

COVID-19 Evidence Bulletin

8th March 2021

Details of new guidance and evidence relating to the response to COVID-19. Please check SaTH, NHS and Government guidance in conjunction with these resources where necessary.

Advance Care Plans

Anticipatory care planning in the context of COVID-19 [Health Improvement Scotland]

[A range of resources that have been developed since the outset of the pandemic in March 2020 and include: information on ACP in the context of COVID-19; the Essential ACP - a tool to support rapid production and sharing of an ACP during the COVID-19 pandemic; guidance on developing Anticipatory Care Plans for people with Dementia. These resources are intended to be used in conjunction with health and social care staff, and are not designed for use by individuals and their families.]

Available [here](#)

Asthma

Risks of and from SARS-COV-2 (COVID-19) infection in people with asthma [Centre for Evidence-Based Medicine]

[This review presents a summary of the latest research evidence on the effects of COVID-19 in people with asthma (PWA).]

Available [here](#)

Cardiovascular Care

Arterial and venous thromboembolism in COVID-19: a study-level meta-analysis [Tan BK. *Thorax*].

[Patients admitted in the ICU for severe COVID-19 had a high risk of VTE. Conversely, further studies are needed to determine the specific effects of COVID-19 on the risk of ATE or VTE in less severe forms of the disease.]

Available [here](#)

The Incidence, Prognosis and Laboratory Indicators of Venous Thromboembolism in Hospitalized Patients with COVID-19: A Systematic Review and Meta-analysis [Liu Y. *Journal of Vascular Surgery. Venous and Lymphatic Disorders*]

[The occurrence of VTE, DVT, and PE is substantial among hospitalized COVID-19 patients, especially severe COVID-19 patients. Severe COVID-19 patients with VTE have significantly higher mortality rate than do patients without VTE. Increased values of D-dimer may be indicators of the occurrence of VTE in COVID-19 patients.]

Available [here](#)

COVID-19 guidance: TOE and stress echo (third wave) [British Society of Echocardiography]

[Earlier guidance has rightly focussed on the risks of potential infection between patients and healthcare staff. It is increasingly important to acknowledge that cardiac conditions themselves are a source of potential morbidity and mortality. The provision of cardiac diagnostics is a vital component of

recognising this risk in individual patients and providing a platform for further treatment to then be put in place, in line with Department of Health and NHS England aims.]

Available [here](#)

Convalescent Plasma

Current views on the potentials of convalescent plasma therapy (CPT) as Coronavirus disease 2019 (COVID-19) treatment: A systematic review and meta-analysis based on recent studies and previous respiratory pandemics [*Reviews in medical virology*]

[Meta-analysis showed reduction of mortality) and higher number of discharged patients in patients receiving CPT compared to standard care alone. A possible mechanism of action is prompt reduction in viral titre.]

Available [here](#)

Diagnosis

Signs and symptoms to determine if a patient presenting in primary care or hospital outpatient settings has COVID-19 [Cochrane Database of Systematic Reviews]

[OBJECTIVES: To assess the diagnostic accuracy of signs and symptoms to determine if a person presenting in primary care or to hospital outpatient settings, such as the emergency department or dedicated COVID-19 clinics, has COVID-19.]

Available [here](#). Last updated 23rd February.

The accuracy of chest CT in the diagnosis of COVID-19: An umbrella review [Centre for Evidence-Based Medicine]

[Chest CT may have a role in the diagnosis of COVID-19 in a limited number of hospitalised patients, particularly where initial PCR testing has been inconclusive, or an alternative diagnosis is being considered]

Available [here](#)

Drug Therapy

Chloroquine or hydroxychloroquine for prevention and treatment of COVID-19 [Cochrane Database of Systematic Reviews]

[OBJECTIVES: To evaluate the effects of chloroquine (CQ) or hydroxychloroquine (HCQ) for 1) treating people with COVID-19 on death and time to clearance of the virus; 2) preventing infection in people at risk of SARS-CoV-2 exposure; 3) preventing infection in people exposed to SARS-CoV-2.]

Available [here](#)

Interferon-beta offers promising avenues to COVID-19 treatment: a systematic review and meta-analysis of clinical trial studies [Naunyn-Schmiedeberg's Archives of Pharmacology]

[According to meta-analysis, IFN- β was found to increase the overall discharge rate. The authors findings revealed that early administration of IFN- β in combination with antiviral drugs is a promising therapeutic strategy against COVID-19.]

Available [here](#)

Emergency Care

Remote patient monitoring for ED discharges in the COVID-19 pandemic [Aalam AA. *Emergency Medicine Journal*]

[COVID-19 has had a significant effect on healthcare resources worldwide, with our knowledge of the natural progression of the disease evolving for the individual patient. To allow for early detection of worsening clinical status, protect hospital capacity and provide extended access for vulnerable patients, our emergency department developed a remote patient monitoring programme for discharged patients with COVID-19. T]

Available [here](#)

Health Services

Rapid evaluation of health and care services: planning a sustainable solution for the post-Covid reset. [AHSN Network]

[In the first wave of Covid-19, health and care services innovated and adapted at unprecedented speed to provide care and protect staff and patients during a rapidly developing global pandemic. This paper explores the barriers and facilitators to performing timely, rigorous and effective evaluations of these changes.]

Available [here](#)

Intensive and Critical Care

A simple nomogram for predicting failure of non-invasive respiratory strategies in adults with COVID-19: a retrospective multicentre study [Liu L. *The Lancet Digital Health*]

[Non-invasive respiratory strategies (NIRS) including high-flow nasal cannula (HFNC) and non-invasive ventilation (NIV) have become widely used in patients with COVID-19 who develop acute respiratory failure. We have developed a nomogram and online calculator that can be used to identify patients with COVID-19 who are at risk of NIRS failure. These patients might benefit from early triage and more intensive monitoring.]

Available [here](#)

Long COVID

In the wake of the pandemic: preparing for Long COVID [World Health Organization Regional Office for Europe]

[This policy brief highlights areas where policy-makers can take action to meet the challenge of post-Covid conditions based on what is currently known. It addresses the need for multidisciplinary, multispecialty approaches to assessment and management; development of new care pathways and contextually appropriate guidelines for health professionals; and the creation of appropriate services, including rehabilitation and online support tools.]

Available [here](#)

A Review of Persistent Post-COVID Syndrome (PPCS) [Oronsky B. *Clinical Reviews in Allergy and Immunology*]

[This review explores underlying mechanisms and possible manifestations of persistent post-COVID syndrome, and presents a framework of strategies for the diagnosis and management of patients with suspected or confirmed persistent post-COVID syndrome.]

Available [here](#)

Coronavirus disease 2019 (COVID-19): Evaluation and management of adults following acute viral illness [evidence summary from UpToDate]
Available [here](#). Last updated 3rd March

Mortality

Patient factors and temporal trends associated with COVID-19 in-hospital mortality in England: an observational study using administrative data [Navaratnam AV. *The Lancet Respiratory Medicine*]
[Reductions in the adjusted probability of in-hospital mortality for COVID-19 patients over time might reflect the impact of changes in hospital strategy and clinical processes. The higher mortality rate reported for certain ethnic minority groups in community-based studies compared with our hospital-based analysis might partly reflect differential infection rates in those at greatest risk, propensity to become severely ill once infected, and health-seeking behaviours.]
Available [here](#)

Association between Clinical Frailty Scale score and hospital mortality in adult patients with COVID-19 (COMET): an international, multicentre, retrospective, observational cohort study [Sablerolles RSG. *The Lancet Healthy Longevity*]
[In patients aged 65 years and older, triage decisions are regularly based on degree of frailty measured by the Clinical Frailty Scale (CFS). However, the CFS could also be useful in patients younger than 65 years. The results of this study suggest that CFS score is a suitable risk marker for hospital mortality in adult patients with COVID-19. However, treatment decisions based on the CFS in patients younger than 65 years should be made with caution.]
Available [here](#)

Neurology

Coronavirus disease 2019 (COVID-19): Neurologic complications and management of neurologic conditions [evidence summary from UpToDate]
Available [here](#). Last updated 26th February

Vaccination

Single-dose administration and the influence of the timing of the booster dose on immunogenicity and efficacy of ChAdOx1 nCoV-19 (AZD1222) vaccine: a pooled analysis of four randomised trials [Lancet]
[The results of this primary analysis of two doses of ChAdOx1 nCoV-19 were consistent with those seen in the interim analysis of the trials and confirm that the vaccine is efficacious, with results varying by dose interval in exploratory analyses. A 3-month dose interval might have advantages over a programme with a short dose interval for roll-out of a pandemic vaccine to protect the largest number of individuals in the population.]
Available [here](#)

Information for Healthcare Professionals on COVID-19 Vaccine AstraZeneca [MHRA]
[Updated side effect frequency and efficacy data, including a new table on efficacy by dosing interval in the Information for UK Healthcare Professionals document. A new Annex (Annex 1: Addition of manufacturer and importer) was added to the Conditions of Authorisation document.]
Available [here](#). Last updated 23rd February

Covid-19 Vaccines and Fertility [British Fertility Society]

[This FAQ document from the British Fertility Society and Association of Reproductive and Clinical Scientists addresses questions about Covid-19 vaccines and fertility and confirms that COVID-19 vaccination does not affect fertility.]

Available [here](#)

Vitamins

Effect of a Single High Dose of Vitamin D3 on Hospital Length of Stay in Patients With Moderate to Severe COVID-19: A Randomized Clinical Trial [*JAMA*]

[Among hospitalized patients with COVID-19, a single high dose of vitamin D3, compared with placebo, did not significantly reduce hospital length of stay. The findings do not support the use of a high dose of vitamin D3 for treatment of moderate to severe COVID-19.]

Available [here](#)

Safety and effectiveness of high-dose vitamin C in patients with COVID-19: a randomized open-label clinical trial [European Journal of Medical Research]

[The authors did not find significantly better outcomes in the group who were treated with HDIVC in addition to the main treatment regimen at discharge.]

Available [here](#)

KnowledgeShare Evidence Alerts

KnowledgeShare contains many updates on COVID-19 that can be accessed from the KnowledgeShare website without a password. If you'd like to receive these by email (along with updates on any other topics of interest) please complete the [form](#).

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