

Supplemental Material

Table 1. Studies included in the meta-analysis

Study	Journal	Study type	Date	Country
Siegel et al	American Roentgen Ray Society	Case series	Apr-20	USA
Pazgan-simon et al	Polish Archives of Internal Medicine	Case report	Apr-20	Poland
Yang, X et al	Clinics and Research in Hepatology and Gastroenterology	Case report	Apr-20	China
Zhang, J et al	Allergy (John Wiley and Sons Ltd.)	Retrospective cohort study	Feb-20	China
Azwar et al	Indones J Intern Med	Case report	Jan-20	Indonesia
Jin, X et al	BMJ	Retrospective cohort study	Mar-20	China
Nobel et al	Gastroenterology	Case-Control Study	Apr-20	USA
Lin et al	BMJ	Retrospective cohort study	Mar-20	China
Zhou et al	Gastroenterology	Retrospective cohort study	Mar-20	China
Pan et al	The American Journal of GASTROENTEROLOGY	Cross-sectional study	Apr-20	China
Poggiali et al	European Journal of Case Reports in Internal Medicine	Case series	Mar-20	Italy
Cholankeril et al	Gastroenterology	Retrospective cohort study	Apr-20	USA
Fu et al	Digestive Diseases and Sciences (Springer)	Case report	Apr-20	China
Li et al	World Journal of Clinical Cases	Case report	Apr-20	China
Saeed et al	British Journal of Surgery	Retrospective cohort study	Apr-20	Norway
Arashiro et al.	Journal of travel medicine	case-report	Apr-20	Japan
Yang F et al	Journal Of Medical Virology	Retrospective Cohort Study	Apr-20	China
Guillen, E et al	American Journal of Transplantation	Case Report	Mar-20	Spain
Chen, Y et al	Journal Of Medical Virology	Retrospective Cohort Study	Apr-20	China
Chen Q et al	Journal of Medical Virology	SHORT COMMUNICATION	Mar-20	China
Huang et al	The Lancet	Prospective Cohort study	Fab-20	China
Chen, N et al	The Lancet	Retrospective Cohort Study	Fab-20	China
Wang et al	JAMA	Case series	Mar-20	China
Xu, X et al	BMJ	retrospective case series	Fab-20	China
Fan et al	MedRxiv	Retrospective Cohort Study	Fab-20	China
Zhang, B et al	MedRxiv	Retrospective Cohort Study	Fab-20	China

Study	Journal	Study type	Date	Country
Huang Y et al	MedRxiv	Retrospective Cohort Study	Mar-20	China
Wan, S et al	Journal of Medical Virology	Retrospective Cohort Study	Mar-20	China
Zhang, Y et al	Liver International	Retrospective Cohort Study	Mar-20	China
Xu, Z et al	The Lancet	Case Report	Fab-20	China
Arentz et al	JAMA	Retrospective Cohort Study	Mar-20	USA
Hajifathalian et al	Gastroenterology	Retrospective Cohort Study	May-20	USA
Kujawski et al	MedRxiv	Retrospective Cohort Study	Mar-20	USA
Young et al	JAMA	Case series	Mar-20	Singapore
Sun et al	Clinical Infectious Diseases	retrospective case-control	Mar-20	Singapore
Pung et al	The Lancet	Retrospective Cohort Study	Mar-20	Singapore
Tabata et al	MedRxiv	Retrospective Cohort Study	Apr-20	Japan
Kluytmans et al	MedRxiv	cross-sectional study	Mar-20	Netherlands
Qian et al	Quarterly Journal of Medicine	Retrospective case series	Mar-20	China
Luo et al	Clinical Gastroenterology and Hepatology	Retrospective cohort study	Mar-20	China
Zhou F et al	Lancet	Retrospective Cohort Study	Mar-20	China
Chen T et al	BMJ	Retrospective Case Series	Mar-20	China
Xu H et al	MedRxiv	Retrospective Cohort Study	Mar-20	China
Shi S et al	JAMACardio	Retrospective Cohort Study	Mar-20	China
Han R et al	Lancet	Retrospective Cohort Study	Jun-20	China
Xu S et al	MedRxiv	Retrospective analysis	Mar-20	China
Ma L et al	MedRxiv	Retrospective Study	Mar-20	China
Liu L et al	Microbes and infection	Retrospective Study	May-20	China
Mao L et al	JAMANEurology	Case Series	Apr-20	China
Ai JW et al	Frontiers in Medicine	Cross sectional study	Jun-20	China
Liu Y et al	MedRxiv	Retrospective Study	May-20	China
Shu L et al	Lancet	Retrospective Cohort Study	Apr-20	China
Wei L et al	MedRxiv	Retrospective Cohort Study	May-20	China
Zhao Z et al	MedRxiv	Retrospective Study	Mar-20	China
Zhao W et al	MedRxiv	Retrospective Cohort Study	Mar-20	China
Yang P et al	MedRxiv	Retrospective Study	Mar-20	China
Li K et al	Investigative Radiology	Retrospective Study	Jun-20	China
Qi D et al	MedRxiv	Retrospective Descriptive study	Mar-20	China
Wen Y et al	MedRxiv	Retrospective Study	Mar-20	China
Xu Y et al	MedRxiv	Retrospective Observational Study	Mar-20	China
Yan S et al	MedRxiv	Retrospective Study	Mar-20	China
Wang L et al	European Respiratory Journal	Retrospective Study	Apr-20	China
Chen X et al	MedRxiv	Observational study	Mar-20	China
Liu S et al	BMC Infectious Diseases	Cohort Study	Jun-20	China

Study	Journal	Study type	Date	Country
Yao et al	Chinese Journal of Hepatology	Retrospective Study	Mar-20	China
Tian S et al	MedRxiv	Retrospective study	Mar-20	China
Lu H et al	MedRxiv	Descriptive Study	Feb-20	China
Fu H et al	MedRxiv	Observational Study	Mar-20	China
Fu H et al	MedRxiv	Observational Study	Mar-20	China
Chen D et al	MedRxiv	Retrospective Study	Feb-20	China
Kuang et al	Gastroenterology	Retrospective study	Feb-20	China
Rubin et al	Journal of Clinical And Translational Science	Cohort	May-20	USA
Covid-19 National Emergency Response Center South Korea	Osong Public Health and Research Perspectives	Case Series	Feb-20	South Korea
Pung et al	Lancet	Retrospective	Mar-20	Singapore
Wolfel et al	Nature	Case series	Apr-20	Germany
Dreher et al	Dtsch Arztebl International	Retrospective	Apr-20	Germany
Gritti et al	MedRxiv	Observational Cohort Study	Apr-20	Italy
Spiteri et al	Euro Surveillance	Surveillance	Mar-20	Germany, Finland, Italy, Russia, Spain, France, Sweden, and Belgium
Covid-19 National Incident Room Surveillance Team Australia	Communicable Diseases Intelligence (2018)	Epidemiology Report	Mar-20	Australia
An P et. al.	European Respiratory Journal	Case series	Jan-20	China
Chan et. al.	MedRxiv	Case series	Jan-20	China
Chang et al	BMC Infectious Diseases	Case series	Jan-20	China
Chen et al	Chinese Journal of Hepatology	Case series	Jan-20	China
Cheung et al	MedRxiv	Case series	Feb-20	China
Fan H et al	MedRxiv	Case series	Feb-20	China
Fernandez-Ruiz et al	MedRxiv	Case series	Mar-20	Spain
Guan et al	MedRxiv	Retrospective cohort	Jan-20	China
Han et al	MedRxiv	Retrospective cohort	Feb-20	China
Hsieh et al	Clinics and Research in Hepatology and Gastroenterology	Case series	Feb-20	Taiwan
Huang et al	Allergy (John Wiley and Sons Ltd.)	Case series	Feb-20	China
Huang et al	Indones J Intern Med	Case series	Feb-20	China
Kim ES et al	BMJ	Case series	Feb-20	Korea
Klopfenstein et al	Gastroenterology	Case series	Mar-20	France
Liu K et al	BMJ	Case series	Jan-20	China
Lechien et al	Gastroenterology	Case series	Feb-20	Europe
Liu Y et al	The American Journal of GASTROENTEROLOGY	Case series	Jan	China
Pan F et al	European Journal of Case Reports in Internal Medicine	Retrospective cohort	Feb-20	China
Redd et al	Gastroenterology	Retrospective cohort	Apr-20	US

Study	Journal	Study type	Date	Country
Ren et al	Digestive Diseases and Sciences (Springer)	Case series	Dec-19	China
Shi H et al	World Journal of Clinical Cases	Retrospective cohort	Jan-20	China
Song et al	British Journal of Surgery	Case series	Jan-20	China
Wan Y et al	Journal of travel medicine	Case series	Mar-20	China
Wang L (b) et. al.	Journal Of Medical Virology	Case series	Feb-20	China
Wang L (c) et. al.	Journal Of Medical Virology	Case series	Feb-20	China
Wang X et. al.	Journal of Medical Virology	Case series	Feb-20	China
Wang Z et. al.	The Lancet	Case series	Jan-20	China
Wei X-S et. al.	The Lancet	Case series	Feb-20	China
Wu J (a) et. al.	JAMA	Retrospective cohort	Feb-20	China
Wu J (b) et al	BMJ	Case series	20-Feb	China
Wu Y et. al.	MedRxiv	Case series	Mar-20	China
Xia X et. al.	MedRxiv	Case series	Mar-20	China
Xiao F et. al.	MedRxiv	Case series	Feb-20	China
Xie H et. al.	Journal of Medical Virology	Case series	Feb-20	China
Xiong Y et. al.	Liver International	Case series	Feb-20	China
Xu X et al	The Lancet	Case series	Feb-20	China
Yu P et. al.	JAMA	Case series	Jan-20	China
Zhang J (b) et. al	Gastroenterology	Case series	Feb-20	China
Zhao X-Y et. al.	MedRxiv	Case series	Feb-20	China
Zhou S et. al.	JAMA	Case series	Jan-20	China
Zou L et. al.	Clinical Infectious Diseases	Case series	Jan-20	China
Sulaiman et al.	JGH Open	retrospective descriptive study	Aug-20	Iraq
Elmunzer et al	Clinical Gastroenterology and Hepatology	observational cohort study	Sept-20	USA and Canada
Laszkowska et al	Clinical Gastroenterology and Hepatology	retrospective study	Sept-20	USA
Hundt et al	Hepatology	Retrospective cohort study	July-20	USA and Canada
Ferm et al	Clinical Gastroenterology and Hepatology	Retrospective cohort study	Sept-20	USA
Zhan et al	Journal of International Medical Research	retrospective study	July-20	China
Ramachandran et al	Digestive Diseases	Retrospective cohort study	June-20	USA
Suleyman et al	JAMA	Case series	June-20	USA
Khader et al	Radiology Case Reports	Case report	Nov-20	Qatar
Grande G et al	ACG Case Reports	Case Report	Sept-20	Italy
Gulen M	Clinics and Research in Hepatology and Gastroenterology	Case Report	Sep-20	Turkey
Cholankeril et al	The American Journal of GASTROENTEROLOGY	Retrospective study	Sept-20	USA
Cavaliere et al	Gastrointestinal endoscopy	Case series	Aug-20	China?
Hassani AH et al	Gastroenterology and Hepatology from Bed to Bench	Case reports	Sep-20	Iran

Study	Journal	Study type	Date	Country
Wu CY et al	Journal of International Medical Research	Case report	Sept-20	China
Wang K et al	Open Forum Infectious Disease	Case report	Sept-20	China
Dietrich CG et al	European Journal of Gastroenterology and Hepatology	Case report	Nov-20	Germany
Kandasamy S et al	Annals of Hepato-Biliary-Pancreatic Surgery	Case Report	Nov-20	India
Wagner J et al	SN comprehensive clinical medicine	Retrospective cohort study	Sep-20	USA
Wahab SF et al	BMJ Case Reports	Case Report	Aug-20	Denmark
Cheung S et al	American journal of Case Reports	Case Report	Aug-20	USA
Docherty AB. et al.	Diseases	Retrospective cohort study	April-20	UK
Fanelli V. et al.	Critical Care	Retrospective cohort study	April-20	Spain
CDC USA	Morb. Mortal. Wkly Rep	Retrospective cohort study	April-20	USA
CDC USA	Morb. Mortal. Wkly Rep	Retrospective cohort study	April-20	USA
Borobia A. et al.	Journal of Clinical Medicine	Retrospective cohort study	June-20	Spain
Gil-Rodrigo A. et al	Emergencias	Retrospective cohort study	Aug-20	Spain
Livanos AE. et al.	MedRxiv	Retrospective cohort study	Nov-20	USA
Bannaga AS. et al	Clinical Medicine Journal	Retrospective cohort study	Sept-20	UK
Moura DTH et al	Clinics	Retrospective cohort study	July-20	Brazil
A. Papa et al	European Review for Medical and Pharmacological Sciences	case control	July-20	Italy
N Aumpan et al.	JGH Open	Retrospective cohort study	July-20	Thailand
Ping Lei et al	Hepatology international	Retrospective cohort study	Sept-20	China
Mo P, et al.	Clinical Infectious Disease	Retrospective cohort study	Sept-20	China
Tsibouris et al	Annals of Gastroenterology	Retrospective cohort study	June-20	Greece
Aghemo et al	Clinical Gastroenterology and Hepatology	Retrospective cohort study	Sept-20	Italy
Klopfenstein et al	Clinical Gastroenterology and Hepatology	Retrospective cohort study	June-20	France
Colaneri et al	Euro Surveillance	Retrospective cohort study	Apr-20	Italy

Table. 2 The Methodical Index for Non-randomized Studies (MINORS)

Study	Clearly stated aim	Inclusion of consecutive patients	Prospective data collection	Endpoints appropriate to study aim	Endpoints appropriate to study aim	Follow-up period appropriate to study aim	Adequate control group	Adequate statistical analyses	Total
Siegel et al	1	1	0	0	0	0	0	0	2
Pazgan-simonal	1	0	0	1	0	0	0	0	2
Yang, X et al	1	0	0	1	0	0	0	0	2
Zhang, J et al	2	2	2	1	0	0	0	1	8
Azwar et al	1	1	0	1	0	1	0	0	4
Jin, X et al	2	2	2	2	0	1	1	1	11

Nobel et al	2	2	2	1	0	0	0	1	8
Lin et al	1	1	0	2	0	1	0	1	6
Zhou et al	2	2	0	2	0	0	0	1	7
Pan et al	2	2	1	0	0	0	0	1	6
Poggiali et al	2	0	0	1	0	1	0	2	6
Cholankeril et al	2	1	2	0	2	0	0	1	8
Fu et al	2	0	1	1	0	0	0	0	4
Li et al	2	0	2	0	0	0	0	0	4
Saeed et al	2	1	2	1	0	0	0	1	7
Arashiro et al.	2	0	0	2	0	0	0	1	5
Yang F et al	2	1	2	0	2	0	0	1	8
Guillen, E et al	2	1	1	1	0	1	0	2	8
Chen, Y et al	1	1	0	2	0	1	0	1	6
Chen Q et al	2	1	0	1	0	0	0	1	5
Huang et al	2	2	1	0	0	0	0	1	6
Chen, N et al	2	0	1	1	0	0	0	2	6
Wang et al	2	0	2	0	0	0	0	2	6
Xu, X et al	2	1	0	1	0	0	0	2	6
Fan et al	2	0	1	1	0	0	0	2	6
Zhang, B et al	2	1	2	0	0	0	0	2	7
Huang Y et al	2	0	1	1	0	0	0	2	6
Wan, S et al	2	0	2	0	0	0	0	2	6
Zhang, Y et al	2	1	0	1	0	0	0	2	6
Xu, Z et al	2	0	0	0	0	0	0	2	4
Arentz et al	1	2	2	2	0	0	0	1	8
Hajifathalian et al	2	1	1	1	0	0	0	2	7
Kujawski et al	2	1	1	1	0	0	0	1	6
Young et al	2	1	0	1	0	0	0	2	6
Sun et al	2	0	0	0	0	0	0	2	4
Pung et al	2	1	2	1	0	0	0	1	7
Tabata et al	2	2	0	1	0	0	0	1	6
Kluytmans et al	2	1	1	0	0	0	0	1	5
Qian et al	2	0	0	1	0	1	0	2	6
Luo et al	0	1	1	1	2	3	0	1	9
Zhou F et al	1	0	1	2	0	2	0	2	6
Chen T	1	1	1	2	1	0	0	2	8
Xu H et al	2	1	0	3	0	0	0	1	7
Shi S et al	2	1	1	0	0	0	0	2	6
Han R et al	1	0	0	0	0	1	0	2	4
Xu S et al	0	1	1	1	2	3	0	1	9

Study	Clearly stated aim	Inclusion of consecutive patients	Prospective data collection	Endpoints appropriate to study aim	Endpoints appropriate to study aim	Follow-up period appropriate to study aim	Adequate control group	Adequate statistical analyses	Total
Ma L et al	2	0	1	3	0	3	0	1	9
Liu L et al	2	0	2	0	0	0	0	2	6
Mao L et al	2	1	0	1	0	0	0	2	6
Ai JW et al	c	0	0	0	0	0	0	2	4
Shu L et al	1	0	2	0	0	0	0	1	4
Wei L et al	2	1	1	1	0	0	0	2	7
Zhao Z et al	1	1	0	1	0	0	0	1	4
Zhao W et al	2	0	2	0	0	0	0	2	6
Yang P et al	2	1	0	1	0	0	0	2	6
Li K et al	2	0	0	0	0	0	0	2	4
Qi D et al	2	1	0	1	0	0	0	1	5
Wen Y et al	2	1	1	0	0	0	0	1	5
Xu Y et al	1	0	0	0	0	1	0	2	4
Yan S et al	0	1	1	1	2	3	0	1	9
Wang L et al	2	0	1	3	0	4	0	2	11
Chen X et al	2	1	0	3	0	0	0	1	7
Liu S et al	2	1	1	0	0	0	0	2	6
Fan L et al	1	0	1	0	0	1	0	2	5
Yao et al	0	1	1	1	2	3	0	1	9
Tian S et al	2	0	1	3	0	4	0	1	10
Lu H et al	2	1	0	1	0	0	0	2	6
Fu H et al	2	1	1	0	0	0	0	1	5
Fu H et al	2	1	0	3	0	0	0	1	7
Chen D et al	2	1	1	0	0	0	0	2	6
Kuang et al	1	0	0	0	0	1	0	2	4
Rubin et al	0	1	1	1	2	3	0	1	9
COVID-19 National Emergency Response Center	2	0	1	3	0	4	0	2	12
Pung et al	2	2	0	1	0	0	0	1	6
Wolfel	2	1	0	1	0	0	0	1	5
Dreher et al	2	1	1	0	0	0	0	1	5
Gritti et al	2	0	0	1	0	1	0	2	6
Spiteri et al	0	1	1	1	2	3	0	1	9

Study	Clearly stated aim	Inclusion of consecutive patients	Prospective data collection	Endpoints appropriate to study aim	Endpoints appropriate to study aim	Follow-up period appropriate to study aim	Adequate control group	Adequate statistical analyses	Total
Covid-19 National Incident Surveillance	2	0	1	4	0	4	0	2	13
An P et. al.	1	1	1	2	1	0	0	2	8
Chan F-W et.al.	2	1	0	3	0	0	0	1	7
Chang D et. al.	2	1	1	0	0	0	0	2	6
Chen Q (b) et. al.	1	0	0	0	0	1	0	2	4
Cheung K et. al.	0	1	1	1	2	3	0	1	9
Fan H et. al.	2	0	1	3	0	3	0	1	9
FernandezRuiz et. al.	2	0	2	0	0	0	0	2	6
Guan W-j et. al.	2	1	0	1	0	0	0	2	6
Han C et. al.	1	0	0	0	0	0	0	2	4
Hsieh W-H et. al.	1	0	2	0	0	0	0	1	4
Huang R et. al.	2	1	1	1	0	0	0	2	7
Huang WH et. al.	1	1	0	1	0	0	0	1	4
Kim ES et. al.	2	0	2	0	0	0	0	2	6
Klopfenstein T et. al.	2	1	0	1	0	0	0	2	6
Liu K et. al.	2	0	0	0	0	0	0	2	4
Lechien J et. al.	2	1	0	1	0	0	0	1	5
Liu Y et. al.	2	1	1	0	0	0	0	1	5
Pan F et. al.	1	0	0	0	0	1	0	2	4
Redd W et. al.	0	1	1	1	2	3	0	1	9
Ren L et. al.	2	0	1	3	0	4	0	2	11
Shi H et. al.	2	1	0	3	0	0	0	1	7
Song F et. al.	2	1	1	0	0	0	0	2	6
Wan Y et. al.	1	0	1	0	0	1	0	2	5
Wang L (b) et.	0	1	1	1	2	3	0	1	9
Wang L (c) et. al.	2	0	1	3	0	4	0	1	10
Wang X et. al.	2	1	0	1	0	0	0	2	6
Wang Z et. al.	2	1	1	0	0	0	0	1	5
Wei X-S et. al.	2	1	0	3	0	0	0	1	7
Wu J (a) et. al.	2	1	1	0	0	0	0	2	6
Wu J (b) et al	1	0	0	0	0	1	0	2	4
Wu Y et. al.	0	1	1	1	2	3	0	1	9
Xia X et. al.	2	0	1	3	0	4	0	2	12
Xiao F et. al.	2	2	0	1	0	0	0	1	6

Xie H et. al.	1	0	0	0	0	1	0	2	4
Xiong Y et. al.	2	1	0	3	0	0	0	1	7
Xu X et al	2	1	1	0	0	0	0	2	6
Yu P et. al.	1	0	0	0	0	1	0	2	4
Zhang J (b) et. al.	0	1	1	1	2	3	0	1	9
Zhao X-Y et. al.	2	0	1	3	0	4	0	1	10
Zhou S et. al.	2	1	0	1	0	0	0	1	5
Zou L et. al.	2	1	1	0	0	0	0	1	5
Sulaiman et al.	1	0	0	0	0	1	0	2	4
Elmunzer et al	0	1	1	1	2	3	0	1	9
Laszkowska et al	2	0	1	3	0	4	0	2	11
Hundt et al	2	1	0	3	0	0	0	1	7
Ferm et al	2	1	1	0	0	0	0	2	6
Zhan et al	1	0	1	0	0	1	0	2	5
Ramachandran et al	0	1	1	1	2	3	0	1	9
Suleyman et al	2	0	1	3	0	4	0	1	10
Docherty AB. et al.	2	1	0	1	0	0	0	2	6
Fanelli V. et al.	2	1	2	0	0	0	0	1	6
CDC USA	2	1	0	3	0	0	0	1	7
CDC USA	2	1	1	0	0	0	0	2	6
Borobia A. et al.	2	2	1	0	0	1	0	2	8
Gil-Rodrigo et al	0	1	1	1	2	3	0	1	9
Khader et al	2	0	1	3	0	4	0	2	12
Grande G et al	2	2	0	1	0	0	0	1	6
Gulen et al	2	2	0	1	0	1	0	2	8
Cholanketil et al	2	1	0	3	0	0	0	1	7
Cavaliere K et al	2	1	1	0	0	0	0	2	6
Hassani AH et al	1	1	1	0	0	1	0	2	6
Wu CY et al	2	1	0	3	0	0	0	1	7
Wang K et al	2	1	1	0	0	0	0	2	6
Dietrich al	1	0	1	0	0	1	0	2	5
Kandasamy et al	0	1	1	1	2	3	0	1	9
Wagner J et al	2	0	1	3	0	4	0	1	10
Wahab SF	2	1	0	1	0	0	0	2	6
Cheung S et al	2	1	1	0	0	0	0	1	5
Livanos et al	2	1	0	3	0	0	0	1	7
Bannaga et al	2	1	1	0	0	0	0	2	6
Moura et al	1	2	0	0	0	1	0	2	6
A. Papa et al	2	1	0	3	0	0	0	1	7
N Aumpan et al.	2	0	1	3	0	4	0	1	10
Ping Lei et al	2	1	0	1	0	0	0	2	6

Mo P, et al.	2	2	2	0	0	0	0	1	7
Tsibouris et al	2	1	0	3	0	0	0	1	7
Klopfenstein et al	2	1	1	0	0	0	0	2	6
Aghemo et al	1	2	2	0	0	1	0	2	8
Colaneri et al	0	1	1	1	2	3	0	1	9

Table 3 Gastrointestinal symptoms reported by each study

Study	Total number of patients in each study (n)	Abdominal pain (n)	Diarrhea (n)	Nausea (n)	Vomiting (n)	Anorexia or loss of appetite (n)	Loss of taste (n)	Elevated liver enzymes (n)
Siegel et al	3	3	3	2	2	0	0	0
Pazgan-simon et al	1	1	0	1	0	1	0	0
Yang, X et al	1	1	0	0	0	0	0	0
Zhang, J et al	140	8	18	24	7	17	0	8
Azwar et al	1	1	0	0	1	0	0	0
Jin, X et al	651	0	56	13	14	0	0	64
Nobel et al	278	0	56	63	63	0	0	0
Lin et al	95	2	23	17	4	17	0	31
Zhou et al	254	3	46	21	15	0	0	0
Pan et al	204	2	35	0	4	81	0	0
Poggiali et al	10	1	6		3	0	0	0
Cholankeril et al	116	10	12	1	1	22	0	26
Fu et al	1	0	0	0	1	0	0	0
Li et al	1	0	1	0	0	1	0	0
Saeed et al	9	9	1	8	5	0	0	0
Arashiro et al.	1	0	1	1	0	1	0	0
Yang F et al	92	0	0	0	0	0	0	15
Guillen, E et al	1	0	0	0	1	0	0	0
Chen, Y et al	42	5	7	4	3	0	0	0
Chen Q et al	9	0	2	0	0	0	0	0
Huang C et al	41	0	1	0	0	0	0	0
Chen, N et al	99	0	2	1	1	0	0	63
Wang et al	138	3	14	14	5	55	0	
Xu, X et al	62	0	3	0	0	0	0	0
Fan et al	148	0	6	6	0	0	0	75
Zhang, B et al	82	0	10	0	2	0	0	0
Huang Y et al	36	0	3	0	0	0	0	22
Wan, S et al	135	0	18	4	0	6	0	0

Study	Total number of patients in each study (n)	Abdominal pain (n)	Diarrhea (n)	Nausea (n)	Vomiting (n)	Anorexia or loss of appetite (n)	Loss of taste (n)	Elevated liver enzymes (n)
Zhang, Y et al	115	0	0	0	0	0	0	28
Xu, Z et al	1	0	0	0	0	0	0	1
Arentz et al	21	0	0	0	0	0	0	8
Hajifathalian et al	1059	72	234	168	91	240	57	656
Kujawski et al	12	1	1	0	0	0	0	0
Young et al	18	0	3	0	0	0	0	0
Sun et al	54	0	0	0	0	0	0	0
Pung et al	36	0	4	1	0	0	0	0
Tabata et al	104	0	18	0	0	0	0	9
Kluytmans et al	86	5	16	0	0	15	6	0
Qian et al	91	0	21	11	6	23	0	0
Luo et al	183	45	68	134	119	-	-	183
Zhou F et al	191	-	9	7	7	-	-	59
Chen T	274	19	77	24	16	-	-	84
Xu H et al	1324	-	28	-	-	55	-	-
Shi S et al	416	-	29	-	-	-	-	416
Han R et al	108	-	15	-	-	-	-	-
Xu S et al	355	-	130	-	-	-	-	102
Ma L et al	81	-	6	-	-	-	-	31
Liu L et al	153	1	14	2	3	-	-	-
Mao L et al	214	10	41	-	-	-	-	26
Ai JW et al	102	4	15	9	2	-	-	26
Shu L et al	545	-	49	0	0	-	-	41
Wei L et al	100	-	2	-	2	-	-	17
Zhao Z et al	75	1	7	-	-	-	-	15
Zhao W et al	77	-	1	6	-	-	-	26
Yang P et al	55	-	2	-	-	-	-	-
Li K et al	83	-	7	-	-	-	-	-
Qi D et al	267	-	10	6	-	46	-	20
Wen Y et al	417	-	29	-	-	-	-	-
Xu Y et al	45	-	0	-	-	-	-	17
Yan S et al	168	7	12	9	7	-	-	18
Wang L et al	18	-	3	-	-	-	-	4
Chen X et al	291	1	25	17	-	-	-	44
Liu S et al	620	-	53	-	-	-	-	420
Fan L et al	55	-	6	-	4	-	-	-
Yao et al	40	-	3	3	-	-	-	21

Study	Total number of patients in each study (n)	Abdominal pain (n)	Diarrhea (n)	Nausea (n)	Vomiting (n)	Anorexia or loss of appetite (n)	Loss of taste (n)	Elevated liver enzymes (n)
Tian S et al	37	-	8	-	-	-	-	4
Lu H et al	265	-	17	6	-	-	-	-
Fu H et al	52	-	7	1	-	-	-	-
Fu H et al	36	-	3	-	-	-	-	4
Chen D et al	175	-	35	-	-	-	-	-
Kuang et al	944	-	21	-	-	-	-	-
Rubin et al	54	-	-	-	-	-	-	-
COVID-19 National Emergency Response Center	28	1	2	-	-	-	-	-
Pung et al	17	-	4	1	-	-	-	-
Wolfel	9	-	2	-	-	-	-	-
Dreher et al	50	-	8	1	2	-	-	-
Gritti et al	21	-	5	-	-	-	-	-
Spiteri et al	38	-	1	1	-	-	-	-
Covid-19 National Incident Room Surveillance Team Australia	295	6	48	34	-	-	-	-
An P et. al.	9	-	1	1	1	6	-	-
Chan F-W et.al.	6	-	2	-	-	-	-	-
Chang D et. al.	13	-	1	-	-	-	-	-
Chen Q (b) et. al.	145	-	39	24	6	-	-	-
Cheung K et. al.	59	7	13	-	1	-	-	-
Fan H et. al.	101	-	2	7	-	-	-	-
FernandezRuiz et. al.	17	1	3	-	-	-	-	-
Guan W-j et. al.	1099	-	42	55	55	-	-	-
Han C et. al.	206	9	67	-	24	32	-	-
Hsieh W-H et. al.	2	1	1	-	-	-	-	-
Huang R et. al.	11	-	1	-	-	-	-	-
Huang WH et. al.	2	-	-	-	-	2	-	-
Kim ES et. al.	28	1	3	-	-	-	-	-
Klopfenstein T et. al.	114	19	55	25	9	-	-	-

Study	Total number of patients in each study (n)	Abdominal pain (n)	Diarrhea (n)	Nausea (n)	Vomiting (n)	Anorexia or loss of appetite (n)	Loss of taste (n)	Elevated liver enzymes (n)
Liu K et. al.	137	-	11	-	-	-	-	-
Lechien J et. al.	417	125	208	91	91	-	-	-
Liu Y et. al.	12	-	2	2	-	-	-	-
Pan F et. al.	21	-	-	-	-	9	-	-
Redd W et. al.	318	46	107	84	49	110	-	-
Ren L et. al.	5	-	0	-	-	-	-	-
Shi H et. al.	81	-	3	-	4	-	-	-
Song F et. al.	51	-	5	3	-	9	-	-
Wan Y et. al.	230	-	49	-	-	-	-	-
Wang L (b) et.	26	-	0	-	-	-	-	-
Wang L (c) et. al.	339	-	43	13	-	94	-	-
Wang X et. al.	1021	37	152	-	36	-	-	-
Wang Z et. al.	4	-	0	-	-	-	-	-
Wei X-S et. al.	84	2	26	16	6	-	-	-
Wu J (a) et. al.	80	-	1	1	1	-	-	-
Wu J (b) et al	80	-	7	-	-	-	-	-
Wu Y et. al.	74	-	26	-	-	-	-	-
Xia X et. al.	10	-	1	1	-	-	-	-
Xiao F et. al.	73	-	26	-	-	-	-	-
Xie H et. al.	79	-	7	-	-	-	-	-
Xiong Y et. al.	42	-	10	-	-	-	-	-
Xu X et al	90	-	5	5	2	-	-	-
Yu P et. al.	4	-	-	-	-	4	-	-
Zhang J (b) et. al.	14	-	0	-	0	-	-	-
Zhao X-Y et. al.	91	2	13	10	-	10	-	-
Zhou S et. al.	62	9	9	-	-	-	-	-
Zou L et. al.	18	-	1	1	-	1	-	-
Sulaiman et al.	140	42	41	-	32	40	-	-
Elmunzer et al	1052	-	357	284	168	115	-	554
Laszkowska et al	1084	334	657	649	-	-	-	-
Hundt et al	1827	-	-	-	-	-	-	1158
Ferm et al	892	70	177	148	91	70	21	-
Zhan et al	405	41	112	-	76	170	-	-
Ramachandran et al	150	3	15	6	6	-	-	-
Suleyman et al	463	-	100	94	53	11	-	-
Docherty AB. et al.	16,749	1146	2292	2178	-	-	-	-

Study	Total number of patients in each study (n)	Abdominal pain (n)	Diarrhea (n)	Nausea (n)	Vomiting (n)	Anorexia or loss of appetite (n)	Loss of taste (n)	Elevated liver enzymes (n)
Fanelli V. et al.	14,688	-	881	-	-	6	-	-
CDC USA	10,994	1329	3353	1746	-	-	-	-
CDC USA	6760	-	1507	923	-	-	-	-
Borobia A. et al.	2226	-	484	299	-	-	-	-
Gil-Rodrigo et al	1000	66	186	75	-	-	-	-
Khader et al	1	1	-	1	-	-	-	-
Grande G et al	1	-	-	-	1	-	-	-
Gulen et al	1	1	1	-	-	-	-	-
Cholankeril et al	207	-	22	22	22	-	-	-
Cavaliere K et al	6	-	-	-	2	-	-	-
Hassani AH et al	2	2	-	-	-	-	-	-
Wu CY et al	1	1	-	1	-	-	-	-
Wang K et al	2	2	-	-	-	-	-	-
Dietrich al	1	1	-	1	-	-	-	-
Kandasamy et al	1	1	-	1	1	-	-	-
Wagner J et al	99							
Wahab SF	1	1	1	-	-	-	-	-
Cheung S et al	1	1	-	1	1	-	-	-
Livanos et al	634	-	245	157	-	-	-	-
Bannaga et al	321	15	13	15	-	-	-	-
Moura et al	400	24	69	55	30	46	-	-
A. Papa et al	34	1	1	1	-	-	-	-
N Aumpan et al.	40	2	6	2	2	7	-	-
Ping Lei et al	115	-	14	9	9	9	-	-
Mo P, et al.	155	-	7	3	3	-	-	55
Tsibouris et al	61	2	11	2	2	-	-	-
Klopfenstein et al	114	19	55	25	9	-	-	-
Aghemo et al	325	-	69	-	11	-	-	54
Colaneri et al	44	-	3	-	-	-	-	-
Total	78798	3586	13044	7645	1195	1331	84	4405

Table 4 Newcastle-Ottawa Scale scores to assess the quality of the studies (for cohort and case control studies)

Study	Selection			Comparability	Outcome			Total score (maximum: 8 stars)
	Representativeness of sample (maximum: one star)	Sample size (maximum: one star)	Assessment of the exposure (maximum: one star)	Comparability of cohorts on the basis of the design or analysis (maximum: 2 stars)	Assessment of the outcome (maximum: one star)	Was follow up long enough? (maximum: one star)	Adequacy of follow up cohorts (maximum: one star)	
Siegel et al			*					* (1)
Pazgan-simon et al			*					* (1)
Yang, X et al								* (1)
Zhang, J et al	*		*	*	*		*	***** (5)
Azwar et al			*					* (1)
Jin, X et al	*		*	*		*		**** (4)
Nobel et al			*		*			** (2)
Lin et al	*	*	*	*	*	*	*	***** (7)
Zhou et al	*			*	*		*	**** (4)
Pan et al	*	*	*	**	*	*		***** (7)
Poggiali et al	*		*		*			*** (3)
Cholankeri et al	*	*	*	*	*		*	***** (6)
Fu et al			*					* (1)
Li et al			*					* (1)
Saeed et al	*			*		*	*	**** (4)
Arashiro et al.								
Yang F et al	*		*	*	*		*	***** (5)
Guillen, E et al			*					* (1)
Chen, Y et al	*	*	*	*	*		*	***** (6)
Chen Q et al			*					* (1)
Huang C et al	*		*	*	*		*	***** (5)
Chen, N et al	*	*		*			*	**** (4)

Study	Selection			Comparability	Outcome			Total score (maximum: 8 stars)
	Representativeness of sample (maximum: one star)	Sample size (maximum: one star)	Assessment of the exposure (maximum: one star)	Comparability of cohorts on the basis of the design or analysis (maximum: 2 stars)	Assessment of the outcome (maximum: one star)	Was follow up long enough? (maximum: one star)	Adequacy of follow up cohorts (maximum: one star)	
Wang et al			*		*			** (2)
Xu, X et al	*	*	*	*	*		*	***** (6)
Fan et al	*			*	*		*	**** (4)
Zhang, B et al	*		*	*	*		*	***** (5)
Huang Y et al	*			*	*		*	***** (4)
Wan, S et al	*	*		*		*	*	***** (5)
Zhang, Y et al	*	*		*	*	*	*	***** (6)
Xu, Z et al			*					* (1)
Arentz et al	*			*		*	*	**** (4)
Hajifathalian et al	*	*		*	*		*	***** (5)
Kujawski et al	*	*		*			*	**** (4)
Young et al			*					* (1)
Sun et al			*		*			** (2)
Pung et al	*	*	*	*	*		*	***** (6)
Tabata et al	*			*	*		*	**** (4)
Kluytmans et al			*					* (1)
Qian et al			*		*			** (2)
Luo et al			*					* (1)
Zhou F et al			*		*			** (2)
Chen T			*		*			** (2)

Study	Selection			Comparability	Outcome			Total score (maximum: 8 stars)
	Representativeness of sample (maximum: one star)	Sample size (maximum: one star)	Assessment of the exposure (maximum: one star)	Comparability of cohorts on the basis of the design or analysis (maximum: 2 stars)	Assessment of the outcome (maximum: one star)	Was follow up long enough? (maximum: one star)	Adequacy of follow up cohorts (maximum: one star)	
Xu H et al			*					* (1)
Shi S et al			*					* (1)
Han R et al			*		*			** (2)
Xu S et al			*		*			** (2)
Ma L et al			*					* (1)
Liu L et al			*		*			** (2)
Mao L et al			*		*			** (2)
Ai JW et al			*					* (1)
Shu L et al			*					* (1)
Wei L et al			*		*			** (2)
Zhao Z et al			*					* (1)
Zhao W et al			*		*			** (2)
Yang P et al			*		*			** (2)
Li K et al			*		*			** (2)
Qi D et al			*		*			** (2)
Wen Y et al			*		*			** (2)
Xu Y et al			*		*			** (2)
Yan S et al			*		*			** (2)

Study	Selection			Comparability	Outcome			Total score (maximum: 8 stars)
	Representativeness of sample (maximum: one star)	Sample size (maximum: one star)	Assessment of the exposure (maximum: one star)	Comparability of cohorts on the basis of the design or analysis (maximum: 2 stars)	Assessment of the outcome (maximum: one star)	Was follow up long enough? (maximum: one star)	Adequacy of follow up cohorts (maximum: one star)	
Wang L et al			*		*			** (2)
Chen X et al			*		*			** (2)
Liu S et al			*		*			** (2)
Fan L et al			*		*			** (2)
Yao et al			*		*			** (2)
Tian S et al			*		*			** (2)
Lu H et al			*		*			** (2)
Fu H et al			*		*			** (2)
Fu H et al			*		*			** (2)
Chen D et al		*	*		*			*** (3)
Kuang et al			*					* (1)
Rubin et al			*		*			** (2)
COVID-19 National Emergency Response Center			*		*			** (2)
Pung et al			*		*			** (2)
Wolfel			*		*			** (2)
Dreher et al			*		*			** (2)
Gritti et al			*		*			** (2)
Spiteri et al		*	*		*			*** (3)
Covid-19 National Incident Room Surveillance Team Australia			*					* (1)
An P et. al.			*					* (1)
Chan F-W et.al.			*		*			** (2)
Chang D et. al.			*		*			** (2)

Study	Selection			Comparability	Outcome			Total score (maximum: 8 stars)
	Representativeness of sample (maximum: one star)	Sample size (maximum: one star)	Assessment of the exposure (maximum: one star)	Comparability of cohorts on the basis of the design or analysis (maximum: 2 stars)	Assessment of the outcome (maximum: one star)	Was follow up long enough? (maximum: one star)	Adequacy of follow up cohorts (maximum: one star)	
Chen Q (b) et. al.			*					* (1)
Cheung K et. al.			*		*			** (2)
Fan H et. al.			*		*			** (2)
FernandezRui z et. al.			*					* (1)
Guan W-j et. al.			*		*			** (2)
Han C et. al.		*	*		*			*** (3)
Hsieh W-H et. al.			*		*			** (2)
Huang R et. al.			*		*			** (2)
Huang WH et. al.			*		*			** (2)
Kim ES et. al.			*		*			** (2)
Klopfenstein T et. al.			*		*			** (2)
Liu K et. al.			*		*			** (2)
Lechien J et. al.			*		*			** (2)
Liu Y et. al.			*		*			** (2)
Pan F et. al.		*	*		*			*** (3)
Redd W et. al.		*	*		*			*** (3)
Ren L et. al.			*		*			** (2)
Shi H et. al.			*		*			** (2)
Song F et. al.			*					* (1)
Wan Y et. al.			*		*			** (2)
Wang L (b) et.			*		*			** (2)
Wang L (c) et. al.			*		*			** (2)
Wang X et. al.			*					* (1)
Wang Z et. al.			*		*			** (2)
Wei X-S et. al.			*		*			** (2)
Wu J (a) et. al.		*	*		*			*** (3)
Wu J (b) et al			*		*			** (2)
Wu Y et. al.			*					* (1)
Xia X et. al.			*					* (1)
Xiao F et. al.			*					* (1)

Study	Selection			Comparability	Outcome			Total score (maximum: 8 stars)
	Representativeness of sample (maximum: one star)	Sample size (maximum: one star)	Assessment of the exposure (maximum: one star)	Comparability of cohorts on the basis of the design or analysis (maximum: 2 stars)	Assessment of the outcome (maximum: one star)	Was follow up long enough? (maximum: one star)	Adequacy of follow up cohorts (maximum: one star)	
Xie H et. al.			*		*			** (2)
Xiong Y et. al.			*		*			** (2)
Xu X et al			*		*			** (2)
Yu P et. al.			*					* (1)
Zhang J (b) et. al.			*					* (1)
Zhao X-Y et. al.			*		*			** (2)
Zhou S et. al.			*					* (1)
Zou L et. al.			*		*			** (2)
Sulaiman et al.			*		*			** (2)
Elmunzer et al			*		*			** (2)
Laszkowska et al			*		*			** (2)
Hundt et al			*		*			** (2)
Ferm et al			*		*			** (2)
Zhan et al			*		*			** (2)
Ramachandran et al			*		*			** (2)
Suleyman et al			*		*			** (2)
Docherty AB. et al.	*		*	*	*		*	***** (5)
Fanelli V. et al.	*			*	*		*	***** (4)
CDC USA	*		*	*	*		*	***** (5)
CDC USA	*	*	*	*	*		*	***** (6)
Borobia A. et al.	*	*	*	**	*		*	***** (7)
Gil-Rodrigo et al	*			*	*		*	***** (4)
Khader et al	*	*	*	*	*		*	***** (6)
Grande G et al	*	*	*	*		*	*	***** (6)
Gulen et al	*		*	*	*		*	***** (5)
Cholankeril et al	*			*	*		*	***** (4)

Study	Selection			Comparability	Outcome			Total score (maximum: 8 stars)
	Representativeness of sample (maximum: one star)	Sample size (maximum: one star)	Assessment of the exposure (maximum: one star)	Comparability of cohorts on the basis of the design or analysis (maximum: 2 stars)	Assessment of the outcome (maximum: one star)	Was follow up long enough? (maximum: one star)	Adequacy of follow up cohorts (maximum: one star)	
Cavaliere K et al	*	*	*	*	*		*	***** (6)
Hassani AH et al	*	*	*	*	*	*	*	***** (7)
Wu CY et al	*		*	*	*		*	***** (5)
Wang K et al	*			*	*		*	***** (4)
Dietrich al	*	*		*		*	*	***** (5)
Kandasamy et al	*			*	*		*	***** (4)
Wagner J et al	*		*	*	*		*	***** (5)
Wahab SF	*	*	*	*		*	*	***** (6)
Cheung S et al	c			*	*		*	***** (4)
Livanos et al	*		*	*	*		*	***** (5)
Bannaga et al	*			*	*		*	***** (4)
Moura et al	*	*		*		*	*	***** (5)
A. Papa et al	*	*		*	*	*	*	***** (6)
N Aumpan et al.	*		*	*	*		*	***** (5)
Ping Lei et al	*	*		*	*	*	*	***** (6)
Mo P, et al.	*			*	*		*	***** (4)
Tsibouris et al	*	*		*	*	*	*	***** (6)
Klopfenstein et al	*			*	*		*	***** (4)
Aghemo et al	*	*		*		*	*	***** (5)
Colaneri et al	*			*	*		*	***** (4)

Table 5 Studies included in the Sensitivity Analysis

Study	Study type	Total No. of patients	Abdominal pain (n)	Diarrhea (n)	Nausea (n)	Vomiting (n)	Anorexia or loss of appetite (n)	Loss of taste (n)	Elevated liver enzymes (n)
Zhang, J et al	Retrospective cohort study	140	8	18	24	7	17		8
Jin, X et al	Retrospective cohort study	651	0	56	13	14	0	0	64
Lin et al	Retrospective cohort study	95	2	23	17	4	17	0	31
Zhou et al	Retrospective cohort study	254	3	46	21	15	0	0	0
Pan et al	Cross-sectional study	204	2	35	0	4	81	0	0
Cholankeril et al	Retrospective cohort study	116	10	12	1	1	22	0	26
Saeed et al	Retrospective cohort study	9	9	1	8	5	0	0	0
Yang F et al	Retrospective Cohort Study	92	0	0	0	0	0	0	15
Chen, Y et al	Retrospective Cohort Study	42	5	7	4	3	0	0	0
Huang, C et al	Prospective Cohort study	41	0	1	0	0	0	0	0
Chen, N et al	Retrospective Cohort Study	99	0	2	1	1	0	0	63

Study	Study type	Total No. of patients	Abdominal pain (n)	Diarrhea (n)	Nausea (n)	Vomiting (n)	Anorexia or loss of appetite (n)	Loss of taste (n)	Elevated liver enzymes (n)
Xu, X et al	retrospective case series	62	0	3	0	0	0	0	0
Fan et al	Retrospective Cohort Study	148	0	6	6	0	0	0	75
Zhang, B et al	Retrospective Cohort Study	82	0	10	0	2	0	0	0
Huang Y et al	Retrospective Cohort Study	36	0	3	0	0	0	0	22
Wan, S et al	Retrospective Cohort Study	135	0	18	4	0	6	0	0
Zhang, Y et al	Retrospective Cohort Study	115	0	0	0	0	0	0	28
Arentz et al	Retrospective Cohort Study	21	0	0	0	0	0	0	8
Hajifathalian et al	Retrospective Cohort Study	1059	72	234	168	91	240	57	656
Kujawski et al	Retrospective Cohort Study	12	1	1	0	0	0	0	0
Pung et al	Retrospective Cohort Study	36	0	4	1	0	0	0	0
Tabata et al	Retrospective Cohort Study	104	0	18	0	0	0	0	9

Study	Study type	Total No. of patients	Abdominal pain (n)	Diarrhea (n)	Nausea (n)	Vomiting (n)	Anorexia or loss of appetite (n)	Loss of taste (n)	Elevated liver enzymes (n)
Docherty AB. et al.	Retrospective Cohort Study	16,749	1146	2292	2178	-	-	-	-
Fanelli V. et al.	Retrospective Cohort Study	14,688	-	881	-	-	6	-	-
CDC USA	Retrospective Cohort Study	10,994	1329	3353	1746	-	-	-	-
CDC USA	Retrospective Cohort Study	6760	-	1507	923	-	-	-	-
Borobia A. et al.	Retrospective Cohort Study	2226	-	484	299	-	-	-	-
Gil-Rodrigo et al.	Retrospective Cohort Study	1000	66	186	75	-	-	-	-
Khader et al.	Retrospective Cohort Study	1	1	-	1	-	-	-	-
Grande G et al.	Retrospective Cohort Study	1	-	-	-	1	-	-	-
Gulen et al.	Retrospective Cohort Study	1	1	1	-	-	-	-	-
Cholankeril et al.	Retrospective Cohort Study	207	-	22	22	22	-	-	-
Cavaliere K et al.	Retrospective Cohort Study	6	-	-	-	2	-	-	-

Study	Study type	Total No. of patients	Abdominal pain (n)	Diarrhea (n)	Nausea (n)	Vomiting (n)	Anorexia or loss of appetite (n)	Loss of taste (n)	Elevated liver enzymes (n)
Hassani AH et al	Retrospective Cohort Study	2	2	-	-	-	-	-	-
Wu CY et al	Retrospective Cohort Study	1	1	-	1	-	-	-	-
Wang K et al	Retrospective Cohort Study	2	2	-	-	-	-	-	-
Dietrich al	Retrospective Cohort Study	1	1	-	1	-	-	-	-
Kandasamy et al	Retrospective Cohort Study	1	1	-	1	1	-	-	-
Wagner J et al	Retrospective Cohort Study	99							
Wahab SF	Retrospective Cohort Study	1	1	1	-	-	-	-	-
Cheung S et al	Retrospective Cohort Study	1	1	-	1	1	-	-	-
Livanos et al	Retrospective Cohort Study	634	-	245	157	-	-	-	-
Bannaga et al	Retrospective Cohort Study	321	15	13	15	-	-	-	-
Moura et al	Retrospective Cohort Study	400	24	69	55	30	46	-	-

Study	Study type	Total No. of patients	Abdominal pain (n)	Diarrhea (n)	Nausea (n)	Vomiting (n)	Anorexia or loss of appetite (n)	Loss of taste (n)	Elevated liver enzymes (n)
A. Papa et al	Retrospective Cohort Study	34	1	1	1	-	-	-	-
N Aumpan et al.	Retrospective Cohort Study	40	2	6	2	2	7	-	-
Ping Lei et al	Retrospective Cohort Study	115	-	14	9	9	9	-	-
Mo P, et al.	Retrospective Cohort Study	155	-	7	3	3	-	-	55
Tsibouris et al	Retrospective Cohort Study	61	2	11	2	2	-	-	-
Klopfenstein et al	Retrospective Cohort Study	114	19	55	25	9	-	-	-
Aghemo et al	Retrospective Cohort Study	325	-	69	-	11	-	-	54
Colaneri et al	Retrospective Cohort Study	44	-	3	-	-	-	-	-

Table. 6 Number of deaths reported among patients infected with SARS-CoV2

Study	Total no. of patients	Number of deaths(n)
Siegel et al	3	0
Pazgan-simon et al	1	0
Azwar et al	1	0
Jin, X et al	651	1
Nobel et al	278	9

Study	Total no. of patients	Number of deaths(n)
Lin et al	95	0
Zhou et al	254	16
Pan et al	204	36
Cholankeril et al	116	1
Fu et al	1	0
Li et al	1	1
Saeed et al	9	1
Arashiro et al.	1	1
Yang F et al	92	92
Chen Q et al	9	0
Huang, C et al	41	6
Chen, N et al	99	11
Wang et al	138	6
Xu, X et al	62	0
Fan et al	148	1
Zhang, B et al	82	82
Huang Y et al	36	36
Wan, S et al	135	1
Zhang, Y et al	115	1
Xu, Z et al	1	1
Arentz et al	21	11
Kujawski et al	12	0
Young et al	18	0
Sun et al	54	2
Pung et al	36	0
Qian et al	91	0
Luo et al	183	7
Zhou F et al	191	54
Chen T et al	274	113
Shi S et al	416	30
Mao L et al	214	1
Ai JW et al	102	3
Liu Y et al	109	31
Shu L et al	545	0
Wei et al	100	3
Zhao W et al	77	5
Yang P et al	55	2
Qi D et al	267	4
Wen Y et al	417	3
Xu Y et al	45	1

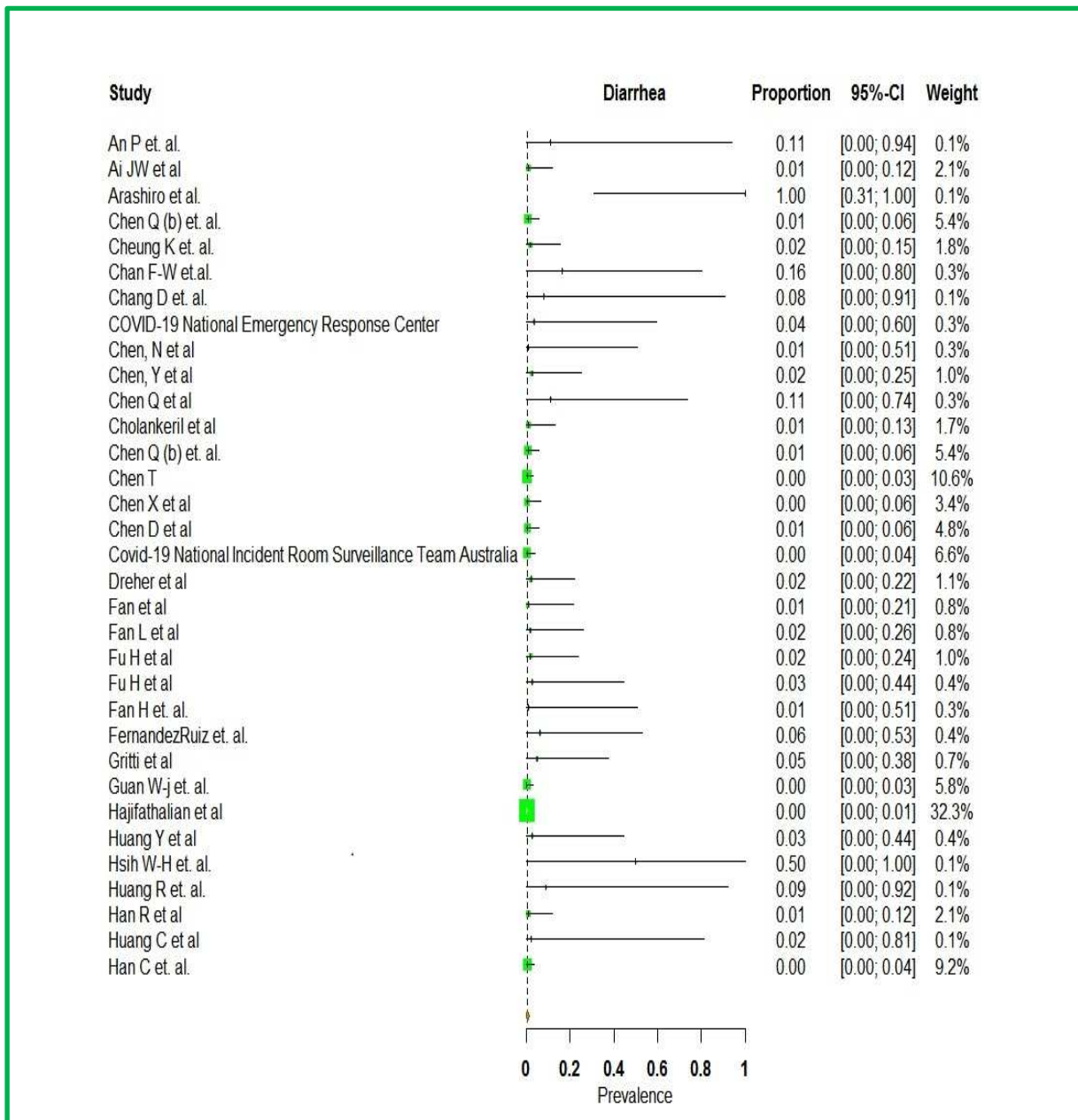
Study	Total no. of patients	Number of deaths(n)
Yan S et al	168	6
Wang L et al	18	0
Chen X et al	291	2
Liu S et al	620	0
Tian S et al	37	0
Lu H et al	265	1
Fu H et al	52	0
Pung et al	17	0
Dreher et al	50	7
Gritti et al	21	1
Spiteri et al	38	1
Covid-19 National Incident Room Surveillance Team Australia	295	3
Sulaiman et al.	140	12
Ferm et al	892	215
Ramachandran et al	150	45
Suleyman et al	463	15
Borobia A. et al.	2226	460
Massironi et al.	38	5
Livanos AE. et al.	634	47
Khader et al	1	0
Grande G et al	1	1
Gulen M et al	1	0
Cholankeril et al.	207	4
Cavaliere et al	6	0
Hassani AH et al.	2	1
Wu CY et al	1	0
Wang K et al	2	1
Dietrich CG	1	0
Kandasamy S et al	1	0
Wagner J et al	99	16
Wahab SF et al	1	0
Cheung S et al	1	0
Moura DTH et al	400	89
A. Papa et al	34	9
N Aumpan et al.	40	0
Tsibouris et al	61	16
Docherty AB. et al.	16749	5527
Aghemo et al	325	56
Total	30148	7113

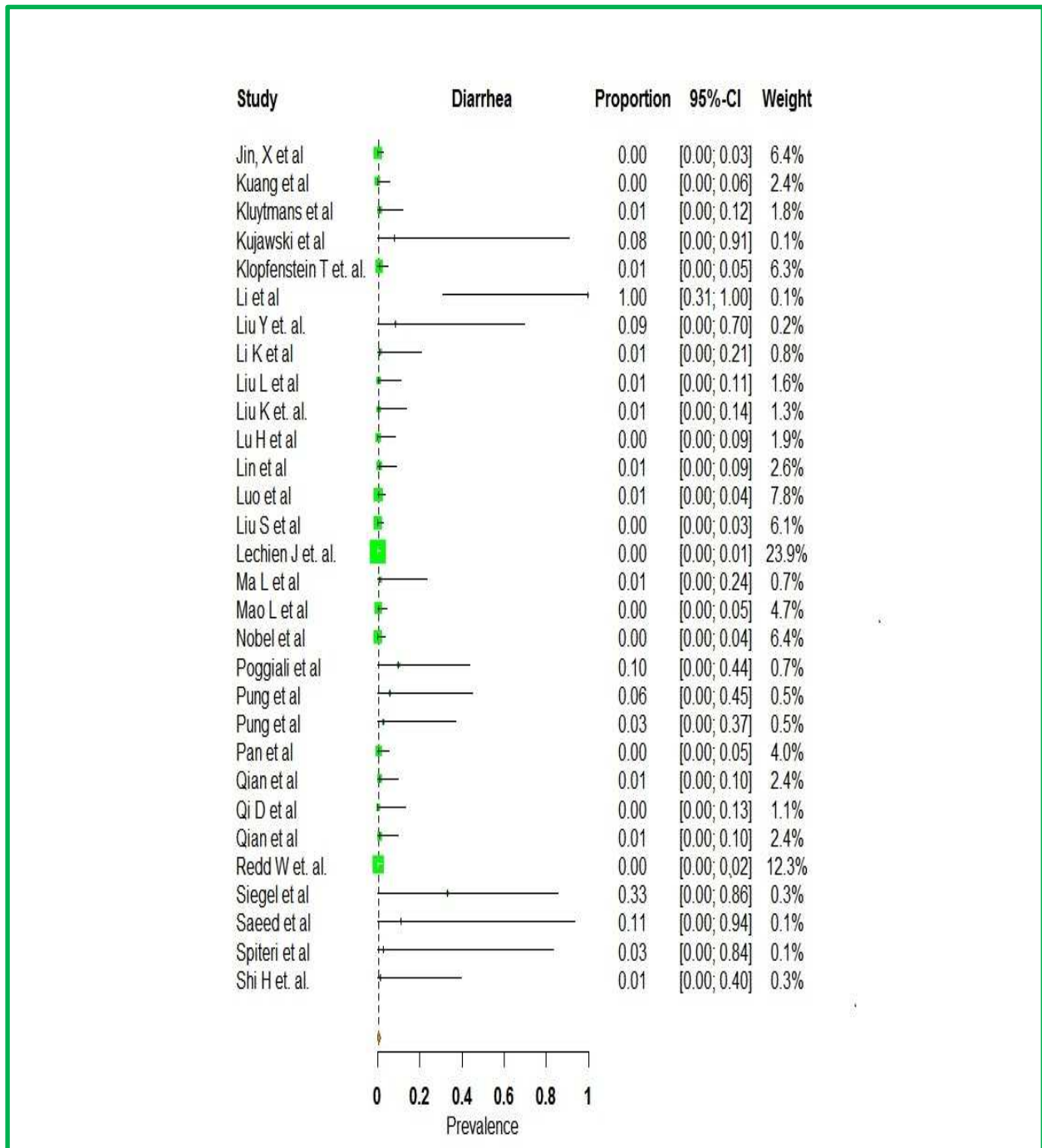
Table. 7 Number of deaths reported among patients infected with SARS-CoV2 who were experiencing GI symptoms/elevated liver enzymes

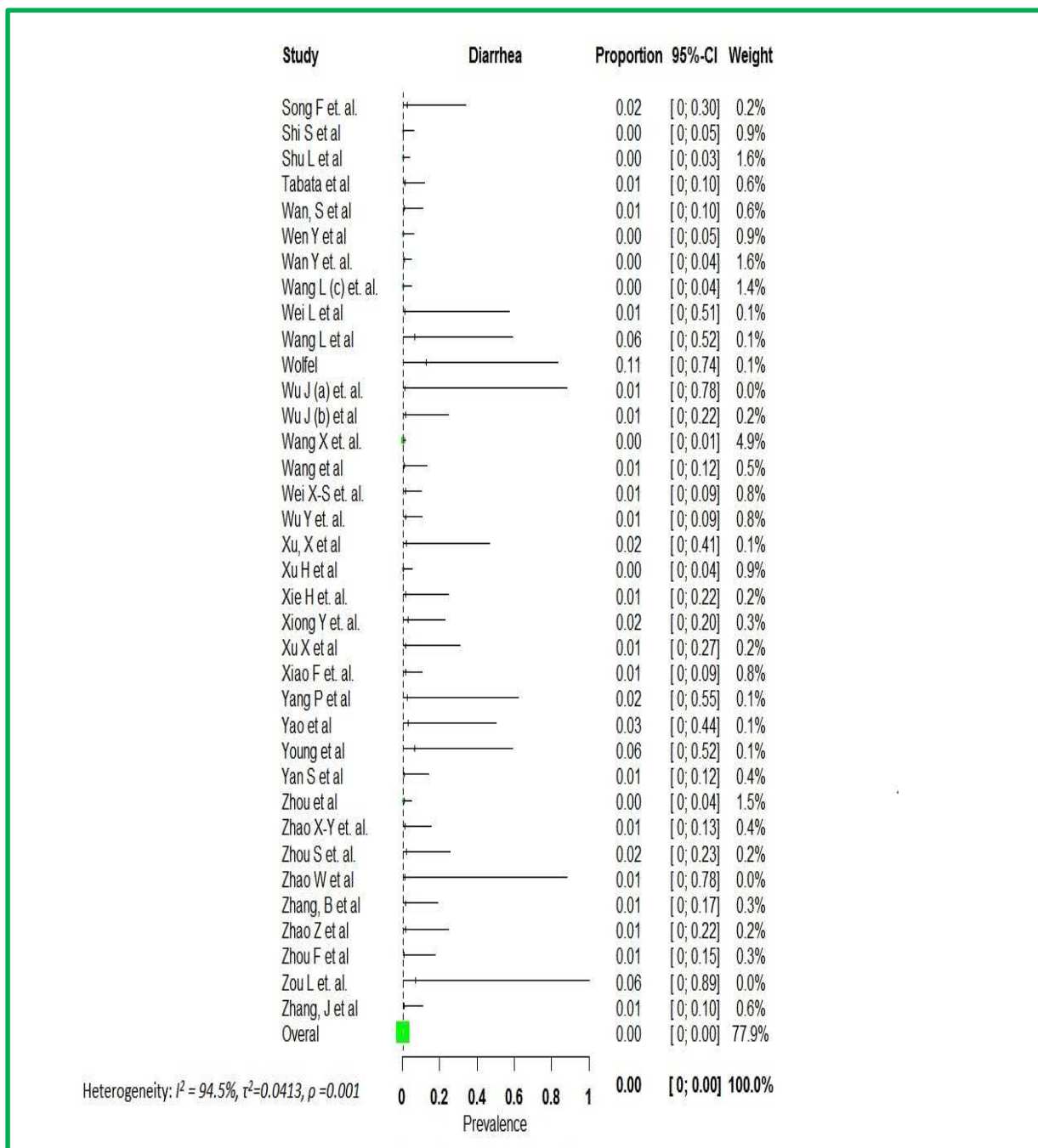
Study	Total no. of patients	Number of deaths in patients with GI symptoms
Fan H et. al.	101	9
Han C et. al.	206	0
Hsih W-H et. al.	2	0
Huang WH et. al.	2	0
Kuang Y et. al.	944	0
Kim ES et. al.	28	0
Shu L et. al.	545	0
Jin X et. al.	651	0
Lin L et. al.	95	0
Pan F et. al.	21	0
Zhao D et. al.	19	0
Redd W et. al.	318	16
Luo S et. al.	1141	7
Song F et. al.	51	0
Wan Y et. al.	230	4
Wei X-S et. al.	84	0
Wu Y et. al.	74	0
Zhou F et. al.	191	2
Zhou Z et. al.	254	5
Xia X et. al.	10	0
Sulaiman et al.	140	0
Ramachandran et al	150	13
Khader et al	1	0
Grande G et al	1	1
Gulen M et al	1	0
Cavaliere K et al	6	0
Hassani AH et al	2	1
Wu CY et al	1	0
Wang K et al	2	1
Dietrich et al	1	0
Kandasamy S et al	1	0
Wagner J et al	99	16
Wahab SF et al	1	0
Cheung S et al	1	0

Moura DTH et al	400	28
A. Papa et al	8	1
Tabata et al	104	0
Cholankeril G et. al.	116	0
Kujawski S et. al.	12	0
Redd W et. al.	318	16
Siegel et. al.	3	0
Laszkowska et al	1084	147
Total	7419	267

Supplementary figure.1 Forest plot depicting prevalence of diarrhea







Supplementary figure.2 Mortality in patients experiencing GI symptoms/elevated liver enzymes

