

## Appendix D. Risk of Bias for includes studies with the Newcastle-Ottawa scale

ID	New ID	First author	Eligible	Design	Newcastle-Ottawa Scale									Total star
					Selection									
					Representativeness of the exposed cohort	Selection of the non exposed cohort	Ascertainment of Exposure	Outcome of interest was not present at start of study	Comparability Most important factors for adjustment (Respiratory status/ ARDS severity)	Any additional factors (age, ICU severity score)	Outcome Assessment of outcome	Follow up long enough for outcomes to occur (ICU or longer than 28days mortality)	Adequacy of follow up of cohorts	Star $\geq 7$ indicates high quality
12		Amato	Yes	Secondary analysis of RCT	*Truly representative of the average	*Drawn from the same community as the exposed cohort	*Secure record	*Yes	*Yes	*Yes	*Record linkage	*Yes	*Complete follow up	9
20		Kassis	Yes	Secondary analysis of RCT	*Truly representative of the average	*Drawn from the same community as the exposed cohort	*Secure record	*Yes	*Yes	*Yes	*Record linkage	*Yes	*Complete follow up	9
26		Bellani	Yes	Prospective cohort	*Truly representative of the average	*Drawn from the same community as the exposed cohort	*Secure record	*Yes	No/Not reported	No/Not reported	*Record linkage	*Yes	*Complete follow up	7
144		Guerin	Yes	Secondary analysis of RCT	*Truly representative of the average	*Drawn from the same community as the exposed cohort	*Secure record	*Yes	*Yes	No/Not reported	*Record linkage	*Yes	*Complete follow up	8
201		Laffey	Yes	Secondary analysis of prospective cohort	*Truly representative of the average	*Drawn from the same community as the exposed cohort	*Secure record	*Yes	*Yes	*Yes	*Record linkage	*Yes	*Complete follow up	9
Ex1		Chiumello	Yes	Secondary analysis of combined cohort of new and prior enrollment	*Truly representative of the average	*Drawn from the same community as the exposed cohort	*Secure record	*Yes	*Yes	*Yes	*Record linkage	*Yes	no statement	8
Ex2		Villar	Yes	Secondary analysis of cohort	*Truly representative of the average	*Drawn from the same community as the exposed cohort	*Secure record	*Yes	*Yes	*Yes	*Record linkage	*Yes	no statement	8