

Symptômes post-covid et leurs associations

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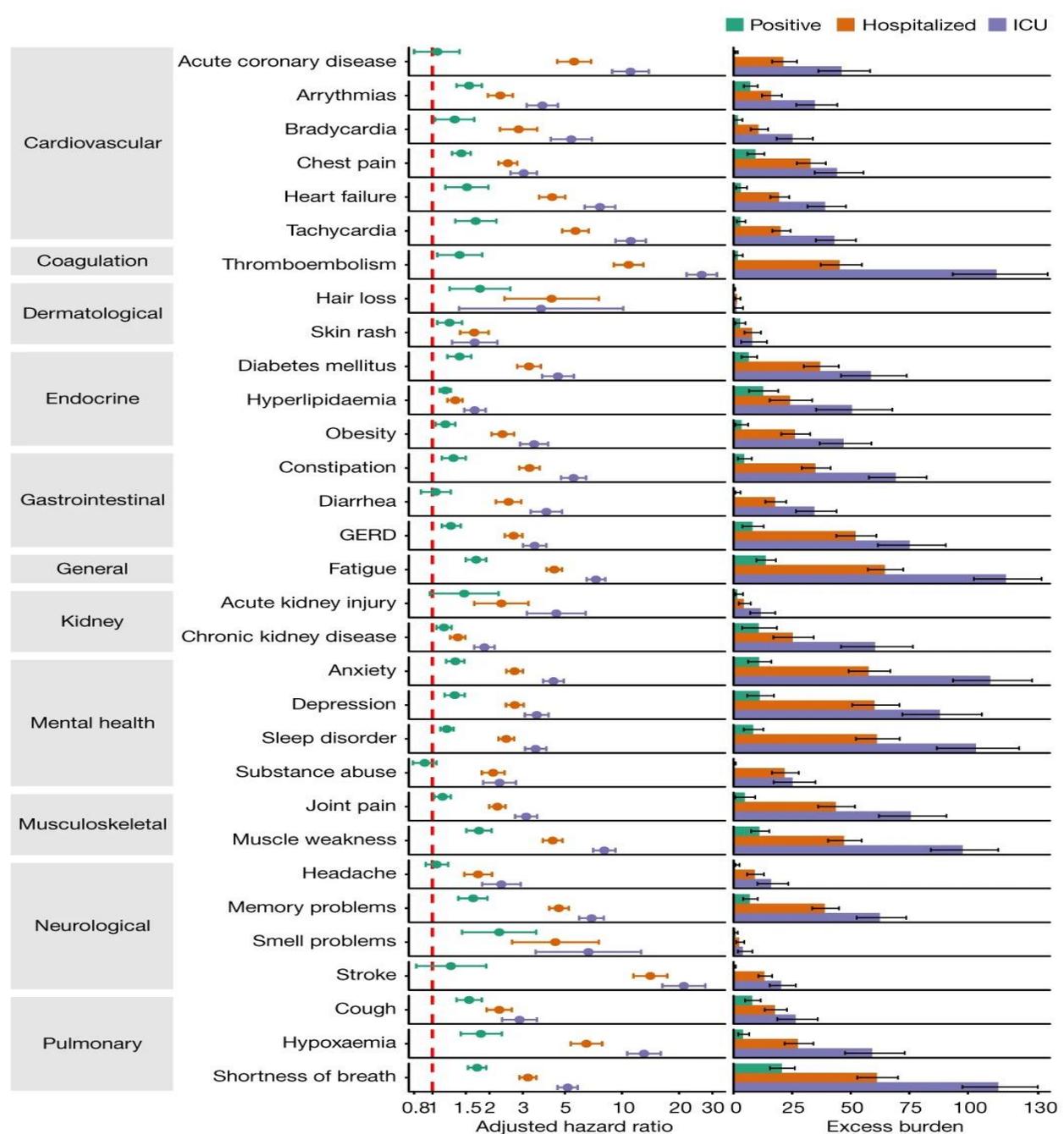
Problématique

- Plaintes multiples + symptômes non spécifiques (hors anosmie)
- Risque:
 - Sur attribution de symptômes « communs » à une cause
 - Diagnostic tardif d'autres pathologies
 - Sous-attribution de symptômes et recherche d'autre causes:
 - Accumulation d'examens
 - Anxiété
- Nécessité de rechercher les symptômes associés au covid, c'est à dire:
 - Plus présent que dans d'autres situations (COVID-long VS « personnes sans histoire »)
 - Autant ou plus présent que dans des situation « similaires » (COVID vs autres infections)

Comparaison de symptômes COVID vs non COVID

| Symptom | SARS-CoV-2 test result, weighted % (95% CI) | | | |
|---|--|--|--|--|
| | Symptom prevalence among all persons receiving testing | | Symptom prevalence among persons receiving testing who reported a symptom lasting >4 weeks since onset | |
| | Respondents who received a positive test result (n = 698)* | Respondents who received a negative test result (n = 2,437)* | Respondents who received a positive test result (n = 465)* | Respondents who received a negative test result (n = 1,058)* |
| Any symptom | 65.9 [†] (61.9–69.8) | 42.9 (40.8–45.1) | — | — |
| 1 symptom only | 27.2 [†] (23.7–30.8) | 18.7 (17.0–20.4) | 41.4 (36.5–46.3) | 43.6 (40.3–46.9) |
| 2 symptoms | 14.0 [†] (11.1–16.8) | 9.5 (8.2–10.7) | 21.2 (17.1–25.3) | 22.1 (19.3–24.8) |
| ≥3 symptoms | 24.7 [†] (21.0–28.3) | 14.7 (13.2–16.3) | 37.4 (32.5–42.4) | 34.3 (31.1–37.5) |
| Fatigue/Tired/Weakness | 22.5 [†] (19.0–26.1) | 12.0 (10.6–13.4) | 34.2 [†] (29.3–39.1) | 28.0 (25.0–31.0) |
| Change in smell or taste | 17.3 [†] (14.1–20.4) | 1.7 (1.1–2.3) | 26.2 [†] (21.8–30.7) | 3.9 (2.6–5.3) |
| Shortness of breath or breathlessness | 15.5 [†] (12.4–18.7) | 5.2 (4.2–6.2) | 23.6 [†] (19.1–28.1) | 12.1 (9.9–14.2) |
| Cough | 14.5 [†] (11.6–17.4) | 4.9 (4.0–5.9) | 22.0 [†] (17.8–26.2) | 11.5 (9.4–13.6) |
| Headache | 13.8 [†] (10.9–16.7) | 9.9 (8.6–11.2) | 20.9 (16.7–25.1) | 23.0 (20.2–25.8) |
| Problems sleeping | 12.0 [†] (9.3–14.7) | 16.5 (14.8–18.1) | 18.1 [†] (14.2–22.1) | 38.3 (35.1–41.6) |
| Joint or muscle pain | 11.1 (8.4–13.9) | 12.4 (10.9–13.9) | 16.9 [†] (12.9–20.9) | 28.9 (25.8–32.0) |
| Cognitive dysfunction [§] | 10.2 [†] (7.7–12.8) | 7.3 (6.1–8.4) | 15.5 (11.8–19.3) | 16.9 (14.4–19.4) |
| Chest pain or pressure | 7.3 [†] (5.2–9.4) | 2.3 (1.6–2.9) | 11.0 [†] (7.9–14.2) | 5.3 (3.7–6.8) |
| Change in mood | 6.6 (4.6–8.7) | 8.8 (7.6–10.0) | 10.1 [†] (7.1–13.1) | 20.6 (17.9–23.2) |
| Postexertional malaise [¶] | 6.1 [†] (4.1–8.0) | 2.4 (1.7–3.0) | 9.2 [†] (6.3–12.2) | 5.5 (3.9–7.0) |
| Stomach pain | 5.8 (3.9–7.7) | 5.1 (4.1–6.1) | 8.9 (6.0–11.7) | 11.9 (9.7–14.1) |
| Hair loss | 5.6 (3.7–7.5) | 4.1 (3.3–5.0) | 8.5 (5.6–11.3) | 9.7 (7.6–11.7) |
| Diarrhea | 5.3 (3.3–7.2) | 3.3 (2.6–4.1) | 8.0 (5.0–10.9) | 7.8 (6.0–9.5) |
| Sore throat | 4.9 [†] (3.1–6.8) | 1.7 (1.1–2.2) | 7.5 [†] (4.7–10.3) | 3.9 (2.7–5.1) |
| Fever or chills | 4.9 [†] (3.0–6.8) | 1.9 (1.4–2.5) | 7.5 (4.7–10.3) | 4.5 (3.2–5.8) |
| Palpitations (heart racing or pounding) | 4.5 (2.7–6.3) | 2.5 (1.9–3.2) | 6.8 (4.1–9.5) | 5.9 (4.3–7.5) |
| Nausea/Vomiting | 4.1 [†] (2.5–5.8) | 1.9 (1.3–2.4) | 6.3 (3.8–8.8) | 4.3 (3.0–5.7) |
| Other symptom | 1.3 (0.3–2.2)** | 1.0 (0.6–1.5) | 2.0 (0.5–3.4)** | 2.4 (1.4–3.4) |

Cohorte des vétérans américains COVID-19 vs cohorte entière



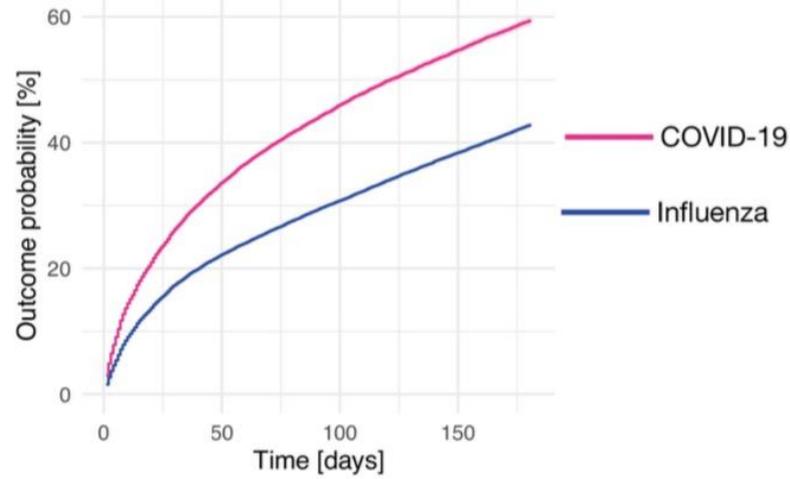
Comparaison à la grippe

| | COVID-19 (unmatched) | COVID-19 (matched) | Influenza (matched) |
|--|----------------------|---------------------|---------------------|
| COHORT SIZE | 273,618 | 106,578 | 106,578 |
| DEMOGRAPHICS | | | |
| Age; mean (SD); y | 46.3 (19.8) | 39.4 (18.4) | 38.3 (19.7) |
| Sex; n (%) female | 152,157 (55.6) | 62,293 (58.4) | 61,419 (57.6) |
| OUTCOMES, % from 1 day to 6 months post-diagnosis (95% CI) | | | |
| Anxiety/Depression | 22.82 (22.48–23.14) | 26.69 (26.14–27.24) | 19.79 (19.47–20.11) |
| Chest/Throat pain | 12.60 (12.34–12.86) | 12.80 (12.36–13.22) | 7.17 (6.97–7.38) |
| Abnormal breathing | 18.71 (18.41–19.02) | 18.43 (17.96–18.90) | 9.72 (9.48–9.95) |
| Myalgia | 3.24 (3.09–3.38) | 3.67 (3.42–3.91) | 2.23 (2.12–2.35) |
| Fatigue | 12.82 (12.56–13.09) | 12.59 (12.16–13.03) | 6.81 (6.60–7.00) |
| Headache | 8.67 (8.44–8.90) | 10.53 (10.14–10.90) | 7.98 (7.75–8.19) |
| Abdominal symptoms | 15.58 (15.26–15.87) | 17.34 (16.84–17.83) | 11.42 (11.16–11.66) |
| Cognitive symptoms | 7.88 (7.69–8.08) | 5.56 (5.28–5.85) | 3.16 (3.02–3.30) |
| Pain | 11.60 (11.33–11.87) | 12.09 (11.67–12.54) | 8.34 (8.13–8.56) |
| Any | 57.00 (56.59–57.43) | 59.37 (58.72–60.00) | 42.77 (42.38–43.16) |
| OUTCOMES, % from 3 months to 6 months post-diagnosis (95% CI) | | | |
| Anxiety/Depression | 15.49 (15.21–15.77) | 19.24 (18.59–19.90) | 14.27 (13.97–14.57) |
| Chest/Throat pain | 5.71 (5.53–5.90) | 6.48 (6.08–6.91) | 3.79 (3.63–3.96) |
| Abnormal breathing | 7.94 (7.72–8.16) | 9.08 (8.62–9.54) | 4.69 (4.51–4.87) |
| Myalgia | 1.54 (1.44–1.64) | 2.05 (1.82–2.28) | 1.27 (1.17–1.36) |
| Fatigue | 5.87 (5.68–6.06) | 6.38 (5.99–6.79) | 3.73 (3.58–3.89) |
| Headache | 4.63 (4.47–4.80) | 6.66 (6.25–7.07) | 5.08 (4.89–5.27) |
| Abdominal symptoms | 8.29 (8.06–8.51) | 10.69 (10.16–11.22) | 6.84 (6.64–7.06) |
| Cognitive symptoms | 3.95 (3.80–4.10) | 3.01 (2.74–3.29) | 1.83 (1.71–1.94) |
| Pain | 7.19 (6.98–7.39) | 8.53 (8.06–9.00) | 5.53 (5.33–5.72) |

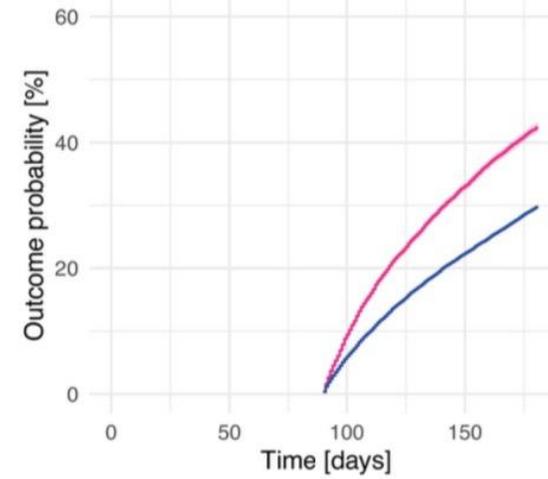
1-180 days follow-up

90-180 days follow-up

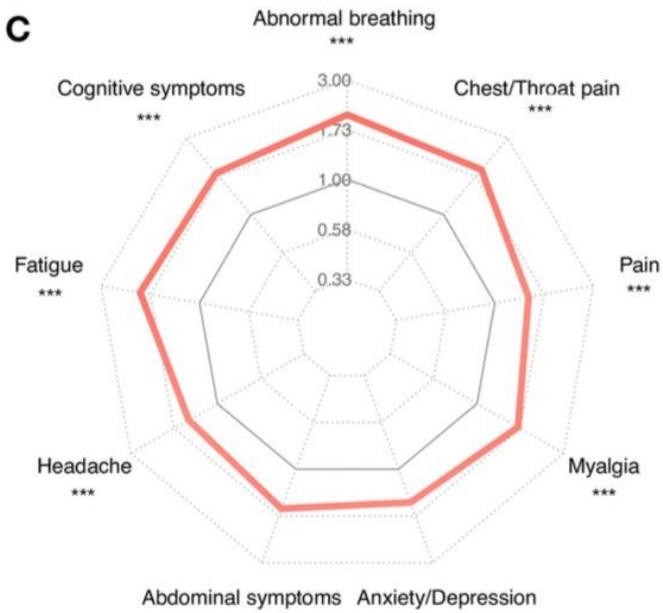
A Any long-COVID feature (HR 1.65, $p < .0001$)



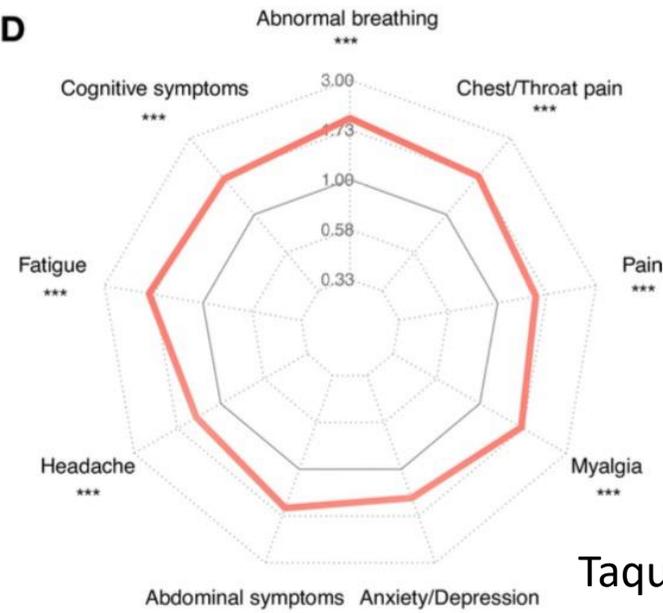
B Any long-COVID feature (HR 1.56, $p < .0001$)



C



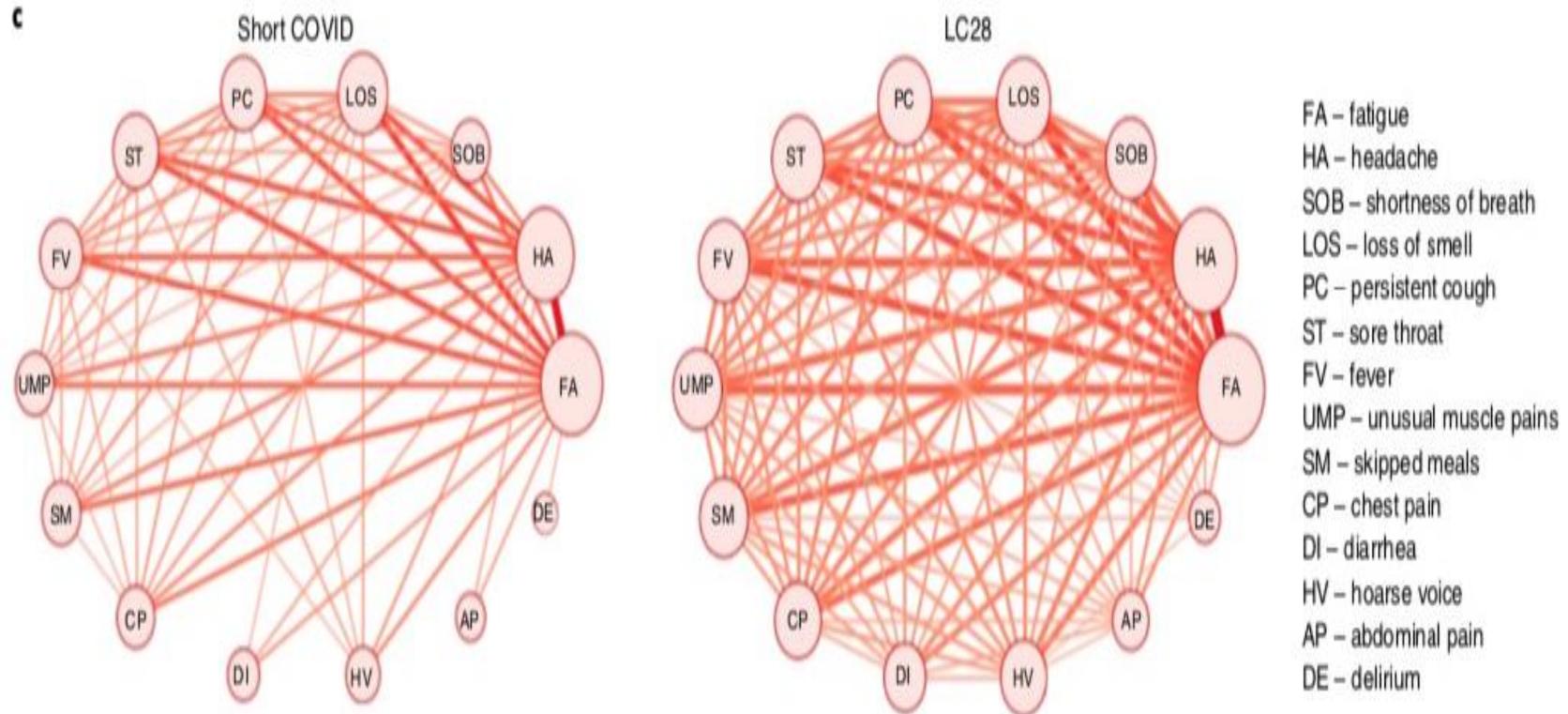
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Association de symptômes

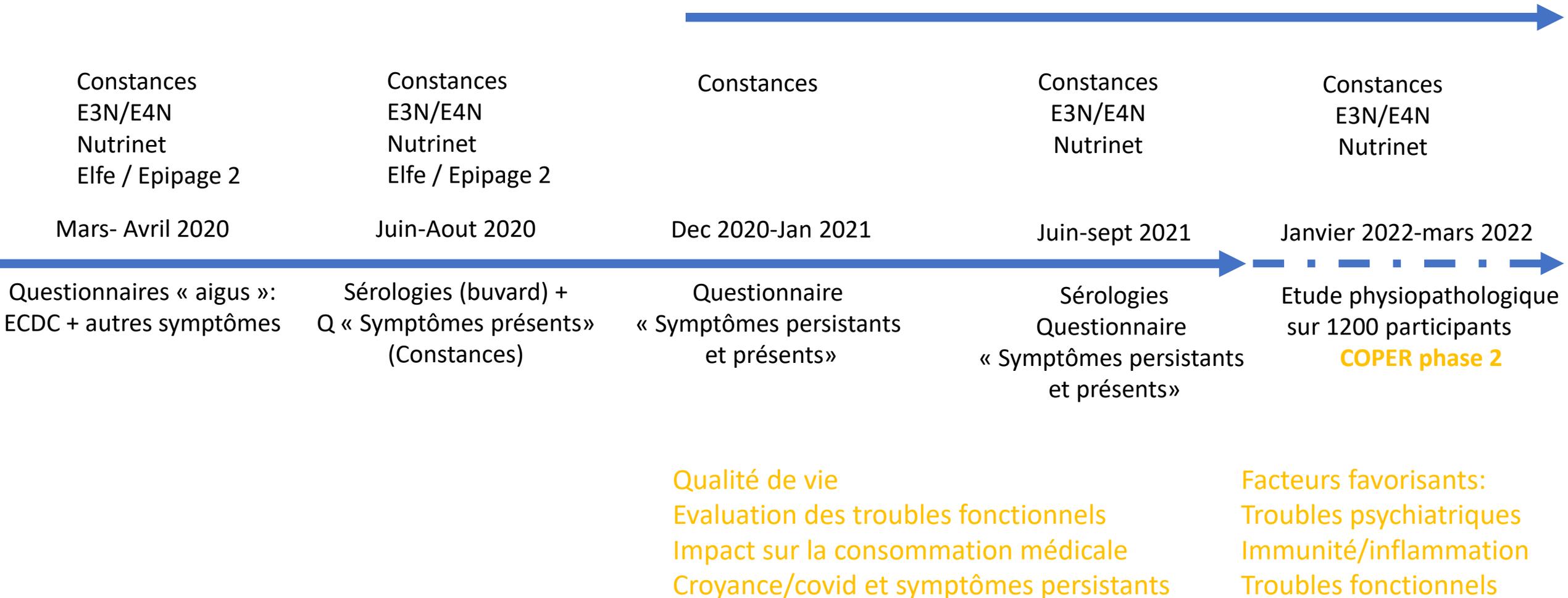
Présentation clinique: étude anglaise prospective à 4 mois

Symptômes polymorphes



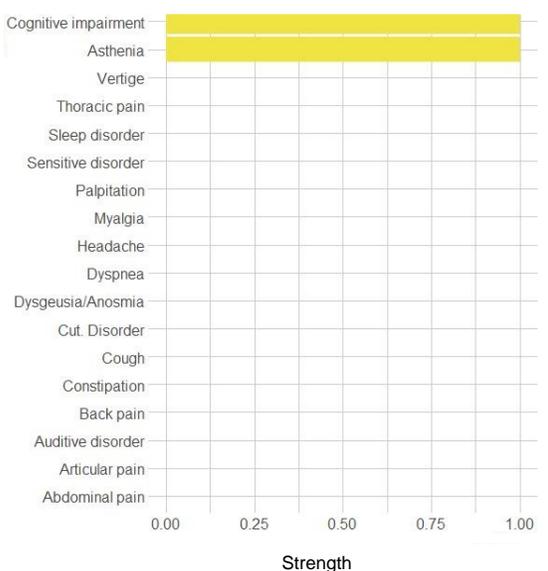
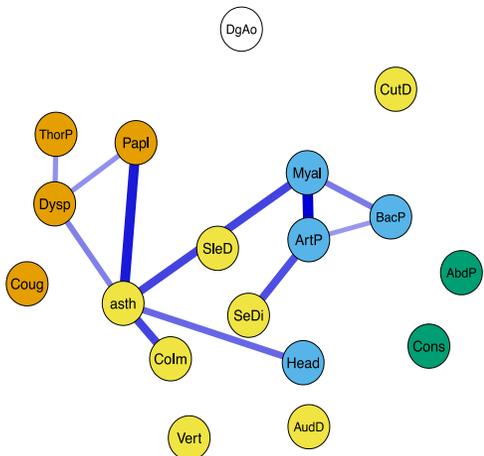
Déroulé des études « covid long » dans SAPRIS

COPER phase « épidémiologique » et de screening (phase 1)

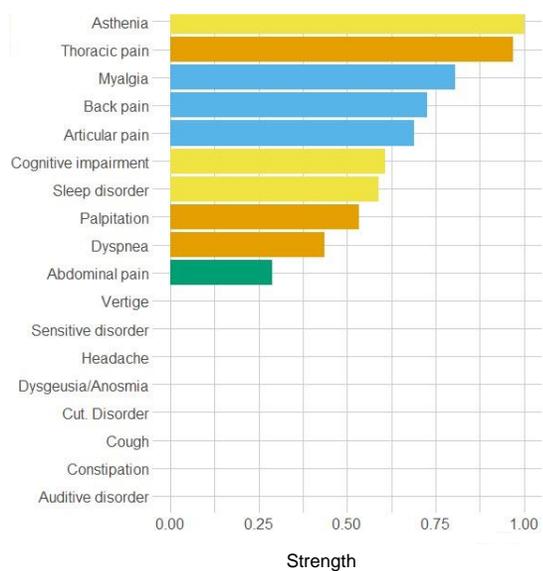
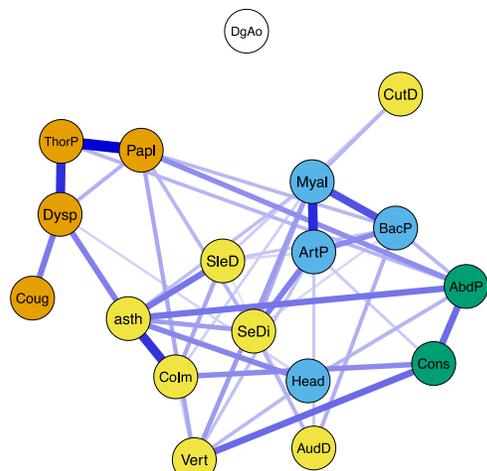


Association de symptômes et centralité

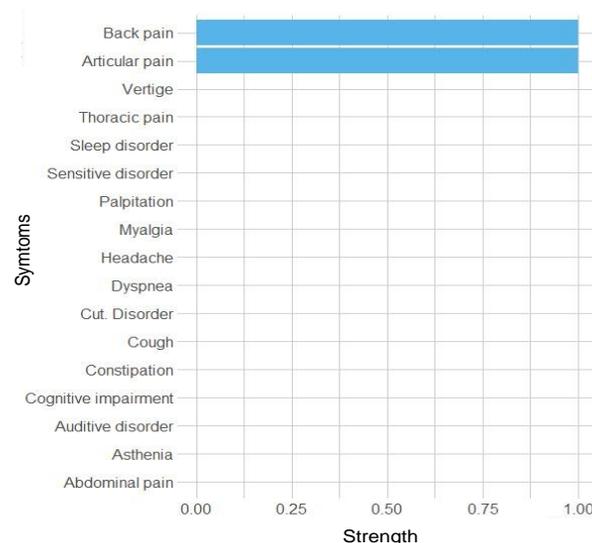
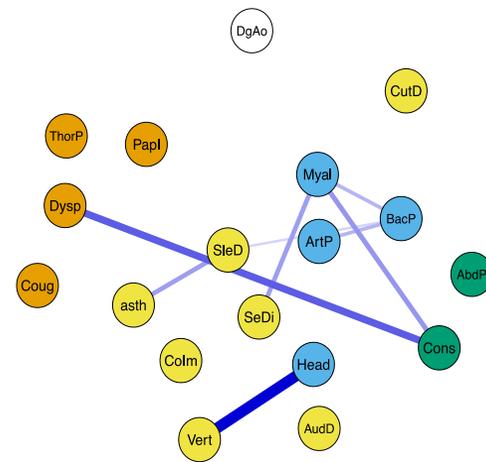
ECDC+/Sero+



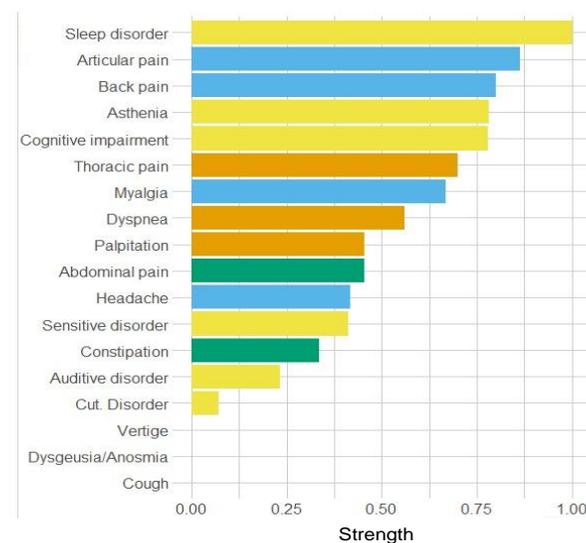
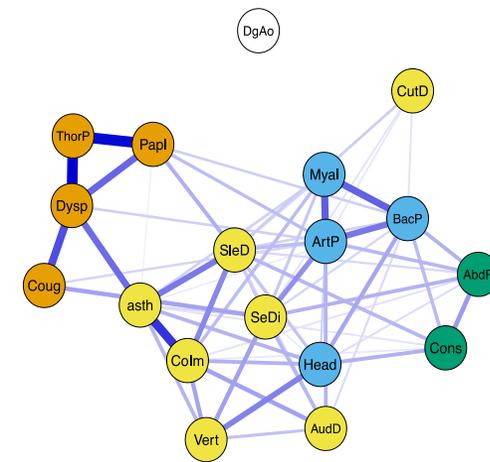
ECDC+/Sero-



ECDC-/Sero+



ECDC-/Sero-



Conclusions

- Les symptômes persistants sont polymorphes
- Plus fréquents Dans le COVID que dans d'autres situations clinique en l'absence d'ajustement sur la sévérité initiale (Hospitalisation ou intensité initiale)
- Leur association n'est pas spécifique de la pathologie
- Ce qu'il manque:
 - Différence dans l'intensité (echelles fonctionnelles, recours au soins, qualité de vie...)
 - Comparaisons ajustées sur l'histoire clinique ambulatoire (en cours)
 - Suivi au delà de 12 mois