



Weekly update

Through our research, community outreach and expert commentary, the University of Birmingham is taking an active role in the fightback against COVID-19. You can read our latest statements and follow our research updates at www.birmingham.ac.uk/coronavirus.

Through Birmingham Health Partners, a strategic alliance between the University and two NHS Foundation Trusts, we are working to support frontline healthcare professionals. For the latest updates visit their [website](#).

Research

New clinical briefings on biomarkers and palliative care released

Researchers from across Birmingham Health Partners are collaborating to analyse and summarise the latest COVID-19 literature to help inform clinical colleagues.



The latest updates focus on biomarkers – the molecules, proteins or characteristics which indicate the presence and severity of disease – and palliative or ‘end-of-life’ care.

An infographic summary of these latest evidence updates can be found in the appendix of this briefing.

Biomarkers evidence update ([More information](#))

Palliative care evidence update ([More information](#))

High doses of vitamin D supplementation has no current benefit in preventing or treating Covid-19

Scientists from the UK, Europe and the USA, including experts from the University of Birmingham, have published a consensus paper warning against high doses of vitamin D supplementation.

According to the study, there is currently insufficient scientific evidence to show vitamin D can be beneficial in preventing or treating Covid-19. Its authors advise that the population adhere to Public Health England guidance on supplementation. ([More information](#))

Migrant sexual violence survivors face global COVID-19 threat

Forced migrant survivors of sexual and gender-based violence (SGBV) face increasingly serious problems – some life-threatening – as a result of the coronavirus pandemic and associated restrictions, a new study reveals.

Researchers found COVID-19’s impact on these people – largely women - and organisations supporting them in the UK, Turkey, Tunisia, Sweden and Australia creates difficulties in daily life that also increase their vulnerability to further abuse and exploitation.

And they are now calling on governments and service providers to take immediate action that ensures forced migrant survivors of SGBV stay as safe as possible during the immediate crisis and beyond.

([More information](#))

COVID-19 disruption will see 28 million surgeries cancelled worldwide

Over 28 million elective surgeries across the globe could be cancelled as a result of the COVID-19 pandemic – leading to patients facing a lengthy wait for their health issues to be resolved, a new study reveals.

The CovidSurg Collaborative has projected that, based on a 12-week period of peak disruption to hospital services due to COVID-19, 28.4 million elective surgeries worldwide will be cancelled or postponed in 2020.

The modelling study, published in the British Journal of Surgery, indicates that each additional week of disruption to hospital services will be associated with a further 2.4 million cancellations.

Led by researchers at the University of Birmingham, the team collected detailed information from surgeons across 359 hospitals and 71 countries on plans for cancellation of elective surgery. This data was then statistically modelled to estimate totals for cancelled surgery across 190 countries. ([More information](#))

Birmingham Health Partners joins ground-breaking new COVID-19 genomic study

University Hospitals Birmingham has begun recruiting COVID-19 patients to participate in a ground-breaking new study of the disease – aiming to identify specific genes that may explain why some people are more affected by the virus than others. The genomic sequencing may also be useful in the search for effective treatments.

The GenOMICC Study Consortium, led by the University of Edinburgh and Genomics England study, will see 170 NHS hospitals including UHB work with researchers to sequence the genomes of 20,000 people who are severely ill with COVID-19. To date, more than 2,000 patients have been recruited to the GenOMICC study, with 88 patients recruited at UHB in the last three weeks. ([More information](#))

Education project launched to understand Birmingham learning at home during COVID-19

The University of Birmingham and Birmingham City Council are working together to study the implications of the shutdown on schools, teachers, pupils and parents due to COVID-19 pandemic. The Birmingham Education and Covid-19 initiative is studying the transition from classes in schools to a wide range of socially distanced learning measures for children and young people across Birmingham and beyond, as well as the imminent return to school-based learning for some pupils. ([More information](#))

Community

University of Birmingham students volunteer to help local NHS partners

Students from the University of Birmingham Medical School have been supporting local NHS partners on the wards, in family liaison, and in research and development.

They have been sharing their experiences in a series of blogs:

- Uchenna Odunukwe shares his experience on Ward 726 at University Hospitals Birmingham ([More information](#))
- Martha Lenaghan talks about being a founding member of the Family Liaison team at University Hospitals Birmingham ([More information](#))
- Lylah Irshad shares her story of assisting with the research effort to counter COVID-19 ([More information](#))



(Above) Medical student Lylah Irshad has been working to support research and development efforts.

Comment

Relighting the economy with heat

Professor Martin Freer, Director of the Birmingham Energy Institute, asks how we can simultaneously address the twin issues of decarbonisation and the post-COVID economic recovery. The answer, he suggests, may lie in heat. ([More information](#))

Furlough vital for mitigating redundancy and health & safety crises

Tony Dobbins, Professor of Employment Relations and HR Management writes how furloughing measures restricting workplace presenteeism during COVID-19 are crucial for combatting both mass redundancies and contagion. ([More information](#))

Contact us

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Twitter: [@BhamPolicy](https://twitter.com/BhamPolicy)

In partnership with



University Hospitals Birmingham
NHS Foundation Trust

Current evidence for potential biomarkers and are not currently clinically approved

= number of people in study



Research Update Biomarkers

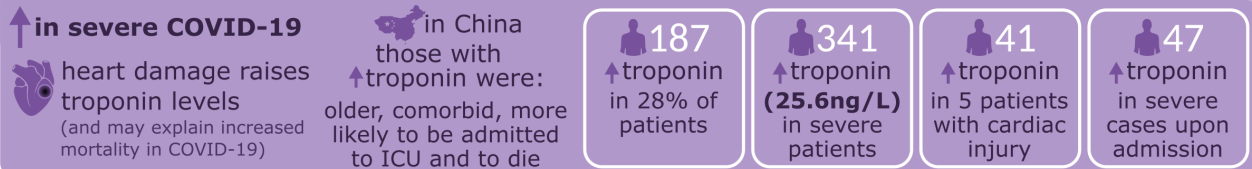
Birmingham Health Partners

Issue#: MAY_V6.03

Date: 05MAY2020

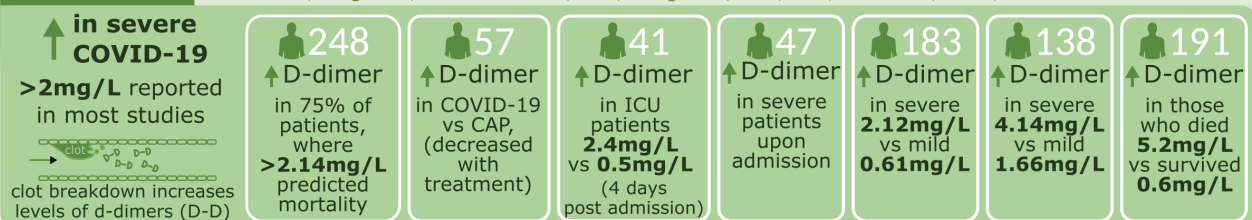
Cardiac troponin

Source: Tersalvi et al., Journal of Cardiac Failure, 2020; Lippi et al., Prog Cardiovasc Dis, 2020; Huang et al., Lancet, 2020; Han et al., medRxiv, 2020; Guo et al., JAMA, 2020



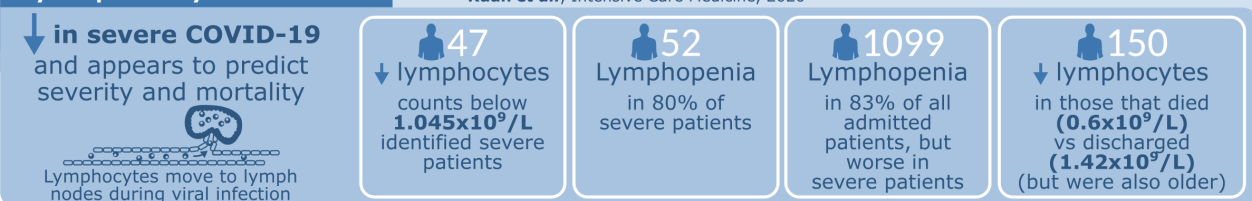
D-dimer

Source: Yao et al., Research Square, 2020; Yu et al., Research Square, 2020; Huang et al., Lancet, 2020; Han et al., medRxiv, 2020; Tang et al., J Thromb Haemost, 2020; Wang et al., JAMA, 2020; Zhou et al., Lancet, 2020



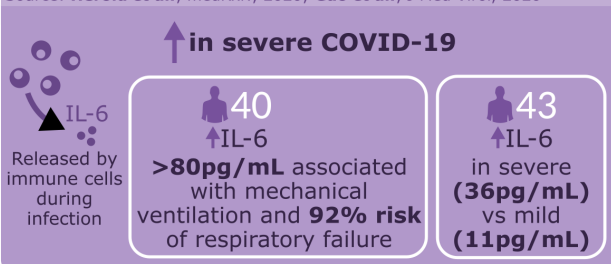
Lymphocyte Count

Source: Han et al., medRxiv, 2020; Yang et al., medRxiv, 2020; Guan et al., New Engl J Med, 2020; Ruan et al., Intensive Care Medicine, 2020



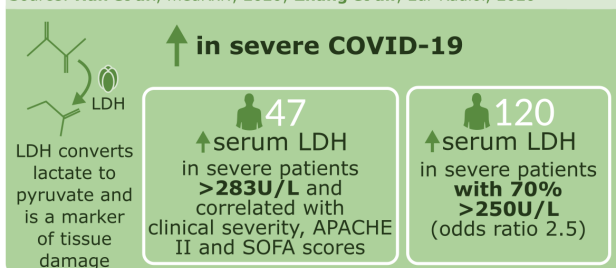
Blood IL-6

Source: Herold et al., medRxiv, 2020; Gao et al., J Med Virol, 2020



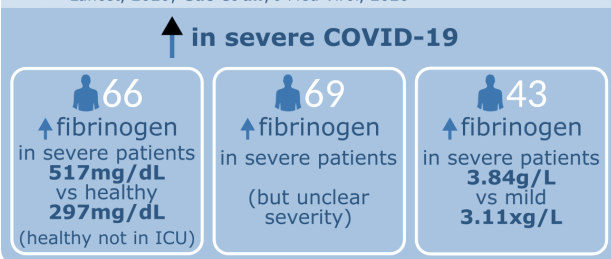
LDH

Source: Han et al., medRxiv, 2020; Zhang et al., Eur Radiol, 2020



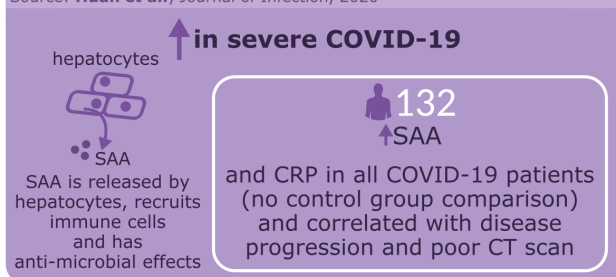
Fibrinogen

Source: Spiezia et al., Coagulation and Fibrinolysis, 2020; Wang et al., Lancet, 2020; Gao et al., J Med Virol, 2020



Serum Amyloid A

Source: Huan et al., Journal of Infection, 2020

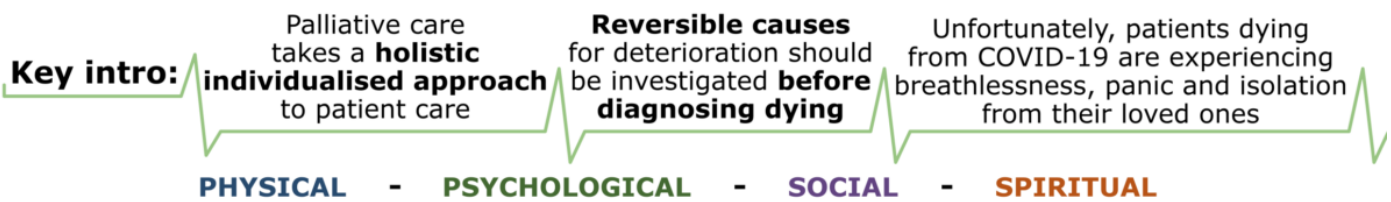


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Generated in collaboration with researchers at the University of Birmingham. This is not a clinical guideline or SOP. This is a summary of the latest evidence available internationally on the management, treatment and science underlying COVID-19 disease presented in accompanying report.



End of Life Care



PHYSICAL

Deterioration can be **rapid** - usually over a few hours
Consider ceiling of treatment including DNACPR

Symptoms

Patients dying with COVID-19 are likely to experience

- ☞ Breathlessness
- ☞ Cough
- ☞ Anxiety
- ☞ Delirium
- ☞ Fever

Non-pharmacological management

- ☞ Keep the room cool
- ☞ Reposition the patient e.g. sit upright
- ☞ Encourage relaxation and breathing techniques
- ☞ **Fans must not be used** as they increase aerosol spread of the virus

Pharmacological management

- ☞ **Is the patient benefiting from any oxygen prescribed?**
If not, down titrate in response to symptoms (not oxygen saturation) and aim to reduce to a flow rate compatible with nasal cannulae ($\leq 4\text{L/min}$)
- ☞ **Prescribe anticipatory PRN medications** via the subcutaneous route. Titrate according to response
- ☞ These medications can be given as a **continuous drug infusion** (e.g. syringe driver) if someone is rapidly deteriorating or requires repeated bolus doses
- ☞ If excess symptom burden and rapid deterioration over hours, **consider starting a continuous drug infusion pre-emptively** (i.e. when either no or only very few PRN doses given)



PSYCHOLOGICAL

- ☞ Explore **ideas, concerns and expectations** with the patient sensitively
- ☞ Ask **open questions**
- ☞ Acknowledge any anxieties around diagnosis and prognosis of COVID-19



SOCIAL

- ☞ Find out **who is important** to the patient
- ☞ Gain consent, if possible, to update them over the phone
- ☞ Explore **preferred place of death** with the patient and, if rate of deterioration allows, **consider fast-track discharge** home or to hospice



SPIRITUAL

- ☞ Find out what is important to the patient and **what gives them hope**
- ☞ Ask about **religious needs**
- ☞ Consider involving **chaplaincy services**



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The Vice-Chancellor's Great Debate

**Trolls, flat-earthers and fake news purveyors:
What are the challenges we face in trusting social media?**

WATCH ON YOUTUBE - 19:00 WEDNESDAY 27 MAY

Social media has grown rapidly since the early 2000s and there are now an estimated 3.5 billion users worldwide. These online platforms have helped people stay in touch, make connections and share experiences. They have also helped give a voice to people who may not have had the opportunity to speak out before. And yet, there is a dark side to social media.

The COVID-19 pandemic has shown how misinformation can spread quickly and cause real harm. The growth of fake news, combined with increasing distrust some have of conventional news sources, can leave us open to manipulation that affects our day-to-day lives and even national political campaigns. Critics also highlight the prevalence of online abuse, particularly – but by no means exclusively – targeted at women and ethnic minorities.

The panel (left to right): Anne McElvoy (Senior Editor, The Economist), **Will Moy** (Chief Executive, Full Fact), **Ritula Shah** (Debate Chair and presenter of BBC Radio 4 The World Tonight), **Isabel Oakeshott** (political journalist and commentator) and **Professor Alice Roberts** (Professor of Public Engagement in Science, University of Birmingham)

