

## Supplementary Appendix

This appendix has been provided by the authors to give additional information about their work.

**Supplement to:** Klassen SA, Senefeld JW, Johnson PW, et al. The Effect of Convalescent Plasma Therapy on COVID-19 Patient Mortality: Systematic Review and Meta-analysis.

### **The Effect of Convalescent Plasma Therapy on COVID-19 Patient Mortality: Systematic Review and Meta-analysis**

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#### **Supplementary Figures**

**Figure S1:** Flow chart of the study selection.

**Figure S2:** Funnel plot of the standard error and log odds ratio for each study. The angled lines define the area including the 95% CI of the log odds ratio and the vertical line defines the middle of the funnel at the mean log odds ratio. Visual inspection of the funnel plot shows that one study fall below 95% CI and two studies are above 95% CI.

Table S1. Cochrane Risk of Bias Assessment for Randomized Clinical Trials.																	
Study	Domain 1. Randomization process				Domain 2. Deviations from intended interventions							Domain 3. Missing outcome data					
	1.1	1.2	1.3	1.0 Algorithm result	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.0 Algorithm result	3.1	3.2	3.3	3.4	3.0 Algorithm result
Agarwal et al.	Y	Y	N	Low	Y	Y	Y	N	NA	Y	NA	Some concerns	Y	NA	NA	NA	Low
AlQahtani et al.	Y	Y	N	Low	Y	Y	N	NA	NA	Y	NA	Low	Y	NA	NA	NA	Low
Avendana-Sola et al.	Y	Y	N	Low	Y	Y	Y	N	NA	Y	NA	Some concerns	Y	NA	NA	NA	Low
Bajpai et al.	Y	Y	N	Low	Y	Y	N	NA	NA	Y	NA	Low	Y	NA	NA	NA	Low
Gharbharan et al.	Y	Y	N	Low	Y	Y	Y	N	NA	Y	NA	Some concerns	Y	NA	NA	NA	Low
Li et al.	Y	Y	N	Low	Y	Y	Y	N	NA	Y	NA	Some concerns	Y	NA	NA	NA	Low
Libster et al.	Y	Y	N	Low	N	N	NA	NA	NA	Y	NA	Low	Y	NA	NA	NA	Low
Rasheed et al.	Y	Y	N	Low	Y	Y	N	NA	NA	Y	NA	Low	Y	NA	NA	NA	Low
Ray et al.	Y	Y	N	Low	Y	Y	Y	N	NA	Y	NA	Some concerns	Y	NA	NA	NA	Low
Simonovich et al.	Y	Y	N	Low	N	N	NA	NA	NA	Y	NA	Low	Y	NA	NA	NA	Low

NA, not applicable; N, no; NI, no information; Y, yes

Table S1. Continued.													
Study	Domain 4. Measurement of the outcome					Domain 5. Selection of the reported result				Domain 6. Overall Bias			
	4.1	4.2	4.3	4.4	4.5	4.0 Algorithm result	5.1	5.2	5.3	5.0 Algorithm result	Algorithm overall Judgement		
Agarwal et al.	N	N	Y	N	NA	Low	Y	N	N	Low	Some concerns		
AlQahtani et al.	N	N	Y	N	NA	Low	NI	N	N	Some concerns	Some concerns		
Avendana-Sola et al.	N	N	Y	N	NA	Low	Y	N	N	Low	Some concerns		
Bajpai et al.	N	N	Y	N	NA	Low	Y	N	N	Low	Low		
Gharbharan et al.	N	N	Y	N	NA	Low	Y	N	N	Low	Some concerns		
Li et al.	N	N	Y	N	NA	Low	Y	N	N	Low	Some concerns		
Libster et al.	N	N	N	NA	NA	Low	Y	N	N	Low	Low		
Rasheed et al.	N	N	Y	N	NA	Low	Y	N	N	Low	Low		
Ray et al.	N	N	Y	N	NA	Low	NI	N	N	Some concerns	Some concerns		
Simonovich et al.	N	N	N	NA	NA	Low	Y	N	N	Low	Low		

NA, not applicable; N, no; NI, no information; Y, yes

**Table S2. Newcastle-Ottawa Risk of Bias Assessment for Controlled Studies.**

Study	Domain 1. Selection					1.0 Total
	1.1	1.2	1.3	1.4		
Abolghasemi et al.	Selected group	Drawn from same community as exposed cohort (*)	Secure record (*)	No		2
ah Yoon et al.	Somewhat representative (*)	Drawn from same community as exposed cohort (*)	Secure record (*)	No		3
Alsharidah et al.	Somewhat representative (*)	Drawn from different source	Secure record (*)	No		2
AlShehry et al.	Selected group	Drawn from same community as exposed cohort (*)	Secure record (*)	Yes (*)		3
Altuntas et al.	Somewhat representative (*)	Drawn from same community as exposed cohort (*)	Secure record (*)	No		3
Budhiraja et al.	Selected group	Drawn from same community as exposed cohort (*)	Secure record (*)	No		2
Donato et al.	Somewhat representative (*)	Drawn from same community as exposed cohort (*)	Secure record (*)	No		3
Duan et al.	Somewhat representative (*)	Drawn from same community as exposed cohort (*)	Secure record (*)	No		3
Hegerova et al.	Somewhat representative (*)	No description of derivation of non-exposed cohort	Secure record (*)	No		2
Joyner et al. a	Somewhat representative (*)	Drawn from same community as exposed cohort (*)	Secure record (*)	Yes (*)		4
Klapholz et al.	Somewhat representative (*)	Drawn from same community as exposed cohort (*)	Secure record (*)	No		3
Klein et al.	Somewhat representative (*)	Drawn from same community as exposed cohort (*)	Secure record (*)	No		3
Liu et al.	Somewhat representative (*)	Drawn from same community as exposed cohort (*)	Secure record (*)	Yes (*)		4
Maor et al.	Somewhat representative (*)	Drawn from same community as exposed cohort (*)	Secure record (*)	Yes (*)		4
Moniuszko-Malinowska et al.	Somewhat representative (*)	Drawn from same community as exposed cohort (*)	Secure record (*)	No		3
Omrani et al.	Somewhat representative (*)	Drawn from same community as exposed cohort (*)	Secure record (*)	No		3
Perotti et al.	Somewhat representative (*)	Drawn from different source	Secure record (*)	No		2
Rogers et al.	Somewhat representative (*)	Drawn from same community as exposed cohort (*)	Secure record (*)	No		3
Salazar M. et al.	Somewhat representative (*)	Drawn from same community as exposed cohort (*)	Secure record (*)	Yes (*)		4
Salazar E. et al.	Somewhat representative (*)	Drawn from same community as exposed cohort (*)	Secure record (*)	Yes (*)		4
Xia et al.	Somewhat representative (*)	Drawn from same community as exposed cohort (*)	Secure record (*)	Yes (*)		4
Zeng et al.	Selected group	Drawn from same community as exposed cohort (*)	Secure record (*)	No		2

**Table S2 Continued.**

Study	Domain 2. Comparability		2.0 Total
	2.1	2.2	
Abolghasemi et al.	controls for most important factor (age) (*)	controls for disease severity (*)	2
ah Yoon et al.	controls for most important factor (age) (*)	controls for disease severity (*)	2
Alsharidah et al.	controls for most important factor (age) (*)	controls for disease severity (*)	2
AlShehry et al.	controls for most important factor (age) (*)	controls for disease severity (*)	2
Altuntas et al.	controls for most important factor (age) (*)	does not control for disease severity	1
Budhiraja et al.	controls for most important factor (age) (*)	controls for disease severity (*)	2
Donato et al.	does not control for age	controls for disease severity (*)	1
Duan et al.	controls for most important factor (age) (*)	controls for disease severity (*)	2
Hegerova et al.	controls for most important factor (age) (*)	controls for disease severity (*)	2
Joyner et al. a	controls for most important factor (age) (*)	controls for disease severity (*)	2
Klapholz et al.	controls for most important factor (age) (*)	controls for disease severity (*)	2
Klein et al.	controls for most important factor (age) (*)	controls for disease severity (*)	2
Liu et al.	controls for most important factor (age) (*)	controls for disease severity (*)	2
Maor et al.	does not control for age	does not control for disease severity	0
Moniuszko-Malinowska et al.	does not control for age	does not control for disease severity	0
Omrani et al.	controls for most important factor (age) (*)	controls for disease severity (*)	2
Perotti et al.	controls for most important factor (age) (*)	does not control for disease severity	1
Rogers et al.	controls for most important factor (age) (*)	controls for disease severity (*)	2
Salazar M. et al.	does not control for age	controls for disease severity (*)	1
Salazar E. et al.	controls for most important factor (age) (*)	controls for disease severity (*)	2
Xia et al.	controls for most important factor (age) (*)	controls for disease severity (*)	2
Zeng et al.	controls for most important factor (age) (*)	controls for disease severity (*)	2

Table S2 Continued.

Study	Domain 3. Outcomes			Domain 4. Overall Bias	
	3.1	3.2	3.3	3.0 Total	4.0 Total
Abolghasemi et al.	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	7
ah Yoon et al.	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	8
Alsharidah et al.	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	7
AlShehry et al.	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	8
Altuntas et al.	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	7
Budhiraja et al.	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	7
Donato et al.	record linkage (*)	No	complete follow-up or lost <20% to follow-up (*)	3	7
Duan et al.	record linkage (*)	No	complete follow-up or lost <20% to follow-up (*)	2	7
Hegerova et al.	record linkage (*)	No	complete follow-up or lost <20% to follow-up (*)	2	6
Joyner et al. a	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	9
Klapholz et al.	record linkage (*)	No	complete follow-up or lost <20% to follow-up (*)	2	7
Klein et al.	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	8
Liu et al.	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	9
Maor et al.	record linkage (*)	No	complete follow-up or lost <20% to follow-up (*)	2	6
Moniuszko-Malinowska et al.	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	6
Omrani et al.	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	8
Perotti et al.	record linkage (*)	No	complete follow-up or lost <20% to follow-up (*)	2	5
Rogers et al.	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	8
Salazar M. et al.	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	8
Salazar E. et al.	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	9
Xia et al.	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	9
Zeng et al.	record linkage (*)	Yes (28+ days) (*)	complete follow-up or lost <20% to follow-up (*)	3	7

Table S3 | Mortality Rates among COVID-19 Patients

Study	Location	Convalescent Plasma		
		Survivor	Non-Survivor	Mortality
<b>Case-Series or Reports</b>				
Abid et al.	Wisconsin, USA	1	1	50%
Ahn et al.	KOR	2	0	0%
Anderson et al.	Tennessee, USA	1	0	0%
Antony et al.	Texas, USA	1	0	0%
Anupama et al.	New York, USA	1	0	0%
Avanzato et al.	Montana, USA	1	0	0%
Baang et al.	Michigan, USA	1	0	0%
Balashov et al.	RUS	1	0	0%
Bao et al.	CHN	1	0	0%
Betrains et al.	BEL	4	1	20%
Bhumbra et al.	Indiana, USA	1	1	50%
Bobek et al.	HUN	2	0	0%
Bradfute et al.	New Mexico, USA	10	2	17%
Choudhury et al.	IND	1	0	0%
Christensen et al.	Virginia, USA	0	1	100%
Cinar et al.	TUR	1	0	0%
Clark et al.	FRA	1	0	0%
Diorio et al.	Pennsylvania, USA	3	1	25%
Donzelli et al.	ITA	1	0	0%
Dulipsingh et al.	Connecticut, USA	20	19	49%
Easterlin et al.	California, USA	1	0	0%
Einollahi et al.	IRN	1	0	0%
Erkurt et al.	TUR	20	6	23%
Ferrari et al.	ITA	7	0	0%
Figlerowicz et al.	POL	1	0	0%
Fisher et al.	ISR	1	0	0%
Fung et al.	California, USA	4	0	0%
Gazitua et al.	CHL	161	31	16%
Gemici et al.	TUR	15	25	63%
Gonzalez et al.	ARG	201	71	26%
Hahn et al.	NOR	1	0	0%
Hartman W. et al. (Translational medicine communications)	Wisconsin, USA	27	4	13%
Hartman W. et al. (Clinical Oncology: Case Reports)	Wisconsin, USA	1	0	0%
Hatzl et al.	AUT	2	0	0%
Hovey et al.	Alabama, USA	1	0	0%
Hu et al.	CHN	7	0	0%
Huang et al.	CHN	20	4	17%
Hueso et al.	FRA	16	1	6%
Im et al.	KOR	1	0	0%
Jaiswal et al.	UAE	10	4	29%
Jamir et al.	IND	1	0	0%
Jamous et al.	South Dakota, USA	24	5	17%
Ji et al.	CHN	8	0	0%
Jiang et al.	CHN	1	0	0%
Jin C. et al.	CHN	6	0	0%
Jin H. et al.	New York, USA	3	0	0%
Joyner et al.	Minnesota, USA	17408	2592	13%
Karatas et al.	TUR	1	0	0%
Katz-Greenberg et al.	Pennsylvania, USA	4	0	0%
Kong et al.	CHN	1	0	0%
Lancman et al.	New York, USA	1	0	0%
Lima et al.	New York, USA	2	0	0%
Luetkens et al.	Maryland, USA	1	0	0%
London et al.	FRA	1	0	0%
Lubnow et al.	DEU	1	0	0%
Malsy et al.	DEU	1	0	0%
Martinez-Resendez et al.	MEX	8	0	0%
Mehta et al.	New York, USA	1	1	50%
Milosevic et al.	SRB	1	0	0%
Mira et al.	ESP	1	0	0%
Moniuszko-Malinowska et al.	POL	1	0	0%
Moore et al.	Connecticut, USA	1	0	0%
Naeem et al.	Rhode Island, USA	3	0	0%
Niu et al.	Louisiana, USA	1	0	0%
Olivares-Gazca et al.	MEX	8	2	20%
Pal et al.	Louisiana, USA	6	0	0%
Peng et al.	CHN	1	0	0%
Ragab et al.	EGY	1	0	0%
Rahman et al.	New York, USA	10	3	23%
Rizvi et al.	Michigan, USA	1	0	0%
Rodriguez et al.	Georgia, USA	1	0	0%
Salazar E. et al.	Texas, USA	24	1	4%
Schwartz et al.	North Carolina, USA	1	0	0%
Shankar et al.	IND	1	0	0%

Shen et al.	CHN	5	0	0%
Szwebel et al.	FRA	1	0	0%
Tan et al.	CHN	1	0	0%
Tremblay et al.	New York, USA	14	10	42%
Trimarchi et al.	ARG	1	0	0%
Van Damme et al.	BEL	1	0	0%
van Oers et al.	Texas, USA	1	0	0%
Vlachogianni et al.	GRC	0	1	100%
Wang M. et al.	CHN	2	3	60%
Wang B. et al.	New York, USA	1	0	0%
Wei et al.	CHN	2	0	0%
Wright et al.	Texas, USA	1	0	0%
Xu et al.	CHN	1	0	0%
Yang et al.	CHN	0	1	100%
Ye et al.	CHN	6	0	0%
Yi et al.	Texas, USA	1	0	0%
Yokoyama et al.	BRA	93	11	11%
Zeng H. et al.	CHN	8	0	0%
Zhang B. et al.	CHN	4	0	0%
Zhang L. et al. (Turkish Journal of Haematology)	CHN	1	0	0%
Zhang L. et al. (Military Medical Research)	CHN	2	0	0%
Zhang L. et al. (Aging)	CHN	1	0	0%
<i>Case Series or Reports Total</i>		18234	2802	13%
<i>Case Series or Reports Total <sup>a</sup></i>		826	210	20%

<sup>a</sup> excluding Joyner et al. (n = 20,000)

**Table S4 | Descriptive Data for Controlled Convalescent Plasma Studies**

	Convalescent Plasma						Control			
	<i>n</i>	Women (%)	Age (years)	Mechanical Ventilation (%)	Time from admission to transfusion (days)	Follow-up (days)	<i>n</i>	Women (%)	Age (years)	Mechanical Ventilation (%)
<b>Randomized Clinical Trials</b>										
Avendano-Sola et al.	38	47	61	0	3	29	43	44	60	0
Rasheed et al.	21	43	56	81	4+	30	28	43	48	57
Gharbharan et al.	43	33	63	19	2	30	43	23	61	12
AlQahtani et al.	20	15	53	0	-	28	20	25	51	0
Libster et al.	80	42	76	0	3	25	80	42	78	0
Li et al.	52	48	70	27	15	28	51	35	69	22
Ray et al.	40	25	61	0	4	30	40	33	61	0
Simonovich et al.	228	29	63	0	8 <sup>a</sup>	30	105	39	62	0
Agarwal et al.	235	25	52	8	4	28	229	23	52	9
Bajpai et al.	14	21	48	0	4+	28	15	27	48	0
<b>Matched-Control Studies</b>										
Duan et al.	10	40	53	30	6	-	10	40	53	-
Perotti et al.	46	39	63	15	14 <sup>a</sup>	7	23	-	-	-
Omrani et al.	40	15	48	20	10 <sup>a</sup>	28	40	12	56	30
Hegerova et al.	20	-	60	35	2	14	20	-	-	-
Alsharidah et al.	135	15	54	4	1	30	223	22	54	2
Zeng Q. et al.	6	17	62	83	21 <sup>a</sup>	-	15	27	73	87
Donato et al.	47	53	59	6	8 <sup>a</sup>	30	1340	-	-	-
Salazar M. et al. (ARG)	868	31	56	21	-	28	2298	33	64	22
Liu et al.	39	36	55	10	7	14	156	29	54	-
Salazar E. et al. (USA)	152	42	51	7	2	60	269	42	51	7
Xia et al.	138	44	65	1	10	14	1430	50	63	0.2
Abolghasemi et al.	115	42	54	0	3	30	74	50	57	0
AlShehry et al.	40	18	50	63	-	30	124	16	53	64
Budhiraja et al.	333	20	60	28	-	28	361	28	59	31
ah Yoon et al.	73	44	67	12	3	28	73	36	66	12
Rogers et al.	64	42	61	11	7 <sup>a</sup>	28	177	46	61	12
Altuntas et al.	888	31	60	49	5+	17	888	29	61	55
Klapholz et al.	47	38	58	19	5	7	47	38	58	19
Klein et al.	34	32	55	82	-	30	34	32	57	82
Moniuszko-Malinowska et al.	55	36	60	11	7 <sup>a</sup>	30	715	47	52	4

<sup>a</sup> denotes time from symptom onset to transfusion

- denotes data not reported

**Table S5 | Descriptive Data for Dose-Response Convalescent Plasma Studies**

	Convalescent Plasma Higher Titer						Convalescent Plasma Lower Titer			
	<i>n</i>	Women (%)	Age (years)	Mechanical Ventilation (%)	Time from admission to transfusion (days)	Follow-up (days)	<i>n</i>	Women (%)	Age (years)	Mechanical Ventilation (%)
<b>Dose-Response Studies</b>										
Joyner et al.	515	39	61	31	5	30	561	36	62	33
Maor et al.	19	~29	~64	~57	~10	14	30	-	-	-

- denotes data not reported



**Table S6 | Descriptive Data for Uncontrolled Convalescent Plasma Studies**

	Convalescent Plasma					
	<i>n</i>	Women (%)	Age (years)	Mechanical Ventilation (%)	Time from admission to transfusion (days)	Follow-up (days)
<b>Case Series or Reports</b>						
Abid et al.	2	0	82	50	8a	5
Ahn et al.	2	50	69	100	-	15
Anderson et al.	1	100	35	0	-	10
Antony et al.	1	0	63	100	14a	RH
Anupama et al.	1	0	66	100	5	30
Avanzato et al.	1	100	71	0	70a	35
Baang et al.	1	0	60	0	31	100
Balashov et al.	1	100	9 months	0	47a	-
Bao et al.	1	0	38	100	-	31
Betrains et al.	5	100	37	0	56a	118
Bhumbra et al.	2	0	<18	100	10	7
Bobek et al.	2	0	66	100	-	14
Bradfute et al.	12	33	52	58	4	9
Choudhury et al.	1	0	52	0	8a	6
Christensen et al.	1	100	64	100	-	-
Cinar et al.	1	0	55	0	-	11
Clark et al.	1	100	76	0	50	36
Diorio et al.	4	-	14-18	75	12a	27
Donzelli et al.	1	100	34	100	2	42
Dulipsingh et al.	39	-	>18	-	-	7
Easterlin et al.	1	100	22	100	2	25
Einollahi et al.	1	0	42	100	12	32
Erkurt et al.	26	31	67	65	14	7
Ferrari et al.	7	14	60	14	8a	30
Figlerowicz et al.	1	100	6	0	37a	21
Fisher et al.	1	100	65	0	-	-
Fung et al.	4	25	53	25	6a	29
Gazitua et al.	192	30	59	41	-	28
Gemici et al.	40	27	58	83	5a	13
Gonzalez et al.	272	28	53	-	-	28
Hahn et al.	1	0	~70	100	31	32
Hartman W. et al. (Translational medicine communications)	31	32	-	32	-	7
Hartman W. et al. (Clinical Oncology: Case Reports)	1	0	35	0	-	61
Hatzl et al.	2	0	54	100	17a	42

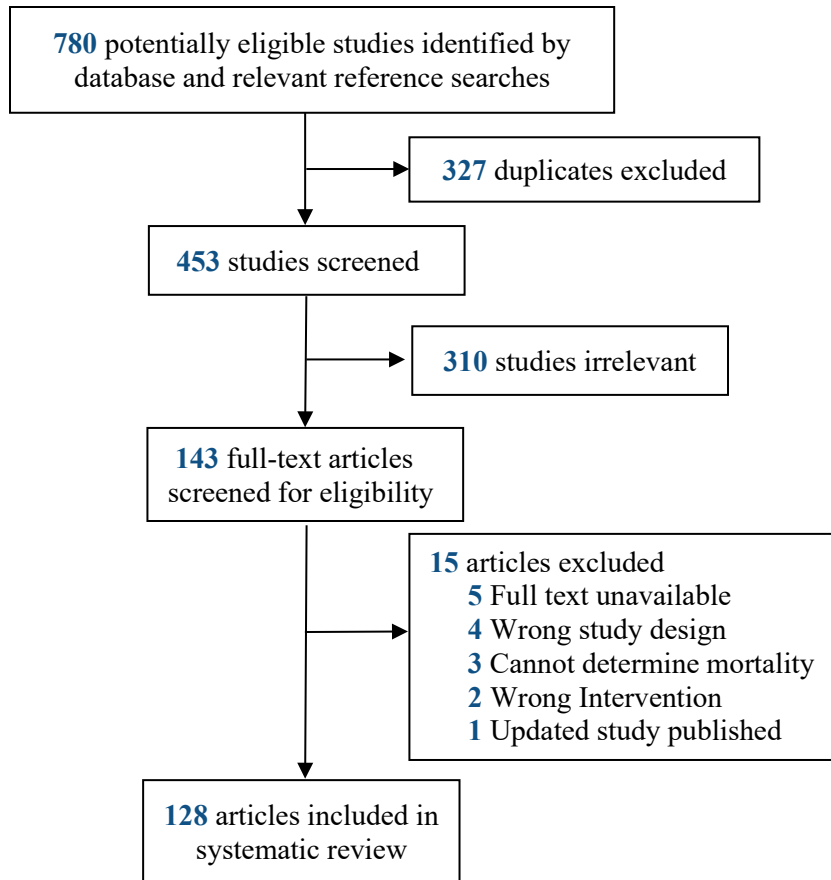
Heueso et al.	17	71	58	12	-	7
Hovey et al.	1	0	26	0	11	3
Hu et al.	7	43	64	14	23	20
Huang et al.	24	46	67	17	18	6
Im et al.	1	0	68	100	-	23
Jaiswal J. et al.	14	21	51	100	9a	28
Jamir et al.	1	0	49	0	2a	21
Jamous et al.	29	24	58	68	-	28
Ji et al.	8	13	70	0	8	7
Jiang et al.	1	100	70	0	4	26
Jin et al.	6	33	61	50	-	60
Jin et al.	3	0	24	0	-	31
Joyner et al.	20,000	39	63	36	5	7
Karatas et al.	1	0	61	0	40a	38
Katz-Greenberg et al.	4	75	52	50	-	-
Kong et al.	1	0	100	0	-	13
Lancman et al.	1	100	55	0	81a	~5
Lima et al.	2	0	65	100	-	RH
Leutkens et al.	1	100	72	0	3a	2
London et al.	1	100	41	0	71a	4
Lubnow et al.	1	100	21	0	15	25
Malsy et al.	1	100	53	0	~90a	~50
Martinez-Resendez et al.	8	25	57	63	-	23
Mehta et al.	2	0	58	100	-	-
Milosevic et al.	1	0	35	0	15a	~50
Mira et al.	1	0	39	0	23a	7
Moniuszko-Malinowska et al.	1	100	63	0	9	14
Moore et al.	1	100	63	0	88a	2
Naeem et al.	3	67	36	67	3a	13
Niu et al.	1	100	53	0	4a	10
Olivares-Gazca et al.	10	0	52	50	-	8
Pal et al.	6	50	59	0	5a	12
Peng et al.	1	100	66	100	-	26
Ragab et al.	1	0	72	0	6	33
Rahman et al.	13	38	51	0	8a	-
Rizvi et al.	1	0	51	100	28	60
Rodriguez Z. et al.	1	100	9 weeks	100	28a	17
Salazar E. et al.	25	56	51	48	2	11
Schwartz et al.	1	100	5	100	6a	21
Shankar et al.	1	100	4	0	8a	10

Shen et al.	5	40	65	100	-	47
Szwebel et al.	1	0	-	0	64	90
Tan et al.	1	0	~45	0	36	6
Tremblay et al.	24	42	69	13	-	9
Trimarchi et al.	1	0	24	0	9a	5
Van Damme et al.	1	0	37	100	20	33
van Oers et al.	1	0	<1	0	6	60
Vlachogianni et al.	1	0	66	100	33a	4
Wang M. et al.	5	60	56	100	37a	7
Wang B. et al.	1	-	-	-	-	RH
Wei et al.	2	0	66	0	39	18
Wright et al.	1	0	54	0	24a	7
Xu et al.	1	0	65	100	-	11
Yang et al.	1	0	66	100	15	12
Ye et al.	6	50	58	0	-	25
Yi et al.	1	-	-	100	-	RH
Yokoyama et al.	104	29	64	35	2	14
Zeng H. et al.	8	50	65	13	15	11
Zhang B. et al.	4	50	57	100	-	38
Zhang L. et al. (Turkish Journal of Haematology)	1	100	46	0	5a	9
Zhang L et al. (Military Medical Research)	2	100	60	0	20	8
Zhang L. et al. (Aging)	1	100	64	100	17	11

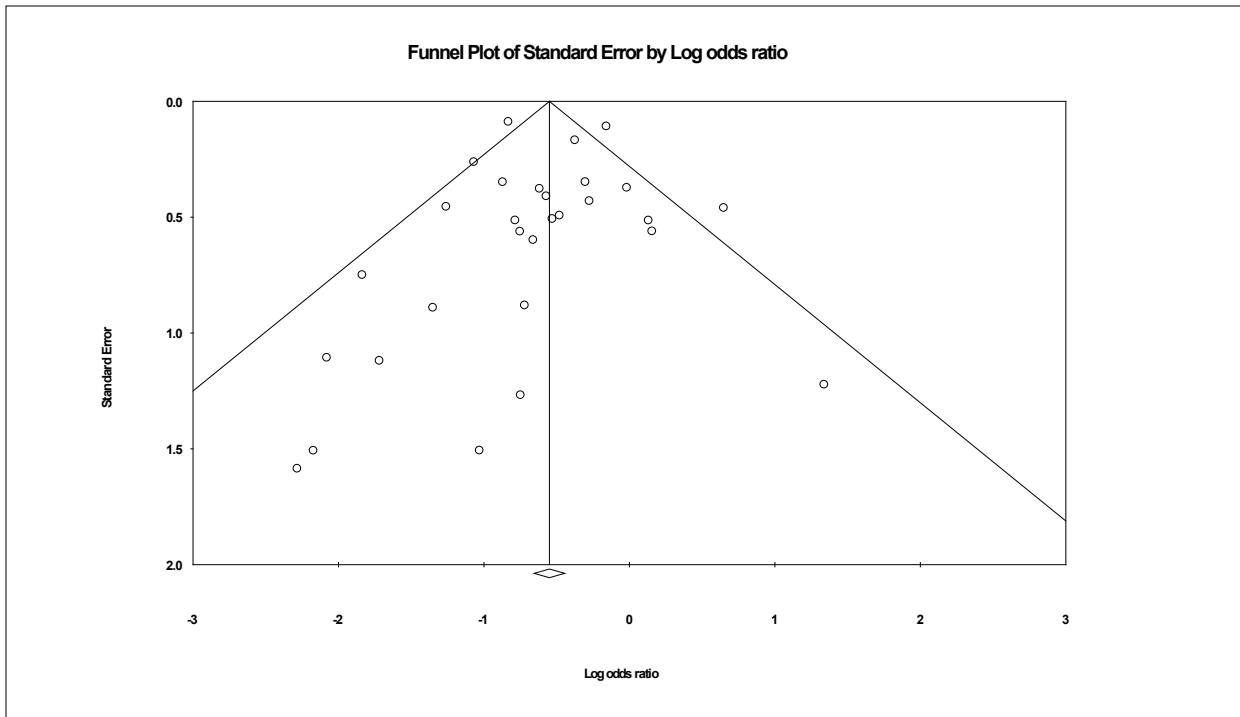
<sup>a</sup> denotes time from symptom onset to transfusion

-, data unavailable

RH, remains hospitalized



**Figure S1.** Flow chart of the study selection.



**Figure S2.** Funnel plot of the standard error and log odds ratio for each study. The angled lines define the area including the 95% CI of the log odds ratio and the vertical line defines the middle of the funnel at the mean log odds ratio. Visual inspection of the funnel plot shows that one study fall below 95% CI and two studies are above 95% CI.