PE 1137.C415
PN 56.W45
P 94.5.N552
PE 1137.P82
SARGENT
PAINTING
RUFINO TAMAYO
Only Connect
Left Margin

Objectives

- Introducing Practitioner PubMed
- Searching for Systematic Reviews
- Combining earch Terms
- MeSH Search

Outline

- What is PubMed
- Searching Clinical Queries
- PICO Model
- PubMed Search
- Logic of Boolean
- Combining Search Terms
- What is MeSH
- MeSH Search
- References

Outcome

Practitioner will;

- Know Search Tools
- Construct PICO model
- Combine Search Terms
- Able to Search in PubMed Search Engine

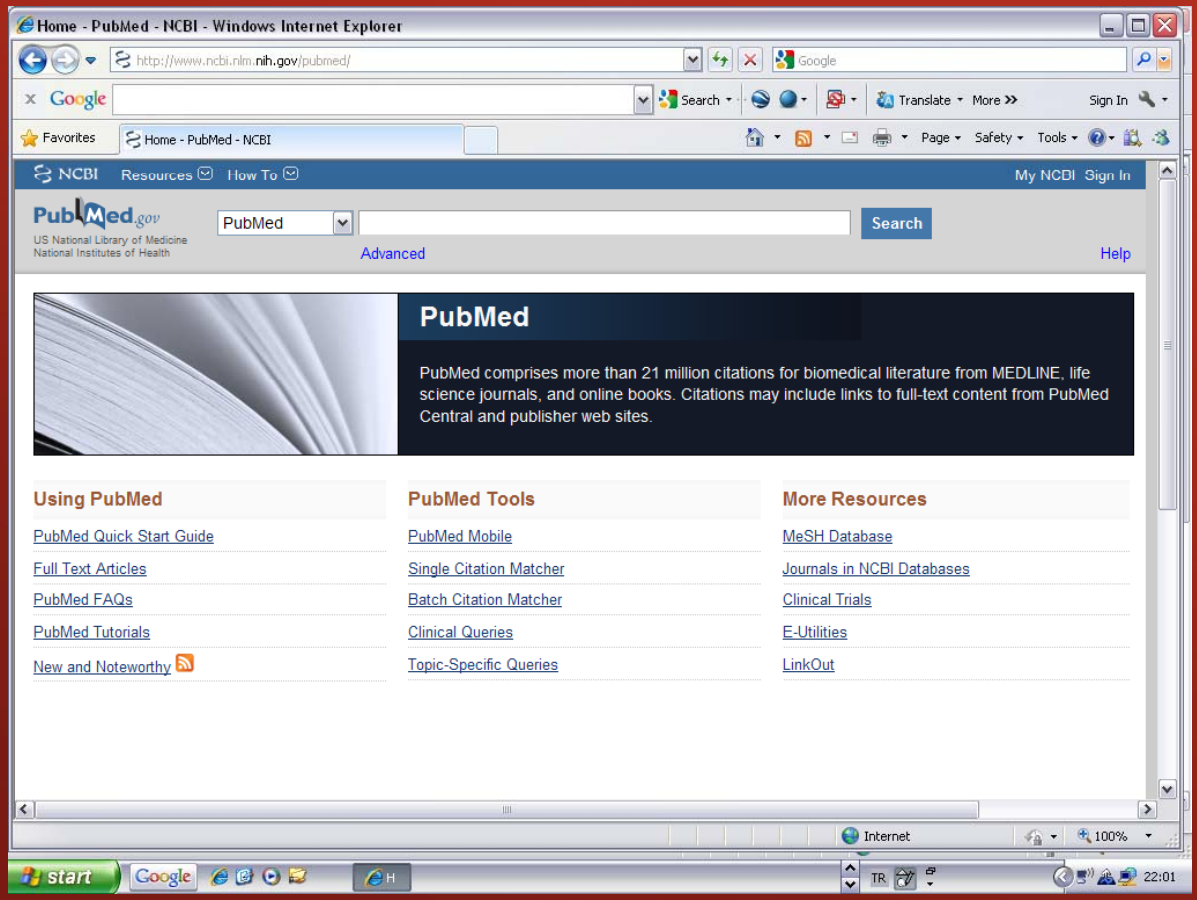
PICO Model

PICO or PECO is an acronym used to identify four primary components of a well formulated clinical question.

P	=	Patient Population or Problem
I	=	Intervention or Exposure
C	=	Comparison
O	=	Outcome

PubMed

http://www.ncbi.nlm.nih.gov



What is PubMed

- Produced by NCBI, PubMed is part of the *Entrez* retrieval system of related biomolecular databases
- PubMed includes MEDLINE, a premier NLM biomedical database of worldwide journal literature in medicine, nursing, dentistry, veterinary medicine, public health and the preclinical sciences
- PubMed is an excellent database for finding some articles on most health/medicine topics.
- PubMed citations come from more than 5,000 biomedical journals.
- PubMed has more than 21 million citations from the 1940's to the present.
- PubMed includes very recent articles and updated each week.
- Coverage is current as participating publishers submit electronic citations daily
- PubMed is free to anyone with internet access.
- PubMed includes links to full text at publisher or library web sites

Combining similar terms

Use Boolean operators to combine different terms

- *OR* use to combine different terms for the same concept
- *AND* to combine different concepts
- *NOT* excludes concepts but must be used with caution to avoid excluding relevant items

Search limits

Consider search refinements to limit to specific aspects of a topic, such as:

- Meta-Analysis (quantitative summary combining results of independent studies)
- human or animal studies
- male or female subjects
- age groups, for example adolescents, infants
- time periods
- languages

Sample Case Scenario; PICO Model

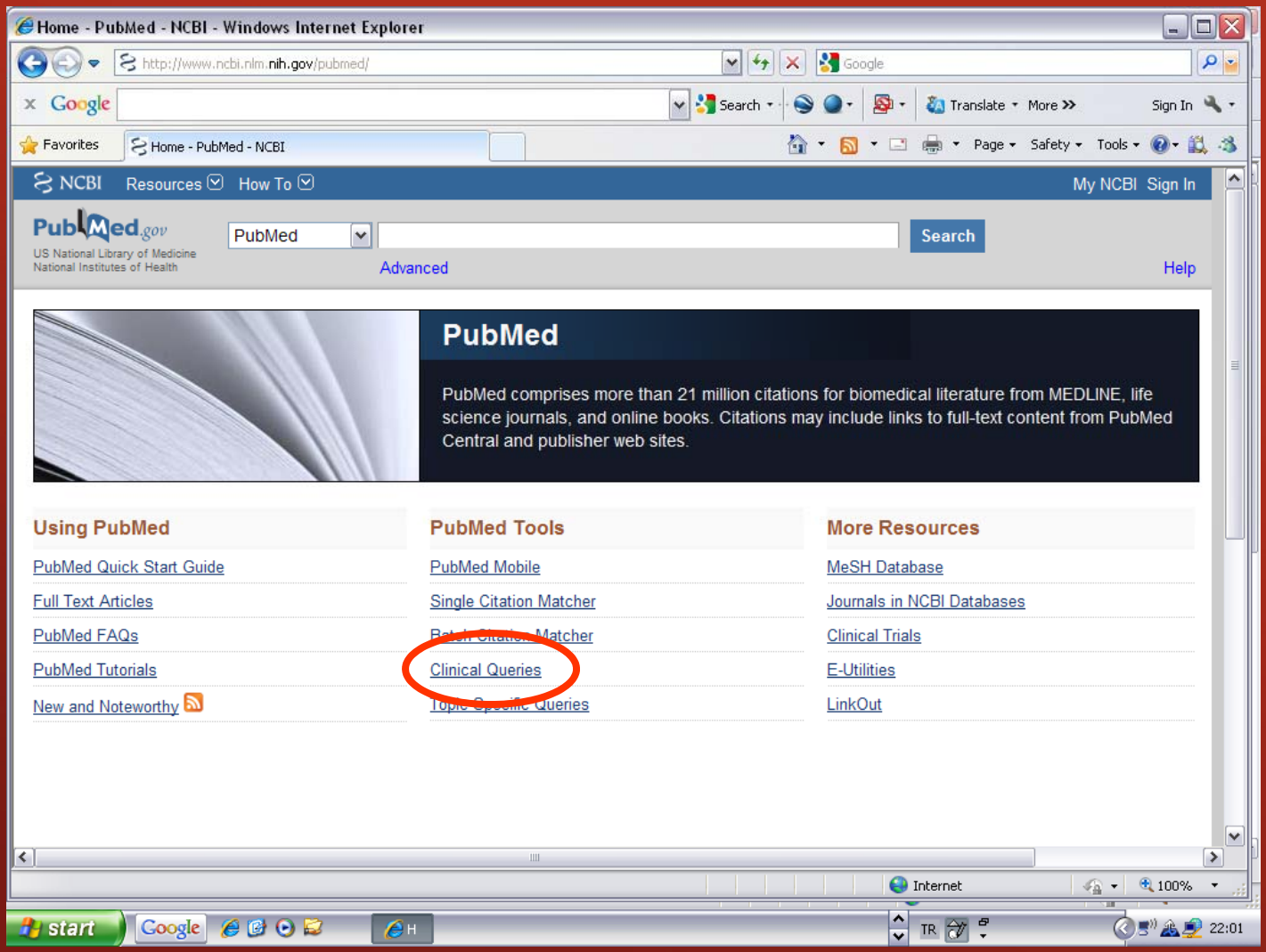
P	Problem/Patient
I	Intervention
C	Comparison
O	Outcome

A patient has prescribed Zometa and referred to your office by a fellow oncologist. Patient admitted to your office for his/her dental treatment.

Some teeth need to be extracted, periodontal and endodontic treatment as well. Finally prosthetic rehabilitation planned.

You are aware of Zometa related osteonecrotic lesions of the jaw bones following dental interventions like tooth extraction.

Is there a dental treatment guideline and what is the best evidence based treatment option for patients under biphosphanates.


Home - PubMed - NCBI - Windows Internet Explorer
http://www.ncbi.nlm.nih.gov/pubmed/
Google
Search
Translate
More
Sign In
Favorites
Home - PubMed - NCBI
Page
Safety
Tools
NCBI
Resources
How To
My NCBI
Sign In
PubMed.gov
US National Library of Medicine
National Institutes of Health
PubMed
Search
Advanced
Help
PubMed
PubMed comprises more than 21 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.
Using PubMed
PubMed Quick Start Guide
Full Text Articles
PubMed FAQs
PubMed Tutorials
New and Noteworthy
PubMed Tools
PubMed Mobile
Single Citation Matcher
Clinical Queries
LinkOut
More Resources
MeSH Database
Journals in NCBI Databases
Clinical Trials
E-Utilities
LinkOut
Internet
100%
start
Google
TR
22:01

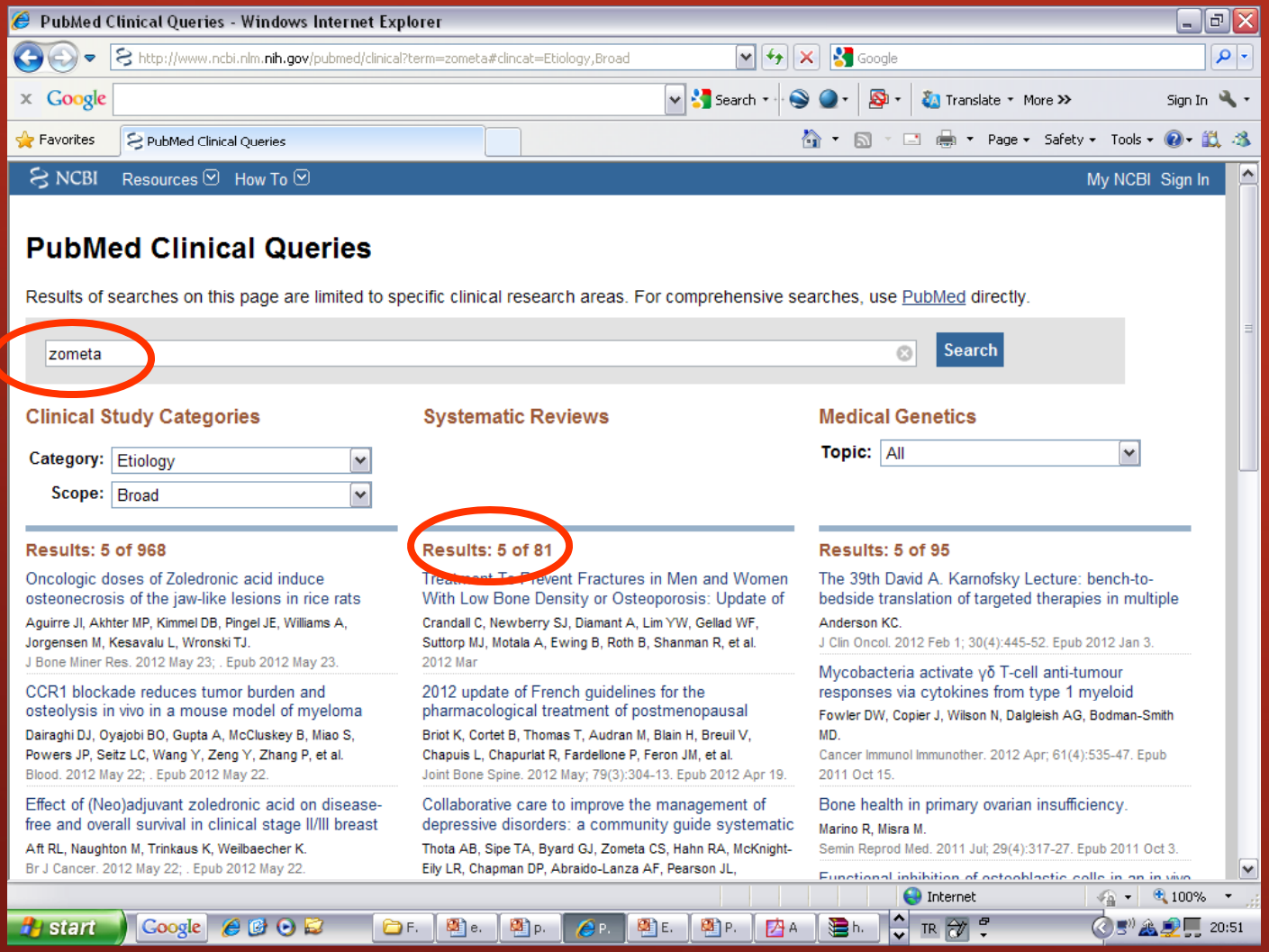
Logic of Boolean

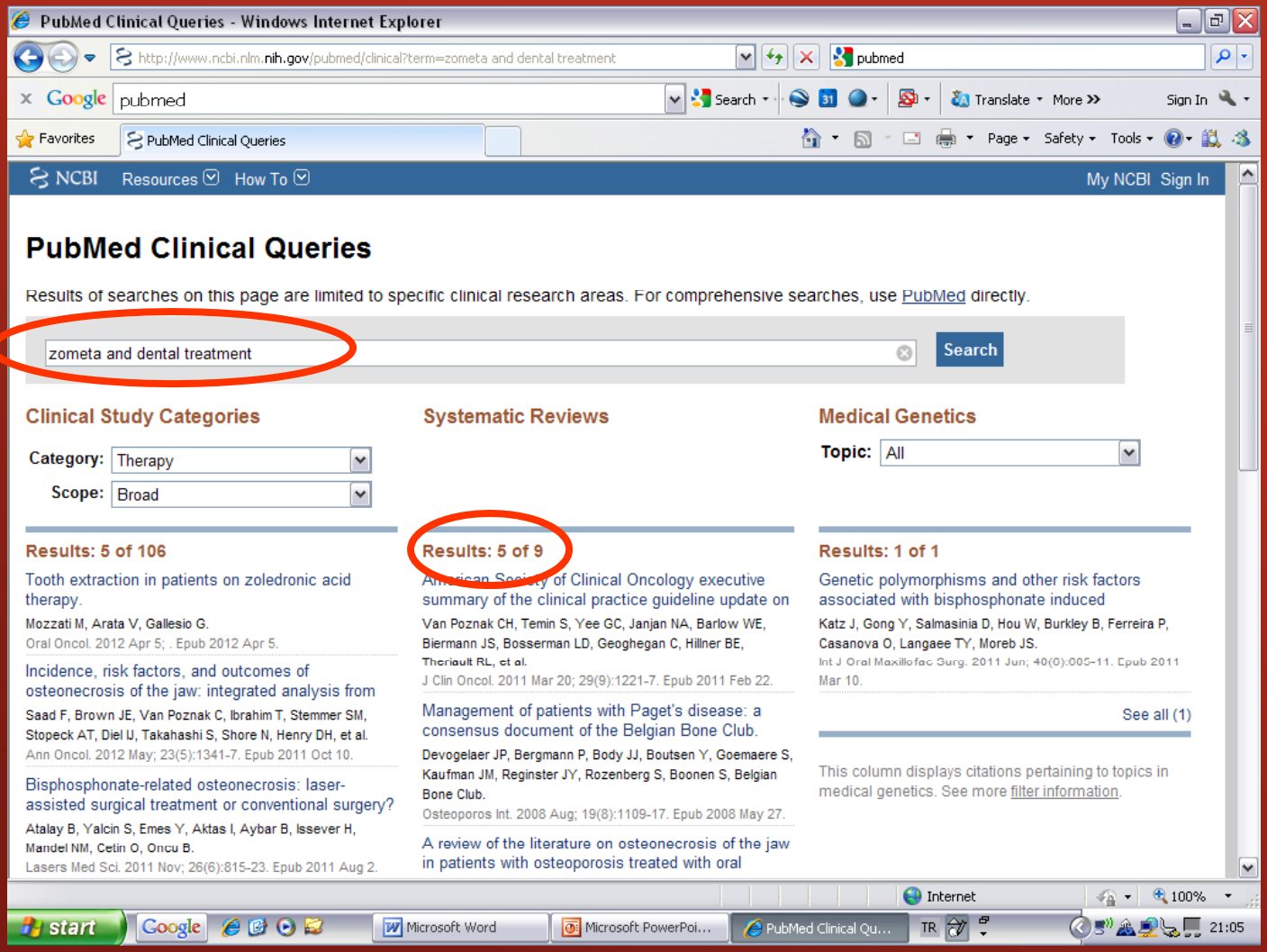
- *OR* will search for articles containing any of the terms we chose.

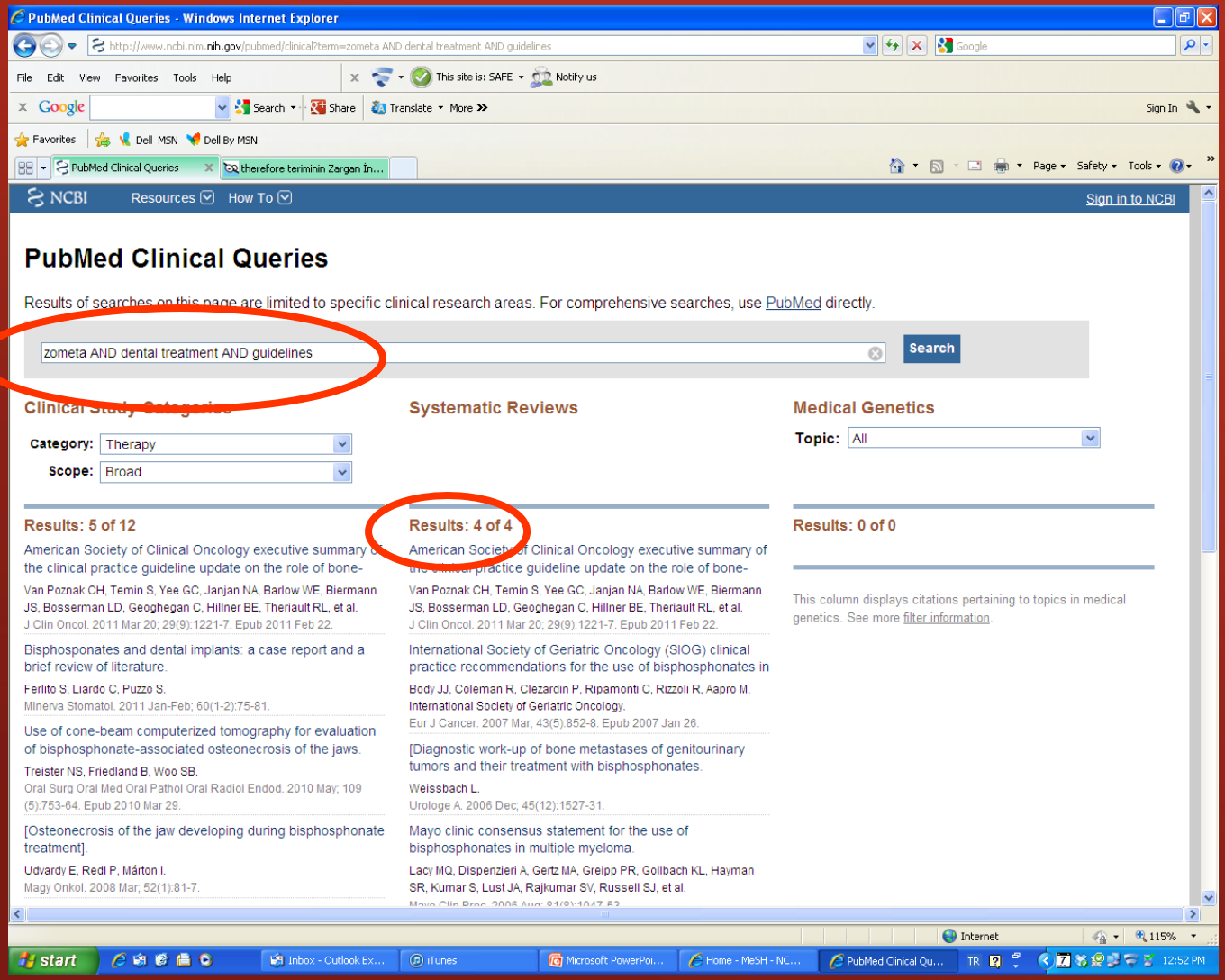
  Use OR to combine synonyms, alterative spellings or related items
- *AND* will search for articles which contain all of the terms we have chosen.

Before starting search consider;

- The keywords
- Other ways to spell the keywords
- Other words which mean the same thing (synonyms)
- Related keywords need to be included
- Limits to apply: date, language, age group, publication type


PubMed Clinical Queries - Windows Internet Explorer
http://www.ncbi.nlm.nih.gov/pubmed/clinical?term=zometa#clincat=Etiology,Broad
Google
Search
Translate
More
Sign In
Favorites
PubMed Clinical Queries
Page
Safety
Tools
NCBI
Resources
How To
My NCBI
Sign In
PubMed Clinical Queries
Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, use PubMed directly.
zometa
Search
Clinical Study Categories
Category: Etiology
Scope: Broad
Systematic Reviews
Medical Genetics
Topic: All
Results: 5 of 968
Oncologic doses of Zoledronic acid induce osteonecrosis of the jaw-like lesions in rice rats
Aguirre JI, Akhter MP, Kimmel DB, Pingel JE, Williams A, Jorgensen M, Kesavalu L, Wronski TJ.
J Bone Miner Res. 2012 May 23; . Epub 2012 May 23.
CCR1 blockade reduces tumor burden and osteolysis in vivo in a mouse model of myeloma
Dairaghi DJ, Oyajobi BO, Gupta A, McCluskey B, Miao S, Powers JP, Seitz LC, Wang Y, Zeng Y, Zhang P, et al.
Blood. 2012 May 22; . Epub 2012 May 22.
Effect of (Neo)adjuvant zoledronic acid on disease-free and overall survival in clinical stage II/III breast
Aft RL, Naughton M, Trinkaus K, Weilbaecher K.
Br J Cancer. 2012 May 22; . Epub 2012 May 22.
Results: 5 of 81
Treatment To Prevent Fractures in Men and Women With Low Bone Density or Osteoporosis: Update of
Crandall C, Newberry SJ, Diamant A, Lim YW, Gellad WF, Suttorp MJ, Motala A, Ewing B, Roth B, Shanman R, et al.
2012 Mar
2012 update of French guidelines for the pharmacological treatment of postmenopausal
Briot K, Cortet B, Thomas T, Audran M, Blain H, Breuil V, Chapuis L, Chapurlat R, Fardellone P, Feron JM, et al.
Joint Bone Spine. 2012 May; 79(3):304-13. Epub 2012 Apr 19.
Collaborative care to improve the management of depressive disorders: a community guide systematic
Thota AB, Sipe TA, Byard GJ, Zometa CS, Hahn RA, McKnight-Eily LR, Chapman DP, Abraido-Lanza AF, Pearson JL,
Results: 5 of 95
The 39th David A. Karnofsky Lecture: bench-to-bedside translation of targeted therapies in multiple
Anderson KC.
J Clin Oncol. 2012 Feb 1; 30(4):445-52. Epub 2012 Jan 3.
Mycobacteria activate γδ T-cell anti-tumour responses via cytokines from type 1 myeloid
Fowler DW, Copier J, Wilson N, Dalgleish AG, Bodman-Smith MD.
Cancer Immunol Immunother. 2012 Apr; 61(4):535-47. Epub 2011 Oct 15.
Bone health in primary ovarian insufficiency.
Marino R, Misra M.
Semin Reprod Med. 2011 Jul; 29(4):317-27. Epub 2011 Oct 3.
Internet
100%
start
Google
20:51


PubMed Clinical Queries - Windows Internet Explorer
http://www.ncbi.nlm.nih.gov/pubmed/clinical?term=zometa and dental treatment
pubmed
Google
pubmed
Search
Translate
More
Sign In
Favorites
PubMed Clinical Queries
Page
Safety
Tools
NCBI
Resources
How To
My NCBI
Sign In
PubMed Clinical Queries
Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, use PubMed directly.
zometa and dental treatment
Search
Clinical Study Categories
Category: Therapy
Scope: Broad
Systematic Reviews
Medical Genetics
Topic: All
Results: 5 of 106
Tooth extraction in patients on zoledronic acid therapy.
Mozzati M, Arata V, Gallesio G.
Oral Oncol. 2012 Apr 5; . Epub 2012 Apr 5.
Incidence, risk factors, and outcomes of osteonecrosis of the jaw: integrated analysis from
Saad F, Brown JE, Van Poznak C, Ibrahim T, Stemmer SM, Stopeck AT, Diel IJ, Takahashi S, Shore N, Henry DH, et al.
Ann Oncol. 2012 May; 23(5):1341-7. Epub 2011 Oct 10.
Bisphosphonate-related osteonecrosis: laser-assisted surgical treatment or conventional surgery?
Atalay B, Yalcin S, Emes Y, Aktas I, Aybar B, Issever H, Mandel NM, Cetin O, Oncu B.
Lasers Med Sci. 2011 Nov; 26(6):815-23. Epub 2011 Aug 2.
Results: 5 of 9
of Clinical Oncology executive summary of the clinical practice guideline update on
Van Poznak CH, Temin S, Yee GC, Janjan NA, Barlow WE, Biermann JS, Bosserman LD, Geoghegan C, Hillner BE, Theriault RL, et al.
J Clin Oncol. 2011 Mar 20; 29(9):1221-7. Epub 2011 Feb 22.
Management of patients with Paget's disease: a consensus document of the Belgian Bone Club.
Devogelaer JP, Bergmann P, Body JJ, Boutsen Y, Goemaere S, Kaufman JM, Reginster JY, Rozenberg S, Boonen S, Belgian Bone Club.
Osteoporos Int. 2008 Aug; 19(8):1109-17. Epub 2008 May 27.
A review of the literature on osteonecrosis of the jaw in patients with osteoporosis treated with oral
Results: 1 of 1
Genetic polymorphisms and other risk factors associated with bisphosphonate induced
Katz J, Gong Y, Salmasinia D, Hou W, Burkley B, Ferreira P, Casanova O, Langaee TY, Moreb JS.
Int J Oral Maxillofac Surg. 2011 Jun; 40(6):605-11. Epub 2011 Mar 10.
See all (1)
This column displays citations pertaining to topics in medical genetics. See more filter information.
Internet
100%
start
Google
Microsoft Word
Microsoft PowerPoi...
PubMed Clinical Qu...
TR
21:05


PubMed Clinical Queries - Windows Internet Explorer
http://www.ncbi.nlm.nih.gov/pubmed/clinical?term=zometa AND dental treatment AND guidelines
NCBI Resources How To Sign in to NCBI
PubMed Clinical Queries
Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, use PubMed directly.
zometa AND dental treatment AND guidelines
Search
Clinical Study Categories
Category: Therapy
Scope: Broad
Systematic Reviews
Medical Genetics
Topic: All
Results: 5 of 12
American Society of Clinical Oncology executive summary of the clinical practice guideline update on the role of bone-
Van Poznak CH, Temin S, Yee GC, Janjan NA, Barlow WE, Biermann JS, Bosserman LD, Geoghegan C, Hillner BE, Theriault RL, et al.
J Clin Oncol. 2011 Mar 20; 29(9):1221-7. Epub 2011 Feb 22.
Bisphosponates and dental implants: a case report and a brief review of literature.
Ferlito S, Liardo C, Puzzo S.
Minerva Stomatol. 2011 Jan-Feb; 60(1-2):75-81.
Use of cone-beam computerized tomography for evaluation of bisphosphonate-associated osteonecrosis of the jaws.
Treister NS, Friedland B, Woo SB.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2010 May; 109 (5):753-64. Epub 2010 Mar 29.
[Osteonecrosis of the jaw developing during bisphosphonate treatment].
Udvardy E, Redl P, Márton I.
Magy Onkol. 2008 Mar; 52(1):81-7.
Results: 4 of 4
American Society of Clinical Oncology executive summary of the clinical practice guideline update on the role of bone-
Van Poznak CH, Temin S, Yee GC, Janjan NA, Barlow WE, Biermann JS, Bosserman LD, Geoghegan C, Hillner BE, Theriault RL, et al.
J Clin Oncol. 2011 Mar 20; 29(9):1221-7. Epub 2011 Feb 22.
International Society of Geriatric Oncology (SIOG) clinical practice recommendations for the use of bisphosphonates in
Body JJ, Coleman R, Clezardin P, Ripamonti C, Rizzoli R, Aapro M, International Society of Geriatric Oncology.
Eur J Cancer. 2007 Mar; 43(5):852-8. Epub 2007 Jan 26.
[Diagnostic work-up of bone metastases of genitourinary tumors and their treatment with bisphosphonates.
Weissbach L.
Urologe A. 2006 Dec; 45(12):1527-31.
Mayo clinic consensus statement for the use of bisphosphonates in multiple myeloma.
Lacy MQ, Dispenzieri A, Gertz MA, Greipp PR, Gollbach KL, Hayman SR, Kumar S, Lust JA, Rajkumar SV, Russell SJ, et al.
Results: 0 of 0
This column displays citations pertaining to topics in medical genetics. See more filter information.
start
12:52 PM

- By adding terms and combining them with apropriate boolean practitioner will refine search.
- In this particular example combining terms “zometa”, “dental treatment”, “guidelines combined by AND.
- Therefore, the practitioner retrieved 4 systematic reviews.

MeSH Medical Subject Headings

- MeSH is the standard terminology used by the indexer and helps to find articles on the topic, regardless of the exact wording used by the authors.
- Controlled vocabulary of subject terms; it is another feature built into PubMed to enhance retrieval of best evidence.

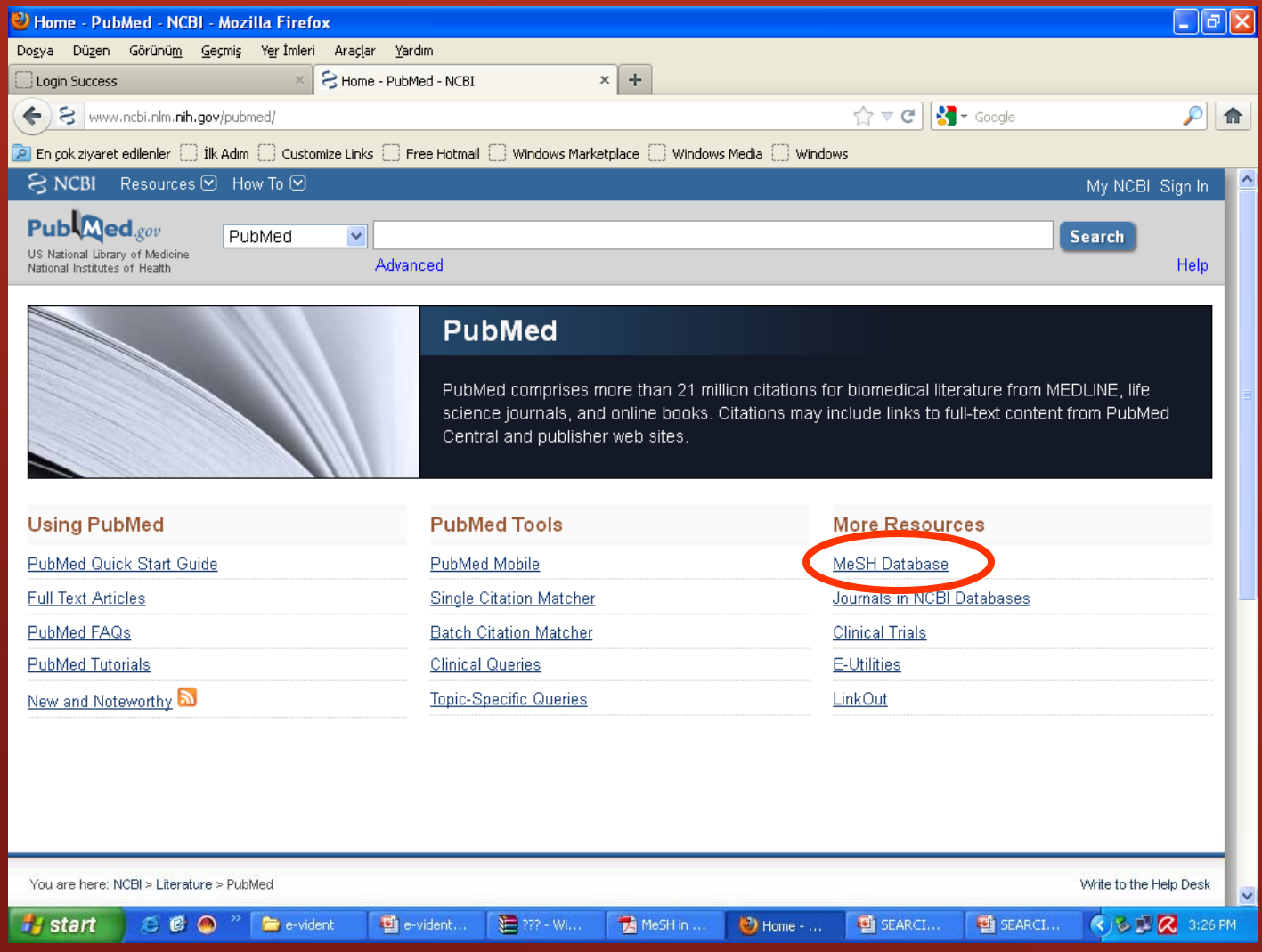
What is MeSH?

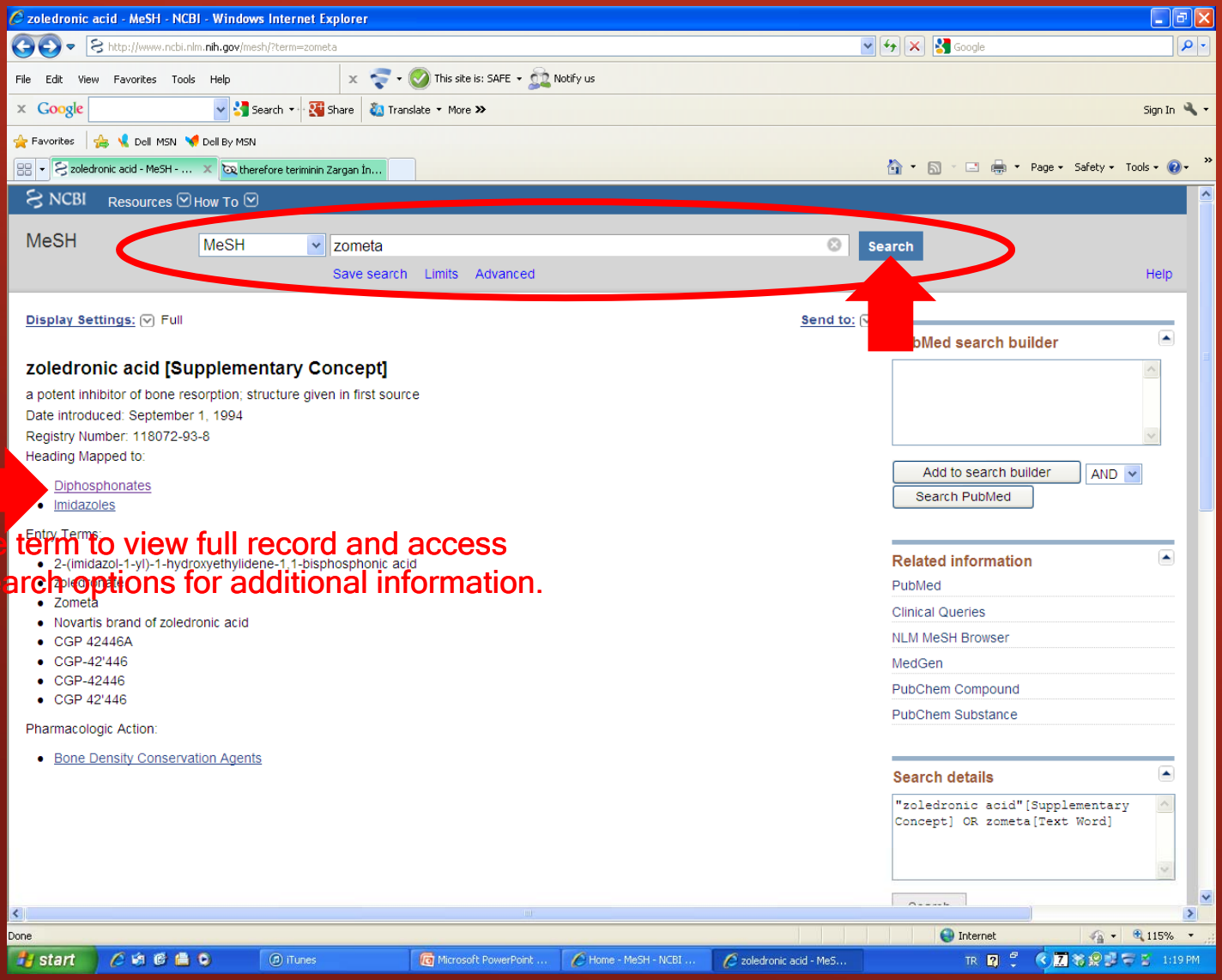
- MeSH is a vocabulary of subject headings and subheadings
- Subject terms are selected and approved for use by NLM
- Each year subject headings are revised with additions and deletions
- Scope note indicate what is meant by the term
- Used to describe the subject content of all publication types in PubMed and in the library catalogs
- Hierarchy of terms with broad and narrow terms
- Items are indexed with the most specific MeSH term available

Advantages of MeSH

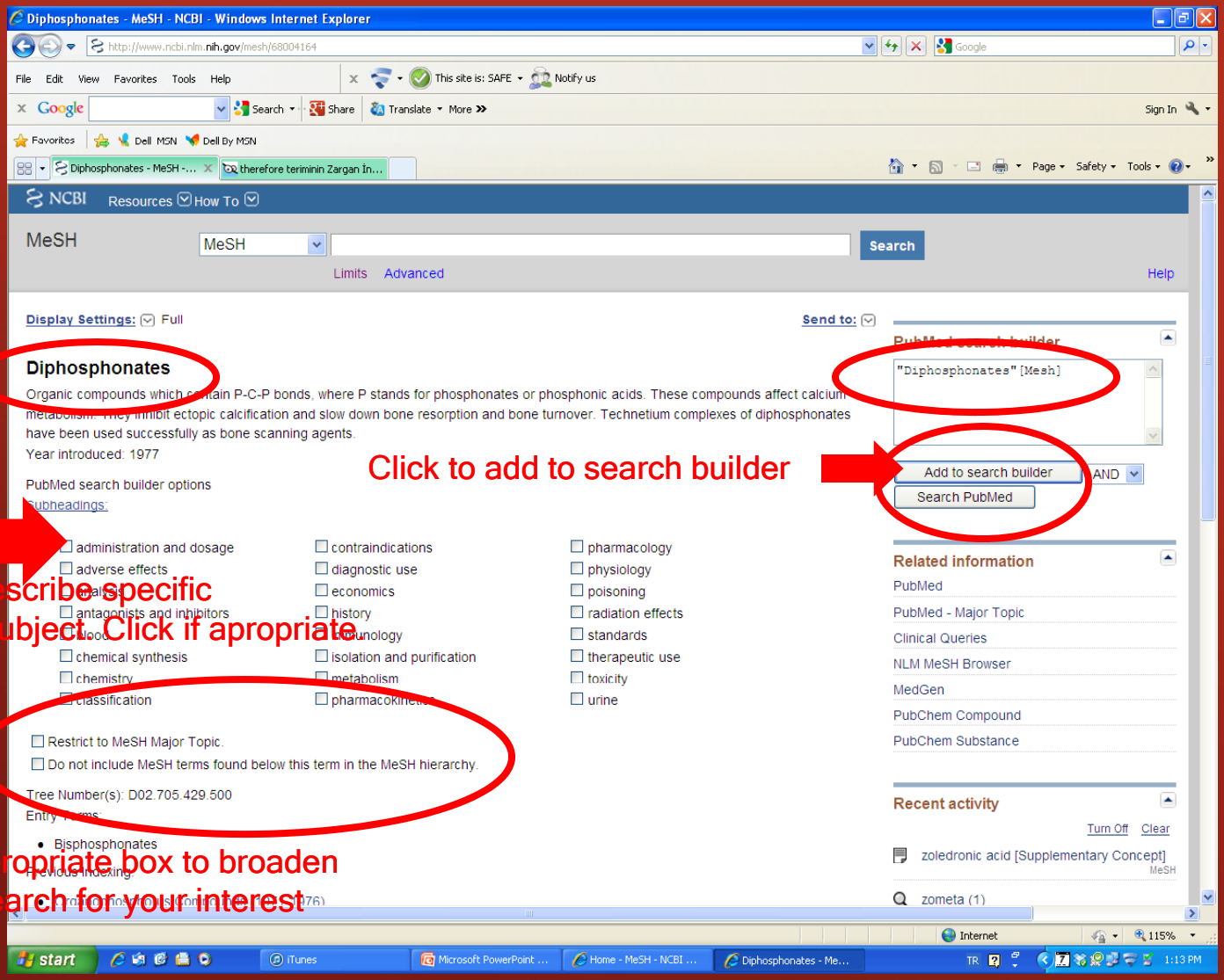
- Consistency in meaning of terms is maintained over time
- Synonyms are organized under one MeSH term
- Allows for both specific and comprehensive results
- Cuts down on irrelevant retrieval

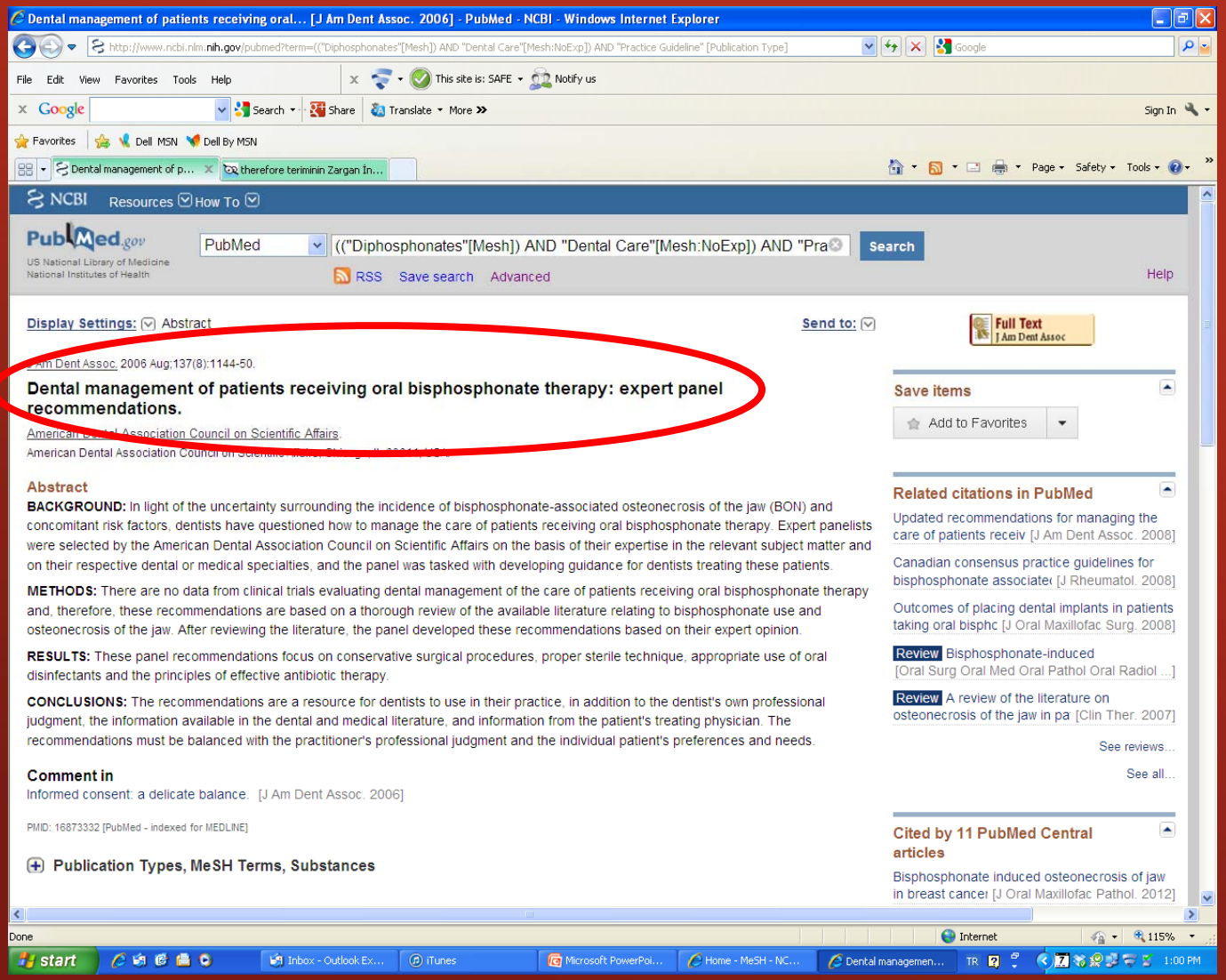
- The MeSH controlled vocabulary is a distinctive feature of MEDLINE.
- It imposes uniformity and consistency to the indexing of biomedical literature.
- MeSH terms are arranged in a hierarchical categorized manner called MeSH Tree Structures and are updated annually.
- Searching using MeSH allows you to overcome problems of spelling and terminology; especially when you might not be aware of different spellings or terminology.


Home - PubMed - NCBI - Mozilla Firefox
Dosya Düzen Görünüm Geçmiş Yer İmleri Araçlar Yardım
Login Success
Home - PubMed - NCBI
www.ncbi.nlm.nih.gov/pubmed/
Google
En çok ziyaret edilenler İlk Adım Customize Links Free Hotmail Windows Marketplace Windows Media Windows
NCBI Resources How To
My NCBI Sign In
PubMed.gov
US National Library of Medicine
National Institutes of Health
PubMed
Search
Advanced
Help
PubMed
PubMed comprises more than 21 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.
Using PubMed
PubMed Quick Start Guide
Full Text Articles
PubMed FAQs
PubMed Tutorials
New and Noteworthy
PubMed Tools
PubMed Mobile
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
Topic-Specific Queries
More Resources
MeSH Database
Journals in NCBI Databases
Clinical Trials
E-Utilities
LinkOut
You are here: NCBI > Literature > PubMed
Write to the Help Desk
start
e-vident
e-vident...
??? - Wi...
MeSH in ...
Home - ...
SEARCI...
SEARCI...
3:26 PM



Click on the term to view full record and access PubMed search options for additional information.


Diphosphonates - MeSH - NCBI - Windows Internet Explorer
NCBI Resources How To
MeSH
Search
Limits Advanced
Help
Display Settings: Full
Send to:
Diphosphonates
Organic compounds which contain P-C-P bonds, where P stands for phosphonates or phosphonic acids. These compounds affect calcium metabolism. They inhibit ectopic calcification and slow down bone resorption and bone turnover. Technetium complexes of diphosphonates have been used successfully as bone scanning agents.
Year introduced: 1977
PubMed search builder options
Subheadings:
administration and dosage
adverse effects
analysis
antagonists and inhibitors
blood
chemical synthesis
chemistry
classification
contraindications
diagnostic use
economics
history
immunology
isolation and purification
metabolism
pharmacokinetics
pharmacology
physiology
poisoning
radiation effects
standards
therapeutic use
toxicity
urine
Restrict to MeSH Major Topic.
Do not include MeSH terms found below this term in the MeSH hierarchy.
Tree Number(s): D02.705.429.500
Entry Terms:
Bisphosphonates
Previous Indexing:
"Diphosphonates"[Mesh]
Add to search builder
AND
Search PubMed
Related information
PubMed
PubMed - Major Topic
Clinical Queries
NLM MeSH Browser
MedGen
PubChem Compound
PubChem Substance
Recent activity
Turn Off Clear
zoledronic acid [Supplementary Concept]
MeSH
zometa (1)
Click to add to search builder
Subheadings describe specific aspects of the subject. Click if apropriate
Tick out the appropriate box to broaden or narrow the search for your interest


Dental management of patients receiving oral... [J Am Dent Assoc. 2006] - PubMed - NCBI - Windows Internet Explorer
NCBI Resources How To
PubMed.gov
US National Library of Medicine
National Institutes of Health
PubMed
((("Diphosphonates"[Mesh]) AND "Dental Care"[Mesh:NoExp]) AND "Pra
Search
RSS Save search Advanced
Help
Display Settings: Abstract
Send to:
Full Text
J Am Dent Assoc
J Am Dent Assoc. 2006 Aug;137(8):1144-50.
Dental management of patients receiving oral bisphosphonate therapy: expert panel recommendations.
American Dental Association Council on Scientific Affairs.
Abstract
BACKGROUND: In light of the uncertainty surrounding the incidence of bisphosphonate-associated osteonecrosis of the jaw (BON) and concomitant risk factors, dentists have questioned how to manage the care of patients receiving oral bisphosphonate therapy. Expert panelists were selected by the American Dental Association Council on Scientific Affairs on the basis of their expertise in the relevant subject matter and on their respective dental or medical specialties, and the panel was tasked with developing guidance for dentists treating these patients.
METHODS: There are no data from clinical trials evaluating dental management of the care of patients receiving oral bisphosphonate therapy and, therefore, these recommendations are based on a thorough review of the available literature relating to bisphosphonate use and osteonecrosis of the jaw. After reviewing the literature, the panel developed these recommendations based on their expert opinion.
RESULTS: These panel recommendations focus on conservative surgical procedures, proper sterile technique, appropriate use of oral disinfectants and the principles of effective antibiotic therapy.
CONCLUSIONS: The recommendations are a resource for dentists to use in their practice, in addition to the dentist's own professional judgment, the information available in the dental and medical literature, and information from the patient's treating physician. The recommendations must be balanced with the practitioner's professional judgment and the individual patient's preferences and needs.
Comment in
Informed consent: a delicate balance. [J Am Dent Assoc. 2006]
PMID: 16873332 [PubMed - indexed for MEDLINE]
Publication Types, MeSH Terms, Substances
Save items
Add to Favorites
Related citations in PubMed
Updated recommendations for managing the care of patients receiv [J Am Dent Assoc. 2008]
Canadian consensus practice guidelines for bisphosphonate associate [J Rheumatol. 2008]
Outcomes of placing dental implants in patients taking oral bisphc [J Oral Maxillofac Surg. 2008]
Review Bisphosphonate-induced [Oral Surg Oral Med Oral Pathol Oral Radiol ...]
Review A review of the literature on osteonecrosis of the jaw in pa [Clin Ther. 2007]
See reviews...
See all...
Cited by 11 PubMed Central articles
Bisphosphonate induced osteonecrosis of jaw in breast cancer [J Oral Maxillofac Pathol. 2012]
Done
Internet
115%
start
1:00 PM

Practitioner easily retrieved a guideline for dental treatment in patients on bisphosphanates by implementing appropriate search terms in a short time in MeSH.

References

1. Elliot Abt; The Basics of Evidence Based Dentistry
2. ADA Policy on Evidence Based Dentistry
3. Sutherland S.; J Can Dent Assoc 2001; 67:204-6
4. McQuay HJ, Moore RA; Evidence-based resource for pain relief. Oxford:Oxford University Press, 1988.
5. Sackett DL, Rosenberg WM, Gray JA, Haynes RB, Richardson WS; Evidence based medicine: what it is and what it isn't. BMJ. 1996;312:71-72.
6. UT Health Science Center; Oral Health Information Tutorial for Dental Public Heath Professionals.