

DATA SUPPLEMENT S1. Complete Search Strategies for the Electronic Database Search

Database: Medline via Ovid <1946 to present>

Search Date: 13 October 2013

Search Results: 818

Update Search: 13 November 2014

*PubMed was also searched at this time (limited to last 180d), but no new search results were found.

Search Results: 56

Total Search Results: 874

MeSH and keywords for Procedural Sedation

1. analgesics/ or analgesics, non-narcotic/ or analgesics, opioid/
2. Conscious Sedation/
3. exp "Hypnotics and Sedatives"/
4. Neuromuscular Agents/
5. Neuromuscular Blockade/
6. exp Nerve Block/
7. Preanesthetic Medication/
8. exp Anesthetics, Dissociative/
9. (anesthetic* or dissociative or hypnotic* or preanesthetic* or pre-anesthetic* or premedicat* or pre-medicat* or PSA or sedation or sedative* or tranquilizer*).tw.
10. (block* adj3 (nerve* or neuromuscular* or neuro-muscular*)).tw.
11. (conscious* adj3 (depress* or lower*)).tw.

12. **or/1-11** [MeSH and keywords for Procedural Sedation] (299,498)

MeSH and keywords for Drugs of Interest

13. Propofol/
- 14/ (propofol* or disoprofol* or diprivan or propoven).tw.
15. Ketamine/
16. (ketamin* or ketalar).tw.
17. Ketofol*.tw.
18. Dexmedetomidine/
19. (dexmedetomidin* or precedex).tw.
20. Nitrous Oxide/
21. ("nitrous oxide*" or alnox or entonox or liqui-med or "laugh* gas").tw.
22. Benzodiazepines/
23. Midazolam/
24. Midazolam*.tw.
25. Lorazepam/
26. (ativan or loraz*).tw.
27. exp Diazepam/
28. (diazepam* or diazemul* or valium*).tw.
29. Etomidate/
30. Etomidat*.tw.

31. exp Meperidine/ 32. (meperidin* or penthidin* or prometh*).tw. 33. Atropine/ 34. (atropin* or antisialogogue* or anti-sialogogue*).tw. 35. ondansetron/ 36. (ondansetron* or zofran).tw.
37. or/13-36 [MeSH and keywords for drugs of interest] (137,586)
<i>MeSH and keywords terms for Children</i> 38. exp Infant/ 39. exp Child/ 40. Adolescent/ 41. exp Pediatrics/ 42. (neonate* or baby or babies or infant* or toddler* or child* or youth or teen* or adolescen* or p?ediatric*).tw.
43. or/38-42 [MeSH and keywords for children <19 years] (3,122,642)
44. and/12,37,43 [combination of PS + drugs + children only] (13,440)
<i>Filter for Systematic Reviews</i> 45. meta analysis.mp.pt. 46. review.pt. 47. search*.tw.
48. or/45-47 [HIRU search filter for SRs] (2,071,861)
49. and/44,48 [PS + drugs + children + HIRU SR] (890)
50. remove duplicates from 49 (818)

Database: Embase via Ovid <1980 to present>

Search Date: 13 September 2013

Search Results: 1,937

<i>Index and keywords terms for Procedural Sedation</i> 1. analgesic agent/ 2. narcotic analgesic agent/ 3. conscious sedation/ 4. hypnotic sedative agent/ 5. muscle relaxant agent/ 6. neuromuscular blocking agent/ 7. exp premedication/ 8. (anesthetic* or dissociative or hypnotic* or preanesthetic* or pre-anesthetic* or premedicat* or pre-medicat* or PSA or sedation or sedative* or tranquilzer*).tw. 9. (block* adj3 (nerve* or neuromuscular* or neuro-muscular*)).tw. 10. (conscious* adj3 (depress* or lower*)).tw.
11. or/1-10 [Index and keywords for Procedural Sedation] (289,640)
<i>Index and keywords for Drugs of Interest</i> 12. propofol/ 13. (propofol* or disoprofol* or diprivan or propoven).tw. 14. ketamine/ 15. (ketamin* or ketalar).tw.

16. ketofol*.tw.
17. dexmedetomidine/
18. (dexmedetomidin* or precedex).tw.
19. nitrous oxide/
20. ("nitrous oxide*" or alnox or entonox or liqui-med or "laugh* gas").tw.
21. benzodiazepine derivative/
22. midazolam/
23. midazolam*.tw.
24. lorazepam/
25. (ativan or loraz*).tw.
26. diazepam/
27. (diazepam* or diazemul* or valium*).tw.
28. etomidate/
29. etomidat*.tw.
30. pethidine/
31. (meperidin* or pethidin* or prometh*).tw.
32. atropine/
33. (atropin* or antisialogogue* or anti-sialogogue*).tw.
34. ondansetron/
35. (ondansetron* or zofran).tw.

36. **or/12-35** [Index and keywords for drugs of interest] (265,422)

Index and keywords terms for Children

37. exp infant/
38. exp child/
39. exp adolescent/
40. pediatrics/
41. (neonate* or baby or babies or infant* or toddler* or child* or youth or teen* or adolescen* or p?ediatric*).tw.

42. **or/37-41** [combination of index and keywords r/t children] (2,943,816)

43. **and/11,36,42** [combination of non exploded muscle relaxant + drugs + peds] (11,998)

Filter for Systematic Reviews

44. meta-analys*.mp.
45. search*.tw.
46. review.pt.

47. **or/44-46** [HIRU Embase filter for SRs] (2,239,103)

48. **and/43,47** [original search results + SR filter] (1,966)

49. remove duplicates from 48 (1,937)

Database: EBM Reviews - Cochrane Database of Systematic Reviews <2005 to August 2013>; Database of Abstracts of Reviews of Effects <3rd Quarter 2013>; Health Technology Assessment <3rd Quarter 2013>

Search Date: 13 September 2013

Search Results: 270

Keywords terms for Procedural Sedation

1. (analgesic* or narcotic* or opioid*).mp.

<p>2. (anesthetic* or dissociative or hypnotic* or preanesthetic* or pre-anesthetic* or premedicat* or pre-medicat* or PSA or sedation or sedative* or tranquilzer*).mp.</p> <p>3. (block* adj3 (nerve* or neuromuscular* or neuro-muscular*)).mp.</p> <p>4. (conscious* adj3 (depress* or lower*)).mp.</p>
<p>5. or/1-4 [MeSH and keywords for Procedural Sedation] (2,875)</p>
<p><i>Keywords for Drugs of Interest</i></p> <p>6. (propofol* or disopropofol* or diprivan or propoven).mp.</p> <p>7. (ketamin* or ketalar).mp.</p> <p>8. Ketofol*.mp.</p> <p>9. (dexmedetomidin* or precedex).mp.</p> <p>10. ("nitrous oxide*" or alnox or entonox or liqui-med or "laugh* gas").mp.</p> <p>11. Benzodiazepin*.mp.</p> <p>12. Midazolam*.mp.</p> <p>13. (ativan or loraz*).mp.</p> <p>14. (diazepam* or diazemul* or valium*).mp.</p> <p>15. Etomidat*.mp.</p> <p>16. (meperidin* or penthidin* or prometh*).mp.</p> <p>17. (atropin* or antisialogogue* or anti-sialogogue*).mp.</p> <p>18. (ondansetron* or zofran).mp.</p>
<p>19. or/6-18 [MeSH and keywords for drugs of interest] (1,068)</p>
<p><i>Keywords terms for Children</i></p> <p>20. (neonate* or baby or babies or infant* or toddler* or child* or youth or teen* or adolescen* or p?ediatric*).mp. (9,693)</p>
<p>21. and/5,19-20 [combination of PS + drugs + children only] (270)</p>

Database: International Pharmaceutical Abstracts <1970 to August 2013>

Search Date: 13 September 2013

Search Results: 51

<p><i>Index and keywords terms for Procedural Sedation</i></p> <p>1. analgesic* or narcotic* or opioid*).mp.</p> <p>2. (anesthetic* or dissociative or hypnotic* or preanesthetic* or pre-anesthetic* or premedicat* or pre-medicat* or PSA or sedation or sedative* or tranquilzer*).mp.</p> <p>3. (block* adj3 (nerve* or neuromuscular* or neuro-muscular*)).mp.</p> <p>4. (conscious* adj3 (depress* or lower*)).mp.</p>
<p>5. or/1-4 [MeSH and keywords for Procedural Sedation] (32,929)</p>
<p><i>Keywords for Drugs of Interest</i></p> <p>6. (propofol* or disopropofol* or diprivan or propoven).mp.</p> <p>7. (ketamin* or ketalar).mp.</p> <p>8. Ketofol*.mp.</p> <p>9. (dexmedetomidin* or precedex).mp.</p> <p>10. ("nitrous oxide*" or alnox or entonox or liqui-med or "laugh* gas").mp.</p> <p>11. Benzodiazepin*.mp.</p> <p>12. Midazolam*.mp.</p> <p>13. (ativan or loraz*).mp.</p> <p>14. (diazepam* or diazemul* or valium*).mp.</p>

15. Etomidat*.mp.
16. (meperidin* or penthidin* or prometh*).mp.
17. (atropin* or antisialogogue* or anti-sialogogue*).mp.
18. (ondansetron* or zofran).mp.
19. or/6-18 [MeSH and keywords for drugs of interest] (10,476)
<i>Keywords terms for Children</i>
20. (neonate* or baby or babies or infant* or toddler* or child* or youth or teen* or adolescen* or p?ediatic*).mp.
21. and/5,19-20 [combination of PS + drugs + children only] (509)
<i>Filter for Systematic Reviews</i>
22. meta analysis.mp.pt.
23. review.pt.
24. search*.tw.
25. or/22-24 [SR filter] (33,946)
26. and/21,25 [original search results + SR filter] (51)

Database: CINAHL via EBSCO <1937 to present>

Search Date: 13 September 2013

Search Results: 289

S59=S46 AND S58 (289)
S58=S52 NOT S57 (106,350)
S57=S53 OR S54 OR S55 OR S56 (465,215)
<i>Filter for Systematic Reviews</i>
S56=(MH "Animals+")
S55=PT editorial
S54=PT=letter
S53=PT commentary
S52=S47 OR S48 OR S49 OR S50 OR S51 (117,079)
S51=TX (systematic N1 (review or overview))
S50=(MH "Literature Review+")
S49=TX metaanalys*
S48=TX meta analys*
S47=(MH "Meta Analysis")
S46=S15 AND S39 AND S45
S45=S40 OR S41 OR S42 OR S43 OR S44 (2,624,966)
<i>Index and keywords terms for Children</i>
S44=TI ((neonate* or baby or babies or infant* or toddler* or child* or youth or teen* or adolescen* or p?ediatic*)) OR AB ((neonate* or baby or babies or infant* or toddler* or child* or youth or teen* or adolescen* or p?ediatic*))
S43=(MH "Adolescence")
S42=(MH "Child")
S41=(MH "Infant, Newborn")
S40=(MH "Infant")

S39=S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 (16,562)

Index and keywords for Drugs of Interest

S38=TI ((ondansetron* or zofran)) OR AB ((ondansetron* or zofran))

S37=(MH "Ondansetron")

S36=TI ((atropin* or antisialogogue* or anti-sialogogue*)) OR AB ((atropin* or antisialogogue* or anti-sialogogue*))

S35=(MH "Atropine")

S34=TI ((meperidin* or penthidin* or prometh*)) OR AB ((meperidin* or penthidin* or prometh*))

S33=(MH "Meperidine")

S32=TI Etomidat* OR AB Etomidat*

S31=(MH "Etomidate")

S30=TI ((diazepam* or diazemul* or valium*)) OR AB ((diazepam* or diazemul* or valium*))

S29=(MH "Diazepam")

S28=TI ((ativan or loraz*)) OR AB ((ativan or loraz*))

S27=(MH "Lorazepam")

S26=TI Midazolam* OR AB Midazolam*

S25=(MH "Midazolam")

S24=(MH "Antianxiety Agents, Benzodiazepine")

S23=TI (("nitrous oxide*" or alnox or entonox or liqui-med or "laugh* gas")) OR AB (("nitrous oxide*" or alnox or entonox or liqui-med or "laugh* gas"))

S22=(MH "Nitrous Oxide")

S21=TI ((dexmedetomidin* or precedex)) OR AB ((dexmedetomidin* or precedex))

S20=TI Ketofol* OR AB Ketofol*

S19=TI ((ketamin* or ketalar)) OR AB ((ketamin* or ketalar))

S18=(MH "Ketamine")

S17=TI ((propofol* or disoprofol* or diprivan or propoven)) OR AB ((propofol* or disoprofol* or diprivan or propoven))

S16=(MH "Propofol")

S15=S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 (44,068)

Index and keywords terms for Procedural Sedation

S14=TI ((conscious* N3 (depress* or lower*))) OR AB ((conscious* N3 (depress* or lower*)))

S13=TI ((block* N3 (nerve* or neuromuscular* or neuro-muscular*)) OR AB ((block* N3 (nerve* or neuromuscular* or neuro-muscular*)))

S12=TI ((anesthetic* or dissociative or hypnotic* or preanesthetic* or pre-anesthetic* or premedicat* or pre-medicat* or PSA or sedation or sedative* or tranquilzer*)) OR AB ((anesthetic* or dissociative or hypnotic* or preanesthetic* or pre-anesthetic* or premedicat* or pre-medicat* or PSA or sedation or sedative* or tranquilzer*))

S11=(MH "Anesthetics, Dissociative")

S10=(MH "Nerve Block")

S9=(MH "Neuromuscular Blocking Agents")

S8=(MH "Neuromuscular Agents")
S7=(MH "Sedatives, Nonbarbiturate+")
S6=(MH "Sedatives, Barbiturate")
S5=(MH "Hypnotics and Sedatives")
S4=(MH "Conscious Sedation")
S3=(MH "Analgesics, Nonnarcotic")
S2=(MH "Analgesics, Opioid")
S1=(MH "Analgesics")