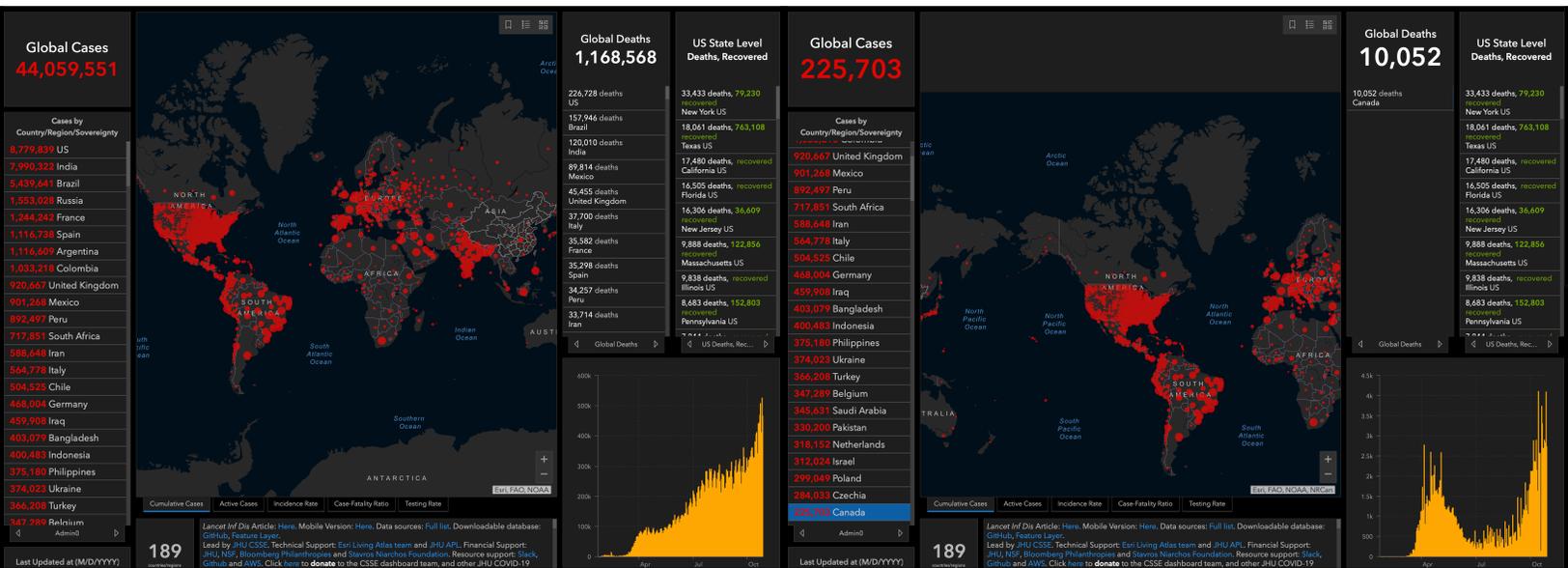
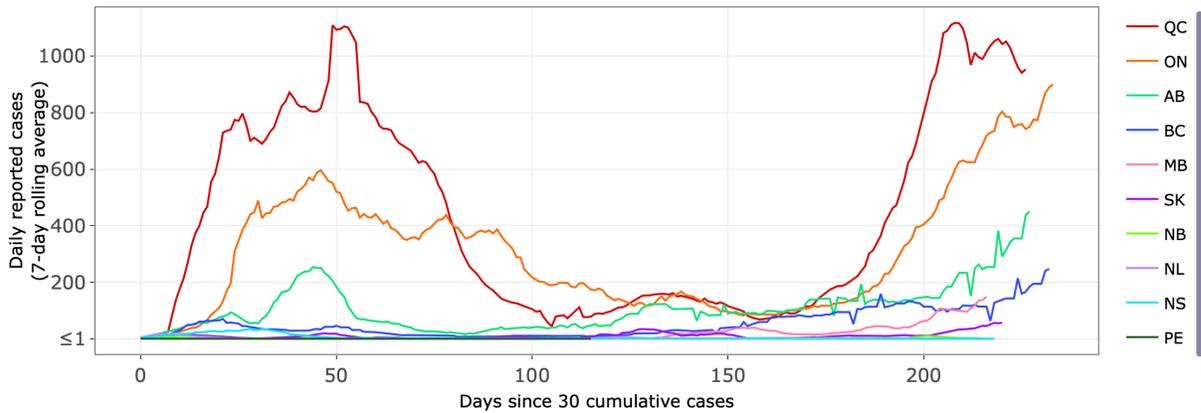


BC Critical Care Network Update - October



Daily reported cases by province (7-day rolling average)

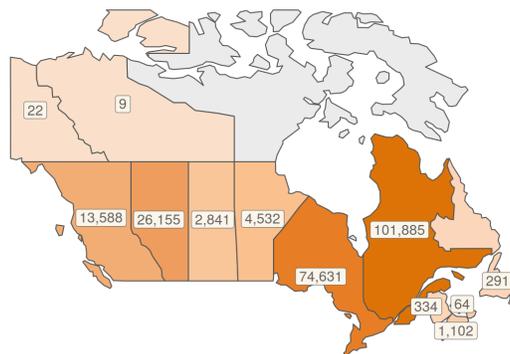


225,467 (2,721 new) Reported cases	28,961 (Change: +537) Active cases	1,157 (Change: +17) Hospitalized	186,464 (2,158 new) Total recovered	10,042 (26 new) Total deaths	10,142.9k (53,532 new) Total tested
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Last updated: 2020-10-27 21:40 EDT

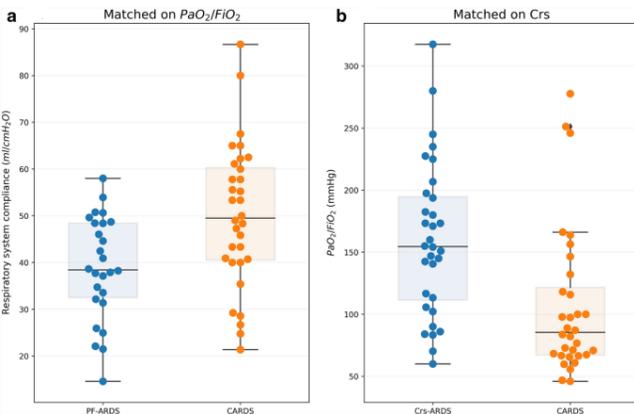
Daily update notes (click + to expand)

Reported cases are cumulative and include both confirmed and presumptive positive cases. Repatriated cases are included in the total but not shown in the map below.



Not shown: repatriated cases (n=13).

COVID LITERATURE



IS COVID-19 ARDS Different? The debate continues

[With this case-control matching of 32 COVID-19](#) patients to “traditional” ARDS patients found that when controlled for compliance, PF ratios are lower in CARDS patients, when matched for PF ratio, Compliance was higher in CARDS.

COVID Intubation and aerosolization

[These authors](#) explored aerosolization rates with AGMP, specifically around intubation and extubation.

Aerosol Generation and Respiratory Support: Its about the cough not the flow

[In this exploration of aerosol dispersion](#), the use of HFNC and NIV respiratory support DID NOT increase aerosol dispersion when used in a negative pressure room.

In-Hospital Cardiac Arrest outcomes in COVID-19 patients

[In the retrospective cohort](#) in southwestern Georgia, 63/1094 (5.7%) hospitalized COVID-19 patients suffered witness cardiac arrest (mainly PEA or systole). They report 100% mortality.

Tocilizumab no so Bueno

These three articles published show no clinical benefit of touch in the [US](#), [Italy](#), and [France](#). These findings were also corroborated in the [NEJM](#) article of a RCT.

A quantitative evaluation of aerosol generation during tracheal intubation and extubation



Both tracheal intubation and extubation produce less aerosol than voluntary coughing.



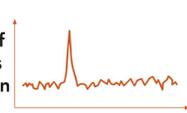
For the sequence of tracheal intubation, the concentration of aerosol generated is several orders of magnitude less than a single cough.

There were no increases in aerosolised particles above the patient's face during anaesthesia, face-mask ventilation and airway suctioning.



During tracheal extubation, aerosol concentration was greater than for intubation, but substantially less than a single cough.

A cough event was noted clinically in 50% of extubations and this was frequently detected as an aerosol spike.



Extubation cough aerosol was transient and only detectable for approximately 5 seconds.

There were reduced particle numbers detected behind the patient's head compared to above their airway.



The process of elective tracheal intubation produces a barely recordable increase in aerosol

Our results are at odds with previous retrospective evidence that was used to designate tracheal intubation as an aerosol-generating procedure.



These results should help inform future airborne prevention PPE guidelines by providing evidence on the relative risk of aerosol

Brown J, Gregson FKA, Shrimpton A, et al. A quantitative evaluation of aerosol generation during tracheal intubation and extubation. *Anaesthesia* 2020 Epub 6 Oct.

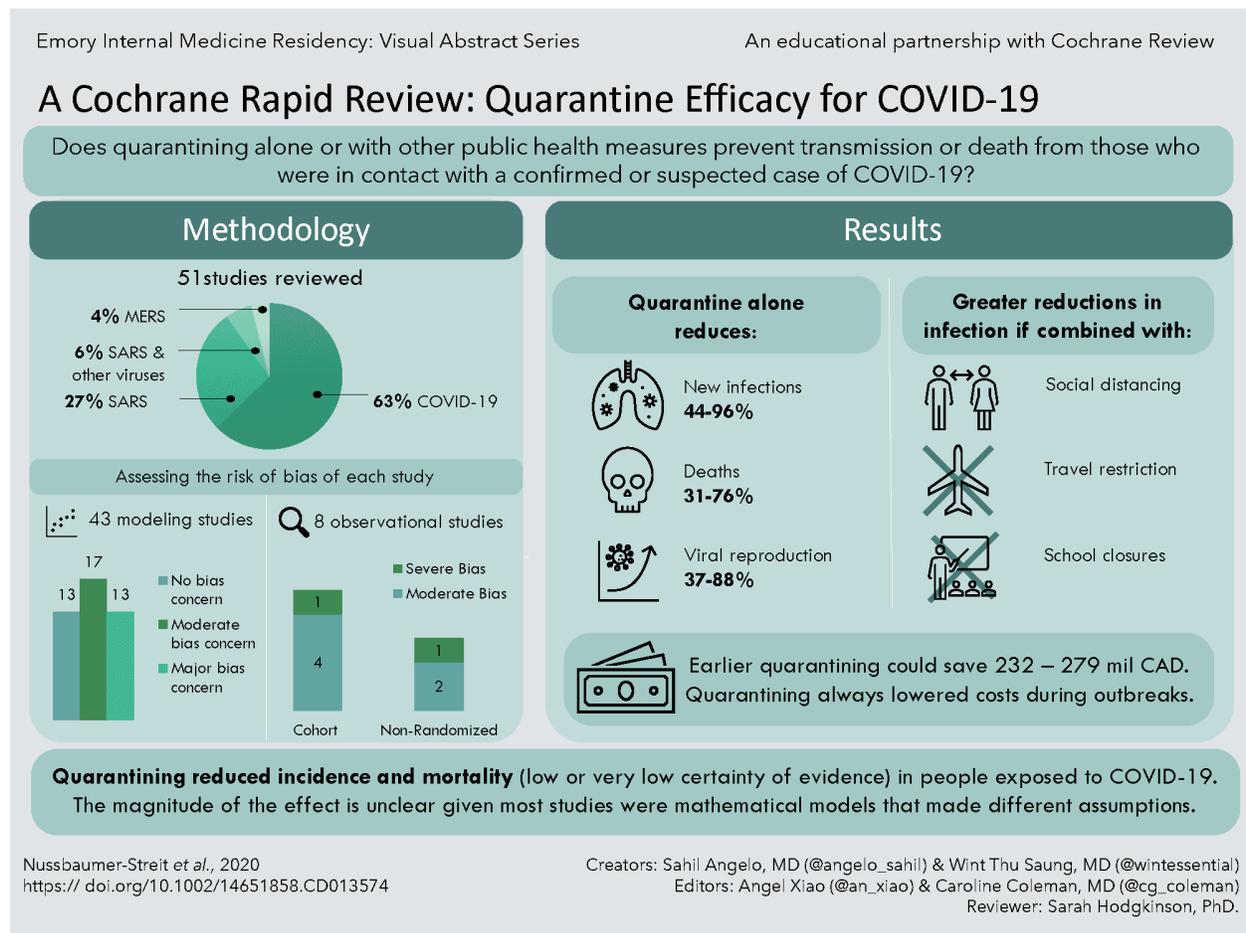
<https://onlinelibrary.wiley.com/doi/full/10.1111/anae.15292>

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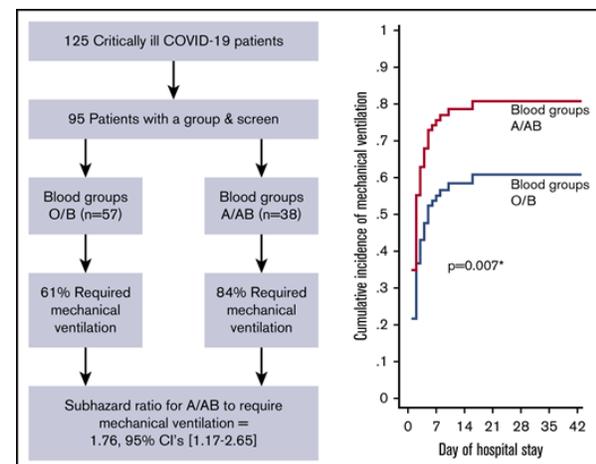
Impact of Quarantine on COVID-19 population outcomes

[This Cochrane review](#) looked at the use of quarantine, or quarantine plus other healthcare interventions at reducing new infections, deaths and viral reproduction.



Blood type and COVID-19 outcomes

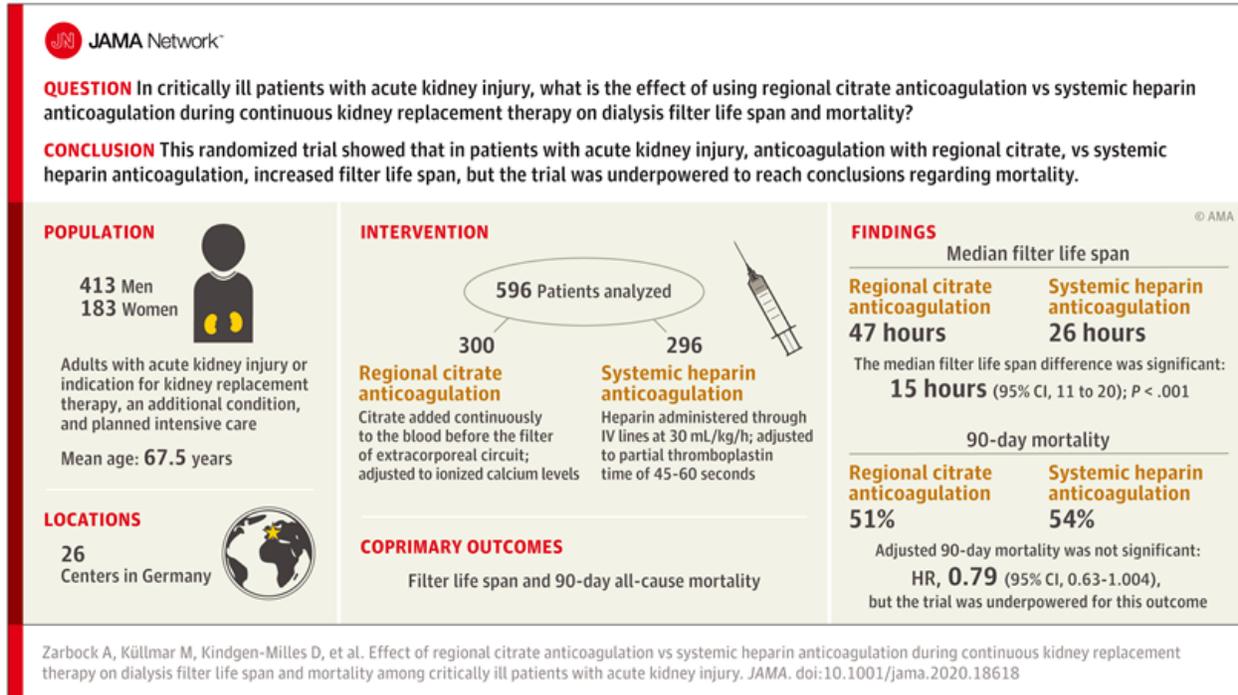
[In this article](#) our local colleagues add to the debate around potential association of blood type and outcomes in COVID-19



Non Covid Literature

CRRT and regional anticoagulation

[In this RCT](#), comparing regional citrate and heparin

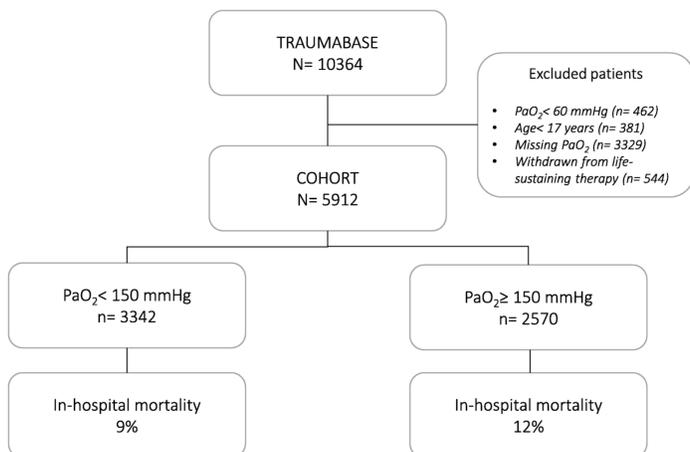


Hyperoxia: Not always a bad thing

With the discussions fostered this year around ICU-Rix and as we await MEGA-Rox, [this French Cohort](#) adds another discussion point around titrating oxygen in critically ill patients. In the majority of male, and high predominance of TBI patients, Hyperoxia was associated with LESS mortality.

Fig. 1

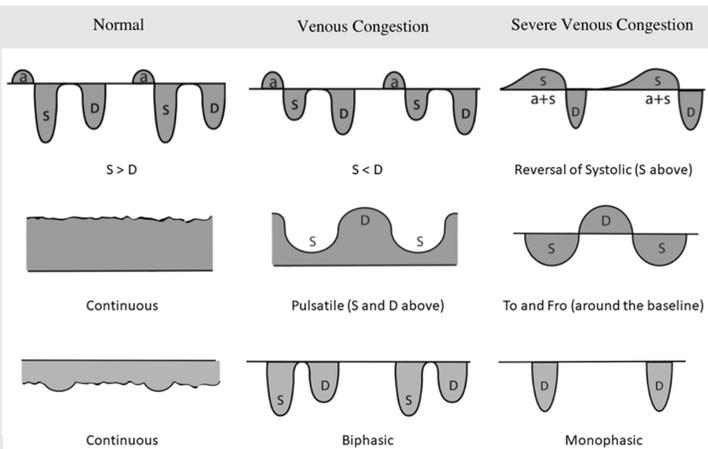
From: [Early hyperoxemia is associated with lower adjusted mortality after severe trauma: results from a French registry](#)



Flowchart of the included trauma patients

Venous doppler to predict AKI in the ICU

Watch this space, as VEXus is being developed. [In this prospective observational study](#), Hepatic Vein abnormalities were found to be predictive for acute kidney injury thought to be secondary to venous congestion.



Sub-Costal TAPSE = A4C TAPSE

[In this article](#), a nice comparison of acquiring TAPSE for evaluation of RV systolic function.

Timing of intubation in Guillain Barres

[In this article](#): authors compared intubating early in this patient population if they presented with swallowing difficulty, vs standard intubation indications. There was no difference in the incidence of pneumonia.

Melatonin for all?

[In this multi centre RCT](#) of 203 patients in ICU, melatonin use (oral 10mg) statistically improved the rate of very good sleep (46% vs 34%), as well as decreased the rate of very poor sleep (3% vs 15%)

ECCOR for Status Asthmaticus

[In this 26 patient series](#) (the largest to date - Columbia NYC) survival to discharge was 100%, with 77% being successfully extubated while still on ECCOR.

Dexamethasone and pre term birth

[NEJM](#) published a nice RCT that informs practise If you take care of sick mothers who are GA 26 weeks -33 weeks and are at risk for preterm birth. Dexamethasone 6mg Q12 hrs was associated with less neonatal death, stillbirth or maternal infection.