Supplemental Methods

Study Selection

Published trials included in this review are prospective randomized and non-randomized, double blind, single blind, placebo controlled, active control and open label clinical trials of any pharmacological agent, given by any route, used for the prevention or treatment of delirium.

Search Strategy

Studies were identified by searching the following electronic databases: 1) MEDLINE, 2) CINAHL, 3) PsycINFO, and the 4) Cochrane Database of Systematic Review using "delirium" and "treatment" search terms. References of systematic reviews and review articles were searched to identify studies that might have been overlooked in the initial search. Two of the authors (LS and CE) reviewed abstracts of all citations from the search and the full articles for inclusion. The decision to include studies was based on the inclusion and exclusion criteria and a review of the full text articles by the primary author (JIF).

Data Extraction

We developed a data extraction sheet and had three review authors (LS, CE, DM) extract the following data from included studies with the primary author (JIF) checking the extracted data for its integrity and accuracy: 1) characteristics of trial participants (age, type of disease, hospital specialty and location of treatment, surgical procedure, if being mechanically ventilated, delirium-free or prevalence rates of delirium at baseline), 2) characteristics of the intervention (specific drugs, dosages, routes, fixed or flexible dosing schedules, duration of treatment), 3) number of subjects randomized to and receiving each intervention, 4) study design (randomization, blinding, control), 4) intervention group imbalances, 5) method for diagnosing delirium, 6) if a delirium risk prediction model was used, 7) how resolution of delirium episode was determined, 8) method for assessing delirium episode severity, 9) outcomes (including; prevalence rates of delirium following intervention, duration and severity of delirium episodes, total hospital LOS, ICU LOS, time to extubation, mortality, discharge disposition, re-admission rates).

Assessing Study Quality

For comparison studies, the quality of studies was assessed with the following characteristics: 1) was there a placebo group?, 2) were participants similar at baseline?, 2) was there randomization?, 3) were participants and raters blinded?, 4) was sample size sufficient?, 5) were subject groups adequately characterized as delirium-free or with extant delirium at baseline with a validated method, 6) was severity and duration of delirium episodes measured by a valid instrument at sufficient intervals.