

Appendix 3: Newcastle Ottawa Scale Ratings of Included Observational Studies [posted as supplied by author]

Author	Selection				Comparability	Outcome			
	Representativeness of the exposed cohort x	Selection of the non exposed cohort xx	Ascertainment of exposure %	Demonstration that outcome of interest was not present at start of study #	Comparability of cohorts on the basis of the design or analysis ##	Assessment of outcome	Was follow-up long enough for outcomes to occur \$	Adequacy of follow up of cohorts	No. of stars (NOS)
Kishi et al, 1995	*	*	*		**	*	*	*	8
Aldemir et al, 2001	*	*	*			*		*	5
Dubois et al, 2001	*	*	*		*	*	*	*	7
Ely et al, 2004; Milbrat et al, 2004		*	*	*	*	*	*	*	7
Lin et al, 2004		*	*		*	*	*	*	6
Micek et al, 2005		*	*			*	*	*	5
Roberts et al, 2005	*	*	*			*	*	*	6
Thomason et al, 2005	*	*	*		**	*	*	*	8
Ranhoff et al, 2006		*	*	*	*	*	*	*	7
Balas et al, 2007 a 2008		*	*	*		*	*	*	6
Marquis et al, 2007; Ouimet et al, 2007a	*	*	*		**	*	*	*	8
Ouimet et al, 2007b	*	*	*		**	*	*	*	8
Plaschke et al, 2007	*	*	*	*		*		*	6
Angles et al, 2008		*	*		**	*	*	*	7
Lin et al, 2008	*	*	*	*	*	*	*	*	8
Van Rompaey et al, 2008	*	*	*			*	*	*	6
Lat et al, 2009		*	*			*	*	*	5
Page et al, 2009	*	*	*			*	*	*	6
Spronk et al, 2009	*	*	*	*	**	*		*	7
Van Rompaey et al, 2009	*	*	*	*	**	*		*	8
van den Boogaard et al, 2010	*	*	*			*		*	5
Tsruta et al, 2010	*	*	*		*	*		*	6
Salluh et al, 2010	*	*	*		**	*		*	7
Heyman et al, 2010	*	*	*			*	*	*	6
Girard et al, 2010		*	*			*	*	*	5
van den Boogaard et al, 2011	*	*	*			*	*	*	6
van den Boogaard et al, 2012 (CCM)	*	*	*			*	*	*	6
Sharma et al, 2012	*	*	*			*	*	*	6
Tomasi et al, 2011	*	*	*		*	*	*	*	7
Serafim et al, 2012		*	*		**	*	*	*	7

Tsuruta et al, 2014		*	*		**	*	*	*	7
Almeida et al, 2014		*	*		**	*	*	*	7
van den Boogaard et al, 2014	*	*	*		*	*	*	*	7
Lahariya et al, 2014	*	*	*		*	*	*	*	7
Pisani et al, 2009	*	*	*	*	*	*	*	*	7
Pandharipande et al, 2013	*	*	*	*	*	*	*	*	8
Brummel et al, 2014	*	*	*	*	*	*	*	*	8
Wolters et al, 2013	*	*	*		*	*	*	*	7
Klein et al, 2014	*	*	*		*	*	*	*	7
Yamaguchi et al, 2014		*	*		**	*	*	*	7

x To be considered representative cohort should include medical and surgical patients consecutively admitted in ICU and not specific population

xx Selection of non exposed cohort should be drawn from the same community as the exposed cohort

% Data should be extracted from a secure record or structured interview

Demonstration that outcome of interest was not present at start of study and preexisting cognitive or psychological function were assessed

Either exposed and non-exposed individuals must be matched in the design and/or confounders must be adjusted for in the analysis. A maximum of 2 stars was allotted in this category if confounders were adjusted for more than one outcome

\$ Patients should be followed until hospital discharge or death.