* or cancer or carcinoma or myeloma).tw.
8. or/6-7
9. 5 and 8
10. exp Bone Neoplasms/
11. (((bone or osteolytic or lytic) adj lesion\*) or (bone adj2 metast\*)).tw.
12. (skeletal or fracture\*).tw.
13. or/10-12
14. 9 and 13
15. randomized controlled trial.pt.
16. 14 and 15
17. limit 16 to english language

### *Ovid MEDLINE In-Process and Other Non-Indexed Citations 8 April 2011*

1. (solid tumor or solid tumour\* or cancer or carcinoma or myeloma).ti.
2. (bone adj2 metast\*).tw.
3. (skeletal related event\* or fracture\*).tw.
4. or/2-3
5. 1 and 4
6. random\*.tw.
7. randomized controlled trial.pt.
8. or/6-7
9. 5 and 8

### *Ovid EMBASE 1980 to March week 5 2011*

1. exp \*DENOSUMAB/
2. \*clodronic acid/ or \*ibandronic acid/ or \*pamidronic acid/ or \*zoledronic acid/
3. (denosumab or bisphosphonate\* or ibandron\* or clodron\* or pamidron\* or zoledron\*).tw.
4. (radiation or radiotherapy or radionuclide\* or hormone therapy or strontium or samarium).ti.
5. or/1-4
6. (solid tumor or solid tumour\* or cancer or carcinoma or myeloma).tw.
7. 5 and 6
8. exp \*bone cancer/
9. ((bone or osteolytic or lytic) adj lesion\*).tw.
10. (bone adj2 metast\*).tw.
11. (skeletal or fracture\*).tw.
12. or/8-11
13. 7 and 12

14. randomized controlled trial/
15. 13 and 14
16. limit 15 to english language

### ***Cochrane Database of Systematic Reviews Issue 3 of 12, March 2011***

### ***Cochrane Central Register of Controlled Trials (CENTRAL) Issue 1 of 4, January 2011***

1. (denosumab or bisphosphonate\* or ibandron\* or clodron\* or pamidron\* or zoledron\*):ti,ab,kw
2. (radiation or radiotherapy or radionuclide\* or hormone therapy or strontium or samarium):ti
3. (solid tumor or solid tumour\* or cancer or carcinoma or myeloma):ti,ab,kw
4. (#1 OR #2)
5. (#4 AND #3)
6. (bone or skeletal) near/1 metast\*:ti,ab,kw
7. (osteoly\* or lesion\* or lytic) near/3 bone\*:ti,ab,kw
8. (#6 OR #7)
9. (#5 AND #8)

### ***Conference Proceedings***

American Society of Clinical Oncology 2011 abstracts

<http://abstract.asco.org/>

American Urological Association's Annual Meeting 2011

<http://www.aua2011.org/>

## **Economics or quality of life of bone metastases and skeletal-related effects**

### ***Ovid MEDLINE 1948 to May week 3 2011***

1. "Costs and Cost Analysis"/
2. "cost of illness"/
3. exp Economics/
4. (pharmacoeconomic\$ or pharmaco-economic\$ or economic\$ or cost-effective\* or cost-benefit).tw.
5. exp Health Status/
6. exp "Quality of Life"/
7. quality-adjusted life years/
8. (health state\* or health status).tw.
9. (qaly\$ or EQ5D or EQ-5D or euroqol or euro-qol or SF-36 or SF36).tw.
10. (markov or time trade off or standard gamble or hrql or hrqol or disabilit\$).tw.
11. (quality adj2 life).tw.
12. (decision adj2 model).tw.
13. (utilit\* adj3 (cost\* or analys\* or score\* or health or value\* or assessment\*)).tw.
14. ((utilit\* or preference) adj3 (weight\* or score\*)).tw.
15. or/1-14
16. ((skeletal or fracture or bone) and (malignan\* or metastat\* or cancer or carcinoma)).tw.
17. (spinal cord compression or hypercalc\* or (surgery adj3 bone)).tw.
18. ((radiation or radiotherapy) adj3 bone).tw.
19. or/16-18
20. 15 and 19
21. limit 20 to english language

### **EMBASE 1980 to 2011 week 21**

### **Ovid MEDLINE In-Process and Other Non-Indexed Citations 27 May 2011**

(pharmacoeconomic\$ or pharmaco-economic\$ or economic\$).ti.

1. (health state\* or health status).tw.
2. (qaly\$ or EQ5D or EQ-5D or euroqol or euro-qol or SF-36 or SF36).tw.
3. (markov or time trade off or standard gamble or hrql or hrqol or disabilit\$).tw.
4. (quality adj2 life).tw.
5. (decision adj2 model).tw.
6. (utilit\* adj3 (cost\* or analys\* or score\* or health or value\* or assessment\*)).tw.
7. ((utilit\* or preference) adj3 (weight\* or score\*)).tw.
8. (cost or costs).m\_titl.
9. ((skeletal or fracture or bone) and (malignan\* or metastat\* or cancer or carcinoma)).ti
10. spinal cord compression or SRE or hypercalc\* or (surgery adj3 bone)).ti.
11. ((radiation or radiotherapy) and bone).ti.
12. or/10-12
13. or/1-9
14. 13 and 14
15. limit 15 to english language

### **Science Citation Index – 1970 to present**

### **Social Sciences Citation Index – 1970 to present**

### **Conference Proceedings Citation Index – Science – 1990 to present**

### **Conference Proceedings Citation Index – Social Science & Humanities – 1990 to present**

1. Title=((skeletal or fracture or bone) and (malignan\* or metastat\* or cancer or carcinoma)) AND Title=(spinal cord compression or SRE or hypercalc\* or surgery or radiation or radiotherapy)
2. Topic=(Pharmacoeconomic\* or pharmaco-economic\* or economic\* or cost or costs or quality of life or health status or health utiliti\*)
3. #1 and #2
4. Title=(Pharmacoeconomic\* or pharmaco-economic\* or economic\* or cost or costs or quality of life or health status or health utiliti\*) AND Topic=((skeletal or fracture or bone) and (malignan\* or metastat\* or cancer or carcinoma)) AND Topic=(spinal cord compression or SRE or hypercalc\* or surgery or radiation or radiotherapy)
5. #3 or #4 Refined by: Languages=( ENGLISH )

## **Economics of denosumab and bisphosphonates**

### **Ovid MEDLINE 1948 to May week 3 2011**

1. (denosumab or bisphosphonate\* or ibandron\* or clodron\* or pamidron\* or zoledron\*).tw.
2. ((skeletal or fracture or bone) and (malignan\* or metastat\* or cancer or carcinoma)).tw.
3. 1 and 2
4. "Costs and Cost Analysis"/
5. "cost of illness"/
6. exp Economics/
7. (pharmacoeconomic\$ or pharmaco-economic\$ or economic\$ or cost-effective\* or cost-benefit).tw.
8. exp Health Status/
9. exp "Quality of Life"/
10. exp quality-adjusted life years/
11. health state\* or health status).tw.
12. (qaly\$ or EQ5D or EQ-5D or euroqol or euro-qol or SF-36 or SF36).tw.
13. (markov or time trade off or standard gamble or hrql or hrqol or disabilit\$).tw.

14. (quality adj2 life).tw.
15. (decision adj2 model).tw.
16. (utilit\* adj3 (cost\* or analys\* or score\* or health or value\* or assessment\*)).tw.
17. ((utilit\* or preference) adj3 (weight\* or score\*)).tw.
18. or/4-17
19. 3 and 18
20. limit 19 to english language

### **EMBASE 1980 to 2011 week 21**

#### **Ovid MEDLINE In-Process and Other Non-Indexed Citations 2 June 2011**

1. (denosumab or bisphosphonate\* or ibandron\* or clodron\* or pamidron\* or zoledron\*).tw.
2. ((skeletal or fracture or bone) and (malignan\* or metastat\* or cancer or carcinoma)).tw.
3. 1 and 2
4. (pharmacoeconomic\$ or pharmaco-economic\$ or economic\$ or cost-effective\* or cost-benefit).tw.
5. (health state\* or health status).tw.
6. (qaly\$ or EQ5D or EQ-5D or euroqol or euro-qol or SF-36 or SF36).tw.
7. (markov or time trade off or standard gamble or hrql or hrqol or disabilit\$).tw.
8. (quality adj2 life).tw.
9. (decision adj2 model).tw.
10. (utilit\* adj3 (cost\* or analys\* or score\* or health or value\* or assessment\*)).tw.
11. ((utilit\* or preference) adj3 (weight\* or score\*)).tw.
12. or/4-11
13. 3 and 12
14. limit 13 to English language

### **NHS Economic Evaluation Database**

#### **Centre for Reviews and Dissemination**

**URL: <http://www.york.ac.uk/inst/crd/>**

1. denosumab or bisphosphonate\* or ibandron\* or clodron\* or pamidron\* or zoledron\*:TI

### **Science Citation Index – 1970 to present**

#### **Social Sciences Citation Index – 1970 to present**

#### **Conference Proceedings Citation Index – Science – 1990 to present**

#### **Conference Proceedings Citation Index – Social Science & Humanities – 1990 to present**

1. Title=(denosumab or bisphosphonate\* or ibandron\* or clodron\* or pamidron\* or zoledron\*) AND Title=(pharmacoeconomic\* or pharmaco-economic\* or economic\* or cost\* or quality of life or qaly\* or EQ5D or EQ-5D or health utilit\* or euroqol or euro-qol or SF-36 or SF36) NOT Title=(postmenopaus\* or postmenopaus\* or osteopor\*)

Conference Proceedings

American Society of Clinical Oncology 2010 and 2011 abstracts

<http://www.asco.org/ascov2/meetings/abstracts>

## **Safety and adverse events**

### **Ovid MEDLINE 1996 to June week 3 2011**

1. exp \*Diphosphonates/ae [Adverse Effects]
2. exp \*RANK Ligand/ae [Adverse Effects]
3. (denosumab or bisphosphonate\* or ibandron\* or clodron\* or pamidron\* or zoledron\*).ti.

4. (risk or safety or adverse or harm or pharmacovigilance).ti.
5. (side-effect\* or precaution\* or warning\* or contraindication\* or contra-indication\* or tolerability or toxic\* or complication\*).ti.
6. (osteonecrosis or ONJ or renal or hypocalc\*).ti.
7. or/4-6
8. or/1-2
9. 3 and 8
10. 7 and 9
11. limit 10 to yr="2000 - 2011"

### ***Ovid MEDLINE In-Process and Other Non-Indexed Citations 28 June 2011***

1. (denosumab or bisphosphonate\* or ibandron\* or clodron\* or pamidron\* or zoledron\*).ti.
2. (risk or safety or adverse or harm or pharmacovigilance).ti.
3. (side-effect\* or precaution\* or warning\* or contraindication\* or contra-indication\* or tolerability or toxic\* or complication\*).ti.
4. (osteonecrosis or ONJ or renal or hypocalc\*).ti.
5. or/2-4
6. 1 and 5

### ***EMBASE 1996 to 2011 week 25***

1. exp \*denosumab/ae [Adverse Drug Reaction]
2. exp \*bisphosphonic acid derivative/ae [Adverse Drug Reaction]
3. (denosumab or bisphosphonate\* or ibandron\* or clodron\* or pamidron\* or zoledron\*).ti.
4. (risk or safety or adverse or harm or pharmacovigilance).ti.
5. (side-effect\* or precaution\* or warning\* or contraindication\* or contra-indication\* or tolerability or toxic\* or complication\*).ti.
6. (osteonecrosis or ONJ or renal or hypocalc\*).ti.
7. or/4-6
8. or/1-2
9. 3 and 8
10. 7 and 9
11. limit 10 to (english language and yr="2005 - 2011")

### ***Science Citation Index – 1970 to present***

### ***Social Sciences Citation Index – 1970 to present***

### ***Arts & Humanities Citation Index – 1970 to present***

### ***Conference Proceedings Citation Index – Science – 1990 to present***

### ***Conference Proceedings Citation Index – Social Science & Humanities – 1990 to present***

1. Title=(denosumab or bisphosphonate\* or ibandron\* or clodron\* or pamidron\* or zoledron\*) AND  
Title=(osteonecrosis or ONJ or renal or hypocalc\* or risk or safety or adverse or side-effect\*) AND  
Title=(cancer or carcinoma or metast\* or malignant or complication\*)

Refined by: Document Type=( MEETING ABSTRACT )

Timespan=2008-2011 – 30 June.

## **Systematic reviews of denosumab and bisphosphonates for bone metastases and skeletal-related events**

### ***Ovid MEDLINE 2000 to 11 July 2011***

1. (bone and metast\*).ti.
2. bisphosphonate\*.m\_titl.
3. (metast\* or cancer).tw.
4. 2 and 3
5. 1 or 4
6. "cochrane database of systematic reviews".jn.
7. (systematic review or meta-analysis).tw.
8. or/6-7
9. 5 and 8
10. limit 9 to english language
11. limit 10 to yr="2000 – 2011