

Literature Search Summary
ACR Appropriateness Criteria®
Evaluation of Nipple Discharge

Literature Searches Performed on: 10/21/2016

Beginning Date: January 2005

End Date: December 2015

Database: Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>

Search Strategy:

-
- 1 Breast Neoplasms/di, pa, ra, su, us [Diagnosis, Pathology, Radiography, Surgery, Ultrasonography] (138258)
 - 2 Breast Neoplasms, Male/di, et, pa, th [Diagnosis, Etiology, Pathology, Therapy] (1749)
 - 3 Nipples/pa, ra, se, su, us [Pathology, Radiography, Secretion, Surgery, Ultrasonography] (2439)
 - 4 Ultrasonography, Mammary/ (4333)
 - 5 Mammography/ (26818)
 - 6 "Sensitivity and Specificity"/ (313256)
 - 7 1 and 3 and 4 and 5 and 6 (13)
 - 8 2 and 3 and 6 (2)
 - 9 2 and 5 (139)
 - 10 (1 or 2) and 3 (1155)
 - 11 Mammary Glands, Human/pa, se, su [Pathology, Secretion, Surgery] (1019)
 - 12 Endoscopy/mt [Methods] (14392)
 - 13 1 and 11 and 12 (32)
 - 14 Breast Diseases/di, pa, ra [Diagnosis, Pathology, Radiography] (7146)
 - 15 3 and 4 and 5 and 6 and 14 (8)
 - 16 Radiographic Image Enhancement/ (17586)
 - 17 1 and 5 and 6 and 16 (423)
 - 18 exp Diagnostic Imaging/ (1958770)
 - 19 1 and 6 and 14 (407)
 - 20 1 and 5 (17999)
 - 21 1 and 4 (3314)
 - 22 1 and 3 and 18 (236)
 - 23 1 and 6 and 18 (4813)
 - 24 Biopsy, Fine-Needle/ (10879)
 - 25 1 and 24 (1042)
 - 26 19 and 24 (21)
 - 27 7 or 8 or 9 or 10 or 13 or 15 or 17 or 19 or 20 or 21 or 22 or 23 or 25 or 26 (23484)
 - 28 limit 27 to (abstracts and english language and humans and yr="2005 - 2015") (9115)
 - 29 limit 28 to case reports (618)
 - 30 28 not 29 (8497)

Literature Searches Performed on: 7/24/2015

Beginning Date: January 2005

End Date: June 2015

Database: Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily, Ovid MEDLINE(R) and Ovid OLDMEDLINE(R) <1946 to Present>

Search Strategy:

-
- 1 Nipples/ (4396)
 - 2 "Exudates and Transudates"/ (9570)
 - 3 serosanguinous.mp. (156)
 - 4 1 and (2 or 3) (164)
 - 5 exp Ultrasonography/ (263171)
 - 6 exp Magnetic Resonance Imaging/ (339773)

7 exp Mammography/ (25544)
 8 NIPPLE DISCHARGE.m_titl. (367)
 9 5 or 6 or 7 (607514)
 10 4 or 8 (419)
 11 9 and 10 (131)
 12 limit 11 to (abstracts and english language and humans and yr="2005 -Current" and "young adult (19 to 24 years)") (10)
 13 limit 11 to (abstracts and english language and humans and yr="2005 -Current" and "adult (19 to 44 years)") (43)
 14 remove duplicates from 13 (41)
 15 14 not 12 (31)
 16 limit 11 to (abstracts and english language and humans and yr="2005 -Current" and "middle aged (45 plus years)") (45)
 17 remove duplicates from 16 (43)
 18 17 not 15 (13)
 19 Risk Factors/ (612601)
 20 Breast Neoplasms/ (231872)
 21 10 and 19 and 20 (11)
 22 limit 21 to (abstracts and english language and humans and yr="2005 -Current" and "young adult (19 to 24 years)") (2)
 23 limit 21 to (abstracts and english language and humans and yr="2005 -Current" and "adult (19 to 44 years)") (7)
 24 23 not 22 (5)
 25 limit 21 to (abstracts and english language and humans and yr="2005 -Current" and "middle age (45 to 64 years)") (6)
 26 25 not 24 (2)
 27 18 or 26 (15)

Literature Search Performed on: 3/5/2015
 Beginning Date: January 2004
 End Date: February 2015

Database: Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily, Ovid MEDLINE(R) and Ovid OLDMEDLINE(R) <1946 to Present>

Search Strategy:

1 Nipples/ (3876)
 2 "Exudates and Transudates"/ (9320)
 3 serosanguinous.mp. (153)
 4 1 and (2 or 3) (159)
 5 nipple discharge.mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier] (772)
 6 4 or 5 (798)
 7 exp diagnostic imaging/ (1771634)
 8 6 and 7 (264)
 9 limit 8 to "all child (0 to 18 years)" (40)
 10 8 not 9 (224)
 11 limit 10 to (abstracts and english language and humans and yr="2004 -Current") (90)
 12 limit 11 to case reports (18)
 13 11 not 12 (72)
 14 remove duplicates from 13 (72)

Literature Search Summary

A literature search was conducted in March 2015 and updated in July 2015 and October 2016 to identify evidence for the *ACR Appropriateness Criteria® Evaluation of Nipple Discharge* topic. Using the search strategies described above, 8584 articles were found. Forty-five articles were used in the topic. The remaining articles were not used due to either poor study design, the articles were not relevant or generalizable to the topic, or the results were unclear or biased.

The author added 27 citations from bibliographies, websites, or books that were not found in the literature searches, including 18 articles outside of the search date ranges.

One citation is a supporting document that was added by staff.