Ovid MEDLINE® Epub ahead of print, In Process & Other Non-indexed Citations, Ovid MEDLINE ® Daily, Ovid MEDLINE and Versions ® 1946 to March 21 2018

Date search commenced Monday 26th March 2018

- 1. exp Papillomavirus Vaccines/ (6262)
- 2. HPV vaccin*.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, synonyms] (5956)
- 3. HPV immunisation.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, synonyms] (49)
- 4. HPV inoculation.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, synonyms] (1)
- 5. 1 or 2 or 3 or 4 (8360)
- 6. VIN.mp. (1046)
- 7. vulvar intraepithelial neoplasia.mp. (580)
- 8. vulva* intraepithelial neoplasia.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, synonyms] (699)
- 9. vaginal intraepithelial neoplasia.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, synonyms] (259)
- 10. exp *Papillomavirus Infections/ (23393)
- 11. vagina* intraepithelial neoplasia.mp. (259)
- 12. vaginal high grade squamous intraepithelial lesion.mp. (1)
- 13. vulva* squamous intraepithelial lesion.mp. (4)
- 14. VAIN.mp. (683)
- 15. 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 (25217)
- 16. 5 and 15 (4644)
- 17. therapeutic vaccin*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word] (3083)
- 18. 16 and 17 (147)

Studies excluded after reading titles – (78)

- Animal models
- Cervix/anal cancer/head and neck
- o Prevention
- o Cancer
- 69 studies identified based on eligibility criteria
 - Review articles (52)
 - Vaccine development (13)
 - Studies excluded after reading abstracts (65)

• 4 studies identified

- Full text not available (1)
- o Daayana 2010 included
- o Van Poelgeest 2016 excluded as trial of Imiquimod at vaccine site
- Welters 2010 excluded as study on immunogenicity after 1 vaccine.
 Follow on from Kenter Study (same group), no clinical measurement

Embase Classic + Embase. 1980 to 2018 Week 13 Date searched 26th March 2018

- 1. exp Papillomavirus Vaccines/ (10999)
- 2. HPV vaccin*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word] (8034)
- 3. HPV immunisation.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word] (60)
- 4. HPV inoculation.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word] (4)
- 5. 1 or 2 or 3 or 4. (13560)
- 6. VIN.mp. (1734)
- 7. vulvar intraepithelial neoplasia.mp. (875)
- 8. vulva* intraepithelial neoplasia.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word] (1079)
- 9. vaginal intraepithelial neoplasia.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word] (604)
- 10. exp *Papillomavirus Infections/ (14809)
- 11. vagina* intraepithelial neoplasia.mp. (606)
- 12. vaginal high grade squamous intraepithelial lesion.mp. (2)
- 13. vulva* squamous intraepithelial lesion.mp. (3)
- 14. VAIN.mp. (1273)
- 15. 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 (18233)
- 16. 5 and 15 (2883)
- 17. therapeutic vaccin*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word] (4151)
- 18. 16 and 17 (72)

Studies excluded after reading titles – (63)

- Animal studies
- Review articles
- Vaccine development
- Head and neck/cervix/other cancer

9 studies identified based on eligibility criteria

- Review article (1)
- Studies in mice (1)
- Vaccine development (4)

3 studies identified

- Daayana 2010 included
- Fiander 2006 prime boost vaccination
- Welters 2010 excluded see above

Web of Science 1900 to present, all databases - 26th March 2018

- 1. (Human papillomavirus vaccines) (13,581)
- 2. (HPV vaccin*) (13,967)
- 3. (HPV immunisation) (4,760)
- 4. (HPV inoculation) (125)
- 5. #4 OR #3 OR #2 OR #1 (17,592)
- 6. (VIN) (10,230)
- 7. (VAIN) (3,507)
- 8. (vaginal intraepithelial neoplasia) (5,723)
- 9. (vulval intraepithelial neoplasia) (308)
- 10. (vulvar intraepithelial neoplasia) (1,941)
- 11. (papillomavirus infections) (52,395)
- 12. #11 OR #10 OR #9 OR #8 OR #7 OR #6 (68,830)
- 13. #12 AND #5 (12,090)
- 14. (Therapeutic vaccine) (100,933)
- 15. #14 AND #5 (4,518)
- 16. #15 AND #13 (3,548)
- 17. Filtered within search to include VIN/VAIN (22)

Studies excluded after reading title - 18

- Review article 6
- Systematic review no lesions 1
- Not vulva/vagina 2
- Immunotherapy 1
- Immune response 2
- Letter -1
- Mice − 2
- Disease review 1
- Booster vaccination 2

4 studies identified

- Samuels 2017 include
- Van Poelgeest 2016 excluded see above
- Daayana 2010 included
- Davidson 2003 included

Cochrane library - 26th March 2018

- 1. HPV Vaccin* and VIN (2)
 - a. Review articles VIN
- 2. HPV vaccin* and VAIN (4)
 - a. All prevention (x1 CIN)

Clinical Trials.gov - 26th March 2018

- 1. VIN/VAIN + HPV vaccination 4 studies
 - a. 2 active not recruiting
 - b. 2 completed
 - i. 1 has results but is CIN
 - ii. Completed August 15 2016, China no results

Reference list search - 7 studies

- Baldwin 2003 included
- Coleman 2016 excluded CIN and vaccine dose development
- Davidson 2003 included
- Kenter 2009 included
- Manuri 2007 excluded mouse model
- Muderspach 2000 included
- Zwaveling 2002 excluded mouse model

7 studies included in total

- Daayana 2010 included
- Fiander 2006 prime boost vaccination
- Samuels 2017 included
- Baldwin 2003 included
- Davidson 2003 included
- Kenter 2009 included
- Muderspach 2000 included

Duplicates = 5