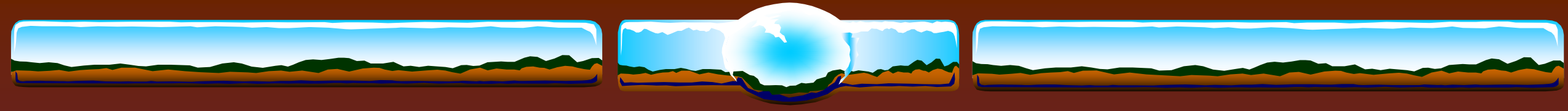




COVID-19 Clinical Update

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Disclosures

Virology

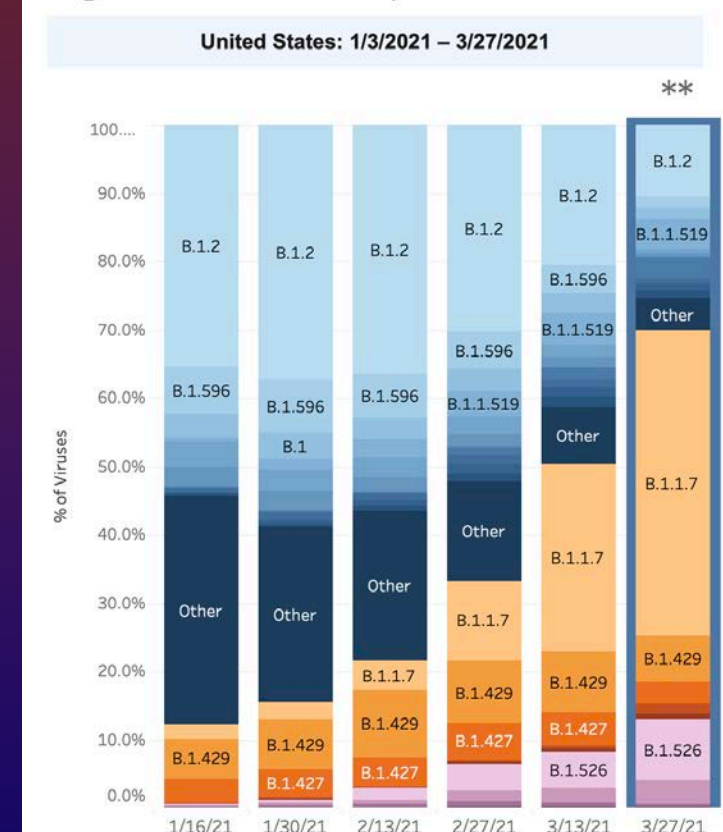
SARS-CoV-2 Variants

- ❖ UK Variant B.1.1.7 dominates!
- ❖ Minimal impact on monoclonal antibody neutralization
- ❖ Minimal impact on post vaccination sera neutralization
- ❖ Infection rate R_T 1.35 x increased
- ❖ No change severity or reinfection
- ❖ No increase hospitalization/death

[https://doi.org/10.1016/S2468-2667\(21\)00055-4](https://doi.org/10.1016/S2468-2667(21)00055-4)

[https://doi.org/10.1016/S1473-3099\(21\)00170-5](https://doi.org/10.1016/S1473-3099(21)00170-5)

Weighted Estimates of Proportions of SARS-CoV-2 L



<https://covid.cdc.gov/covid-data-tracker/#variant-proportions>



Virology

SARS-CoV-2 Variants: India

- ❖ UK B.1.1.7 Variant predominates in Punjab
- ❖ New Variant B.1.617 predominates in Maharashtra
 - ❖ Contains E484Q (SA codon) and L452R (CA mutation)
 - ❖ Found in over 20 countries worldwide
 - ❖ Case reported in San Francisco, Washington and Michigan
 - ❖ Covaxin and Covishield (AZ) provide protection in preliminary reports

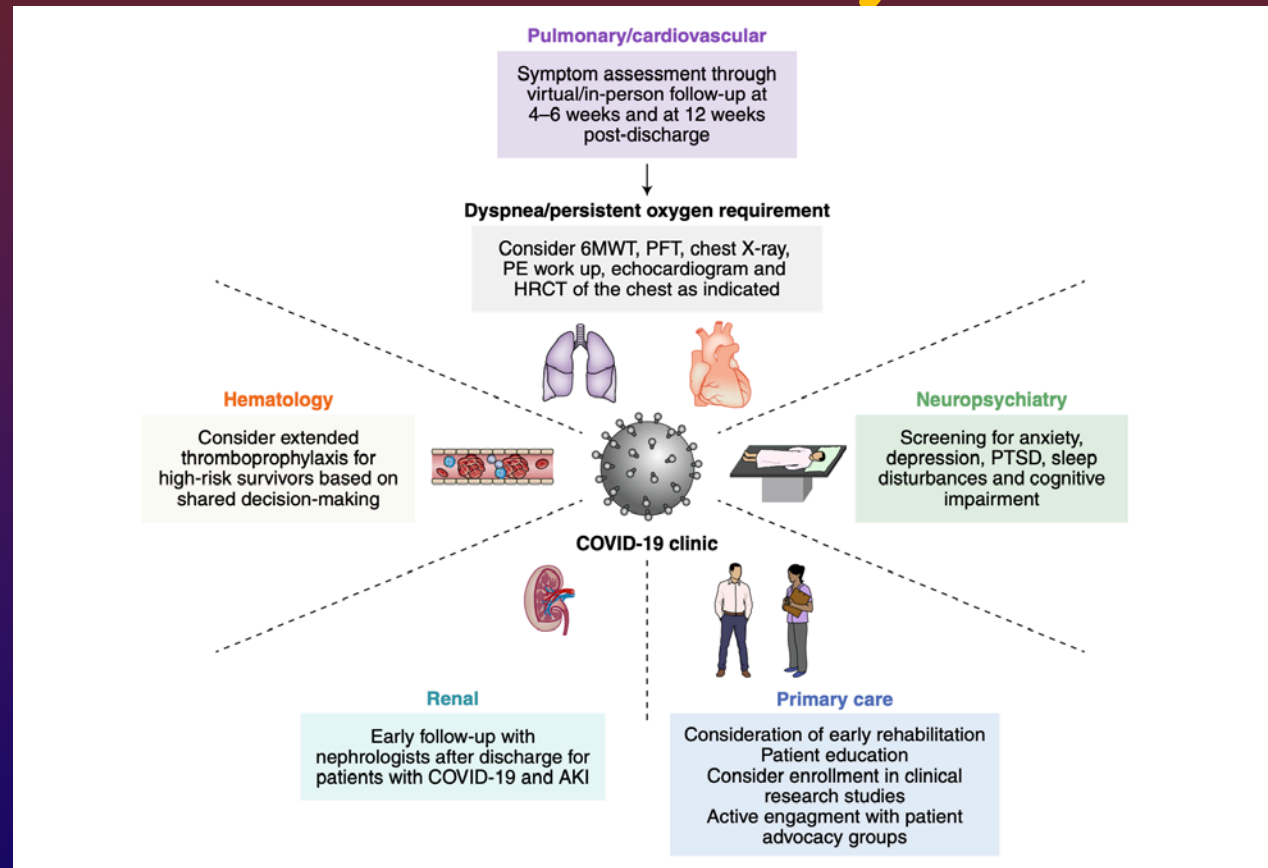
<https://www.nature.com/articles/d41586-021-01059-y>

<https://www.biorxiv.org/content/10.1101/2021.04.22.440932v1>

COVID-19 Clinical Presentation

Nature Medicine Review by Nalbandian et al

Read me!





COVID-19 Treatment

Monoclonal Antibodies

- ❖ **NIH recommends Monoclonal Ab Rx for outpatients with mild-mod COVID-19 at high risk**
 - ❖ BAM 700 mg plus ETE 1400 mg or Casirivimab 1200 mg plus Imdevimab 1200 mg
 - ❖ Start Rx ASAP after positive SARS-CoV-2 Ag or NAAT and within 10 days of onset of symptoms
 - ❖ No comparative data to recommend one combo over the other
 - ❖ E484K mutation weakens the effect of BAM and to a lesser extent ETE and CAS (Brazilian Variant and New York Variant)
 - ❖ L452R mutation strongly weakens the effect of BAM and modestly to BAM-ETE in vitro. (California Variant)
 - ❖ Some panel members recommend CAS-IMD for patients in regions with known resistance in vitro
 - ❖ **Do not use BAM monotherapy** (EUA taken down)
 - ❖ **Do not use Monoclonal Abs for inpatients with COVID-19** unless they are there for another reason

<https://www.covid19treatmentguidelines.nih.gov/anti-sars-cov-2-antibody-products/anti-sars-cov-2-monoclonal-antibodies/>

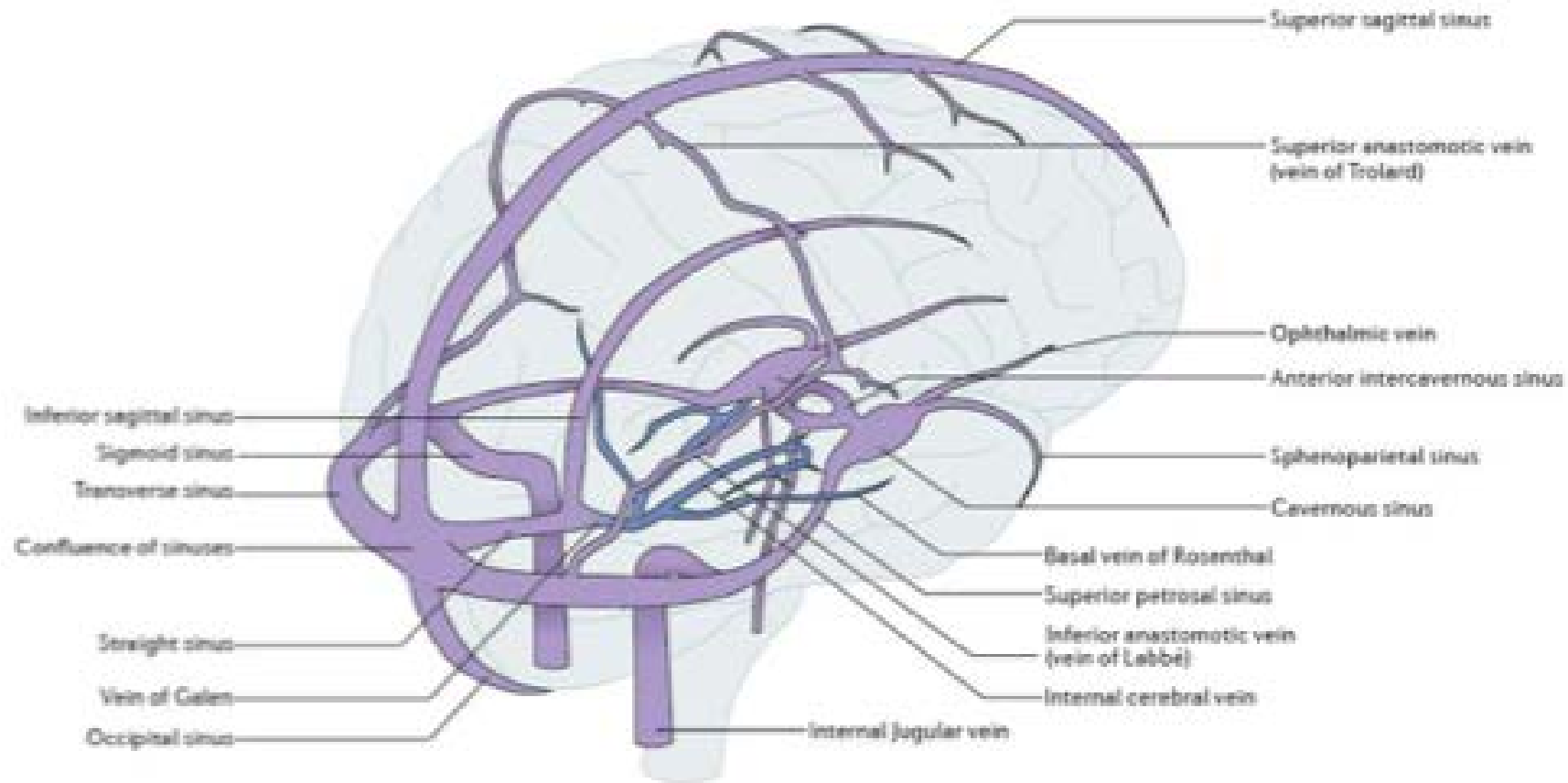


Figure 1 | **Anatomy of the cerebral venous system.** Diagram showing the main components of the cerebral venous system. Blue vessels represent the deep venous system.



COVID-19 Prevention

Johnson and Johnson Vaccine

- ❖ FDA temporarily put the J and J vaccine on “pause” 4/13-4/23/2021
 - ❖ 6 patients reported with central venous sinus/mesenteric/leg vein thrombosis
 - ❖ All 6 were women aged 18-48
 - ❖ 15 cases were detected in total as of 4/23/2021
 - ❖ 2 on OCPs, 0 pregnant, 7 obese
 - ❖ Had severe HA, abdominal pain, N/V, weakness, speech difficulty, LOC, seizures
 - ❖ Associated with severe thrombocytopenia and anti platelet Factor 4 antibodies
 - ❖ Recommended Rx: non heparin anticoagulation and IG
 - ❖ Avoid heparin and platelets





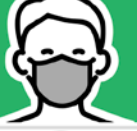







J and J Vaccine ACIP/FDA conclusions 4/23/2021

- ❖ Use of the Janssen COVID-19 Vaccine should be resumed in the US
- ❖ The FDA and CDC have confidence that this vaccine is **safe and effective** in preventing COVID-19.
- ❖ The FDA has determined that the vaccine's **benefits outweigh its known and potential risks** in individuals 18 years of age and older.
- ❖ At this time, the available data suggest that the **chance of TTS occurring is very low**
- ❖ **Health care providers** administering the vaccine and **vaccine recipients** or their caregivers should review the Janssen COVID-19 Vaccine Fact Sheet for Healthcare Providers Administering Vaccine (Vaccination Providers) and Fact Sheet for Recipients and Caregivers



















Infection Prevention

Fully Vaccinated People Outdoors

		Unvaccinated People	Your Activity	Fully Vaccinated People
		Outdoor		
Safest			Walk, run, wheelchair roll, or bike outdoors with members of your household	
			Attend a small, outdoor gathering with fully vaccinated family and friends	
			Attend a small, outdoor gathering with fully vaccinated and unvaccinated people	
Less Safe			Dine at an outdoor restaurant with friends from multiple households	
	Least Safe		Attend a crowded, outdoor event, like a live performance, parade, or sports event	

Infection Prevention

Fully Vaccinated People Indoors

		Indoor	
Less Safe		Visit a barber or hair salon	
		Go to an uncrowded, indoor shopping center or museum	
		Ride public transport with limited occupancy	
		Attend a small, indoor gathering of fully vaccinated and unvaccinated people from multiple households	
Least Safe		Go to an indoor movie theater	
		Attend a full-capacity worship service	
		Sing in an indoor chorus	
		Eat at an indoor restaurant or bar	
		Participate in an indoor, high intensity exercise class	



Infection Prevention

Vaccinated People in Health Care Facilities

❖ Hospital Visitation

- ❖ Permit visits for patient's physical/emotional well being and care
- ❖ Limit visits to compassionate care if patient is infected or in quarantine

❖ Recommend:

- ❖ Vaccinate all HCPs, offer vaccines to all new admissions, encourage visitor vaccines
- ❖ Record vaccine status of patients and HCPs
- ❖ Exclude current infections, symptoms of COVID-19 and prolonged contact
- ❖ Encourage masks, hand hygiene, 6 feet social distancing
- ❖ No visitor if there are patients sharing rooms
- ❖ Maskless and close contact okay if visitor and patient both vaccinated and choose this



Infection Prevention

Vaccinated People in Health Care Facilities

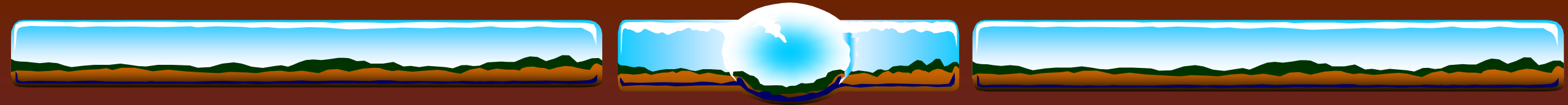
- ❖ **Communal Activities in health care**
 - ❖ Exclude patients with COVID-19 and PUIs until cleared from precautions
 - ❖ If vaccine status is unknown, maintain masking and social distancing
 - ❖ Fully vaccinated HCPS should wear a mask while at work
 - ❖ Could dine and socialize together in breakrooms and meetings with masks/distancing
 - ❖ If unvaccinated HCPs are present, masks are required



Infection Prevention

Vaccinated People in Health Care Facilities

- ❖ **Work Restrictions/Quarantine for asymptomatic HCPs/Residents**
 - ❖ Fully vaccinated HCPs without symptoms **do not need to quarantine** after exposure
 - ❖ Fully vaccinated patients should quarantine for 14 days after exposure (< 6 ft , 15 min/d)
- ❖ **Testing for SARS-CoV-2**
 - ❖ Asymptomatic HCP and patients after exposure need two tests at day 0 and day 5-7
 - ❖ In a facility outbreak, screening practices should not change
 - ❖ **Pre-Procedure or Pre-admission testing is at discretion of facility**
 - ❖ Yield of testing is lower among vaccinated patients
 - ❖ Testing might be useful for room assignment, cohorting and PPE decisions



Infection Prevention

Vaccinated People in Health Care Facilities

- ❖ PPE guidance for HCPs remains unchanged



More COVID-19 Training

❖ **CDC:** <https://www.cdc.gov/coronavirus/2019-ncov/hcp/index.html>

❖ **ACP Physician Handbook:** <https://www.acponline.org/clinical-information/clinical-resources-products/coronavirus-disease-2019-covid-19-information-for-internists>

❖ **UW Protocols:** <https://covid-19.uwmedicine.org/Pages/default.aspx>

➤ **UW IDEA Program:** <https://covid.idea.medicine.uw.edu/>

➤ **NIH Guidelines:** <https://covid19treatmentguidelines.nih.gov/>

❖ **Brigham and Women's Hospital:** covidprotocols.org

