

Appendix 2: Characteristics of included studied [posted as supplied by author]

Author	Country	Type of ICU	Data Collection Period	Study design	Multicenter enrollment	No. of patients enrolled	Duration of follow up	Multivariable model to adjust association between delirium and mortality?	Study quality (NOS unless otherwise stated)
Kishi et al, 1995	Japan	Medical and surgical	Mar 1993- May 1993	Prospective cohort	No	238	Hospital Stay	No	8
Aldemir et al, 2001	Turkey	Medical and surgical	Jan 1996 – Jan 1997	Prospective cohort	No	818	NR	No	5
Dubois et al, 2001	Canada	Medical and surgical	Nov 1998 – Apr1999	Prospective cohort	No	198	Hospital Stay	Yes	7
Ely et al, 2004; Milbrandt et al, 2004	USA	Mechanically ventilated	Feb 2000 - May 2001	Prospective cohort	No	224	180 days	Yes	7
Lin et al, 2004	Taiwan	Mechanically ventilated	Oct 2002 – May 2003	Prospective cohort	No	102	60 days	Yes	6
Micek et al, 2005	USA	Mechanically ventilated	Mar – Aug 2003	Prospective cohort	No	93	Hospital Stay	No	5
Roberts et al, 2005	Australia; New Zealand	Medical and surgical	6 Months	Prospective cohort	Yes	185	Hospital Stay	No	6
Thomason et al, 2005	USA	Medical	Feb 2002 - Jan 2003	Prospective cohort	No	261	Hospital Stay	Yes	8
Ranhoff et al, 2006	Italy	Surgical	Jan 15, 2003 – Apr 15, 2004	Prospective cohort	No	401	Hospital Stay	Yes	7
Balas et al, 2007	USA	Surgical	Aug 22, 2004 – Dec 31, 2004	Prospective cohort	No	114	Hospital Stay	No	6
Marquis et al, 2007; Ouimet et al, 2007a	Canada	Medical and surgical	Dec 2003 – Aug 2004	Prospective cohort	No	537	Hospital Stay	Yes	8
Ouimet et al, 2007b	Canada	Medical and surgical	Dec 2003 – Aug 2004	Prospective cohort	No	764	Hospital Stay	Yes	8
Plaschke et al, 2008	Germany	Medical and surgical	Apr – Oct 2005	Prospective cohort	No	37	2 days	No	6
Angles et al, 2008	USA	Trauma ICU	May – Aug 2007	Prospective cohort	No	69	Hospital Stay	Yes	7
Lin et al, 2008	Taiwan	Medical and surgical	Oct 2002 – May 2003	Prospective cohort	No	151	Hospital Stay	Yes	8
Van Rompaey et al, 2008	Belgium	Medical and surgical	Jan - Apr 2007 and Jan - Apr 2008	Prospective cohort	Yes	172	180 days	No	6
Lat et al, 2009	USA	Surgical and trauma	N/A	Prospective cohort	Yes	134	Hospital Stay	No	5
Page et al, 2009	UK	Medical and surgical	Nov 9, 2010 – Sep 21, 2012	Prospective cohort	No	71	Hospital Stay	No	6
Spronk et al, 2009	Netherlands	Medical and surgical	3 months	Prospective cohort	No	46	NR	No	7
Van Rompaey et al, 2009	Belgium	Medical and surgical	Jul-Aug 2006	Prospective cohort	Yes	523	NR	Yes	8

van den Boogaard et al, 2010	Netherlands	Medical and surgical	Feb 2008 – Feb 2009	Prospective cohort	No	1740	24 hrs	No	5
Tsuruta et al, 2010	Japan	Medical and surgical	Apr 1 - Jun 30, 2008	Prospective cohort	No	103	ICU stay	Yes	6
Shehabi et al, 2010	5 countries	Medical and surgical	Mar 2005 – Aug 2007	Randomized controlled trial	Yes	354	48 after extubation or until cessation of sedation	Yes	Cochrane ROB tool: low risk
Salluh et al, 2010	11 countries	Medical and surgical	Nov 27, 2009	Prospective cohort	Yes	232	24 hrs	Yes	7
Heymann et al, 2010		Medical and surgical	Mid-Aug - Mid-Nov 2006 and mid- Feb - mid-May 2007	Prospective cohort	No	418	ICU stay	No	6
Girard et al, 2010	USA	Mechanically ventilated	Oct 2003 – Mar 2006	Prospective cohort	No	77	12 months	No	5
van den Boogaard et al, 2011	Netherlands	Medical and surgical	Feb 2008 - Feb 2009	Prospective cohort	No	1613	Hospital Stay	No	6
van den Boogaard et al, 2012 (CCM)	Netherlands	Medical and surgical	Feb 1, 2008 – Feb 1, 2009	Prospective cohort	No	915	18 months	No	6
Sharma et al, 2012	USA	Medical and surgical	Mid-Oct 2008 – Jan 2009 and Mar 2009 – Jun 2009	Prospective cohort	No	140	Hospital stay	No	6
Tomasi et al, 2011	Brazil	Medical and surgical	May -Nov 2008	Prospective cohort	No	162	Hospital Stay	No	7
Serafim et al, 2012	Brazil	Surgical	Nov 2005 - Jul 2006	Prospective cohort	No	467	Hospital Stay	Yes	7
Tsuruta et al, 2014	Japan	Mechanically ventilated	Jun 1 - Jul 31, 2011 and Oct 1 – Nov 30, 2011	Prospective cohort	No	180	ICU stay	Yes	7
Almeida et al, 2014	Brazil	Mechanically ventilated cancer patients	Feb 2010 - Feb 2012	Prospective cohort	No	170	Hospital Stay	Yes	7
van den Boogaard et al, 2014	Netherlands	Medical and surgical	Aug 1, 2010 – Aug 1, 2011	Prospective cohort	Yes	1824	ICU Stay	Yes	7
Lahariya et al, 2014	India	Medical	May 16 – Jul 16, 2010	Prospective cohort	No	309	Hospital Stay	Yes	7
Pisani et al, 2009	USA	Medical and surgical	Sep 5, 2002 - Sep 2004	Prospective cohort	No	309	12 months	Yes	7
Pandharipande et al, 2013	USA	Medical and surgical	Aug 2004 – Apr 2006	Prospective cohort	No	821	3 and 12 months	Yes	8
Brummel et al, 2014	USA	Medical and surgical	Oct 2003 - Mar 2006	Prospective cohort	No	126	3 and 12 months	Yes	8
Wolters et al, 2013	Netherlands	Medical and surgical	Jul 2009 – Aug 2011	Prospective cohort	No	1101	12 months	Yes	7
Mehta et al, 2014	North America	Mechanically ventilated	Jan 2008 – Jul 2011	Randomized controlled trial	Yes	420	Hospital Stay	Yes	Cochrane ROB tool: low risk

Klein Klouwenberg et al, 2014	Netherlands	Medical and surgical	Jan 2011 – Jul 2013	Prospective cohort	No	1112	ICU stay	Yes	7
Yamaguchi et al, 2014	Japan	Medical and surgical	N/A	Prospective cohort	No	126	Hospital stay	Yes	7

APACHE II - Acute Physiology and Chronic Health disease Classification System II; CAM -Confusion Assessment Method; CAM-ICU - Confusion Assessment Method for intensive care unit; DSM III-R - Diagnostic and Statistical Manual of Mental Disorders III R; DDS - Delirium Detection Score; ICDS - Intensive Care Delirium Screening Checklist; SAS- Riker Sedation-Agitation Scale; GCS - Glasgow Coma Scale. NOS, Newcastle-Ottawa Scale. ROB, Cochrane Risk of Bias tool.