**SI 5 Table. Excluded primary studies with reasons**

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| **Study**  | **Year** | **Reason for exclusion** |
| **Aakerlund** [**1**](#_ENREF_1) | 1994 | Not a comparative study. |
| **Aizawa** [**2**](#_ENREF_2) | 2002 | This study used a pharmacological treatment as an intervention. |
| **Akunne** [**3**](#_ENREF_3) | 2012 | An economic analysis of primary studies. |
| **Bogardus** [**4**](#_ENREF_4) | 2003 | This was a six-month follow-up study of Inouye 1999. |
| **Budd** [**5**](#_ENREF_5) | 1974 | Patients ranged between 23 and 63 years of age. Delirium data were not reported. |
| **Caplan** [**6**](#_ENREF_6) | 2006 | A study of home versus hospital care. |
| **Cole** [**7**](#_ENREF_7) | 1991 | Delirium incidence was not an outcome. |
| **Egbert** [**8**](#_ENREF_8) | 1990 | This study used a pharmacological treatment as an intervention. |
| **Fick** [**9**](#_ENREF_9) | 2000 | This was an observational study without any intervention. |
| **Flaherty** [**10**](#_ENREF_10) | 2011 | A comment on a retrospective observational study. |
| **Gagnon** [**11**](#_ENREF_11) | 2012 | Multicomponent non-pharmacological interventions used as a palliative care for terminally cancer patients |
| **Girard** [**12**](#_ENREF_12) | 2008 | The type of intervention was paired sedation and ventilator weaning protocol for mechanically ventilated patients in intensive care. |
| **González-Montalvo** [**13**](#_ENREF_13) | 2010 | Delirium not considered. |
| **Gustafson** [**14**](#_ENREF_14) | 1991 | This study used a historical control. |
| **Inouye** [**15**](#_ENREF_15) | 1993 | Delirium incidence was not an outcome of interest. |
| **Inouye** [**16**](#_ENREF_16) | 2003 | This was a follow-up study of Inouye 1999. |
| **Kamdar** [**17**](#_ENREF_17) | 2013 | The median age was 54 with interquartile range 43-63. |
| **Koizumi** [**18**](#_ENREF_18) | 1988 | Study with serious methodological flaws: subjects selected without a specific inclusion criteria; unclear study design; unclear allocation to treatment. |
| **Kolanowski** [**19**](#_ENREF_19) | 2011 | This was a study protocol. |
| **Landefeld** [**20**](#_ENREF_20) | 1995 | Delirium incidence was not an outcome. |
| **Layne** [**21**](#_ENREF_21) | 1971 | No non-pharmacological treatment considered. |
| **Lazarus** [**22**](#_ENREF_22) | 1968 | This was an observational study without any interventions. |
| **Leslie** [**23**](#_ENREF_23) | 2005 | This was an economic analysis of Inouye 1999. |
| **Lundstrom** [**24**](#_ENREF_24) | 1999 | This study used an historical control. |
| **McCusker** [**25**](#_ENREF_25) | 2001 | This was an observational study without any interventions. |
| **Meagher** [**26**](#_ENREF_26) | 1996 | The mean age of patients was less than 65 years. There was no control group and the number of non-pharmacological interventions differed between the two delirium groups. |
| **Mehta** [**27**](#_ENREF_27) | 2013 | Experimental treatment was mainly based on pharmacologic treatment. |
| **Mentes** [**28**](#_ENREF_28) | 2003 | Initial analysis of an included study (Culp 2003) |
| **Milisen** [**29**](#_ENREF_29) | 1998 | Delirium incidence was not an outcome. |
| **Milisen** [**30**](#_ENREF_30) | 2005 | This was a systematic review. |
| **Mouchoux** [**31**](#_ENREF_31) | 2011 | This was a study protocol. |
| **Nagley** [**32**](#_ENREF_32) | 1986 | The SPMSQ questionnaire was used to screen for delirium during patient recruitment. |
| **Naughton** [**33**](#_ENREF_33) | 2005 | Data were reported at 4 and 9 months post-discharge. but not during hospitalization. |
| **Needham** [**34**](#_ENREF_34) | 2010 | Before-after study with a historical control. |
| **Rizzo** [**35**](#_ENREF_35) | 2001 | This was an economic analysis of Inouye 1999. |
| **Robinson** [**36**](#_ENREF_36) | 2008 | This study used an historical control. |
| **Rockwood** [**37**](#_ENREF_37) | 1994 | This was a diagnostic accuracy study. |
| **Rubin** [**38**](#_ENREF_38) | 2011 | This was a before-after study using historical controls  |
| **Schindler** [**39**](#_ENREF_39) | 1989 | The mean age of patients was less than 65 years. |
| **Schweickert** [**40**](#_ENREF_40) | 2009 | Patients’ mean age < 60 years; type of intervention was daily interruption of sedation combined with physical and occupational therapy for mechanically ventilated patients. |
| **Siepe** [**41**](#_ENREF_41) | 2011 | The experimental group was mainly based on pharmacologic treatment |
| **Stenvall** [**42**](#_ENREF_42) | 2007 | This was a follow-up study of Lundstrom 2007. |
| **Stenvall** [**43**](#_ENREF_43) | 2012 | This study used subgroup analyses. |
| **Ushida** [**44**](#_ENREF_44) | 2009 | This study used a pharmacological treatment as an intervention. |
| **Vidan** [**45**](#_ENREF_45) | 2005 | Delirium incidence was not reported. |
| **Voller** [**46**](#_ENREF_46) | 2007 | Apparently a before after study. However, the information describing the study design and the baseline population characteristics was extremely limited. In addition. the period of recruitment was unknown and it was unclear if the controls were historical. |
| **Wanich** [**47**](#_ENREF_47) | 1992 | The patient population was a mix of subjects with delirium and subjects at risk of developing delirium. |

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