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Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Cevik M, Tate M, Lloyd O, et al. SARS-CoV-2, SARS-CoV, and MERS-CoV viral load dynamics, duration of viral shedding, and infectiousness: a systematic review and meta-analysis. *Lancet Microbe* 2020; published online November 19. https://doi.org/10.1016/S2666-5247(20)30172-5.

Supplementary Table 1: Summary of included studies

Study	Geographical location	Study setting	Study design	Number of patients	Age Median (IQR)	Male sex N (%)	Specimen types
SARS-CoV-2							
Andersson et al. [1]	Oxford, UK	Hospital	Case series	167	56 (46-76)	89 (53)	Serum
Arons et al.[2]	King's County, USA	Care home	Cross-sectional	46	78.6 ± 9.5*	NR	URT
Bullard et al.[3]	Manitoba, Canada	Hospital	Case series	90	45 (30-59)	44 (49)	Respiratory samples (not specified)
Cai et al.[4]	Shanghai/ Hefei/ Qingdao, China	Hospital	Case series	10	6	4 (40)	LRT, blood, stool, urine
Cai et al.[5]	Shenzhen, China	Hospital	Case series	298	47 (33-61)	149 (50)	URT
Chang et al.[6]	Bejing, China	Hospital	Case series	16	35.5 (24-53)	11 (69)	URT
Chau et al.[7]	Ho Chi Minh City, Vietnam	Hospital	Case series	30	29 (16-60)	15 (50)	URT
Chen et al.[8]	Shanghai, China	Hospital	Case series	249	51 (36-64)	126 (51)	URT
Chen et al. [9]	Wuhan, China	Hospital	Case series	25	51.4 ±16.6*	11 (44)	URT
Chen et al.[10]	Guangzhou, China	Hospital	Case series	284	48 (33-62)	131 (46)	URT
Chen et al. [11]	Wuhan, China	Hospital	Case series	42	51	15 (36)	URT, stool, urine
Corman et al.[12]	Germany	Hospital	Case series	18	NR	12 (67)	Blood
Fan et al.[13]	Shenyang, China	Hospital	Case series	55	46.8	30 (55)	URT, sputum
Fang et al.[14]	Xiangtan, China	Hospital	Case series	32	41	16 (50)	URT, stool, blood
Fu et al.[15]	Huazhong, China	Hospital	Case series	50	64 (37-87)	27 (54)	URT
Han et al.[16]	Chongqing, South Korea	Hospital	Case series	12	6.5 (0.007-16)	5 (42)	URT, stool
He et al.[17]	Guangzhou, China	Hospital	Case series	94	46	47 (50)	URT
Hu et al.[18]	Qingdao, China	Hospital	Case series	59	46 (33-57)	28 (47)	URT
Hu et al.[19]	Nanjing, China	Hospital	Case series	24	32.5 (21-57)	8 (33)	URT
Huang et al.[20]	Guangzhou, China	Hospital	Case series	27	NR	12 (44)	URT
Huang et al.[21]	Wenzhou, China	Hospital	Case series	33	47 (range 2-84)	17 (52)	URT, LRT, stool
Huang et al.[22]	Wuhan, China	Hospital	Retrospective cohort	200	58± 17*	115 (48)	URT
Hung et al.[23]	Hong Kong	Hospital	RCT	127	52 (32-62)	68 (54)	URT, stool

Kim et al.[24]	Soeul/ Incheon/ Seongna, South Korea	Hospital	Case series	28	40 (28-54)	15 (54)	URT, LRT
Kujawski et al.[25]	6 states, USA	Hospital /Outpatient	Case series	12	53 (range 21-68)	8 (75)	URT, LRT, stool, blood, urine
L'Huillier et al.[26]	Geneva, Switzerland	Hospital	Case series	23	12 (3.8-14.5)	NR	URT
La Scola et al.[27]	France	Hospital	Case series	155	NR	NR	URT, LRT
Lavezzo et al.[28]	Vo', Italy	Community	Cross-sectional		Mixed	Mixed	URT
Le et al.[29]	Hanoi, Vietnam	Hospital	Case series	12	29.5*	3 (25)	URT
Li et al.[30]	Wuhan China	Hospital	Case series	36	57.5 (52-65)	23 (64)	URT
Liang et al.[31]	Wuhan, China	Hospital	Case series	120	61.5 (47-70)	68 (57)	URT
Ling et al.[32]	Shanghai, China	Hospital	Case series	66	44 (16-778)	38 (58)	URT, stool, blood, urine
Liu et al. [33]	Wuhan, China	Hospital	Case series	238	55 (38.3-65)	138 (58)	URT
Liu et al.[34]	Nanchang, China	Hospital	Case series	76	48.3	48 (63)	URT
Lo et al.[35]	Macau, China	Hospital	Case series	10	54 (27-64)	3 (30)	URT, LRT, stool, urine
Lou B et al.[36]	Zhejiang, China	Hospital	Case series	80	55 (45-64)	50 (69)	LRT
Pongpirul et al.[37]	Bangkok, Thailand	Hospital	Case series	11	61 (28-74)	6 (55)	URT
Qian et al.[38]	Ningbo, China	Hospital	Case series	24	NR	NR	URT
Quan et al.[39]	Wuhan/Shenzhen/ Xiangyang, China	Hospital	Case series	23	60.3 ±15.3*	23 (100)	Prostatic secretions all negative (URT)
Sakurai et al.[40]	Aichi, Japan	Hospital	Case series	90	59.5 (36-68)	53 (59)	URT
Seah et al.[41]	Singapore	Hospital	Case series	17	NR	NR	Tears
Shastri et al.[42]	Mumbai, India	Reference lab	Case series	68	37 (range 3-75)	48 (71)	URT
Shi et al.[43]	Wuhan, China	Hospital	Case series	246	58 (47-67)	126 (51)	URT

Song et al.[44]	Nanjing, China	Hospital	Case series	13	22 – 67 (range only)	13 (100)	URT, semen, testicular sample
Song et al. [45]	Beijing, China	Hospital/Outpatient	Case series	21	37 (21-59.5)	8 (38)	URT
Talmy et al.[46]	Ramat Gan, Israel	Outpatient	Case series	119	21 (19-25)	84 (71)	URT
Tan et al. [47]	Chongqing, China	Hospital	Case series	142	NR	NR	URT
Tan et al.[48]	Chongqing, China	Hospital	Case series	67	49 (10-77)	35 (52)	URT, LRT, stool, blood, urine
Tan et al.[49]	Changsha, China	Hospital	Case series	10	7 (1-12)	3 (30)	URT, stool
Tian et al. [50]	Beijing, China	Hospital/Outpatient	Case series	75	41.5 (range 0.8 – 88)*	42 (56)	Respiratory tract sample (not specified further)
To et al.[51]	Hong Kong, China	Hospital	Case series	23	62 (37-75)	13 (57)	URT, stool, blood, urine
To et al. [52]	Hong Kong, China	Hospital	Prospective Cohort	12	62.5 (37-75)	7 (58)	URT (saliva)
Tu et al. [53]	Anhui, China	Hospital	Case series	40	Viral shedding <10 days: 40.86 ± 8.26 Viral shedding ≥10 days: 45.5 ± 14.60	21 (53)	URT
Wang et al.[54]	Henan, China	Hospital	Case series	18	39 (29-55)	10 (56)	URT
Wang et al.[55]	Jinhua, China	Hospital	Case series	17	42 ± 17*	10 (59)	URT, stool
Wölfel et al.[56]	Munich, Germany	Hospital	Case series	9	NR	NR	URT, blood, urine
Wu et al.[57]	Hainan, China	Hospital	Case series	91	50 (range 21-83)*	52 (57)	URT, stool
Wu et al.[58]	Qingdao, China	Hospital	Case series	74	6 (0.1-15.08 range)	44 (59)	Stool
Wu et al.[59]	Zhuhai, China	Hospital	Case series	74	43.8*	35 (47)	Stool
Wyllie et al.[60]	New Haven, USA	Hospital	Case series	44	61 (23-92 range)*	23 (52)	URT (saliva)
Xiao et al. [61]	Wuhan, China	Hospital	Case series	56	55 (42-68)	34 (61)	URT
Xiao et al.[62]	Guangzhou, China	Hospital	Case series	28			Stool
Xu et al. [63]	Shenzhen/ Zheijang, China	Hospital	Retrospective Cohort	113	52 (42-63)	66 (58)	URT

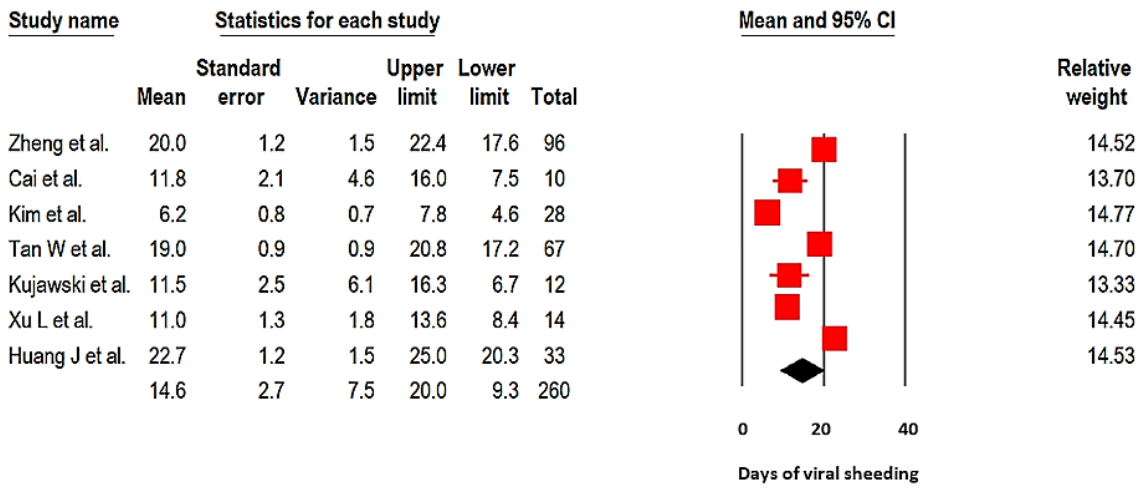
Xu et al.[64]	Shenyang, China	Hospital	Case series	14	48 ± 13.4*	7 (50)	URT, LRT, serum, conjunctiva
Xu et al. [65]	Guangzhou, China	Hospital	Case series	10	6.6	6 (60)	URT, rectal swab
Yan et al.[66]	Hubei, China	Hospital	Case series	120	52 (35-63)	54 (45)	URT
Yang et al.[67]	Wuhan, China	Hospital	Case series	78	Symptomatic: 56 (34-63) Asymptomatic: 37 (26-45)	Symptomatic:31 (40) Asymptomatic: 11 (33)	URT
Yang et al.[68]	Shenzhen, China	Hospital	Case series	213	52 (range 2-86)	108 (51)	URT, LRT
Yongchen et al.[69]	Nanjing, Xuzhou, China	Hospital	Case series	21	37	13 (62)	URT, stool
Young et al.[70]	Singapore	Hospital	Case series	18	47	9 (50)	URT, stool, blood, urine
Zha et al.[71]	Wuhu, China	Hospital	Case series	31	39 (32-54)	20 (65)	URT
Zhang et al.[72]	Beijing, China	Hospital	Case series	23	48 (40-62)	12 (52)	URT, stool, blood, urine
Zhang et al. [73]	Shenzhen, China	Hospital	Case series	56	Mixed	Mixed	URT, stool
Zheng et al.[74]	Zhejiang, China	Hospital	Retrospective Cohort	96	53 (33.4-64.8)	NR	LRT, stool, blood, urine
Zhou et al.[75]	Wuhan, China	Hospital	Case series	41	58 (48-62)	22 (54)	URT
Zhou et al. [76]	Wuhan, China	Hospital	Case series	191	56 (46-67)	119 (62)	URT
Zhou et al.[77]	Guangzhou, China	Hospital	Case series	31	45 (33-60) 37 (28-57)	4 (44) 6 (27)	URT
Zhu et al. [78]	Wuhan, China	Hospital	Case series	10	49.5	8 (80)	URT
Zou et al.[79]	Zhuhai, China	Hospital/outpatient	Case series	18	59 (range 26-76)	9 (50)	URT
SARS-CoV-1							
Chan et al.[80]	Hong Kong, China	Hospital	Case series	415	11.3 ± 4.1* 37.1 ± 11.2*	132 (33)	URT, LRT, stool, urine
Chen et al.[81]	Taiwan	Hospital	Case series	108	Stratified	95	URT
Cheng et al.[82]	Hong Kong, China	Hospital	Case series	1041	NR	NR	URT, LRT, stool, urine
Kwan et al.[83]	Hong Kong, China	Hospital	Case series	12 33	Dialysis: 58 (range 34-74);*	6 (50)	URT, stools, urine

					Controls: 57 (range 34-75)		
Liu et al.[84]	Beijing, China	Hospital	Case series	56	31 (male) 34 (female)	31 (55)	LRT, stool
Leong et al.[85]	Singapore	Hospital	Case series	64	35.2 (17-63 range)*	16 (25)	URT, stool, blood, urine
Peiris et al. [86]	Hong Kong, China	Hospital	Case series	75	39.8 (SD 12.2)	0.92	URT
Xu et al.[87]	Beijing, China	Hospital	Case series	54	NR	NR	LRT, blood, urine
MERS-CoV							
Al Hosani et al.[88]	Abu Dhabi, UAE	Hospital/community	Case series	65	20 -59	43 (66)	LRT
Al-Jasser et al.[89]	Riyadh, Saudi Arabia	Hospital	Case series	167	46.71*	142 (57)	URT
Alkendi et al.[90]	Tawam/Al Ain, UAE	Hospital	Case series	58	43.5	41 (71)	URT
Arabi et al.[91]	Saudi Arabia	Hospital	Cohort	330	58 (44-69)	225 (68)	URT
Corman et al.[92]	Riyadh, Saudi Arabia	Hospital	Case series	37	69 (24–90)*	27 (39)	URT, LRT, stool, blood, urine
Hong et al.[93]	Seoul, South Korea	Hospital	Case series	30	49*	19 (63)	Blood
Min et al.[94]	Seoul/others, South Korea	Hospital	Case series	14	62	6 (35)	LRT, serum
Muth et al.[95]	Riyadh, Saudi Arabia	Hospital	Case series	32	66 (24-90)	24 (75)	LRT
Oh et al.[96]	Seoul, South Korea	Hospital	Case series	17	NR	NR	URT, LRT, serum
Park et al.[97]	Seoul, South Korea	Hospital	Case series	17	NR	NR	URT, LRT
Shalhoub et al.[98]	Jeddah, Saudi Arabia	Hospital	Retrospective cohort	32	65	14 (44)	LRT, serum

Abbreviations: UK, United Kingdom, USA; United States of America; UAE, United Arab Emirates; RCT, randomised controlled trial; URT, upper respiratory tract; LRT, lower respiratory tract; NR, not reported.

* Mean ± standard deviation (or range if stated).

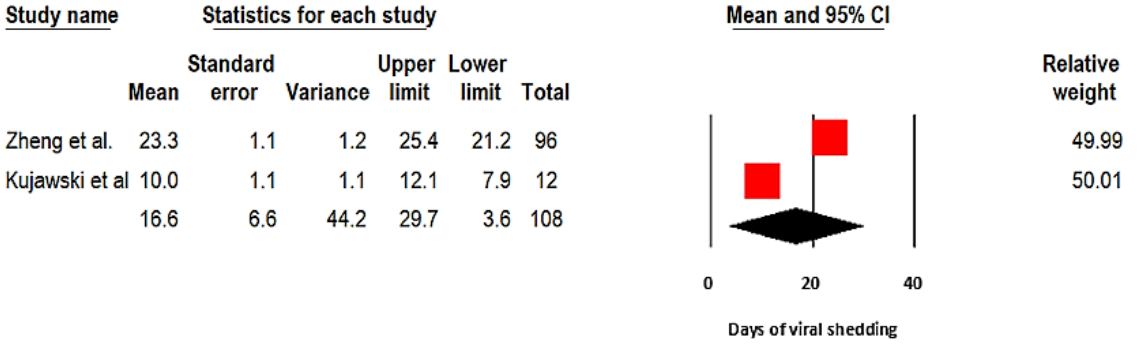
Supplementary Figure 1: Pooled mean duration (days) of SARS-CoV-2 shedding from the lower respiratory tract (random-effects model).



Note: the overall effect is plotted as a black square.

Test for heterogeneity: Q-value = 203.3, df(Q) = 6, $p < 0.001$, $I^2 = 97\%$.

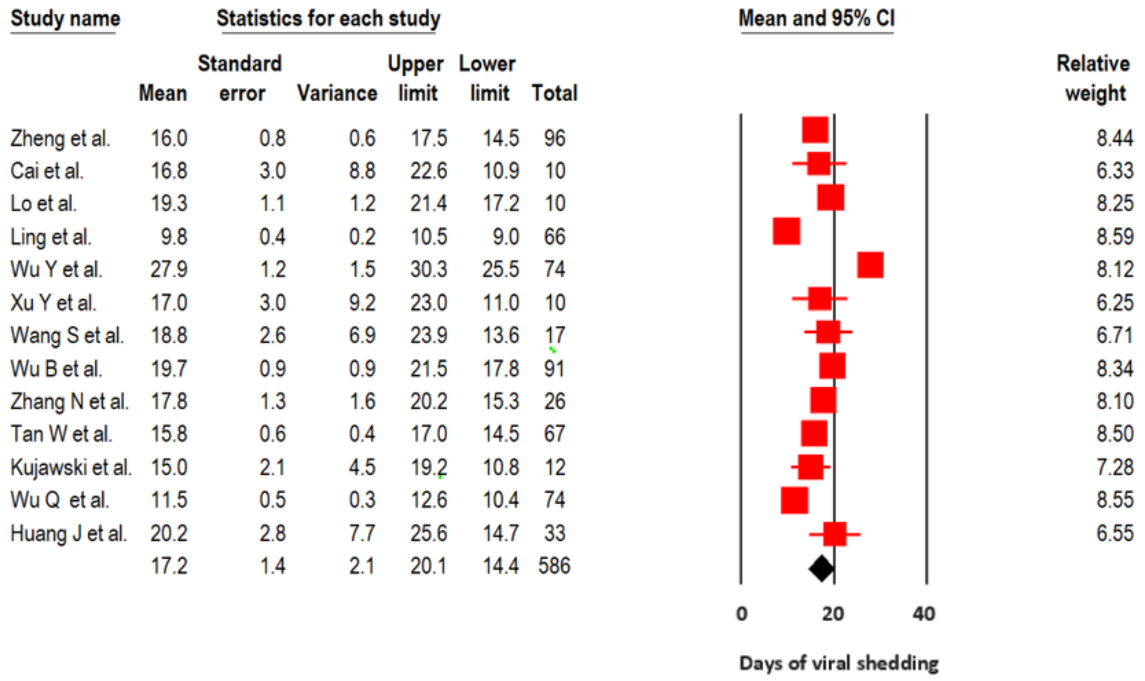
Supp Figure 2. Pooled mean duration (days) of SARS-CoV-2 shedding in the blood (random-effects model).



Note: the overall effect is plotted as a black square.

Test for heterogeneity: Q-value = 77,6, df(Q) = 1, $p < 0.001$, $I^2 = 99\%$.

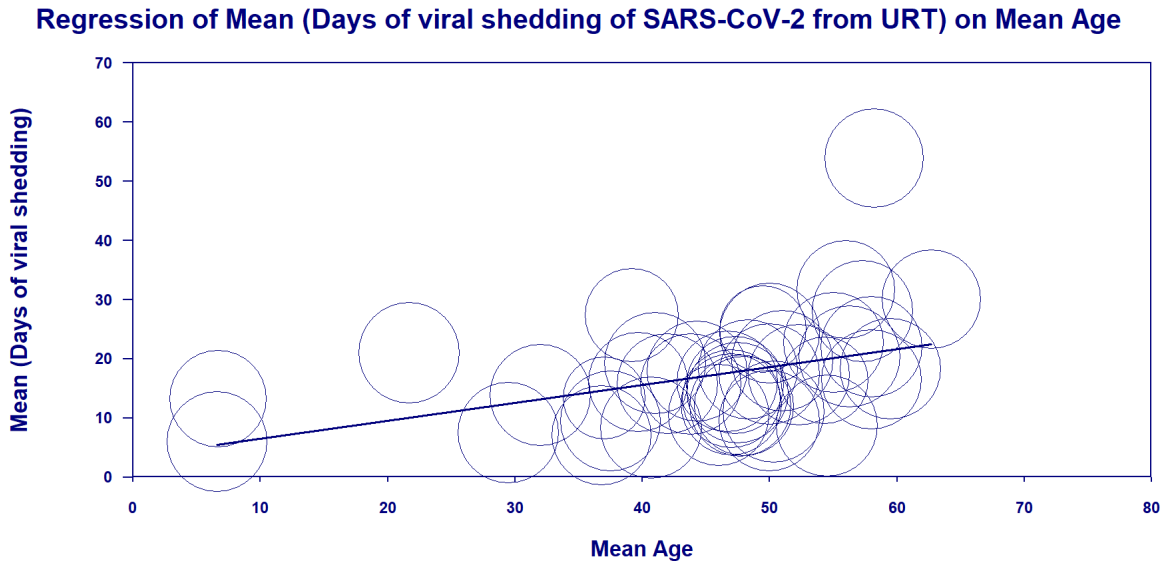
Supplementary Figure 3. Pooled mean duration (days) of SARS-CoV-2 shedding from the stool (random-effects model).



Note: the overall effect is plotted as a black square.

Test for heterogeneity: Q-value = 356.0, df(Q) = 12, $p < 0.001$, $I2 = 96.6\%$.

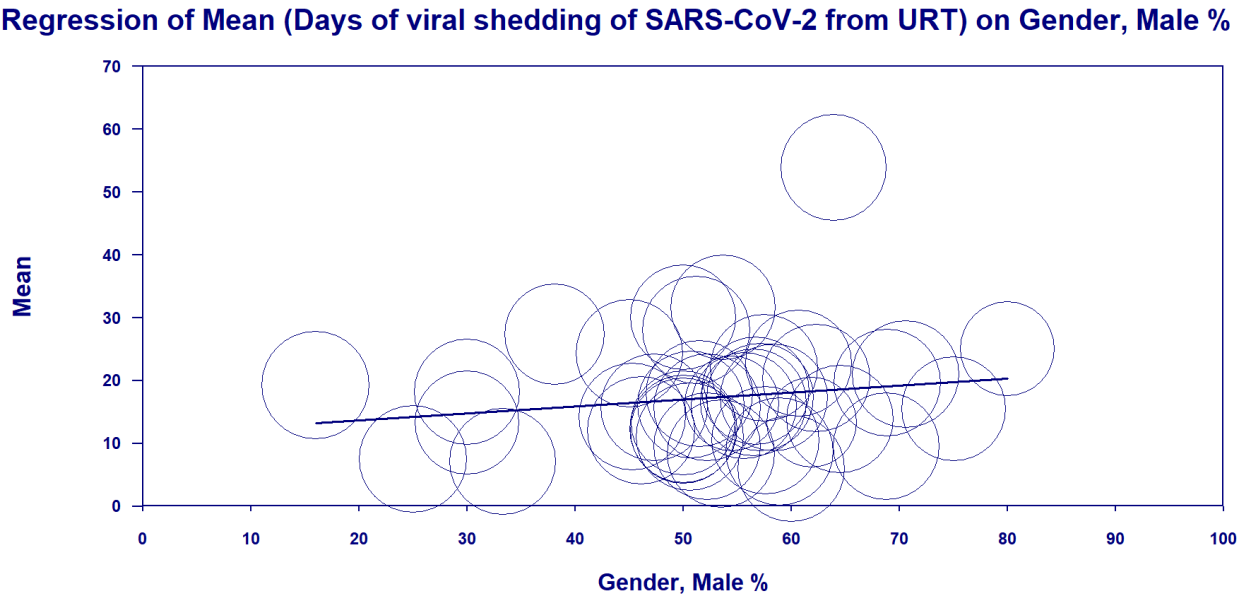
Supplementary Figure 4. Meta-regression bubble plot of the impact of age on mean SARS-CoV-2 shedding from the upper respiratory tract



URT: upper respiratory tract.

Note: the plot was built upon 41 studies (no data on mean age from the study of Qian et al.[38]). A random-effects model was used.

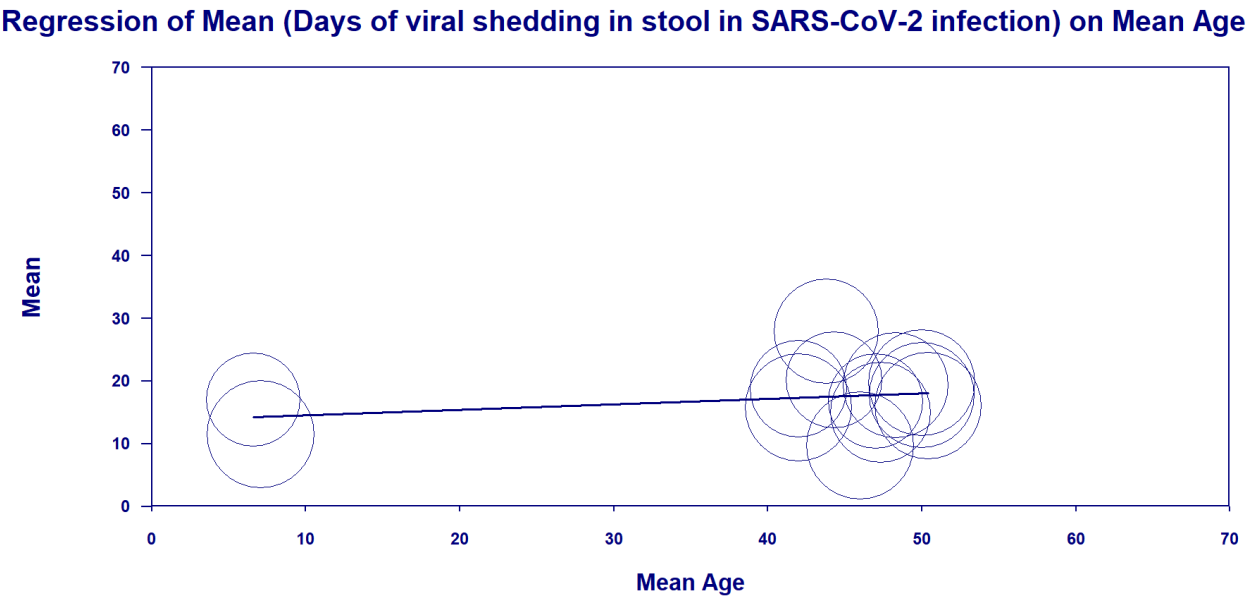
Supplementary Figure 5. Meta-regression bubble plot of the impact of male proportion on mean SARS-CoV-2 shedding from the upper respiratory tract



URT: upper respiratory tract.

Note: the plot was built upon 41 observations (no data on mean age from the study of Qian et al.). A random-effects model was used.

Supplementary Figure 6. Meta-regression bubble plot of the impact of age on mean SARS-CoV-2 shedding from the stool



Note: the plot was built upon 13 studies. A random-effects model was used.

(slope: +0.087; 95% CI, -0.128 to +0.302; p = 0.43)

Supplementary Table 2: Critical Appraisal

CASE SERIES

SARS-CoV-2

	1. Were there clear criteria for inclusion in the case series?	2. Was the condition measured in a standard, reliable way for all participants included in the case series?	3. Were valid methods used for identification of the condition for all participants included in the case series?	4. Did the case series have consecutive inclusion of participants?	5. Did the case series have complete inclusion of participants?	6. Was there clear reporting of the demographics of the participants in the study?	7. Was there clear reporting of clinical information of the participants?	8. Were the outcomes or follow up results of cases clearly reported?	9. Was there clear reporting of the presenting site(s)/clinic(s) demographic information?	10. Was statistical analysis appropriate?
Andersson M et al.	Y	Y	Y	N	N	Y	Y	Y	Y	Y
Bullard J et al.	Y	Y	Y	N	U	Y	N	Y	N	Y
Cai J et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA
Cai Q et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Chang D et al.	Y	U	U	Y	Y	Y	Y	Y	Y	Y
Chau N et al.	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Chen J et al.	Y	Y	Y	U	U	Y	Y	Y	Y	Y
Chen X et al.	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
Chen X et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Chen Y et al.	Y	Y	Y	U	Y	Y	Y	Y	Y	Y
Corman V et al.	N	Y	Y	N	N	N	Y	Y	N	NA
Fan L et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fang Z et al.	U	Y	Y	N	U	Y	Y	Y	Y	Y
Fu S et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Han M et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
He X et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Hu X et al.	Y	Y	Y	N	U	Y	Y	Y	Y	Y
Hu Z et al.	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
Huang H et al.	Y	Y	Y	U	Y	Y	Y	Y	Y	Y
Huang J et al.	Y	U	U	U	U	Y	Y	Y	Y	Y
Kim E et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Kujawski S et al.	Y	Y	Y	U	U	Y	Y	Y	N	Y

L'Huillier A et al.	Y	Y	Y	N	Y	Y	N	Y	N	Y
La Scola B et al.	N	Y	Y	N	U	N	N	Y	N	Y
Le T et al.	Y	Y	Y	U	Y	Y	N	Y	Y	NA
Li N et al.	Y	Y	Y	N	Y	Y	Y	N	Y	Y
Liang M et al.	Y	Y	Y	N	U	Y	Y	Y	Y	Y
Ling Y et al.	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
Liu L et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Liu Y et al.	Y	Y	Y	U	U	Y	Y	Y	Y	Y
Lo I et al.	Y	Y	Y	N	N	Y	Y	Y	Y	Y
Lou B et al	Y	Y	Y	N	Y	Y	N	Y	Y	Y
Pongpirul W et al.	Y	Y	Y	N	N	Y	Y	Y	Y	Y
Qian G et al.	Y	Y	Y	N	N	N	N	Y	N	NA
Quan W et al.	Y	Y	Y	N	N	Y	Y	Y	Y	Y
Sakurai A et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Seah I et al.	U	Y	Y	N	U	Y	Y	Y	N	NA
Shastri A et al.	Y	Y	Y	N	U	Y	Y	Y	Y	Y
Shi J et al.	Y	Y	Y	N	U	Y	N	Y	Y	Y
Song C et al.	N	Y	Y	N	N	Y	Y	Y	N	NA
Song R et l.	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
Talmy T et al.	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
Tan L et al.	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
Tan W et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Tan Y et al.	Y	Y	Y	U	Y	Y	Y	Y	Y	Y
Tian D et al.	Y	Y	Y	U	U	Y	Y	Y	Y	Y
To K et al.	Y	Y	Y	N	N	Y	N	Y	N	NA
Tu Y et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Wang L et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Wang S et al.	Y	Y	Y	N	U	Y	Y	Y	Y	Y
Wolfel R et al.	N	Y	Y	N	N	N	Y	Y	U	Y
Wu B et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Wu Q et al.	Y	Y	Y	U	U	Y	Y	Y	Y	Y

Wu Y et al.	Y	Y	Y	N	N	Y	Y	Y	Y	Y
Wyllie A et al.	Y	Y	Y	U	N	Y	Y	Y	Y	Y
Xiao A et al.	Y	Y	Y	U	Y	Y	N	Y	Y	Y
Xiao F et al.	N	Y	Y	U	U	N	N	Y	Y	NA
Xu L et al.	N	Y	Y	U	U	Y	Y	Y	N	NA
Xu Y et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Yan D et al.	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
Yang R et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Yang Y et al.	Y	Y	Y	U	U	Y	N	Y	Y	Y
Yongchen Z et al.	U	Y	Y	N	N	Y	N	Y	Y	U
Young B et al.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Zha L et al.	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
Zhang N et al	Y	U	Y	U	U	Y	Y	Y	N	Y
Zhang Z et al.	Y	Y	Y	U	Y	Y	Y	Y	Y	Y
Zhou B et al.	Y	Y	Y	U	U	Y	N	Y	Y	Y
Zhou F et al	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Zhou R et al.	Y	Y	Y	U	U	Y	N	Y	Y	Y
Zhu L et al.	Y	Y	Y	U	U	Y	Y	Y	Y	Y
Zou L et al.	U	Y	Y	U	U	Y	Y	Y	U	Y
SARS-CoV-1										
Chan P et al.	Y	Y	Y	N	N	Y	N	Y	N	Y
Chen W et al.	Y	Y	Y	N	N	Y	N	Y	N	Y
Cheng P et al.	Y	Y	Y	N	U	N	N	Y	N	Y
Kwan B et al.	Y	Y	Y	U	Y	Y	Y	Y	N	Y
Leong H et al.	Y	Y	Y	N	U	Y	N	Y	N	Y
Liu W et al.	Y	Y	Y	N	N	Y	Y	Y	N	Y
Peiris J et al.	Y	Y	Y	U	N	Y	Y	Y	Y	Y
Xu D et al.	Y	Y	Y	U	U	N	N	Y	Y	Y
MERS										
Al Hosani F et al.	Y	Y	Y	N	Y	Y	Y	Y	N	Y
Al-Jasser F et al.	Y	Y	Y	U	Y	Y	Y	Y	Y	Y

Alkendi F et al.	Y	Y	Y	U	Y	Y	Y	Y	Y	NA
Corman V et al.	Y	Y	Y	U	U	Y	N	Y	N	Y
Hong K et al.	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
Min C-K et al.	Y	Y	Y	N	U	Y	Y	Y	N	Y
Muth D et al.	Y	Y	Y	U	U	Y	N	Y	Y	Y
Oh M et al.	Y	Y	Y	Y	Y	N	N	Y	Y	Y
Park W et al.	Y	Y	Y	U	U	N	N	Y	Y	Y

COHORT

Author	1. Were the two groups similar and recruited from the same population?	2. Were the exposures measured similarly to assign people to both exposed and unexposed groups?	3. Was the exposure measured in a valid and reliable way?	4. Were confounding factors identified?	5. Were strategies to deal with confounding factors stated?	6. Were the groups/participants free of the outcome at the start of the study (or at the moment of exposure)?	7. Were the outcomes measured in a valid and reliable way?	8. Was the follow up time reported and sufficient to belong enough for outcomes to occur?	9. Was follow up complete, and if not, were the reasons to loss to follow up described and explored?	10. Were strategies to address incomplete follow up utilized?	11. Was appropriate statistical analysis used?
SARS-CoV-2											
Huang L et al.	Y	Y	Y	Y	Y	Y	Y	Y	NA	NA	Y
To K et al	NA	NA	Y	Y	N	NA	Y	Y	Y	NA	Y
Xu K et al	NA	NA	Y	Y	Y	NA	Y	Y	Y	NA	Y
Zheng S et al	NA	NA	Y	Y	Y	NA	Y	Y	Y	NA	Y
MERS											
Arabi Y et al.	N	Y	Y	Y	Y	Y	Y	Y	U	U	Y
Shalhoub S et al.	Y	Y	Y	Y	Y	Y	Y	Y	U	U	Y

CROSS SECTIONAL STUDIES

SARS-CoV-2

Author	1.Were the criteria for inclusion in the sample clearly defined?	2.Were the study subjects and the setting described in detail?	3.Was the exposure measured in a valid and reliable way?	4.Were objective, standard criteria used for measurement of the condition?	5.Were confounding factors identified?	6.Were strategies to deal with confounding factors stated?	7.Were the outcomes measured in a valid and reliable way?
Arons M et al	Y	Y	Y	Y	Y	N	Y	Y
Lavezzo E et al	Y	Y	Y	Y	Y	Y	Y	Y

RANDOMISED CONTROLLED TRIALS

SARS-CoV-2

	1. Was true randomization used for assignment of participants to treatment groups?	2. Was allocation to treatment groups concealed?	3. Were treatment groups similar at the baseline?	4. Were participants blind to treatment assignment?	5. Were those delivering treatment blind to treatment assignment?	6. Were outcomes assessors blind to treatment assignment?	7. Were treatment groups treated identically other than the intervention of interest?	8. Was follow up completeand if not, were differences between groups in terms of their follow up adequately described and analyzed?	9. Were participants analyzedin the groups to which they were randomized?	10. Were outcomes measured in the same way for treatment groups?	11. Were outcomes measured in a reliable way?	12. Was appropriate statistical analysis used?	13. Was the trial design appropriate, and any deviations from the standard RCT design (individual randomization, parallel groups) accounted for in the conduct and analysis of the trial?
Hung I et al.	Y	N	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y

Search strategy

Research question: What is the duration and dynamics of viral shedding in various body fluids in coronaviruses?

Search methods:

The following databases will be searched: MEDLINE and EMBASE. For the following conferences we will hand search abstracts: European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Additionally, if any literature reviews are identified, reference lists of those review articles will be searched.

Time: the search will be limited to literature published after 2003, since the first recognised case of SARS was identified in March 2003.

Language: only English language articles will be reviewed.

Search terms:

1. nCoV or n-Cov
2. 2019-nCoV
3. coronavirus disease 2019
4. coronavirus disease-19
5. novel coronavirus
6. COVID
7. COVID-19
8. Middle East Respiratory Syndrome Coronavirus/
9. Middle East respiratory syndrome
10. MERS
11. SARS Virus/
12. SARS
13. severe acute respiratory syndrome
14. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13
15. shed* OR viabl*
16. viral OR virus OR rna OR ribonucleic
17. viral shedding
18. 15 or 16 or 17
19. 14 AND 18

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