Understanding and treating long COVID

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FLCCC®
ALLIANCE

How the NIH defines long COVID

Large study provides scientists with deeper insight into long COVID symptoms

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The team found that 37 symptoms were substantially more likely to occur in people who had been infected with COVID-19.

Of these, 12 in particular best distinguish those with and without long COVID:

- Post-exertional malaise (the worsening of symptoms after physical or mental activity)
- Fatigue
- Brain fog
- Dizziness
- Gut symptoms
- Heart palpitations
- Sexual problems
- Change in smell or taste
- Thirst
- Chronic cough
- Chest pain
- Abnormal movements such as muscle twitching or jerking

How FLCCC defines long COVID

From the I-RECOVER protocol

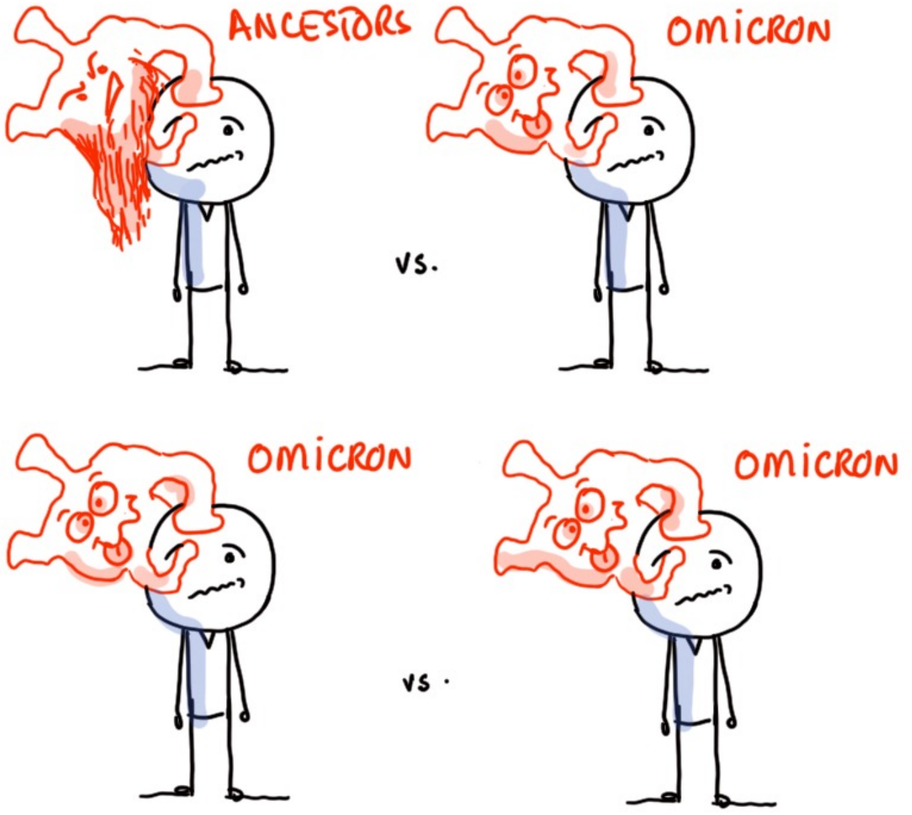
https://covid19criticalcare.com/protocol/i-recover-long-covid-treatment/

The clinical signs and symptoms can be grouped into the following clusters. The reason for this grouping is to allow organ-specific targeted therapy or individualized therapy:

1. Respiratory: shortness of breath, congestion, persistent cough, etc.
2. Neurological/psychiatric: brain fog, malaise, tiredness, headaches, migraines, depression, inability to focus or concentrate, altered cognition, insomnia, vertigo, panic attacks, tinnitus, anosmia, phantom smells, etc.
3. Musculoskeletal: myalgias, fatigue, weakness, joint pains, inability to exercise, post-exertional malaise, inability to perform normal activities of daily life
4. Cardiovascular: Palpitations, arrhythmias, Raynaud-like syndrome, hypotension, and tachycardia on exertion
5. Autonomic: Postural tachycardia syndrome (POTs), abnormal sweating
6. Gastrointestinal disturbance: anorexia, diarrhea, bloating, vomiting, nausea, etc.
7. Dermatologic: itching, rashes, dermatographia
8. Mucus membranes: running nose, sneezing, burning and itchy eyes

LONG COVID AFTER OMICRON vs. ITS ANCESTORS

LONG COVID AFTER REINFECTION



STUDY (HAEMATOLOGY PATIENTS)

MORTALITY REDUCED IN OMICRON ERA

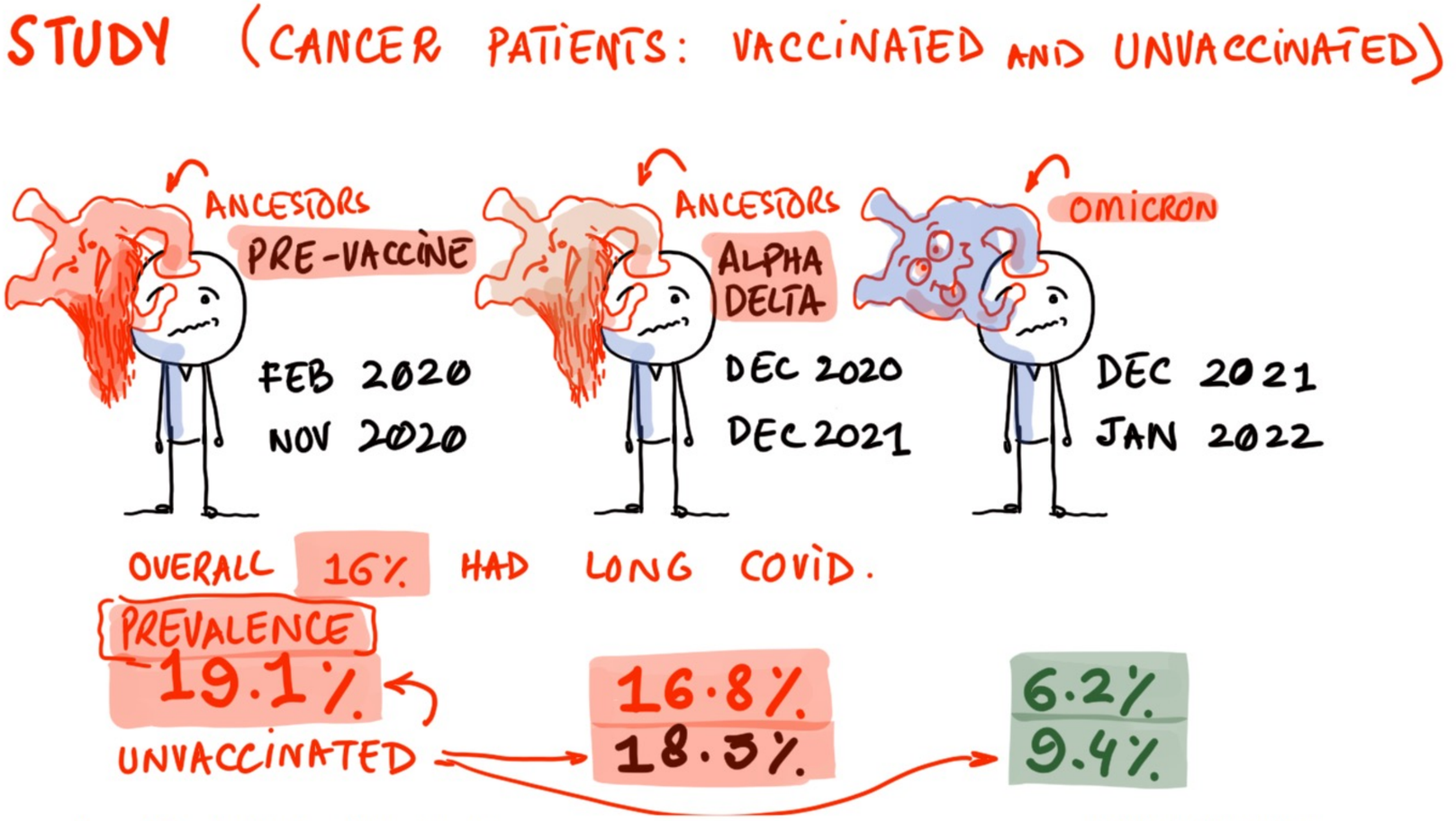
LONG COVID REDUCED IN OMICRON ERA

MORTALITY 90 DAYS ATTRIBUTED TO COVID

42% 9% 2%

LONG COVID RISK

46% 35% 14%



Lancet Oncol. 2023 Apr; 24(4): 335–346.
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PMID: 36898391

SARS-CoV-2 omicron (B.1.1.529)-related COVID-19 sequelae in vaccinated and unvaccinated patients with cancer: results from the OnCovid registry

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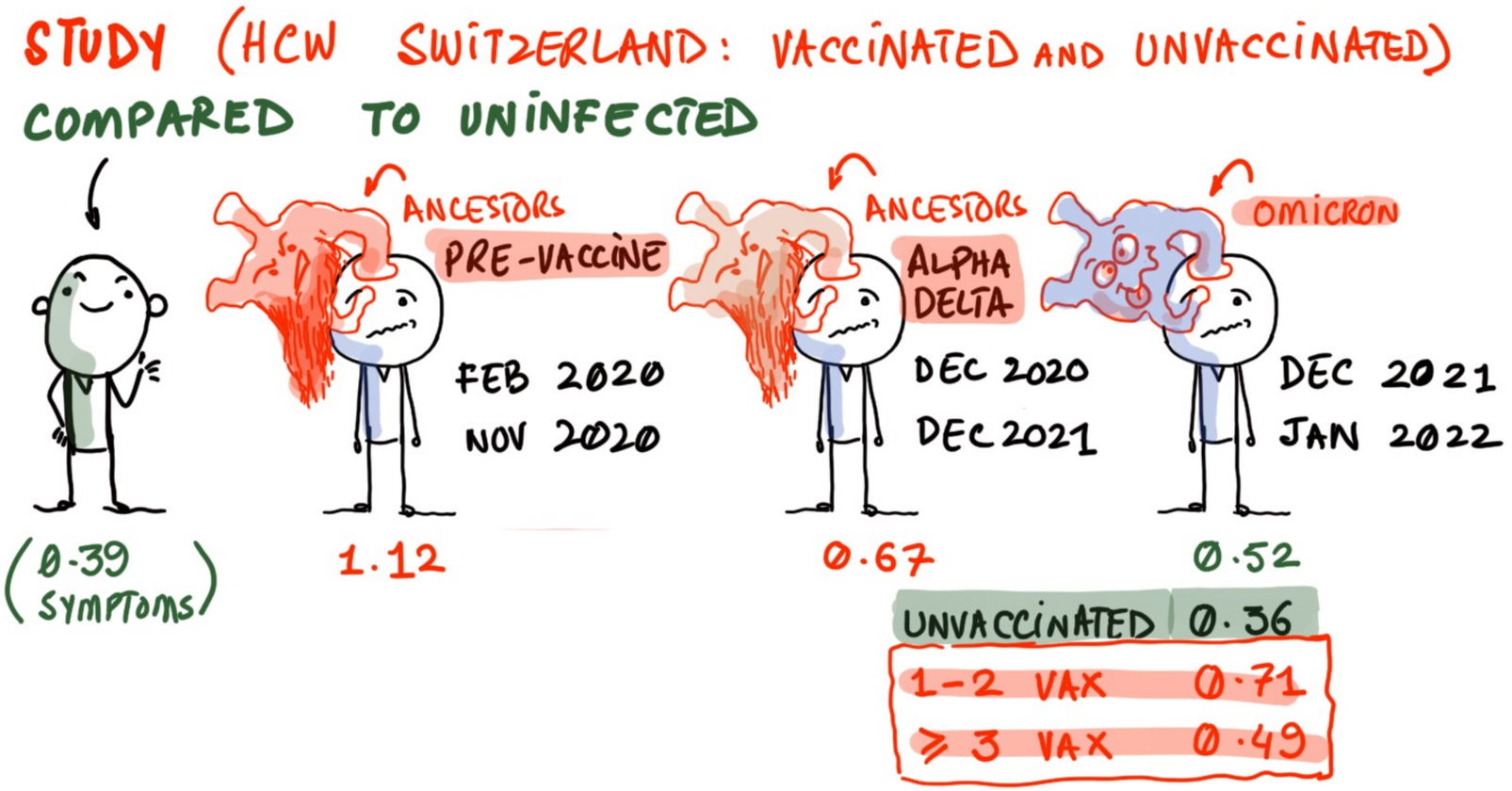
Findings

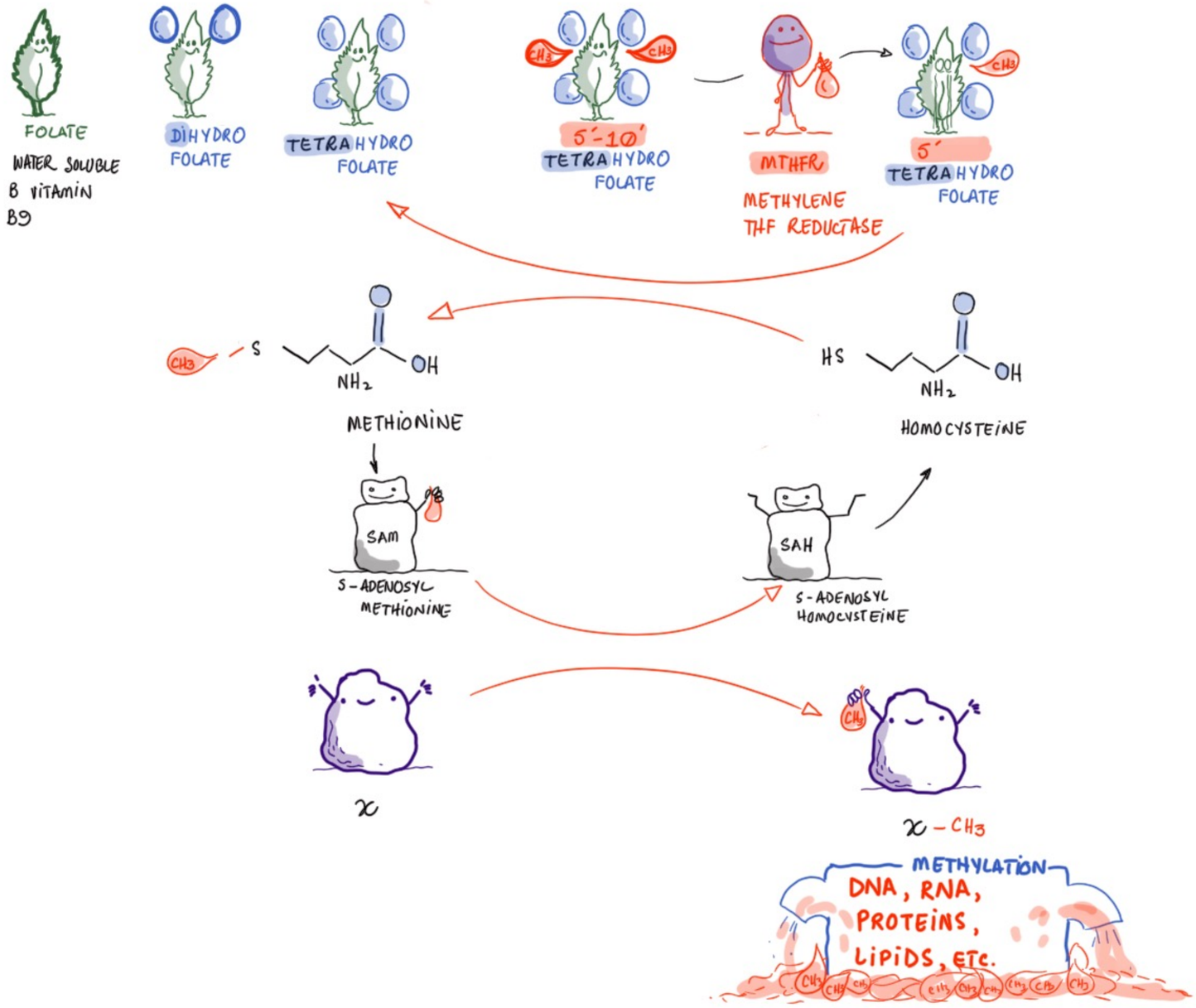
At the follow-up update on June 20, 2022, 1909 eligible patients, evaluated after a median of 39 days (IQR 24–68) from COVID-19 diagnosis, were included (964 [50·7%] of 1902 patients with sex data were female and 938 [49·3%] were male). Overall, 317 (16·6%; 95% CI 14·8–18·5) of 1909 patients had at least one sequela from COVID-19 at the first oncological reassessment. The prevalence of COVID-19 sequelae was highest in the pre-vaccination phase (191 [19·1%; 95% CI 16·4–22·0] of 1000 patients). The prevalence was similar in the alpha–delta phase (110 [16·8%; 13·8–20·3] of 653 patients, p=0·24), but significantly lower in the omicron phase (16 [6·2%; 3·5–10·2] of 256 patients, p<0·0001). In the alpha–delta phase, 84 (18·3%; 95% CI 14·6–22·7) of 458 unvaccinated patients and three (9·4%; 1·9–27·3) of 32 unvaccinated patients in the omicron phase had sequelae. Patients who received a booster and those who received two vaccine doses had a significantly lower prevalence of overall COVID-19 sequelae than unvaccinated or partially vaccinated patients (ten [7·4%; 95% CI 3·5–13·5] of 136 boosted patients, 18 [9·8%; 5·8–15·5] of 183 patients who had two vaccine doses *vs* 277 [18·5%; 16·5–20·9] of 1489 unvaccinated patients, p=0·0001), respiratory sequelae (six [4·4%; 1·6–9·6], 11 [6·0%; 3·0–10·7] *vs* 148 [9·9%; 8·4–11·6], p=0·030), and prolonged fatigue (three [2·2%; 0·1–6·4], ten [5·4%; 2·6–10·0] *vs* 115 [7·7%; 6·3–9·3], p=0·037).



JOURNAL ARTICLE CORRECTED PROOF EDITOR'S CHOICE

Post-acute Sequelae After Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection

MTHFR and the possibility of blood clotting



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