**Supplemental Appendix**

# Search Strategy (Search date: 2/25/2016)

# PubMed

(procedural sedation OR conscious sedation) AND clinical trials AND (double blind OR double-blind)

Filter: English

# Web of Science

(procedural sedation OR conscious sedation) AND clinical trials AND (double blind OR double-blind)

Filter: English

# CINAHL

# procedural sedation OR conscious sedation OR safety OR clinical trials

# Filter: English

Records identified through database searching
(n = 545)

## Screening

## Included

## Eligibility

## Identification

Additional records identified after cross-checking reference lists
(n = 2 )

Records screened (n = 547)

Records excluded
(n = 408)

Full-text articles assessed for eligibility
(n = 139)

Full-text articles excluded, assessing pre-medication or not procedural sedation
(n = 6)

Studies included in qualitative synthesis
(n = 133)

**Supplement Appendix Figure.** Flow chart of studies selected for inclusion in the review.

|  |  |  |
| --- | --- | --- |
| AEs recorded | Adult studies | Pediatric studies |
| None | 0 | 1 |
| Vital signs only | 36 | 25 |
| Defined physiologic variables/ listed or defined AEs and side effects | 48 | 23(1 combined) |
| Airway/Respiratory events, *e.g.,* apnea, laryngospasm | 48 | 23(1 combined) |
| Cardiovascular events. *e.g.,* arrhythmias | 34 | 16 |
| Gastrointestinal events, *e.g*., nausea and vomiting | 16 | 12 |
| Neurological events. *e.g.,* headache, vertigo | 14 | 11 |
|  |
| Supplement Appendix Table. 133 studies included: 84 Adult, 48 pediatric. One study included both adults and pediatric patients. AE – Adverse Events. |
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**Adult Procedural Sedation Clinical Trials**

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2. Akin et al. A comparison of fentanyl-propofol with a ketamine-propofol combination for sedation during endometrial biopsy. Journal of Clinical Anesthesia (2005) 17, 187–190
3. Alhashemi. Dexmedetomidine vs midazolam for monitored anaesthesia care during cataract surgery British Journal of Anaesthesia 96 (6): 722–6 (2006)
4. Andolfatto et al. Ketamine-Propofol Combination (Ketofol) Versus Propofol Alone for Emergency Department Procedural Sedation and Analgesia: A Randomized Double-Blind Trial Ann Emerg Med. 2012;59:504-512
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8. Bergese et al. A Phase IIIb, Randomized, Double-blind, Placebo-controlled, Multicenter Study Evaluating the Safety and Efficacy of Dexmedetomidine for Sedation During Awake Fiberoptic Intubation. American Journal of Therapeutics 17, 586–595 (2010)
9. Bergese et al. A comparative study of dexmedetomidine with midazolam and midazolam alone for sedation during elective awake fiberoptic intubation. J Clin Anesth. 2010 Feb;22(1):35-40.
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33. Ferguson et al. Propofol or Ketofol for Procedural Sedation and Analgesia in Emergency Medicine—The POKER Study: A Randomized Double-Blind Clinical Trial. Ann Emerg Med. 2016 Nov;68(5):574-582
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**Pediatric Procedural Sedation Clinical Trials**

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