Figure S1 Flow diagram – Data collection and validation process

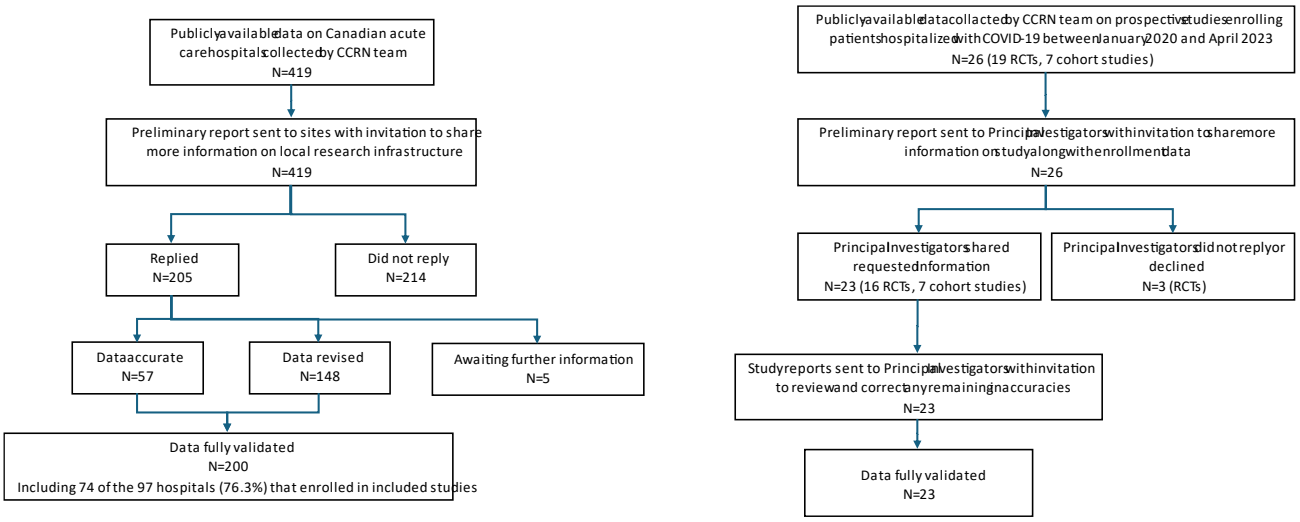
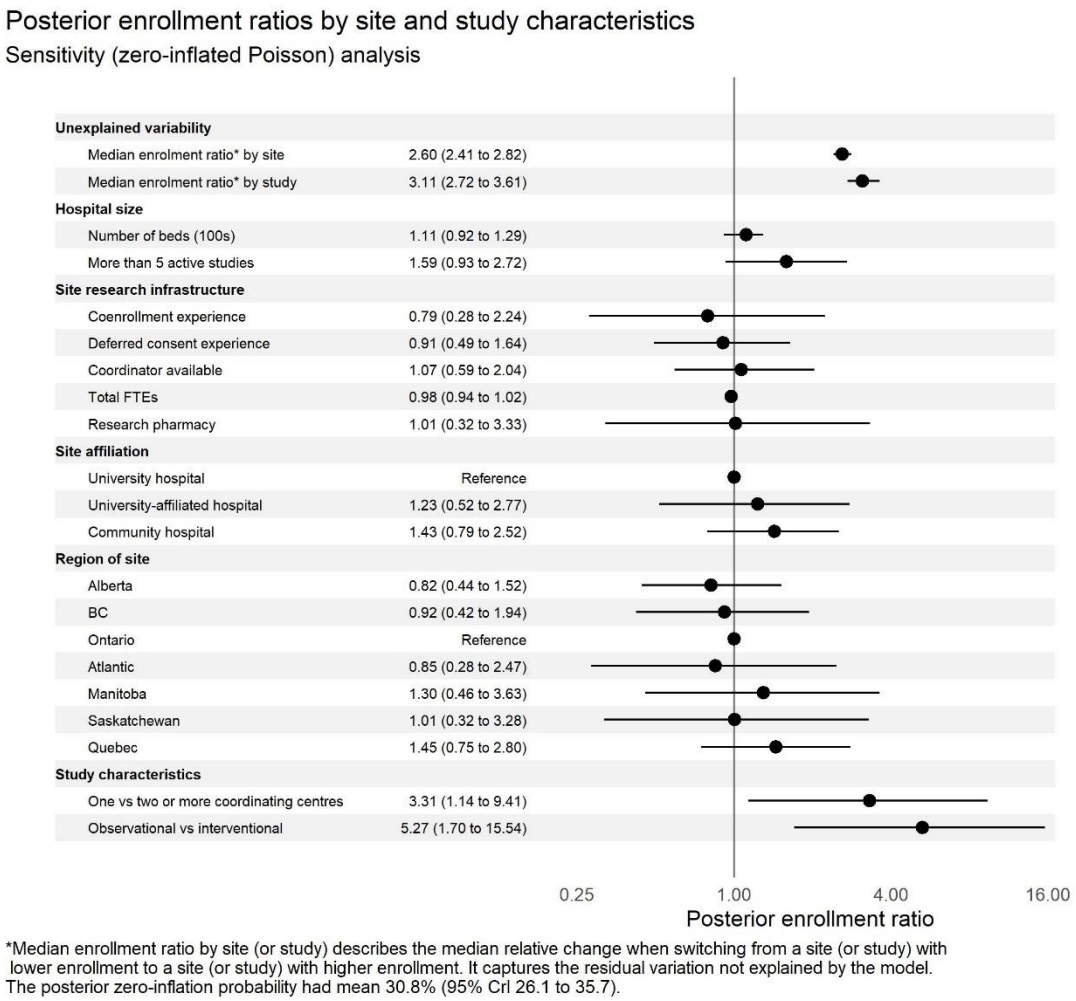
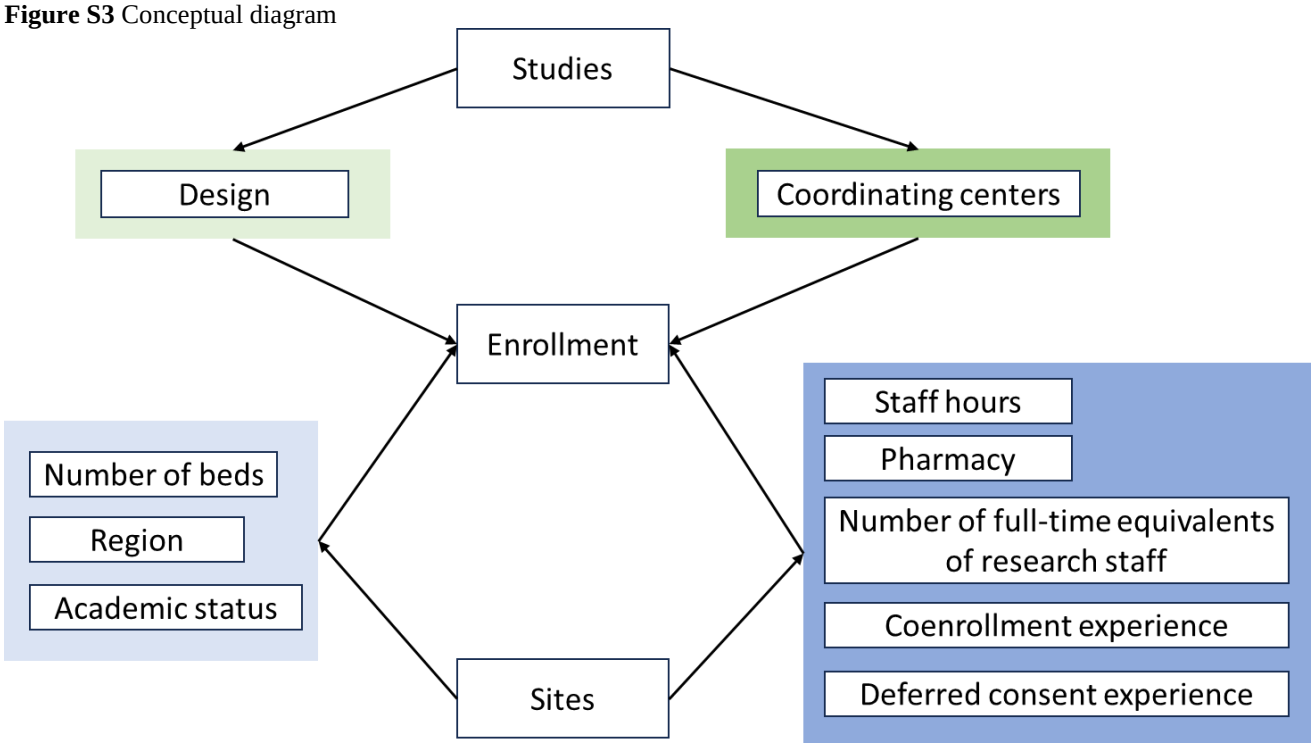


Figure S2 Forest plot of exploratory modeling of enrolment according to study and site characteristics (including study-site pairs without enrolment)



Legend: This forest plot shows the posterior mean enrolment ratios for enrolment associated with study and site characteristics. The mean and 95% credible interval are written in the middle column, and the forest plot on the right shows the same information graphically. The mean is the black dot, while the black line spans the 95% credible interval.

Figure S3 Conceptual diagram



Legend: This diagram shows the proposed relationship between measured study characteristics (green) and measured site characteristics (blue). Unmeasured factors that influence enrolment at study and site level will be captured by the random effects structure of the model and become evident as residual variability measured by the median odds ratio.

Additional details regarding the exploratory modelling analysis

Missing data

ANALYSIS

For the Bayesian hierarchical Poisson regression analysis and the Bayesian zero-inflated Poisson regression analysis, we used multiple imputation with chained equations for imputing missing data. We were conscious of the structure of the data, where observations were clustered by study and site. This needed to be incorporated into the imputation strategy. Fortunately, there were no missing data at the study-site or study level. The only variables with missing data were site-level variables. Therefore we imputed missing data using a dataframe with one row for every site, as opposed to imputing data using the dataframe with one row for every combination of site and study.

As predictors for imputation, we included all site-level variables, as well as variables that summarised the study information relevant to that site: whether or not there were more than 5 studies at that site, the percentage of studies that were "Interventional", the total enrolment across all studies at that site, and the percentage of studies at that site with more than 1 coordinating centre.

We used the Multivariate imputation by Chained Equations (MICE) package from R to perform multiple imputation with chained equations using predictive mean matching. We generated 10 imputated datasets. We then fit the model using the brm_multiple function of the Bayesian Multilevel Models (BRMS) package in R, which facilitated pooling of the posterior distributions.

RESULTS

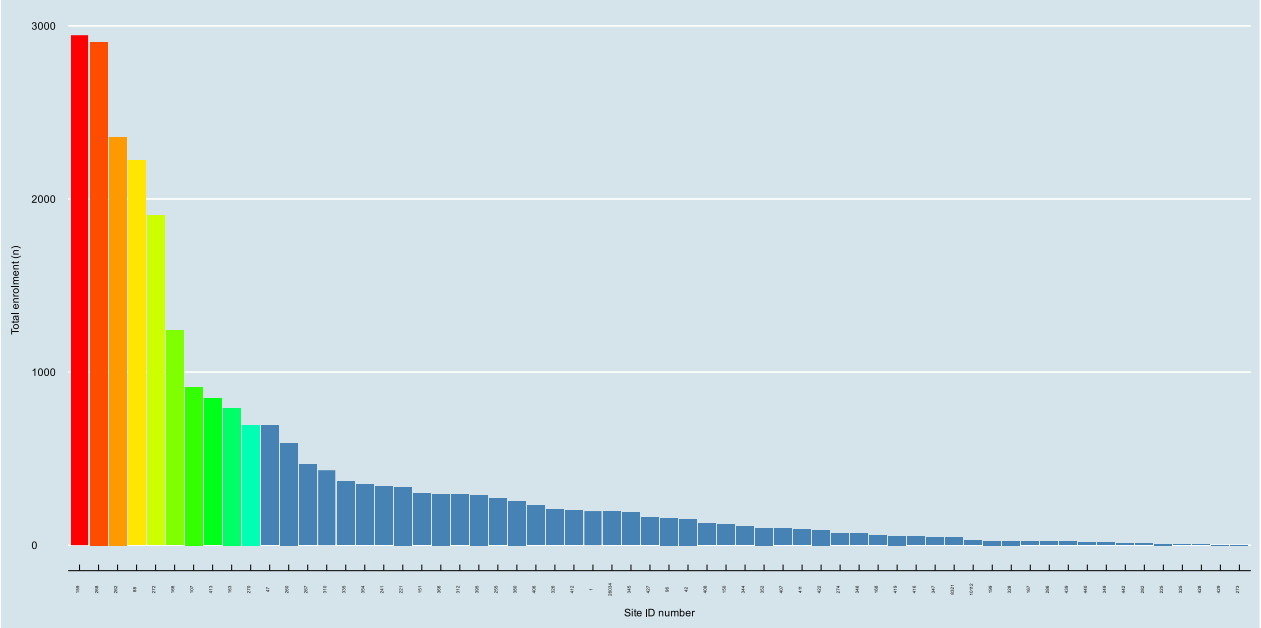
Site-level variable	Number (%) missing
Province	0
Site type (eg. Academic)	0
Total FTEs	27 (28%)
Coordinator available after hours	30 (31%)
Experience with coenrolment	29 (30%)
Experience with deferred consent	29 (30%)
Number of beds	1 (1%)
Research pharmacy	29 (30%)

Primary analysis – Bayesian hierarchical Poisson regression

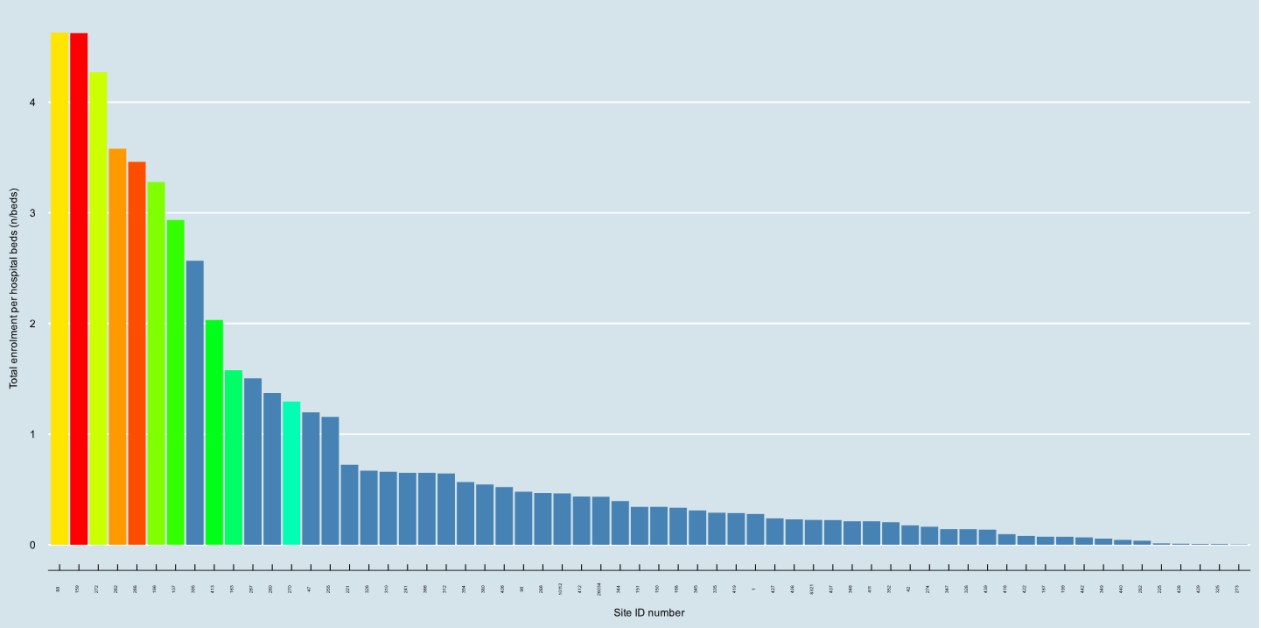
Our outcome – number of patients enrolled per site-study pair – was not a true Poisson process, because we were unable to include site-study pairs with 0 patients enrolled. We were unable to include those data points because we did not have comprehensive information on all of the sites that enrolled no patients in studies. Therefore, we used the observed number of patients enrolled per site-study pair minus one as the outcome. This assumes that enrolment in a study after the first patient is enrolled is a Poisson process. This has some scientific face validity, as there are different factors that facilitate or impede enrolment of the first patient in a study compared to the factors that facilitate or impede enrolment of subsequent patients in a study, at a given site.

Figure S4 Hospitals ranked by cumulative enrolment in cohort studies (panel A) and cumulative enrolment in cohort studies per number of hospital beds (panel B)

Panel A

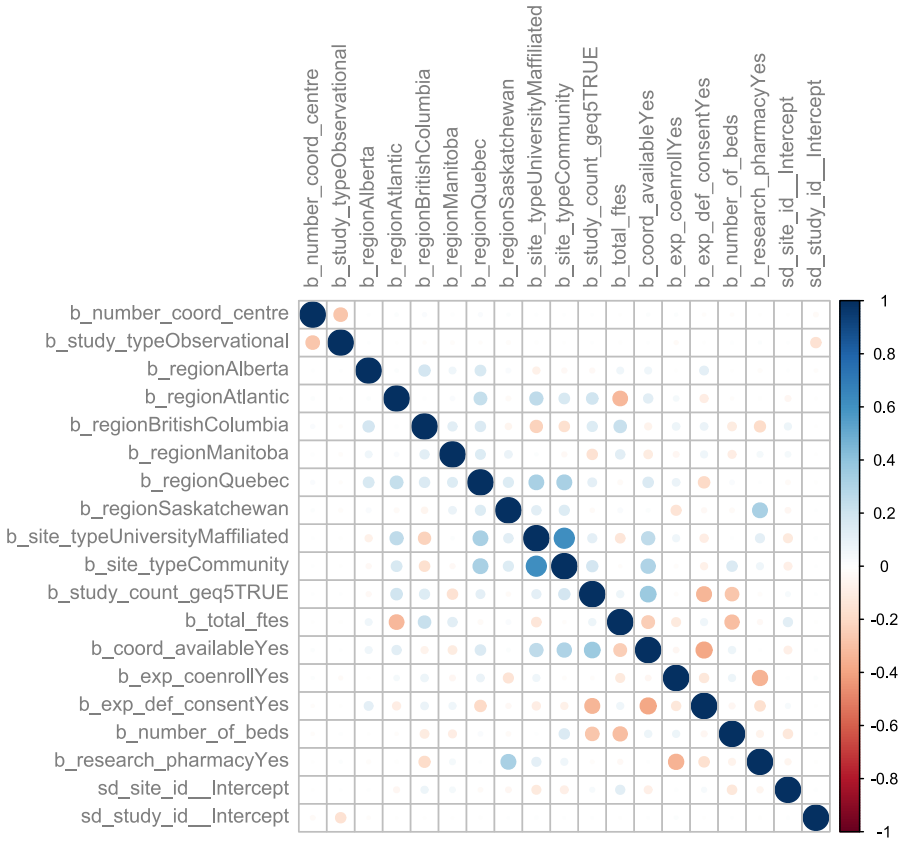


Panel B



Legend: Each bar represents a site that enrolled at least one participant in one of the CIHR-funded COVID-19 cohort studies. In panel A, the y axis corresponds to the cumulative enrolment at sites ranked from left (highest) to right (lowest). In panel A, the top 10 enrolling sites are tagged by a different color to enable their identification in panel B, where site ranking is a function of cumulative enrolment by total number of hospital beds.

Figure S5 Correlation plot between posterior parameter draws in the hierarchical Bayesian Poisson regression



Legend: This figure shows the correlation between posterior draws of each parameter in the hierarchical Bayesian Poisson regression. For each pair of parameters, the correlation between them is shown with a circle where the size and colour of the circle show the extent of correlation. When parameters are compared with themselves (diagonal), the correlation is perfect (1, large circle, dark blue). If collinearity were an important issue for this model, then many of the circles on the plot would be large and dark blue or large and dark red. This is not the case, suggesting that collinearity is probably not as important for this dataset. To assess for multicollinearity, we also calculated variance inflation factors for the posterior draws of each parameter. The variance inflation factors were between 1.08 (number of coordinating centres or observational study type) and 1.99 (site type = community). This provides evidence that neither collinearity nor multicollinearity were important issues for this model.

Table S1 List of prospective CIHR-funded COVID-19 studies, research questions, and registration

Study name	Population as coded in database	Population	Intervention	Control	Primary Outcome	Registration number or link to protocol
Randomized Controlled Trials						
ARBs CORONA II	COVID | Critically ill | Non critically ill (e.g. patients on ward)	Adult patients with COVID-19 hospitalized	Losartan (25 to 50 to 100mg daily)	Standard of care	Mortality at day 28	NCT04606563
ATTACC	COVID | Non critically ill (e.g. patients on ward)	Adult patients with laboratory confirmed COVID-19 admitted to hospital for at least 72 hours	Therapeutic anticoagulation for 14 days (or until hospital discharge or liberation from the need for supplemental oxygen, whichever comes first) with preference for low-molecular weight heparin, or alternative unfractionated heparin	Usual care (which is anticipated to include thromboprophylactic dose anticoagulation according to local practice)	Days alive and free of organ support at day 21	https://journals.sagepub.com/doi/10.1177/1740774520943846
CATCO	COVID | Critically ill | Non critically ill (e.g. patients on ward)	Adult patients with COVID-19 hospitalized	•Lopinavir/ritonavir •Remdesivir •Hydroxychloroquine •Dexamethasone •Imatinib OR Infliximab OR Artesunate; •Losartan	Standard of care	All-cause mortality assessed at hospital discharge	https://journals.sagepub.com/doi/10.1177/1740774520943846

Study name	Population as coded in database	Population	Intervention	Control	Primary Outcome	Registration number or link to protocol
CIRCA RCT	COVID | Sepsis | Critically ill | Mechanically ventilated	Mechanically ventilated with ARDS secondary to COVID-19	270 million mesenchymal stromal cells IV daily x 3 days	Placebo	Number of days free of oxygen by NIV/HFNC or mechanical ventilation at Day 28 Number of days free of oxygen by NIV/HFNC or mechanical ventilation at Day 28	NCT04865107
CONCOR-1	COVID | Critically ill | Non critically ill (e.g. patients on ward)	Patients ≥16 years of age (>18 years of age in the United States, Brazil, and Israel), admitted for COVID-19 respiratory illness and receiving supplemental oxygen for whom there is ABO-compatible COVID-19 Convalescent Plasma available	COVID-19 Convalescent Plasma: one unit of approximately 500 mL apheresis plasma collected from a single donor, or 2 units of approximately 250 mL collected from one or two donors who have recovered from COVID-19 infection.	Usual care	Intubation or death at day 30	https://trialsjournal.biomedcentral.com/articles/10.1186/s13063-021-05235-3
COVI-PRONE	COVID | Critically ill	Adults with suspected or confirmed COVID-19 on oxygen with chest infiltrates admitted to ICU or an acute care unit	Awake proning for 8-10 hours daily	Usual care (without proning)	Endotracheal intubation within 30 days of randomization	https://www.medrxiv.org/content/10.1101/2021.08.06.21261531v1

Study name	Population as coded in database	Population	Intervention	Control	Primary Outcome	Registration number or link to protocol
CORONA	COVID | Critically ill | Non critically ill (e.g. patients on ward)	Adult patients hospitalized with suspected pneumonia with goals of care do-not-intubate but need >=2L/min of oxygen to maintain a SpO2>=92% and patient can be positioned to and from prone to supine with minimal assistance	Prone positionning	Usual care	Hospital mortality or discharge to hospice by day 60	NCT04402879
REMAP-CAP - ACE2 RAs Modulation	COVID | Critically ill | Non critically ill (e.g. patients on ward) | Mechanically ventilated	Adult patient admitted to an ICU for acute community acquired pneumonia with suspected or microbiological testing confirmed COVID-19	Angiotensin converting enzyme inhibitor (ACEi) or Angiotensin II receptor blocker (ARB)	No Renin-angiotensin-system (RAS) inhibitor	All-cause mortality at 90 days	https://www.remapcap.org/protocol-documents
REMAP-CAP - Anticoagulation	COVID | Critically ill | Mechanically ventilated	Adult patient for which COVID-19 infection is suspected by the treating clinician or has been confirmed by microbiological testing -Microbiological testing for SARS-CoV-2 infection of upper or lower respiratory tract secretions or both has occurred or is intended to occur	Intermediate dose thromboprophylaxis or continuation of therapeutic dose anticoagulation (Prior Therapeutic Anticoagulation Stratum only)	Conventional low dose thromboprophylaxis	All-cause mortality at 90 days	https://www.remapcap.org/protocol-documents

Study name	Population as coded in database	Population	Intervention	Control	Primary Outcome	Registration number or link to protocol
REMAP-CAP - Antiplatelet	COVID | Critically ill | Mechanically ventilated	Adult patient admitted to hospital with acute illness due to suspected or proven COVID-19 infection	Aspirin or P2Y12 inhibitor (clopidogrel, prasugrel or ticagrelor)	No antiplatelet	All-cause mortality at 90 days	https://www.remapcap.org/protocol-documents
REMAP-CAP - COVID Antiviral	COVID | Critically ill	Adult participants admitted to participating ICU for a acute community acquired pneumonia or admitted to hospital with acute illness with suspected or microbiological testing-confirmed COVID-19 infection	Lopinavir/ritonavir or hydroxychloroquine or hydroxychloroquine and lopinavir/ritonavir	No antiviral for COVID-19	All-cause mortality at 90 days	https://www.remapcap.org/protocol-documents
REMAP-CAP - COVID-19 Immune Modulation Therapy	COVID | Critically ill | Mechanically ventilated	Adult patients admiited to ICU for acute community acquired pneumonia and patients admitted to hospital for acute illness, with suspected or microbiological testing-confirmed COVID-19 infection	interferon-beta-1a (IFN-β1a) or anakinra i.e. interleukin-1 receptor antagonist (IL1Ra)	No immune modulation for COVID-19	All-cause mortality at 90 days	https://www.remapcap.org/protocol-documents
REMAP-CAP - COVID-19 Immunoglobulin	COVID | Critically ill | Non critically ill (e.g. patients on ward)	Adult patients admitted to ICU for acute community acquired pneumonia or patients admitted to hospital for acute illness andSARS-CoV-2 infection is confirmed by microbiological testing	Convalescent plasma	No immunoglobulin against SARS-CoV-2	All-cause mortality at 90 days	https://www.remapcap.org/protocol-documents

Study name	Population as coded in database	Population	Intervention	Control	Primary Outcome	Registration number or link to protocol
REMAP-CAP - Mechanical Ventilation	COVID | Sepsis | Critically ill | Mechanically ventilated	Adult patients admitted to ICU for acute community acquired pneumonia or admitted to hospital with acute illness with a suspected or proven COVID-19 infection, receiving mechanical ventilation	Protocolized mechanical ventilation strategy	Clinician-preferred mechanical ventilation strategy	All-cause mortality at 90 days	https://www.remapcap.org/protocol-documents
REMAP-CAP - Simvastatin	COVID | Critically ill | Non critically ill (e.g. patients on ward)	Adult patients admitted to hospital with acute illness due to suspected or proven COVID-19 including patients admitted to ICU	Simvastatin	No simvastatin	All-cause mortality at 90 days	https://www.remapcap.org/protocol-documents
SAVE-ICU	COVID | Critically ill | Mechanically ventilated	Adult patients with suspected or proven COVID-19, mechanically ventilated and expected to remain mechanically ventilated at the end of the next day, receiving IV sedation for less or equal to 72 hours to facilitate ventilation	Inhaled volatile anesthetic-based sedation (sevoflurane or isoflurane)	Standard of care defined as intravenous sedative-based regimen	Hospital mortality, ventilator-free-days at day 30, quality of life at 90 and 365 days and ICU-free-days at day 30	NCT04415060
Observational cohorts						

Study name	Population as coded in database	Population	Intervention	Control	Primary Outcome	Registration number or link to protocol
CANCOV (HOSPITALIZED NON-ICU COHORT)	COVID | Non critically ill (e.g. patients on ward)	Hospitalized non-ICU COVID-19 patients and caregivers	Not applicable	Not applicable	Short (in-hospital) and longer-term (1, 3, 6 and 12, months post-hospital discharge & optional 18, 24, 30, 36 months post-hospital discharge) outcomes in patients and their caregivers, and the clinical, sociodemographic, genetic, transcriptomic, epigenomic, immunological, serological, inflammatory, coagulation predictors of these outcomes	NCT05125510
CANCOV (ICU COHORT)	COVID | Critically ill	Hospitalized ICU COVID-19 survivors	Not applicable	Not applicable	Short (in-hospital) and longer term (1, 3, 6, and 12 months) post-ICU discharge and optional 18,24,36 months post-ICU discharge outcomes in patients and their caregivers: clinical, sociodemographic, genetic, transcriptomic, epigenomic, immunological, serological, inflammatory, coagulation predictors of these outcomes	NCT05125510
CCEDRRN	COVID | Critically ill | Non critically ill (e.g. patients on ward) | Other	Patients presenting to the emergency department with suspected or confirmed COVID-19 since Mar. 1, 2020	Not applicable	Not applicable	World Health Organization (WHO) COVID clinical improvement outcome ordinal scale at 30 days	https://pubmed.ncbi.nlm.nih.gov/33731427/
COREG	COVID | Critically ill | Non critically ill (e.g. patients on ward)	Eligible patients will be 18 years of age or older and currently hospitalised/recently discharged due to/since confirmed or suspected COVID-19 infection using the ISARIC definition	Not applicable	Not applicable	To characterize the functional recovery of hospitalised patients, age 18 and over, diagnosed with COVID-19 at 3, 6, 9, and 12 months post discharge and to examine determinants of functional outcomes after COVID-19 infection for hospitalised patients	https://bmjopen.bmj.com/content/11/12/e053021.long

Study name	Population as coded in database	Population	Intervention	Control	Primary Outcome	Registration number or link to protocol
COVID-Beacons	COVID | Critically ill | Non critically ill (e.g. patients on ward)	Adult patients admitted with a primary diagnosis of COVID-19 related pneumonia	Not applicable	Not applicable	For the ICU cohort :90-day survival censoring at discharge from hospital and loss to follow-up. For the non-ICU (at admission) cohort: Time to ICU admission and treating death as a competing risk.	https://cancovid.ca/fr/grant/covid-19-comprehensive-biomarker-analysis-for-prediction-of-clinical-course-and-patient-treatment-outcomes-covid-beacons/
REVIVe	COVID | Critically ill	Adult and pediatric survivors of severe COVID-19 disease admitted to participating ICUs and PICUs. We define children as less than, and adults as greater than or equal to, 18 years old respectively	Not applicable	Not applicable	The prevalence of, and factors associated with, frailty at hospital discharge in critically ill adult and pediatric survivors of COVID-19	NCT05246098
SPRINT-SARI	COVID | Sepsis | Critically ill | Non critically ill (e.g. patients on ward) | Mechanically ventilated	Patients admitted to hospital with a suspected acute respiratory infection (SARI) due to COVID-19	Not applicable	Not applicable	To establish a research response capability for a future epidemic and pandemic through a global SARI observational study	NCT02498587

ACEi: Angiotensin converting enzyme inhibitor; ARB: Angiotensin II receptor blocker; AF: Atrial fibrillation; HRQL: Health-related quality of life; ICU: Intensive care unit; IFN-β1a: interferon-beta-1a; IL1Ra: interleukin-1 receptor antagonist; ISARIC: International Severe Acute Respiratory and emerging

Infection Consortium; IU: International unit; IV: Intraveinous; MV: Mechanical ventilation; PEEP: Positive end expiration pressure; PICU: Pediatric intensive care unit; PS: Pressure support; RAS: Renin-angiotensin-system; SARI: Suspected acute respiratory infection; SBT: Spontaneous breathing trial; SpO2: Oxygen saturation; WHO: World Health Organization

Table S2 List of prospective CIHR-funded COVID-19 studies, planned sample size, enrolment period, funders

Study name	Planned sample size	Start date	End date	Planned N of recruiting hospitals	Funder
Randomized Controlled Trials					
ARBs CORONA II	1372	2020-NOV	2022-MAY	30	CIHR | Internal flunds
ATTACC	Not defined	2020-MAY	2021-JAN	58	CIHR
CATCO	Not defined	2020-APR	2023-MAR	54	CIHR
CIRCA RCT	54	2021-APR	2022-JUL	4	CIHR
CONCOR-1	1200	2019-OCT	2021-JAN	52	CIHR | Internal funds | Foundation
COVI-PRONE	400	2020-JUN	2021-MAY	20	CIHR | Internal funds
CORONA	600	2020-NOV	2022-JAN	7	CIHR | Internal funds
REMAP-CAP - ACE2 RAs Modulation	Not defined	2022-JAN	2022-JUN	37	CIHR
REMAP-CAP – Anticoagulation	Not defined	2020-JUL		37	CIHR
REMAP-CAP – Antiplatelet	Not defined	2021-APR	2021-JUL	36	CIHR
REMAP-CAP - COVID Antiviral	Not defined	2020-APR	2020-NOV	37	CIHR
REMAP-CAP - COVID-19 Immune Modulation Therapy	Not defined	2020-APR	2021-APR	36	CIHR
REMAP-CAP - COVID-19 Immunoglobulin	Not defined	2020-SEP	2021-JAN	36	CIHR
REMAP-CAP - Mechanical Ventilation	Not defined	2022-JAN		37	CIHR
REMAP-CAP – Simvastatin	Not defined	2021-MAR	2023-JAN	37	CIHR
SAVE-ICU	758	2020-AUG		13	CIHR | Internal funds | Other
Cohorts studies					

Study name	Planned sample size	Start date	End date	Planned N of recruiting hospitals	Funder
CANCOV (HOSPITALIZED NON-ICU COHORT)	800	2020-AUG	2022-SEP	13	CIHR
CANCOV (ICU COHORT)	700	2020-AUG	2022-SEP	17	CIHR | Other
CCEDRRN	Not defined	2020-OCT	2023-AUG	38	CIHR | Other
COREG	211	2020-AUG	2022-JAN	5	CIHR
COVID-Beacons	200	2021-FEB	2023-MAY	2	CIHR
REVIVe	900	2022-AUG		1	CIHR
SPRINT-SARI	Not defined	2020-JAN		46	CIHR

Table S3 : List of hospitals

Alberta	Alberta Children's Hospital, Grey Nuns Community Hospital, Mazankowski Alberta Heart Institute, Misericordia Community Hospital, Queen Elizabeth II – Grande- Prairie, Red Deer Regional Hospital Centre, Royal Alexandra Hospital, Sturgeon Community Hospital, University of Alberta Hospital, University of Calgary/Foothills Medical Centre, University of Calgary/Peter Lougheed Hospital, University of Calgary/Rockyview General Hospital, University of Calgary/South Health Campus Hospital
British Columbia:	Abbotsford Regional Hospital and Cancer Centre, BC Children's Hospital, Lions Gate Hospital, Mills Memorial Hospital, Richmond Hospital, Royal Columbian Hospital, Royal Inland Hospital, Royal Jubilee Hospital – Island Health, St-Paul's Hospital (Vancouver), Surrey Memorial Hospital, University Hospital of Northern BC, Vancouver General Hospital, Victoria General (Victoria)
Manitoba:	Grace General Hospital (Winnipeg), Health Sciences Centre (Winnipeg), St-Boniface General Hospital
New Brunswick:	Centre hospitalier universitaire Dr. Georges L. Dumont, Saint John Regional Hospital
Newfoundland and Labrador:	Eastern Regional Health Authority, Health Sciences Centre
Nova Scotia:	Queen Elizabeth II – Halifax Infirmary
Ontario:	Bluewater Health, Brantford General Hospital, Children's Hospital of Eastern Ontario, Grand River Hospital Corporation, Hamilton General Hospital, Hamilton Health Sciences – Juravinski, Hamilton Health Sciences – McMaster University, Health Sciences North – Sudbury Regional Hospital – General Site (SJHC), Humber River Regional Hospital – Humber River RH Memorial, Joseph Brant Memorial Hospital, Kingston General Hospital, Lakeridge Health Corporation – Oshawa, Lakeridge Health Corporation – Bowmanville, London Health Sciences Centre – University Campus, London Health Sciences Centre – Victoria Campus and Children's Hospital, Markham Stoufville Hospital (Oak Valley Health), Montfort Hospital, Mount Sinai Hospital, Niagara Health System – Greater Niagara Site, Niagara Health System – St-Catharines General Site, North York General Hospital, Queensway Carleton Hospital, Royal Victoria Hospital Barrie, Scarborough Health Network – Birchmount hospital, Scarborough Health Network – Centenary Site, Scarborough Health Network – General Site, St. Joseph's Health Care (London), St. Joseph's Health Centre (Toronto), St. Joseph's Healthcare System (Hamilton) – Charlton, St-Mary's General Hospital, St-Michael's Hospital, Sunnybrook Health Sciences, The Hospital for Sick Children, The Ottawa Hospital, Thunder Bay Regional Health Sciences Centre, Toronto East General Hospital - Michael Garron, Trillium Health Centre – Credit Valley Hospital, Trillium Health Centre – Mississauga Hospital, University Health Network - Toronto General Hospital, University Health Network – Toronto Western Hospital, William Osler Health Centre – Brampton Campus, William Osler Health Centre – Etobicoke Campus, Windsor Regional Hospital
Québec:	CHU Sainte-Justine; CHU de Québec Université Laval (CHUL), CHU de Québec Université Laval (Hôpital de l'Enfant-Jésus), CHUM – Centre hospitalier de l'Université de Montréal, CISSS-CA Hôtel-Dieu de Lévis, CIUSSS de la Mauricie-Centre-du-Québec - Trois-Rivières, CIUSSS de l'Estrie-CHUS, CIUSSS du Nord de l'IÎle de Montréeal – Hôpital du Sacré-Coeur de Montréal, Hôpital Charles Lemoyne, Hôpital Cité de la Santé, Hôpital de Chicoutimi, Hôpital de Montréal pour enfants – Montreal Children's Hospital, Hôpital général de Montréal – CUSM McGill, Hôpital Maisonneuve-Rosemont, Hôpital régional de Saint-Jérôme, Hôpital Royal Victoria – CUSM McGill, Institut universitaire de cardiologie et de pneumologie de Québec – IUCPQ, L'Hôpital général Juif Sir Mortimer B. Davis
Saskatchewan:	Regina General Hospital, Royal University Hospital /University of Saskatchewan.

Table S4 Study-related publications, preprints, and citations until 31 October 2023

Study name	Publication title and link (Results)	Number of citations; field-weighted citation impact (Scopus, accessed 31 October 2023)	Incorporated in WHO COVID-19 Therapeutic Guidelines (Yes/No)
Randomized Controlled Trials			
ARBs CORONA II	Not published (Enrollment completed, results pending)		
ATTACC and REMAP-CAP – Anticoagulation (joint publications	Therapeutic Anticoagulation in Critically Ill Patients with Covid-19 – Preliminary Report (https://doi.org/10.1101/2021.03.10.21252749) Effects of inflammation on thrombosis and outcomes in COVID-19: secondary analysis of the ATTACC/ACTIV-4a trial (https://www.rpthjournal.org/article/S2475-0379(23)00460-0/fulltext) Therapeutic anticoagulation with heparin in critically ill patients with covid-19 (https://www.nejm.org/doi/10.1056/NEJMoa2103417) Therapeutic Anticoagulation with Heparin in Noncritically Ill Patients with Covid-19 (https://www.nejm.org/doi/10.1056/NEJMoa2105911)	N/A; N/A 0 553; 105.4 532; 99.96	No
CATCO	Remdesivir for the treatment of patients inhospital with COVID-19 in Canada: a randomized controlled trial (https://www.cmaj.ca/content/194/7/E242) Cost-effectiveness of remdesivir plus usual care versus usual care alone for hospitalized patients with COVID-19: an economic evaluation as part of the Canadian Treatments for COVID-19 (CATCO) randomized clinical trial (https://doi.org/10.9778/cmajo.20220077) Remdesivir in Patients With Severe Kidney Dysfunction A Secondary Analysis of the CATCO Randomized Trial (10.1001/jamanetworkopen.2022.29236)	58; 27.67 N/A; N/A 6; 2.3	Yes
CIRCA RCT	Preliminary results for the cellular immuno-therapy for COVID-19-related ARDS multicentre Canadian randomized clinical trial: CIRCA-19 phase 2 RCT (10.1016/s1465-3249(23)00177-9)	N/A, N/A	xx
CONCOR-1	Convalescent plasma for hospitalized patients with COVID-19: an open-label, randomized controlled trial (https://www.nature.com/articles/s41591-021-01488-2)	155; 12.24	Yes
CORONA	Not published (Enrollment stopped, results pending)		
COVI-PRONE	Effect of Awake Prone Positioning on Endotracheal Intubation in Patients With COVID-19 and Acute Respiratory Failure (https://jamanetwork.com/journals/jama/fullarticle/2792506)	47; 11.83	No

Study name	Publication title and link (Results)	Number of citations; field-weighted citation impact (Scopus, accessed 31 October 2023)	Incorporated in WHO COVID-19 Therapeutic Guidelines (Yes/No)
REMAP-CAP - ACE2 RAs Modulation	Effect of Angiotensin-Converting Enzyme Inhibitor and Angiotensin Receptor Blocker Initiation on Organ Support–Free Days in Patients Hospitalized With COVID-19 A Randomized Clinical Trial (https://jamanetwork.com/journals/jama/fullarticle/2803515)	6; 6.6	
REMAP-CAP - Antiplatelet	Effect of Antiplatelet Therapy on Survival and Organ Support–Free Days in Critically Ill Patients With COVID-19. A Randomized Clinical Trial (https://jamanetwork.com/journals/jama/fullarticle/2790488)	66; 34.58	No
REMAP-CAP - COVID Antiviral	Lopinavir-ritonavir and hydroxychloroquine for critically ill patients with COVID-19: REMAP-CAP randomized controlled trial (https://link.springer.com/article/10.1007/s00134-021-06448-5)	51; 6.36	Yes
REMAP-CAP - COVID-19 Immune Modulation Therapy	Interleukin-6 Receptor Antagonists in Critically Ill Patients with Covid-19 (https://www.nejm.org/doi/full/10.1056/NEJMoa2100433)	1116; 213.02	Yes
REMAP-CAP - COVID-19 Immunoglobulin	Effect of Convalescent Plasma on Organ Support–Free Days in Critically Ill Patients With COVID-19 (https://jamanetwork.com/journals/jama/fullarticle/2784914) Coronavirus disease 2019 subphenotypes and differential treatment response to convalescent plasma in critically ill adults: secondary analyses of a randomized clinical trial (https://link.springer.com/article/10.1007/s00134-022-06869-w)	121; 23.34 8; 2.19	Yes
REMAP-CAP - Mechanical Ventilation	Not published (Recruiting)		
REMAP-CAP - Simvastatin	Simvastatin in Critically Ill Patients with Covid-19 (https://www.nejm.org/doi/full/10.1056/NEJMoa2309995)	N/A; N/A	xx
SAVE-ICU	Not published (Recruiting)		
Observational cohorts			
CANCOV (HOSPITALIZED NON-ICU COHORT)	Not published (Recruiting)		
CANCOV (ICU COHORT)	Not published (Recruiting)		
CCEDRRN	CCEDRRN COVID-19 Infection Score (CCIS): development and validation in a Canadian cohort of a clinical risk score to predict SARS-CoV-2 infection in patients presenting to	10; 1.81	No

Study name	Publication title and link (Results)	Number of citations; field-weighted citation impact (Scopus, accessed 31 October 2023)	Incorporated in WHO COVID-19 Therapeutic Guidelines (Yes/No)
	the emergency department with suspected COVID-19 (https://bmjopen.bmj.com/content/11/12/e055832)		
	The CCEDRRN COVID-19 Mortality Score to predict death among nonpalliative patients with COVID-19 presenting to emergency departments: a derivation and validation study (https://www.cmajopen.ca/content/10/1/E90.short)	10; 5.18	
	Treatments, resource utilization, and outcomes of COVID-19 patients presenting to emergency departments across pandemic waves: an observational study by the Canadian COVID-19 Emergency Department Rapid Response Network (CCEDRRN) (https://link.springer.com/article/10.1007/s43678-022-00275-3)	7; 5.76	
	Derivation and validation of a clinical decision rule to risk-stratify COVID-19 patients discharged from the emergency department: The CCEDRRN COVID discharge score (https://onlinelibrary.wiley.com/doi/10.1002/emp2.12868)	1; N/A	
	Diagnostic yield of screening for SARS-CoV-2 among patients admitted to hospital for alternate diagnoses: an observational cohort study (https://bmjopen.bmj.com/content/12/8/e057852.long)	1; 0.57	
	The burden of incidental SARS-CoV-2 infections in hospitalized patients across pandemic waves in Canada (https://www.nature.com/articles/s41598-023-33569-2)	2; NA	
	Sensitivity and Diagnostic Yield of the First SARS-CoV-2 Nucleic Acid Amplification Test Performed for Patients Presenting to the Hospital (https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2797202)	3: 0.57	
	Patient-reported health outcomes of SARS-CoV-2–tested patients presenting to emergency departments: a propensity score–matched prospective cohort study (https://www.sciencedirect.com/science/article/pii/S0033350622003328?via%3Dihub)	0	
	Prognostic association between d-dimer thresholds and 30-day pulmonary embolism diagnosis among emergency department patients with suspected SARS-CoV-2 infection: a Canadian COVID-19 Emergency Department Rapid Response Network study (https://link.springer.com/article/10.1007/s43678-022-00440-8)	1; 4.11	
	Intubation practices and outcomes for patients with suspected or confirmed COVID-19: a national observational study by the Canadian COVID-19 Emergency Department Rapid Response Network (CCEDRRN) (https://link.springer.com/article/10.1007/s43678-023-00487-1)	0	
		2; 2.6	

Study name	Publication title and link (Results)	Number of citations; field-weighted citation impact (Scopus, accessed 31 October 2023)	Incorporated in WHO COVID-19 Therapeutic Guidelines (Yes/No)
	Accuracy of Self-Reported COVID-19 Vaccination Status Compared With a Public Health Vaccination Registry in Québec: Observational Diagnostic Study (https://publichealth.jmir.org/2023/1/e44465)		
COREG	Incidence and Outcomes of Acute Kidney Injury in Patients Admitted to Hospital With COVID-19: A Retrospective Cohort Study (https://journals.sagepub.com/doi/pdf/10.1177/20543581211027759)	4; 0.51	No
COVID-BEACONS	Biomarkers of coagulation, endothelial function, and fibrinolysis in critically ill patients with COVID-19: A single-center prospective longitudinal study (https://www.jthjournal.org/article/S1538-7836(22)00795-4/fulltext) Cross-immunity against SARS-COV-2 variants of concern in naturally infected critically ill COVID-19 patients (https://www.sciencedirect.com/science/article/pii/S2405844022039925)	40; 3.52 2; 4.19	Xx xx
REVIVe	Not published (Recruiting)		
SPRINT-SARI	Using research to prepare for outbreaks of severe acute respiratory infection (http://dx.doi.org/10.1136/bmjgh-2018-001061) The value of open-source clinical science in pandemic response: lessons from ISARIC (https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(21)00565-X/fulltext) COVID-19 symptoms at hospital admission vary with age and sex: results from the ISARIC prospective multinational observational study (https://link.springer.com/article/10.1007/s15010-021-01599-5#citeas) Clinical characteristics, risk factors and outcomes in patients with severe COVID-19 registered in the International Severe Acute Respiratory and Emerging Infection Consortium WHO clinical characterisation protocol: a prospective, multinational, multicentre, observational study (https://openres.ersjournals.com/content/8/1/00552-2021)	8; 0.51 16; 2.88 42; 5.09 27; 9.25	No
	Ten months of temporal variation in the clinical journey of hospitalised patients with COVID-19: An observational cohort (https://elifesciences.org/articles/70970) Association of body mass index with COVID-19 related in-hospital death (https://www.clinicalnutritionjournal.com/article/S0261-5614(22)00026-7/fulltext)	8; 1.05 7; 2.65	

Study name	Publication title and link (Results)	Number of citations; field-weighted citation impact (Scopus, accessed 31 October 2023)	Incorporated in WHO COVID-19 Therapeutic Guidelines (Yes/No)
	Use of an extended KDIGO definition to diagnose acute kidney injury in patients with COVID-19: A multinational study using the ISARIC–WHO clinical characterisation protocol (https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1003969)	5; 2.88	
	Symptom-based case definitions for COVID-19: time and geographical variations for detection at hospital admission among 260,000 patients (https://www.authorea.com/users/492379/articles/575096-symptom-based-case-definitions-for-covid-19-time-and-geographical-variations-for-detection-at-hospital-admission-among-260-000-patients?commit=c370b349e5804576f9663625517ce28b69f426bd)	N/A	
	An international observational study to assess the impact of the Omicron variant emergence on the clinical epidemiology of COVID-19 in hospitalised patients (https://elifesciences.org/articles/80556)	5; 1.88	
	Respiratory support in patients with severe COVID-19 in the International Severe Acute Respiratory and Emerging Infection (ISARIC) COVID-19 study: a prospective, multinational, observational study (https://ccforum.biomedcentral.com/articles/10.1186/s13054-022-04155-1)	3; 0.73	
	Neurological manifestations of COVID-19 in adults and children (https://academic.oup.com/brain/article/146/4/1648/6695387)	10; 11.35	
	Paediatric COVID-19 mortality: a database analysis of the impact of health resource disparity (https://bmjpaedsopen.bmj.com/content/6/1/e001657)	1; 0.7	
	Characteristics and outcomes of an international cohort of 600 000 hospitalized patients with COVID-19 (https://academic.oup.com/ije/article/52/2/355/7059267)	8; 6.53	
	Characteristics and outcomes of patients with COVID-19 admitted to hospital and intensive care in the first phase of the pandemic in Canada: a national cohort study (https://www.cmajopen.ca/content/9/1/E181)	37; 7.05	
Median citations per article (Q1, Q3); median field-weighted citation		8 (2.8, 40.5); 4.2 (2.0, 10.3)	

Study name	Publication title and link (Results)	Number of citations; field-weighted citation impact (Scopus, accessed 31 October 2023)	Incorporated in WHO COVID-19 Therapeutic Guidelines (Yes/No)
impact per article (Q1, Q3)			