



International EPI Cell Daily Evidence Digest – 16/04/2020

This Daily Evidence Digest is produced by the PHE COVID-19 Literature Digest Team as a resource for professionals working in public health. We do not accept responsibility for the availability, reliability or content of the items included in this resource and do not necessarily endorse the views expressed within them. The papers are organised under the following themes:

- Diagnostics
- Genomics
- Epidemiology and clinical - children and pregnancy
- Epidemiology and clinical - risk factors
- Epidemiology and clinical - other
- Infection control
- Treatment
- Social sciences
- Miscellaneous
- Modelling
- Guidance and consensus statements (no digest)
- Overviews, comments and editorials (no digest)

Please note that we are including preprints (**highlighted in red**), which are preliminary reports of work that have NOT been peer-reviewed. They should not be relied on to guide clinical practice or health-related behaviour and should NOT be reported in news media as established information.

Diagnostics

Publication Date	Title/URL	Journal/ Article type	Digest
15.04.2020	Utility of hyposmia and hypogeusia for the diagnosis of COVID-19	The Lancet Infectious Diseases / Correspondence	<ul style="list-style-type: none">• The authors aimed to investigate the diagnostic value of reported loss of smell (hyposmia) and taste (hypogeusia).• Of 259 patients, 68 were positive for SARS-CoV-2. Hypogeusia was reported by 63 patients (24%), hyposmia by 51 patients (20%), both

			<p>hypogeusia and hyposmia by 43 patients (17%), and ENT disorders by 82 patients (32%).</p> <ul style="list-style-type: none"> • Hypogeusia and hyposmia were strongly associated with COVID-19 diagnosis, separately and combined, in patients with and without a medical history of ENT disorders.
13.04.2020	C-reactive protein correlates with CT findings and predicts severe COVID-19 early	Journal of Medical Virology / Article	<ul style="list-style-type: none"> • Study aimed to identify biomarkers for differential diagnosis and prognosis prediction. 27 consecutive patients with COVID-19 and 75 patients with flu were retrospectively enrolled. • C-reactive protein (CRP) in severe COVID-19 patients increased significantly at the initial stage, prior to CT findings. Importantly, CRP, which was associated with disease development, predicted early severe COVID-19.
29.03.2020	Anesthesia Management and Perioperative Infection Control in Patients With the Novel Coronavirus	Journal of cardiothoracic and vascular anesthesia / Article	<ul style="list-style-type: none"> • The authors have presented a protocolized approach that uses diagnostic criteria to clearly define benchmarks from the medical history along with clinical symptoms and laboratory tests.
25.03.2020	Coronavirus Disease 2019 (COVID-19) CT Findings: A Systematic Review and Meta-analysis	Journal of the American College of Radiology / Systematic review	<ul style="list-style-type: none"> • A systematic review and meta-analysis which reports that the most common CT features in patients affected by COVID-19 included ground glass opacities and consolidation involving the bilateral lungs in a peripheral distribution.
15.04.2020	Evolution of CT findings in patients with mild COVID-19 pneumonia	European radiology / Article	<ul style="list-style-type: none"> • CT images and medical records of 88 patients with confirmed mild COVID-19 pneumonia, a baseline CT, and at least one follow-up CT were retrospectively reviewed. • While bilateral ground glass opacities were predominant features, CT findings changed during different time intervals in the 3 weeks after symptom onset in patients with COVID-19.
14.04.2020	CT features of novel coronavirus pneumonia (COVID-19) in children	European radiology / Article	<ul style="list-style-type: none"> • The chest CT characteristics of COVID-19 in paediatric patients were atypical, with more localized GGO extent, lower GGO attenuation, and relatively rare interlobular septal thickening. • Chest CT should be used with more caution in paediatric patients with COVID-19 to protect this vulnerable population from risking radiation.
13.04.2020	Three unsuspected CT diagnoses of COVID-19	Emergency radiology	<ul style="list-style-type: none"> • Three patients imaged for non-respiratory-related symptoms had COVID-19; first reported case of coincident presentation of COVID-19 and an intraparenchymal haemorrhage. • Using imaging characteristics of COVID-19 on abdominal or neck CT when a portion of lungs is included, patients not initially suspected of COVID-19 infection can be quarantined earlier.
15.04.2020	A Clinical Study of Noninvasive Assessment of Lung Lesions in Patients	Ultraschall in der Medizin / Article	<ul style="list-style-type: none"> • Retrospective study with 30 patients with COVID-19 admitted to hospital from Jan 18 to Feb 5, 2020, to explore non-invasive assessment

	with Coronavirus Disease-19 (COVID-19) by Bedside Ultrasound		<p>of lung lesions .</p> <ul style="list-style-type: none"> • The diagnostic efficacy of bedside ultrasound was relatively low for mild to moderate patients, and high for severe patients.
15.04.2020	SARS-CoV-2 shedding and infectivity	The Lancet / Correspondence	<ul style="list-style-type: none"> • Response to Fei Zhou and colleagues. The authors state that the presence of nucleic acid alone cannot be used to define viral shedding or infection potential, as is discussed in the methods of the original study.
11.04.2020	Self-Collected Oral Fluid and Nasal Swabs Demonstrate Comparable Sensitivity to Clinician Collected Nasopharyngeal Swabs for Covid-19 Detection	medRxiv (not peer-reviewed) / Research article	<ul style="list-style-type: none"> • This study found that supervised self-collected oral fluid and nasal swab specimens performed similarly to, if not better than clinician-collected nasopharyngeal swab specimens for the detection of SARS-CoV-2 infection. No sample type captured all SARS-CoV-2 infections, suggesting potential heterogeneity in the distribution of viral load in different parts of the respiratory tract between individuals. • Supervised self-collection performed comparably to clinician collection and would allow for rapid expansion of testing capacity by reducing the need for trained healthcare workers, reducing exposure of healthcare workers, and reducing the amount of PPE being used for testing during a critical shortage.
11.04.2020	Rapid diagnosis of SARS-CoV-2 infection by detecting IgG and IgM antibodies with an immunochromatographic device: a prospective single-center study	medRxiv (not peer-reviewed) / Research article	<ul style="list-style-type: none"> • This study shows that serologic rapid tests can be used as a complement of PCR to diagnose SARS-CoV-2 infection after 14 days from the onset of symptoms. These immunochromatographic devices could be especially useful in hospitalized patients with pneumonia of unknown aetiology with 14 or more days from the onset of symptoms and in whom the PCR has been negative.
15.04.2020	Triplex Real-Time RT-PCR for Severe Acute Respiratory Syndrome Coronavirus 2	Emerging infectious diseases/ Research letter	<ul style="list-style-type: none"> • The authors describe a triplex, real-time reverse transcription PCR for SARS-CoV-2 that maintained clinical performance compared with singleplex assays. • This protocol could streamline detection and decrease reagent use during current high SARS-CoV-2 testing demands.
15.04.2020	Rates of Co-infection Between SARS-CoV-2 and Other Respiratory Pathogens	JAMA / Research letter	<ul style="list-style-type: none"> • Report on co-infection rates between SARS-CoV-2 and other respiratory pathogens in Northern California. • Performed real-time reverse transcriptase-PCR tests for SARS-CoV-2 and other respiratory pathogens on nasopharyngeal swabs of symptomatic patients. • Analysis was performed as a quality assessment of a new diagnostic test.

Publication Date	Title/URL	Journal/ Article type	Digest
14.04.2020	Cytosine drives evolution of SARS-CoV-2	Environmental microbiology / Article	<ul style="list-style-type: none"> The authors report that the role of cytosine-based metabolites used as cell growth coordinators is central to understanding innate antiviral immunity and evolution of SARS-COV-2.
15.04.2020	Cell type-specific expression of the putative SARS-CoV-2 receptor ACE2 in human hearts	European heart journal / Article	<ul style="list-style-type: none"> The authors used single nuclei RNA sequencing to determine the expression of ACE and ACE2 in the different cell types of the human heart. Gene expression signatures were detected in cardiac tissues of five patients with aortic stenosis (AS) and two patients with heart failure with reduced ejection fraction (HFrEF).
10.04.2020	CoV Genome Tracker: tracing genomic footprints of Covid-19 pandemic	bioRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> CoV Genome Tracker is publicly available at http://cov.genometracker.org and updated weekly with the data downloaded from GISAID (http://gisaid.org).
15.04.2020	ADAM17 inhibition may exert a protective effect on COVID-19	Nephrology, dialysis, transplantation / Letter	<ul style="list-style-type: none"> Angiotensin-converting enzyme 2 (ACE2) has been found to be the receptor for SARS-CoV-2 and ACE2 shedding by ADAM17 has been previously described and it may play a role in entry of SARS-CoV. There is potential for ADAM17 inhibition to decrease ACE2 shedding and have a protective effect on SARS-CoV infection by reducing the viral load.
07.04.2020	The aging transcriptome and cellular landscape of the human lung in relation to SARS-CoV-2	bioRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> Several age-associated genes have functional effects on SARS-CoV replication, and directly interact with the SARS-CoV-2 proteome. Interestingly, age-associated genes are heavily enriched among those induced or suppressed by SARS-CoV-2 infection.
15.04.2020	TMPRSS2 and furin are both essential for proteolytic activation and spread of SARS-CoV-2 in human airway epithelial cells and provide promising drug targets	bioRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> This data demonstrate that both TMPRSS2 and furin are essential for SARS-CoV-2 activation in human airway cells and are promising drug targets for the treatment of COVID-19 either by targeting one of these proteases alone or by a combination of furin and TMPRSS2 inhibitors. Therefore, this approach has a high therapeutic potential for treatment of COVID-19.
14.04.2020	Humanized Single Domain Antibodies Neutralize SARS-CoV-2 by Targeting Spike Receptor Binding Domain	bioRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> Using SARS-CoV-2 spike RBD, the authors have discovered a panel of humanized single domain antibodies (sdAbs) to be used for antibody drug development.
14.04.2020	A transcription regulatory network within the ACE2 locus may promote a pro-viral environment for SARS-CoV-2	bioRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> The study, although limited by the fact that the identification of the regulatory interactions is putative until proven by targeted experiments, supports the hypothesis that viral silencing of ACE2 alters the activity of

	by modulating expression of host factors		gene regulatory regions and promotes an intra-cellular environment suitable for viral replication.
14.04.2020	Glycosaminoglycan binding motif at S1/S2 proteolytic cleavage site on spike glycoprotein may facilitate novel coronavirus (SARS-CoV-2) host cell entry	bioRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> The authors discovery of a novel insertion of glycosaminoglycan (GAG)-binding motif at S1/S2 proteolytic cleavage site (681-686 (PRRARS)) and two other GAG-binding-like motifs within SARS-CoV-2 spike glycoprotein (SGP) led them to hypothesize that host cell surface GAGs might be involved in host cell entry of SARS-CoV-2.
14.04.2020	Genetic Variability of Human Angiotensin-Converting Enzyme 2 (hACE2) Among Various Ethnic Populations	bioRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> The authors examined genetic differences in the human angiotensin-converting enzyme 2 (hACE2) gene, as its receptor serves as a cellular entry for SARS-CoV-2. They concluded that the significance of the study findings is not clear in the absence of further in vitro and functional studies.
14.04.2020	The global population of SARS-CoV-2 is composed of six major subtypes	bioRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> The authors propose the subdivision of the global SARS-CoV-2 population into sixteen well-defined subtypes by focusing on the widely shared polymorphisms in non-structural cistrons, structural and accessory genes. Six virus subtypes were predominant in the population, but all sixteen showed amino acid replacements which might have phenotypic implications.
11.04.2020	A High-Coverage SARS-CoV-2 Genome Sequence Acquired by Target Capture Sequencing	medRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> The authors describe a method developed urgently to deal with the research requirement in the conflict between achieving a complete genome sequence for the evolutionary history of SARS-CoV-2 study and the low viral RNA concentration.

Epidemiology and clinical - children and pregnancy

Publication Date	Title/URL	Journal/ Article type	Digest
15.04.2020	SARS-CoV-2 Infection in a 2-Week-Old Male With Neutropenia	Clinical pediatrics / Article	<ul style="list-style-type: none"> This case report focuses on a 2-week-old male infant who presented to the paediatric emergency department with fever and fussiness. This is the youngest patient with COVID-19 reported in the USA.
15.04.2020	COVID-19 vaginal delivery - a case report	The Australian & New Zealand journal of obstetrics & gynaecology / short communication	<ul style="list-style-type: none"> Case report from a tertiary Australian hospital describing an uncomplicated vaginal birth in a SARS-CoV-2 positive mother. The authors report this as the first case described of a mother with COVID-19 not separated from her infant.
11.04.2020	Pregnancy outcomes, Newborn complications and Maternal-Fetal	medRxiv (not peer-reviewed) / Systematic review	<ul style="list-style-type: none"> This systematic review found that in pregnant women with COVID-19, diabetes and hypertensive disorders are common co-morbidities and there is a risk of preterm delivery. Amongst the neonates born to mothers

	Transmission of SARS-CoV-2 in women with COVID-19: A systematic review	with COVID-19, respiratory distress syndrome and pneumonia are common occurrence. There is an evidence of vertical transmission of SARS-CoV-2 infection in women with COVID-19.
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Epidemiology and clinical - risk factors

Publication Date	Title/URL	Journal/ Article type	Digest
15.04.2020	Prognostic value of NT-proBNP in patients with severe COVID-19	Respiratory research / Article	<ul style="list-style-type: none"> • The authors report the use of N terminal pro B type natriuretic peptide (NT-proBNP) to predict outcome of severe COVID-19 patients. • Patients with high NT-proBNP values (> 88.64 pg/mL) had a significantly increased risk of death during the days of following-up compared with those with low values (≤88.64 pg/mL). • After adjustment for potential risk factors, NT-proBNP was independently correlated with in-hospital death.
10.04.2020	Arterial hypertension and risk of death in patients with COVID-19 infection: systematic review and meta-analysis	The Journal of infection / Article	<ul style="list-style-type: none"> • Arterial hypertension is the most common cardiovascular comorbidity which seems to significantly increase the mortality risk in COVID-19 patients. • Further studies are needed to explain the underline pathophysiological mechanisms linking HT and COVID-19 infection.
15.04.2020	Hypertension, the renin-angiotensin system, and` the risk of lower respiratory tract infections and lung injury: implications for COVID-19	Cardiovascular research / Article	<ul style="list-style-type: none"> • The authors provide a critical review on the relationship of hypertension, renin–angiotensin system (RAS), and risk of lung injury with COVID-19. • They demonstrate a lack of sound evidence that hypertension per se is an independent risk factor. • They find that angiotensin-converting enzyme inhibitors (ACEIs) and angiotensin receptor blockers (ARBs) may be associated with lower incidence and/or improved outcome in patients with lower respiratory tract infections. • A critical review of available evidence does not support a harmful effect of RAS blockers in COVID-19 infections.
15.04.2020	The Science Underlying COVID-19: Implications for the Cardiovascular System	Circulation / Article	<ul style="list-style-type: none"> • Overview of the impact of cardiovascular disease on COVID-19, including the clinical characteristics and discusses the clinical implications of the molecular properties of the virus and receptor pathways, and potential long term consequences.
09.04.2020	Comorbidities in COVID-19: Outcomes in hypertensive cohort and	Diabetes & metabolic syndrome / Article	<ul style="list-style-type: none"> • Evaluated the outcome in hypertensive patients with COVID-19 and its relation to the use of renin-angiotensin system blockers (RASB).

	controversies with renin angiotensin system blockers		<ul style="list-style-type: none"> • Special attention is definitely required in patients with COVID-19 with associated comorbidities including hypertension, diabetes and established CVD. • Although the role of renin-angiotensin system blockers (RASB) has a mechanistic equipoise, patients with COVID-19 should not stop these drugs at this point of time, as recommended by various world organizations and without the advice of health care provider.
15.04.2020	The impact of COPD and smoking history on the severity of Covid-19: A systemic review and meta-analysis	Journal of medical virology / Review	<ul style="list-style-type: none"> • Meta-analysis of 11 case-series (total 2002 cases) exploring the risk of severe Covid-19 in patients with pre-existing chronic obstructive pulmonary disease (COPD) and ongoing smoking history. • The pooled OR of COPD and the development of severe Covid-19 was 4.38, while the OR of ongoing smoking was 1.98. • There was no publication bias as examined by the funnel plot and Egger's test (p=NS).
11.04.2020	COVID-19 in the perioperative period of lung resection: a brief report from a single thoracic surgery department in Wuhan, China	Journal of Thoracic Oncology / Brief report	<ul style="list-style-type: none"> • Three out seven patients died from COVID-19 pneumonia, suggesting that lung resection surgery might be a risk factor for death in patients with COVID-19 in the perioperative period.
11.04.2020	Delayed-Phase Thrombocytopenia in Patients of Coronavirus Disease 2019 (COVID-19)	medRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> • The delayed phase thrombocytopenia in COVID-19 is prone to develop in elderly patients or patients with low lymphocyte count on admission. The delayed-phase thrombocytopenia is significantly associated with increased length of hospital stay and higher ICU admission rate. • The authors speculate that the delayed phase platelet destruction might be mediated by antibodies, and suggest immunoregulatory treatment in severe patients to improve outcomes.
13.04.2020	Smoking is Associated with COVID-19 Progression: A Meta-Analysis	medRxiv (not peer-reviewed) / Meta-analysis	<ul style="list-style-type: none"> • This study found that smoking is a risk factor for progression of COVID-19, with smokers having higher odds of COVID-19 progression than never smokers.
12.04.2020	The clinical characteristics and mortal causes analysis of COVID-19 death patients	medRxiv (not peer-reviewed) / Research article	<ul style="list-style-type: none"> • This study concluded that male, age and heart disease were the main risk factors of death. Asymptomatic patients with serious coexisting disorders may also die of SARS-CoV-2.
12.04.2020	Cardiovascular Diseases and COVID-19 Mortality and Intensive Care Unit Admission: A Systematic Review and Meta-analysis	medRxiv (not peer-reviewed) / Systematic review	<ul style="list-style-type: none"> • This study found a high burden of CVDs among COVID-19 patients which was significantly associated with mortality and ICU admission.

Publication Date	Title/URL	Journal/ Article type	Digest
15.04.2020	Death from Covid-19 of 23 Health Care Workers in China	The New England journal of medicine / Correspondence	<ul style="list-style-type: none"> • Report of the 23 healthcare workers in China who have died following infection with COVID-19, as of 3rd April 2020. • The median age of the 23 health care workers who died was 55 years, 17 were men and 6 were women. • 18 were from Wuhan, 4 were from areas of Hubei Province outside Wuhan, and 1 was from Hainan Province.
15.04.2020	COVID-19 in patients with HIV: clinical case series	The Lancet HIV / Correspondence	<ul style="list-style-type: none"> • The authors describe the first single-centre experience of COVID-19 in patients infected with HIV-1, including clinical characteristics, antiviral and antiretroviral treatment, and outcomes.
15.04.2020	Neurologic Features in Severe SARS-CoV-2 Infection	The New England journal of medicine / correspondence	<ul style="list-style-type: none"> • The authors report the neurologic features, including encephalopathy, prominent agitation and confusion, and corticospinal tract signs, in an observational series of 58 of 64 consecutive patients admitted to hospital with acute respiratory distress syndrome (ARDS) due to Covid-19.
15.04.2020	Concomitant neurological symptoms observed in a patient diagnosed with coronavirus disease 2019	Journal of medical virology / Letter	<ul style="list-style-type: none"> • A report of a rare case of a patient diagnosed with COVID-19 who manifested with concomitant neurological symptoms. • The patient developed fever and respiratory symptoms at disease onset, and subsequently altered consciousness and psychiatric symptoms, with positive signs based on neurological examination.
15.04.2020	Enteric involvement in hospitalised patients with COVID-19 outside Wuhan	The Lancet Gastroenterology & Hepatology / Correspondence	<ul style="list-style-type: none"> • Evidence for gastrointestinal symptoms of patients presenting with COVID-19 is emerging. • The authors retrospectively analyse data from 232 patients and report on the correlation between the presence of diarrhoea and the severity of respiratory symptoms.
15.04.2020	Smell and taste dysfunction in patients with COVID-19	The Lancet Infectious Diseases / Correspondence	<ul style="list-style-type: none"> • International reports are accumulating from ear, nose, and throat (ENT) surgeons and other health-care workers on the front lines that anosmia, with or without dysgeusia, are symptoms frequently associated with SARS-CoV-2 infection.
15.04.2020	Immune Thrombocytopenic Purpura in a Patient with Covid-19	New England Journal of Medicine / Correspondence	<ul style="list-style-type: none"> • Case report: 65-year-old woman with hypertension, autoimmune hypothyroidism, and known Covid-19 exposure presented to the emergency department with a 4-day history of fatigue, fever, dry cough, and abdominal discomfort. • The temporal sequence in this case suggests, but does not prove, that Covid-19 was a causal factor in immune thrombocytopenia in this patient.

28.03.2020	A Case of COVID-19 Pneumonia in a Young Male with Full Body Rash as a Presenting Symptom	Clinical practice and cases in emergency medicine / Case report	<ul style="list-style-type: none"> • The authors describe a case of COVID-19 pneumonia requiring hospitalization that presented with fever and extensive rash as the primary presenting symptoms. • Rash has only been rarely reported in COVID-19 patients, and has not been previously described.
15.04.2020	Analysis of 92 deceased patients with COVID-19	Journal of medical virology / Letter	<ul style="list-style-type: none"> • Of 92 patients with COVID-19 in Renmin Hospital of Wuhan University who died during Jan 6th to Feb 25th, complications included ARDS (73/91), myocardial injury (31/91), liver injury (15/91), renal insufficiency (14/91), multiple organ dysfunction syndrome (MODS) (14/91) and pneumothorax (1/91). • 83 patients had at least one complication.
10.04.2020	Clinical Features of COVID-19-Related Liver Damage	Clinical gastroenterology and hepatology / Article	<ul style="list-style-type: none"> • More than one third of patients admitted to hospital with SARS-CoV-2 infection have abnormal liver function, and this is associated with longer hospital stay. • A significantly higher proportion of patients with abnormal liver function had received lopinavir/ritonavir after admission; these drugs should be given with caution.
10.04.2020	Clinical and Laboratory-Derived Parameters of 119 Hospitalized Patients with Coronavirus Disease 2019 in Xiangyang, Hubei Province, China	The Journal of infection / Article	<ul style="list-style-type: none"> • In this study, the authors found that this virus can cause damage to the liver, heart and kidney, in which abnormal renal indicators may be caused by immunopathological damage.
12.04.2020	Clinical characteristics of 34 COVID-19 patients admitted to ICU in Hangzhou, China	medRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> • This study concluded that lymphocytopenia, neutrophilia, and increase of IL-6 and IL-10 occurred in SARS-CoV-2 infected patients in ICU, however, the dynamics of those were significantly different in invasive mechanical ventilation cases and non-invasive ventilation cases during hospitalization.
13.04.2020	Characteristics and outcomes of a cohort of SARS-CoV-2 patients in the Province of Reggio Emilia, Italy	medRxiv (not peer-reviewed) / Cohort study	<ul style="list-style-type: none"> • Study describing the age- and sex-specific prevalence of SARS-CoV-2 disease (COVID-19) and its prognostic factors in 2653 patients. Concludes that the mechanisms underlying the observed associations are mostly unknown.
12.04.2020	Incidence, clinical outcomes, and transmission dynamics of hospitalized 2019 coronavirus disease among 9,596,321 individuals residing in California and Washington, United States: a prospective cohort study	medRxiv (not peer-reviewed) / Research article	<ul style="list-style-type: none"> • This study identifies high probability of ICU admission, long durations of stay, and considerable mortality risk among hospitalized COVID-19 cases in the western United States. Reductions in reproductive number have occurred in conjunction with implementation of non-pharmaceutical interventions.

10.04.2020	Clinical characteristics of coronavirus disease 2019 (COVID-19) in China: a systematic review and meta-analysis	The Journal of infection / Systematic review	<ul style="list-style-type: none"> • This study found that patients living in Wuhan, older patients, and those with medical comorbidities tend to have more severe clinical symptoms and higher case-fatality rate (CFR).
15.04.2020	Clinical characteristics of 3,062 COVID-19 patients: a meta-analysis	Journal of Medical Virology / Review	<ul style="list-style-type: none"> • Systematically review including 38 studies looking at clinical characteristics of COVID-19 in 3062 patients. • The most commonly experienced symptoms of COVID-19 patients were fever, fatigue, cough and expectoration. • A relatively small percentage of patients were asymptomatic.
10.04.2020	A Dermatologic Manifestation of COVID-19: Transient Livedo Reticularis	Journal of the American Academy of Dermatology / Journal pre-proof	<ul style="list-style-type: none"> • Present two cases of transient unilateral livedo reticularis (LR) in COVID-19-positive non-ICU subjects to bring awareness to a dermatologic manifestation.
15.04.2020	Cutaneous manifestations in COVID-19: a new contribution	Journal of the European Academy of Dermatology and Venereology / Letter	<ul style="list-style-type: none"> • A case study of COVID-19 patient that presented with skin manifestations is described, which differ to previously published reports.

Infection control

Publication Date	Title/URL	Journal/ Article type	Digest
15.04.2020	Visualizing Speech-Generated Oral Fluid Droplets with Laser Light Scattering	New England Journal of Medicine / Correspondence	<ul style="list-style-type: none"> • The aim of this article is to provide visual evidence of speech-generated droplets and to qualitatively describe the effect of a damp cloth cover over the mouth to curb the emission of droplets.
10.04.2020	A carton-made protective shield for suspicious/confirmed COVID-19 intubation and extubation during surgery	Anesthesia and analgesia / Letter to the editor	<ul style="list-style-type: none"> • The authors proposed a simple, carton-made, protective shield, which provide an effective reduce of transmission of droplets and aerosols during both intubation and extubation. • The protective shield has been proved to be effective minimized the aerosols spread during intubation.
10.04.2020	Modifying reusable elastomeric respirators to utilise breathing system filters with 3D printed adapters, a safe alternative to N95 during COVID-19	medRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> • The authors concluded that breathing system filters combined with properly fitted reusable elastomeric respirators is a safe alternative to N95 during the COVID-19 pandemic.
16.04.2020	What is the effectiveness of protective gowns and aprons against COVID-19 in primary care settings?	Oxford COVID-19 Evidence Service / Briefing	<ul style="list-style-type: none"> • No relevant trials have tested gowns versus aprons for prevention of COVID-19 infection in healthcare workers in primary care settings. • Exposure simulation studies suggest that the risk of exposure in healthcare workers is greater with aprons than with gowns but do not provide sufficient data to quantify those risks in the context of primary or community care activity.

			<ul style="list-style-type: none"> • The WHO recommends long-sleeved non-sterile gowns and gloves for both aerosol-generating procedures (AGPs) and non-AGPs.
15.04.2020	Personal protective equipment for preventing highly infectious diseases due to exposure to contaminated body fluids in healthcare staff	The Cochrane database of systematic reviews / Review	<ul style="list-style-type: none"> • An updated systematic review (now including 24 studies/2278 participants) into effect of PPE types, methods of donning or doffing on contamination or infection for HCW, and which training methods increase compliance with PPE protocols. • Low-certainty evidence that covering more parts of the body leads to better protection but usually comes at the cost of more difficult donning or doffing and less user comfort. • More breathable types of PPE may lead to similar contamination but may have greater user satisfaction. • Modifications to PPE design, such as tabs to grab, may decrease the risk of contamination.
14.04.2020	Common breaches in biosafety during donning and doffing of protective personal equipment used in the care of COVID-19 patients	Canadian Journal of Anaesthesia / Correspondence	<ul style="list-style-type: none"> • The authors report the results of a number of donning/doffing PPE training simulations which have revealed critical aspects of the process that, if done improperly, may lead to breaches in biosafety and potential contamination with the virus, causing COVID-19.
13.04.2020	Inactivation of Severe Acute Respiratory Syndrome Coronavirus 2 by WHO-Recommended Hand Rub Formulations and Alcohols	Emerging infectious diseases / Dispatch	<ul style="list-style-type: none"> • The authors determined the virucidal activity of WHO–recommended hand rub formulations, at full strength and multiple dilutions, and of the active ingredients. All disinfectants demonstrated efficient virus inactivation.
13.04.2020	Concise Communication: Covid-19 and the N95 Respirator Shortage: Closing the Gap	Infection control and hospital epidemiology / Review	<ul style="list-style-type: none"> • Authors discuss use of ultraviolet germicidal irradiation (UVGI) to sterilize masks of SARS-CoV-2 for safer re-use, based on earlier research. Research on UVGI effectiveness at destroying SARS-CoV-2 needed. • Potential to greatly extending the limited FFR (disposable particulate Filtering Facepiece Respirators typified by N95 respirators) supply in a simple, cost-effective, and rapidly deployable fashion.
11.04.2020	Effect of various decontamination procedures on disposable N95 mask integrity and SARS-CoV-2 infectivity	medRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> • The authors tested the feasibility of vaporized hydrogen peroxide (VHP), ultraviolet light (UV), and ethanol decontamination strategies on N95 mask integrity and the ability to remove the infectious potential of SARS-CoV-2. FIT test data showed functional degradation by both ethanol and UV decontamination to different degrees. VHP treated masks showed no significant change in function after two treatments.
10.04.2020	Adoption of personal protective measures by ordinary citizens during the COVID-19 outbreak in Japan	International Journal of Infectious Diseases / Article	<ul style="list-style-type: none"> • A total of 2,400 people (50% male: 20-79 years) were selected between Feb 25 and 27, 2020. • The protective measures implemented by ordinary citizens are insufficient and further public awareness activities are required.

10.04.2020	A cluster of pneumonia associated with the SARS-Cov-2 outside of Wuhan related to a house-warming banquet	The Journal of infection / Case reports	<ul style="list-style-type: none"> • This study further indicates that the SARS-Cov-2 infection can cause clustering onset, person-to-person transmission and intercity spread, and it is more likely to happen in crowded places.
10.04.2020	Community quarantine strategy against coronavirus disease 2019 in Anhui: an evaluation based on trauma center patients	International Journal of Infectious Diseases / Article	<ul style="list-style-type: none"> • From the perspective of the injuries in trauma centres, community quarantine strategy was effectively implemented and significantly slowed the outbreak of COVID-19 in Anhui.
13.04.2020	What Is the Appropriate Use of Laparoscopy over Open Procedures in the Current COVID-19 Climate?	Journal of gastrointestinal surgery : official journal of the Society for Surgery of the Alimentary Tract	<ul style="list-style-type: none"> • Despite very little evidence to support viral transmission through laparoscopic or open approaches, authors of this literature review recommend making modifications to surgical practice such as the use of smoke evacuation and minimizing energy device use among other measures to minimize operative staff exposure to aerosolized particles.
10.04.2020	Back to the Basics: Diluted Bleach for COVID-19	Journal of the American Academy of Dermatology / Letter	<ul style="list-style-type: none"> • With rapidly diminishing availability of commercial cleaning supplies, simple diluted bleach, which is readily available, can effectively disinfect clinics, homes, and environment to prevent sustained transmission from inanimate objects.
16.04.2020	What does RCGP surveillance tell us about COVID-19 in the community?	Oxford COVID-19 Evidence Service / Briefing	<ul style="list-style-type: none"> • The current community transmission of COVID is low and not at epidemic levels. The rates are less than that of confirmed cases in the UK. • This could be explained by asymptomatic people or those with mild infections not seeking out testing in primary care. • The observed reductions in URTIs and LRTIs suggest that most of the effect on rates of transmission occurred through the encouragement of social distancing.
10.04.2020	A cluster of the Corona Virus Disease 2019 caused by incubation period transmission in Wuxi, China	The Journal of infection / Case reports	<ul style="list-style-type: none"> • This study further indicates that the SARS-Cov-2 infection can cause clustering onset, person-to-person transmission and intercity spread, and it is more likely to happen in crowded places.
11.04.2020	Household Secondary Attack Rate of COVID-19 and Associated Determinants	medRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> • This study concluded that SARS-CoV-2 is more transmissible in households than SARS-CoV and MERS-CoV, and the elderly ≥60 years old are the most vulnerable to household transmission. Case finding and isolation alone may be inadequate to contain the pandemic and need to be used in conjunction with heightened restriction of human movement as implemented in Guangzhou.

Treatment

Publication Date	Title/URL	Journal/ Article type	Digest
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13.04.2020	Emergency Open-source Three-dimensional Printable Ventilator Circuit Splitter and Flow Regulator during the COVID-19 Pandemic	Anesthesiology / Correspondence	<ul style="list-style-type: none"> Using access to open-source data for three-dimensional printing, ventilator splitters can be rapidly produced at any location to allow multiple patients to share a single ventilator in disaster situations.
13.04.2020	Rapid and Severe Covid-19 Pneumonia with Severe Acute Chest Syndrome in a Sickle Cell Patient Successfully Treated with Tocilizumab	American journal of hematology / Article	<ul style="list-style-type: none"> Covid-19 and associated ARDS, represent a significant mortality risk for SCD patients. Extracorporeal oxygenation (ECMO), often required in ARDS, is associated in SCD patients with catastrophic prognosis (70% mortality rate) Case study of 45-year-old male patient with homozygous sickle cell disease (SCD). Given prior history of severe SCD and the potential risks, treatment with hydroxychloroquine and TCZ were initiated, with a positive resolution. More studies are needed to determine the proper therapy for COVID-19 in patients affected by SCD.
13.04.2020	COVID-19 and Renin Angiotensin Blockers: Current Evidence and Recommendations	Circulation	<ul style="list-style-type: none"> RAS blockers are extensively used for CVD and hypertension therapy; inconsistent evidence that RAS blockers exert a favourable effect on pulmonary outcome in viral pneumonia, no data specifically for SARS-CoV-2-infected patients. Conversely, patients with CVD and hypertension seem to be prone to SARS-CoV-2-infection, although this most likely is due to confounding. RAS blockade should be continued in infected patients as clinically indicated. Present evidence is insufficient to recommend use of RAS blockade prophylactically in subjects at risk or therapeutically in those infected with SARS-CoV-2.
13.04.2020	Immunosuppressive therapy maintenance in a kidney transplant recipient SARS-CoV-2 pneumonia: a case report	American journal of transplantation / Article	<ul style="list-style-type: none"> The role of systemic inflammation is proving crucial in determining unfavourable outcome in SARS-CoV-2 infected patients. Limited data are available regarding immunosuppression management in kidney transplant recipients (KTRs) with SARS-CoV-2 pneumonia. Authors report a case of a 32-year-old KTR who developed SARS-CoV-2 infection and fully recovered in 15 days while maintaining standard immunosuppressive therapy.
28.03.2020	The potential of low molecular weight heparin to mitigate cytokine storm in severe COVID-19 patients: a retrospective clinical study	medRxiv (not peer-reviewed) / Research article	<ul style="list-style-type: none"> Conclusion: LMWH improves the coagulation dysfunction of COVID-19 patients and exerts anti-inflammatory effects by reducing IL-6 and increasing lymphocyte %. It appears that LMWH can be used as a potential therapeutic drug for the treatment of COVID-19, paving the way for a subsequent well-controlled clinical trial.
13.04.2020	Nepriylsin inhibitor-angiotensin II receptor blocker combination	European heart journal. Cardiovascular pharmacotherapy / Correspondence	<ul style="list-style-type: none"> Authors review evidence supporting the biological plausibility of early administration of sacubitril/valsartan in COVID-19 patients, in order to

	(sacubitril/valsartan): rationale for adoption in SARS-CoV-2 patients		maximize the anti-inflammatory effects of sacubitril and contain the effect of Ang I on the lungs.
13.04.2020	Searching therapeutic strategy of new coronavirus pneumonia from angiotensin-converting enzyme 2: the target of COVID-19 and SARS-CoV	European journal of clinical microbiology & infectious diseases / Article	<ul style="list-style-type: none"> • Article summarizes the role of angiotensin-converting enzyme 2 (ACE2) in multiple organ damage caused by COVID-19 and SARS-CoV, targeted blocking drugs against ACE2, and drugs that inhibit inflammation in order to provide the basis for subsequent related research, diagnosis and treatment, and drug development.
14.04.2020	Multidrug treatment with nelfinavir and cepharanthine against COVID-19	bioRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> • Mathematical modelling in vitro antiviral activity coupled with the known pharmacokinetics for these drugs predicts that Nelfinavir will facilitate viral clearance. Combining Nelfinavir/Cepharanthine enhanced their predicted efficacy to control viral proliferation, to ameliorate both the progression of disease and risk of transmission.
11.04.2020	Clinical Efficacy of Intravenous Immunoglobulin Therapy in Critical Patients with COVID-19: A multicenter retrospective cohort study	medRxiv (not peer-reviewed) / Cohort study	<ul style="list-style-type: none"> • Early and high dose of intravenous immunoglobulin (IVIG) therapy may improve the prognosis of COVID-19 patients only in critical type, which provides the clinical basis for the choice of treatment population and method of IVIG therapy for the SARS-CoV-2 infection.
10.04.2020	Cytokine Storm in COVID-19 and Treatment	Journal of Infection / Article in press	<ul style="list-style-type: none"> • This article reviews the occurrence mechanism and treatment strategies of the COVID-19 virus-induced inflammatory storm in attempt to provide valuable medication guidance for clinical treatment.
14.04.2020	Why tocilizumab could be an effective treatment for severe COVID-19?	Journal of translational medicine / Commentary	<ul style="list-style-type: none"> • The authors discuss the potential of Tocilizumab is an effective treatment in severe patients of COVID-19 to calm inflammatory storm and reduce mortality.
10.04.2020	Coronavirus (COVID-19), First Indication of Efficacy of Gene-Eden-VIR/Novirin in SARS-CoV-2 Infections	International Journal of Antimicrobial Agents / Letter to the editor	<ul style="list-style-type: none"> • Gene-Eden-VIR/Novirin is a patented herbal broad-spectrum antiviral treatment. • The authors showed that Gene-Eden-VIR/Novirin ingredients exert a variety of antiviral effects on betacoronaviruses, and SARS-CoV, including inhibition of cell entry and infection, inhibition of replication, inhibition of the viral proteases, enhancing the antiviral immune response, and reducing virulent quasispecies formation.
17.03.2020	Favipiravir versus Arbidol for COVID-19: A Randomized Clinical Trial	medRxiv (not peer-reviewed) / RCT	<ul style="list-style-type: none"> • Among patients with COVID-19, Favipiravir, compared to Arbidol, did not significantly improve the clinically recovery rate at Day 7. Favipiravir significantly improved the latency to relief for pyrexia and cough. Adverse effects caused Favipiravir are mild and manageable.
10.04.2020	Arbidol Monotherapy is Superior to Lopinavir/ritonavir in Treating COVID-19	The Journal of infection / Article	<ul style="list-style-type: none"> • Fifty patients with laboratory-confirmed COVID-19 were divided into two groups: including lopinavir/ritonavir group (34 cases) and arbidol group (16 cases). Lopinavir/ritonavir group received 400mg/100mg of Lopinavir/ritonavir, twice a day for a week, while the arbidol group was given 0.2g arbidol, three times a day.

12.04.2020	Challenges and cares to promote rational use of chloroquine and hydroxychloroquine in the management of coronavirus disease 2019 (COVID-19) pandemic: a timely review	Journal of toxicology and environmental health. Part B, Critical reviews / Review	<ul style="list-style-type: none"> This study provides information on the main toxicological and epidemiological aspects to be considered for prophylaxis or treatment of COVID-19 using chloroquine (CQ) but mainly hydroxychloroquine (HCQ), which is a less toxic derivative than CQ, and was shown to produce better results in inhibiting proliferation of SARS-CoV-2 based upon preliminary tests.
11.04.2020	Identifying common pharmacotherapies associated with reduced COVID-19 morbidity using electronic health records	medRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> Preliminary findings suggest that electronic health records may be applied to identify medications associated with lower risk of morbidity with COVID-19, but larger cohorts will be required to address confounding by indication.
15.04.2020	Why are lopinavir and ritonavir effective against the newly emerged Coronavirus 2019?: Atomistic insights into the inhibitory mechanisms	Biochemistry / Article	<ul style="list-style-type: none"> A combination of two HIV-1 protease inhibitors lopinavir and ritonavir has been found to be effective against SARS-CoV, and both drugs could bind well to the SARS-CoV 3C-like protease. To investigate why they may be effective, molecular complexation between each inhibitor and the SARS-CoV-2 3CLpro was studied using all-atom molecular dynamics simulations, free energy calculations and pair interaction energy analyses. Both anti-HIV drugs interacted well with the residues at the active site of the SARS-CoV-2 3CLpro.

Social sciences

Publication Date	Title/URL	Journal/ Article type	Digest
10.04.2020	A comparison of burnout frequency among oncology physicians and nurses working on the front lines and usual wards during the COVID-19 epidemic in Wuhan, China	Journal of Pain and Symptom Management / Article	<ul style="list-style-type: none"> Compared to medical staff working on their usual wards for uninfected patients, medical staff working on the COVID-19 front line had a lower frequency of burnout. These results suggest that in the face of the COVID-19 crisis, both front line and usual ward staff should be considered when policies and procedures to support the well-being of health care workers are devised.
10.04.2020	Attending to the Emotional Well-Being of the Health Care Workforce in a New York City Health System During the COVID-19 Pandemic	Academic medicine : journal of the Association of American Medical Colleges / Article	<ul style="list-style-type: none"> The task force identified 3 priority areas central to promoting and maintaining the well-being of the entire Mount Sinai Health System (MSHS) workforce during the pandemic: meeting basic daily needs; enhancing communications for delivery of current, reliable, and reassuring messages; and developing robust psychosocial and mental health support options.

13.04.2020	We're staying at home. Association of self-perceptions of aging, personal and family resources and loneliness with psychological distress during the lock-down period of COVID-19	The journals of gerontology. Series B, Psychological sciences and social sciences / Article	<ul style="list-style-type: none"> • Study of 1310 Spanish people (age range: 18-88 years) during a lock-down period at home. Data suggest that it is not chronological age itself but having negative self-perceptions of aging that is related to loneliness and psychological distress in people during the lock-down. • Older adults with positive self-perceptions of aging seem to be more resilient to loneliness and distress during the COVID-19 outbreak.
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Miscellaneous

Publication Date	Title/URL	Journal/ Article type	Digest
15.04.2020	Clinician Education and Adoption of Preventive Measures for COVID-19: A Survey of a Convenience Sample of General Practitioners in Lombardy, Italy	Annals of Internal Medicine / Letter	<ul style="list-style-type: none"> • Study assessing challenges faced by GPs in the prevention and management of COVID-19 in Lombardy, Italy. • One in 5 GPs in the study had suggestive symptoms and less than half received PPE from the local health department. • Specific education on prevention and management of COVID-19 was an unmet need: More than two thirds of GPs had to self-educate because of lack of training.
09.04.2020	COVID-19 as a factor influencing air pollution?	Environmental pollution / Letter to the editor	<ul style="list-style-type: none"> • In addition to the reduced number of deaths due to air pollution, the reduction in air pollution itself could also have positive benefits in reducing preventable non communicable diseases.
10.04.2020	COVID-19 and the liver: the perils of non-peer reviewed science in times of a pandemic	Gastroenterology / Letter to the editor	<ul style="list-style-type: none"> • The authors review the issue of a non-peer-reviewed study that has been widely references in a number of opinions and original contributions, and ask that scientists and researchers become more efficient in navigating the current scientific standards, i.e. be more willing to and expedite in reviewing manuscripts, but resist the temptation to bypass these standards, as doing so will further contribute to misinformation and misguide.
14.04.2020	Not Dying Alone - Modern Compassionate Care in the Covid-19 Pandemic	The New England journal of medicine / Perspective	<ul style="list-style-type: none"> • The authors discuss the dilemma of providing compassionate care while reducing the risk of COVID-19 transmission, including commenting on creative workarounds to allow patients to speak to family using technology.

Modelling

Publication Date	Title/URL	Journal/ Article type	Digest
14.04.2020	Projecting the transmission dynamics of SARS-CoV-2 through the postpandemic period	Science / Report	<ul style="list-style-type: none"> • Estimates of seasonality, immunity, and cross-immunity for betacoronaviruses OC43 and HKU1 from time series data from the USA were used to inform a model of SARS-CoV-2 transmission. • It is projected that recurrent wintertime outbreaks of SARS-CoV-2 will probably occur after the initial, most severe pandemic wave. • A key metric for the success of social distancing is whether critical care capacities are exceeded, and prolonged or intermittent social distancing may be necessary into 2022 to prevent this.
11.04.2020	Intervention strategies against COVID-19 and their estimated impact on Swedish healthcare capacity	medRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> • The results of this study predict that, under conservative epidemiological parameter estimates, current measures in Sweden will result in at least 40-fold over-subscription of pre-pandemic Swedish intensive care capacity, with 15.8 percent of Swedish healthcare workers unable to work at the pandemic peak. Modifications to ICU admission criteria from international norms would further increase mortality.
04.04.2020	Adaptive cyclic exit strategies from lockdown to suppress COVID-19 and allow economic activity	medRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> • Use mathematical models to show that a cyclic schedule of 4-day work and 10-day lockdown, or similar variants that can be adapted in response to epidemiological observations, can in certain conditions suppress the epidemic while providing part-time employment.
25.03.2020	Outbreak analysis with a logistic growth model shows COVID-19 suppression dynamics in China	medRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> • Modelling study demonstrating that suppression of the disease in China has been successful, demonstrating that suppression is a viable strategy to contain SARS-CoV2.
12.04.2020	Challenges in control of Covid-19: short doubling time and long delay to effect of interventions	medRxiv (not peer-reviewed) / Article	<ul style="list-style-type: none"> • The authors estimate from European data that COVID-19 cases are expected to double initially every three days, until social distancing interventions slow this growth, and that the impact of such measures is typically only seen nine days - i.e. three doubling times - after their implementation.

Guidance, consensus statements and hospital resources

Publication Date	Title/URL	Journal/ Article type
13.04.2020	Pediatric Airway Management in COVID-19 patients - Consensus Guidelines from the Society for Pediatric Anesthesia's Pediatric Difficult Intubation Collaborative and the Canadian Pediatric Anesthesia Society	Anesthesia and analgesia / Article
08.04.2020	COVID-19 and haemostasis: a position paper from Italian Society on Thrombosis and Haemostasis (SISIT)	Blood transfusion / Position paper
13.04.2020	A framework for open tracheostomy in COVID-19 patients	Clinical otolaryngology / Letter

08.04.2020	Anesthetic Management of Endovascular Treatment of Acute Ischemic Stroke During COVID-19 Pandemic: Consensus Statement from Society for Neuroscience in Anesthesiology & Critical Care (SNACC) Endorsed by Society of Vascular & Interventional Neurology (SVIN), Society of NeuroInterventional Surgery (SNIS), Neurocritical Care Society (NCS), and European Society of Minimally Invasive Neurological Therapy (ESMINT)	Journal of neurosurgical anesthesiology / Consensus statement
15.04.2020	Global guidance for surgical care during the COVID-19 pandemic	The British journal of surgery / Review
14.04.2020	Preliminary recommendations for lung surgery during COVID-19 epidemic period	Thoracic cancer / Commentary
13.04.2020	Adapting palliative radiation therapy for bone metastases during the Covid-19 pandemic: GEMO position paper	Journal of bone oncology / Article
13.04.2020	Guidelines for Ambulatory Surgery Centers for the Care of Surgically Necessary/Time-Sensitive Orthopaedic Cases during the COVID-19 Pandemic	The Journal of bone and joint surgery / Article
10.04.2020	COVID-19 - Considerations for the paediatric rheumatologist	Clinical immunology / Article
14.04.2020	Blueprint for Restructuring a Department of Surgery in Concert With the Health Care System During a Pandemic: The University of Wisconsin Experience	JAMA Surgery / Special Communication
10.04.2020	COVID-19 - A Guide to Rapid Implementation of Telehealth Services: A Playbook for the Pediatric Gastroenterologist	Journal of pediatric gastroenterology and nutrition / Invited commentary
11.04.2020	Collaborative Multi-Disciplinary Incident Command at Seattle Children's Hospital for Rapid Preparatory Pediatric Surgery Countermeasures to the COVID-19 Pandemic	Journal of the American College of Surgeons / Article
15.04.2020	COVID-19 Preparedness in Michigan Nursing Homes	Journal of the American Geriatrics Society / Letter
15.04.2020	Face the COVID-19 emergency: measures applied in an Italian Dermatologic Clinic	Journal of the European Academy of Dermatology and Venereology : JEADV
13.04.2020	Early Impact of COVID-19 on Transplant Center Practices and Policies in the United States	American journal of transplantation
15.04.2020	Benefits, Open questions and Challenges of the use of Ultrasound in the COVID-19 pandemic era. The views of a panel of worldwide international experts	Ultraschall in der Medizin / Editorial
13.04.2020	Coronavirus disease 2019: Utilizing an ethical framework for rationing absolutely scarce healthcare resources in transplant allocation decisions	American journal of transplantation / Viewpoint
12.04.2020	Containing COVID-19 in the emergency room: the role of improved case detection and segregation of suspect cases	Academic Emergency Medicine / Article
08.04.2020	Determining Urgent/Emergent status of Gastrointestinal (GI) Endoscopic Procedures in an Ambulatory Care Setting during the Coronavirus Disease of 2019 (COVID-19) Pandemic: Additional Factors that need to be considered	Anesthesia and Analgesia / Article ahead of print

Overviews, comments and editorials

Publication Date	Title/URL	Journal/ Article type
15.04.2020	The UK Coronavirus Cancer Monitoring Project: protecting patients with cancer in the era of COVID-19	The Lancet Oncology / Comment
15.04.2020	COVID-19 and the coming epidemic in US immigration detention centres	The Lancet Infectious Diseases / Comment
15.04.2020	Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science	The Lancet Psychiatry / Position paper
15.04.2020	Covid-19 (Coronavirus): Challenges for Psychiatry	The British journal of psychiatry : the journal of mental science / Editorial
15.04.2020	Hydroxychloroquine in the management of critically ill patients with COVID-19: the need for an evidence base	The Lancet Respiratory Medicine / Comment
15.04.2020	Impact of COVID-19 on people with cystic fibrosis	The Lancet Respiratory Medicine / Correspondence
14.04.2020	Outcomes in Patients with COVID-19 Infection Taking ACEI/ARB	Current cardiology reports / Editorial
15.04.2020	Droplets and Aerosols in the Transmission of SARS-CoV-2	The New England journal of medicine / Correspondence
15.04.2020	COVID-19: What Paramedics Need to Know!	Canadian Journal of Emergency Medicine / Comment
13.04.2020	A Call to Action: Novel Ways that Hepatologists Can Contribute to Patient Care During the COVID-19 Pandemic	Digestive diseases and sciences / Correspondence
15.04.2020	Failing Another National Stress Test on Health Disparities	JAMA / A Piece of My Mind
15.04.2020	COVID-19 and African Americans	JAMA / Comment
15.04.2020	Comment on: Cutaneous manifestations in COVID-19: a first perspective. Safety concerns of clinical images and skin biopsies	Journal of the European Academy of Dermatology and Venereology / Comment
15.04.2020	Coronavirus infections and type 2 diabetes-shared pathways with therapeutic implications	Endocrine reviews / Article
10.04.2020	Care of the Pregnant Woman with COVID-19 in Labor and Delivery: Anesthesia, Emergency cesarean delivery, Differential diagnosis in the acutely ill parturient, Care of the newborn, and Protection of the healthcare personnel	American journal of obstetrics and gynecology / Article
13.04.2020	Call to action for the cardiovascular side of COVID-19	European heart journal / Article
13.04.2020	COVID-19 and neuromuscular disorders	Neurology / Article
15.04.2020	Does COVID-19 Disprove the Obesity Paradox in ARDS?	Obesity / letter

15.04.2020	Concerns related to COVID-19 pandemic among patients with Inflammatory Bowel Disease, and its influence on patients management	European journal of clinical investigation / Report
11.04.2020	The daily impact of COVID-19 in gastroenterology	United European Gastroenterology Journal / Review article
13.04.2020	Initiating adjunct low dose-hydroxyurea therapy for stroke prevention in children with SCA during the COVID-19 pandemic	Blood / Article
09.04.2020	Covid-19 and its impact on nephropathic patients: the experience at Ospedale "Guglielmo da Saliceto" in Piacenza	Giornale italiano di nefrologia / Article
26.03.2020	The COVID-19 pandemic: implications for the cytology laboratory	Journal of the American Society of Cytopathology / Review
15.04.2020	Abnormal coagulation parameters are associated with poor prognosis in patients with novel coronavirus pneumonia	Journal of thrombosis and haemostasis / Letter
10.04.2020	COVID-19 or Lung Cancer: what should we treat?	Journal of Thoracic Oncology / Letter to the editor

Produced by the PHE COVID-19 Literature Digest Team

Bláthnaid Mahon, Caroline De Brún, Nicola Pearce-Smith, Ruth Muscat, Rachel Gledhill, Emma Farrow, Cath Hayes