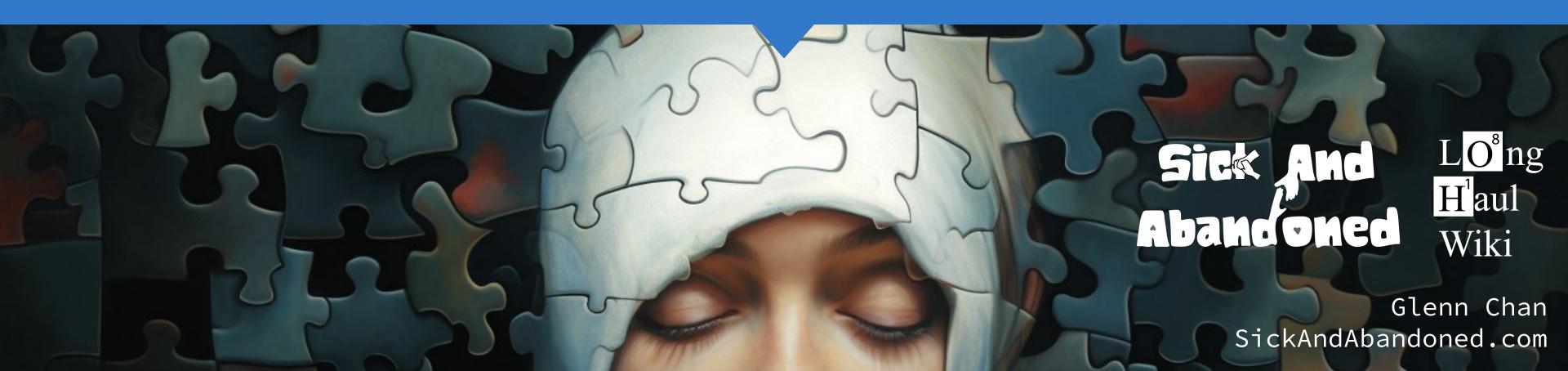
# What Worked For 36 People Who Recovered Patient Experiences Survey Data



## Highlights of the Patient Experiences Survey



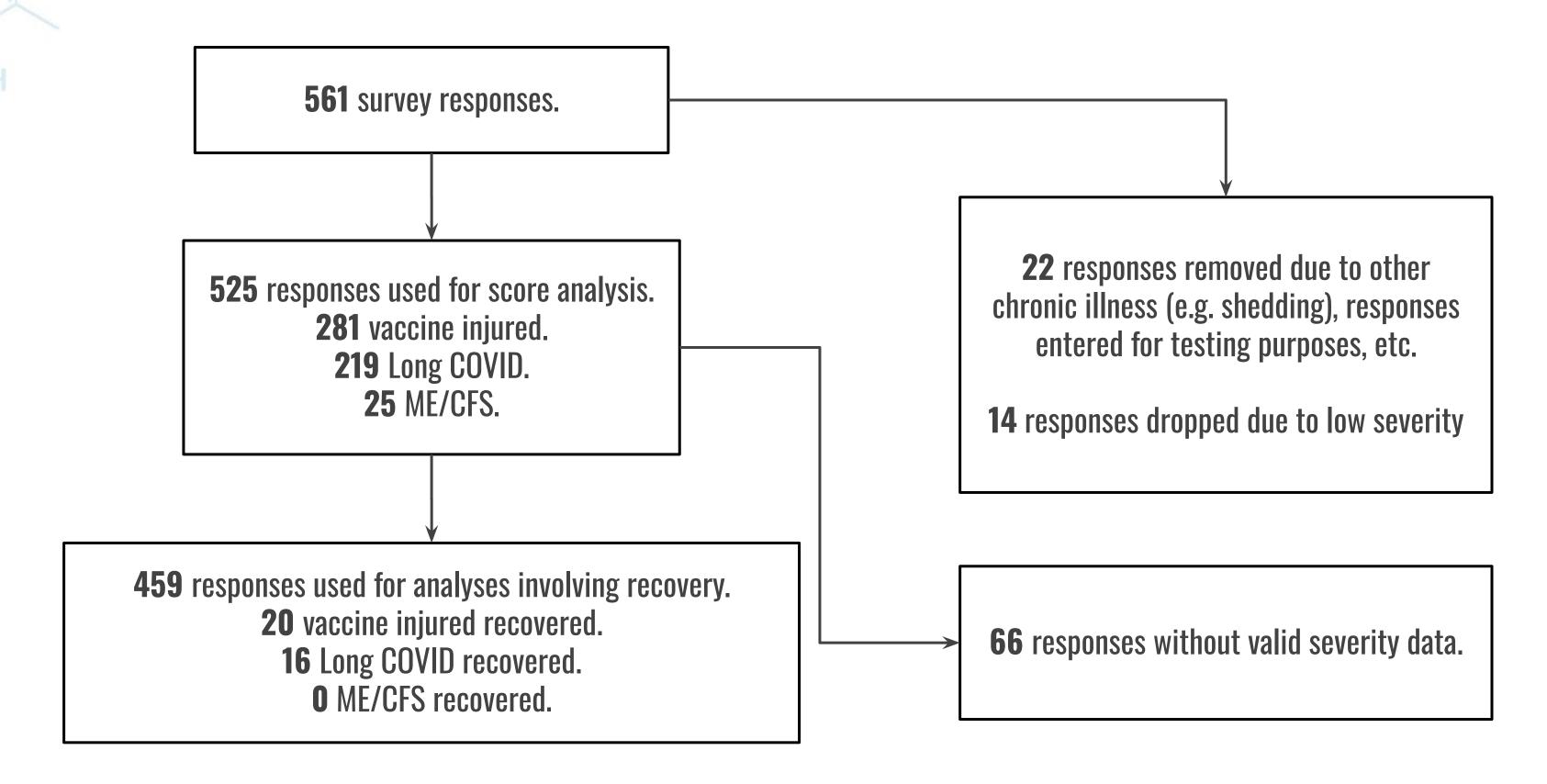
The data suggests that the following groups of treatments are promising:

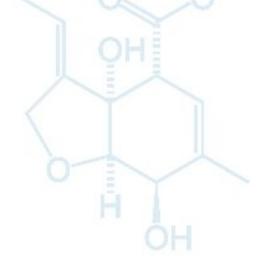
- HBOT
- Fasting (preferably extended)
- Certain supplements nattokinase, serrapeptase, ?cat's claw?, ?NAC?
- Certain prescription drugs ivermectin, statins, colchicine, LDN?

The double-edge nature of most treatments provides some support for taking a conservative, risk-averse approach to treatment:

- Discontinue treatment if symptoms are worsening.
- Start with low dosages before increasing.

## **525** responses analyzed across **235** treatments







Disclaimer: using experimental treatments to fix chronic illness is not always a good idea! Almost all of the treatments discussed in this presentation have risk.

### Survey design



Surveyees were asked to rate the treatments they tried on a Likert scale. The addition of "Tried this, effect was unclear" takes some responses away from the other columns if the surveyee is not confident. Thus, low-confidence answers are less likely to lead to spurious conclusions.

| Anti-depressants - SNRIs<br>Serotonin–norepinephr <mark>i</mark> ne reuptake inhibitors |                            |                             |                                |                           |                                     |                                      |  |
|---|----------------------------|-----------------------------|--------------------------------|---------------------------|-------------------------------------|--------------------------------------|--|
|   | Significant<br>improvement | Mild overall<br>improvement | Not much<br>benefit or<br>harm | Mild overall<br>worsening | Significant<br>overall<br>worsening | Tried this,<br>effect was<br>unclear |  |
| Duloxetine<br>(Cymbalta)  | 0                          | 0                           | 0                              | 0                         | 0                                   | 0                                    |  |
| Venlafaxine<br>(Effexor)  | 0                          | 0                           | 0                              | 0                         | 0                                   | 0                                    |  |

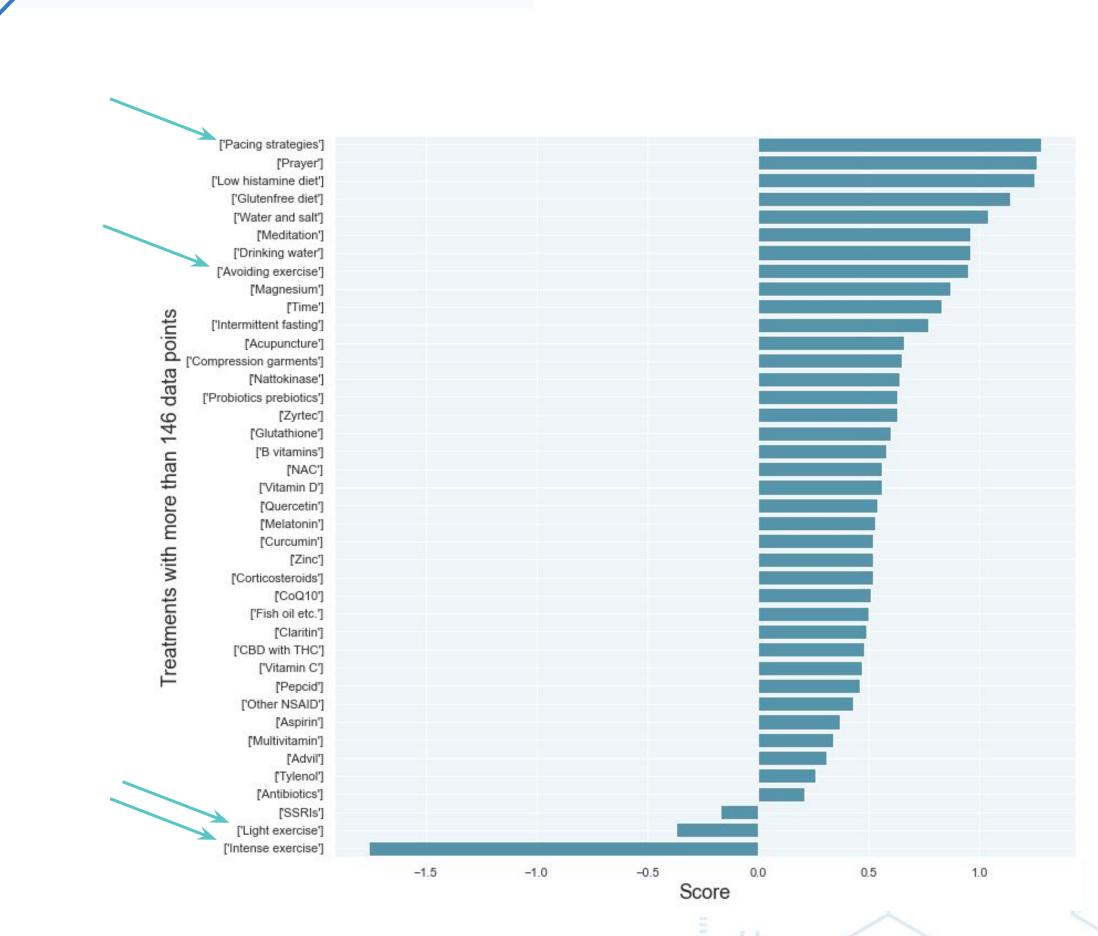
## Popular treatments ranked by score

#### 

Scores of +3/-3 were given to / significant improvement/worsening and +1/-1 for mild. 0 points for effect was unclear.

Exercise-related treatments (such as limiting exercise through pacing strategies) were outliers and took both the top and bottom spots.

This ranking system is not the most reliable as it often measures how surveyees answer surveys rather than medical outcomes. It does however measure patient satisfaction.



worsening

improvement improvement

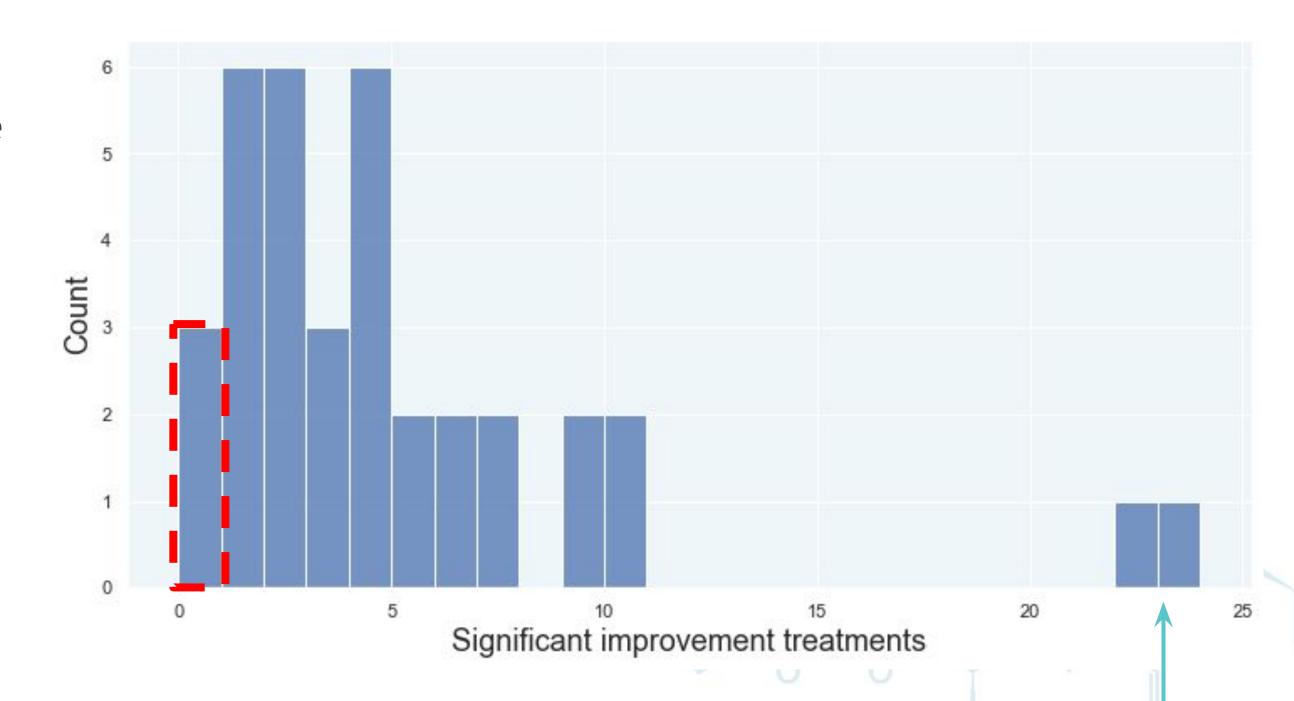
Duloxetine (Cymbalta)

## Some people did not identify any great treatments

#### 

3 surveyees did not report that any of the 235 treatments on the survey resulted in significant improvement.

The most 'significant improvement' treatments reported were 23 and 22.



## Analysis of mostly recovered patients - 20 vax injured, 16 Long COVID

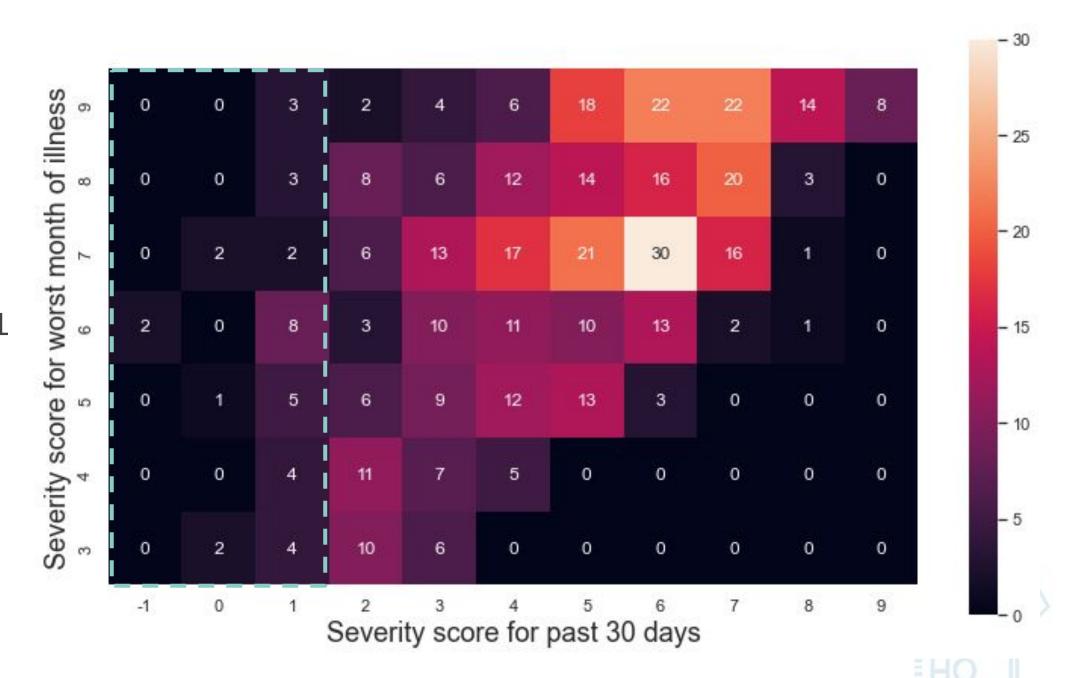
#### 

Data is from the Patient Experiences Survey (<u>Dec 26</u>). The mostly recovered (in the **turquoise** box) could:

- Work their last job full-time.
- Walk more than 5 minutes without causing symptoms to worsen.
- Report that their suffering was 1
   or less on a scale of 0-4, where
   4 is the worst suffering
   imaginable.

About 8% (36/459) of the surveyees were mostly recovered.

\*A lengthier description of the severity score can be found <u>in a previous</u>
presentation's slides.





## Data from the mostly recovered may be more reliable

#### 

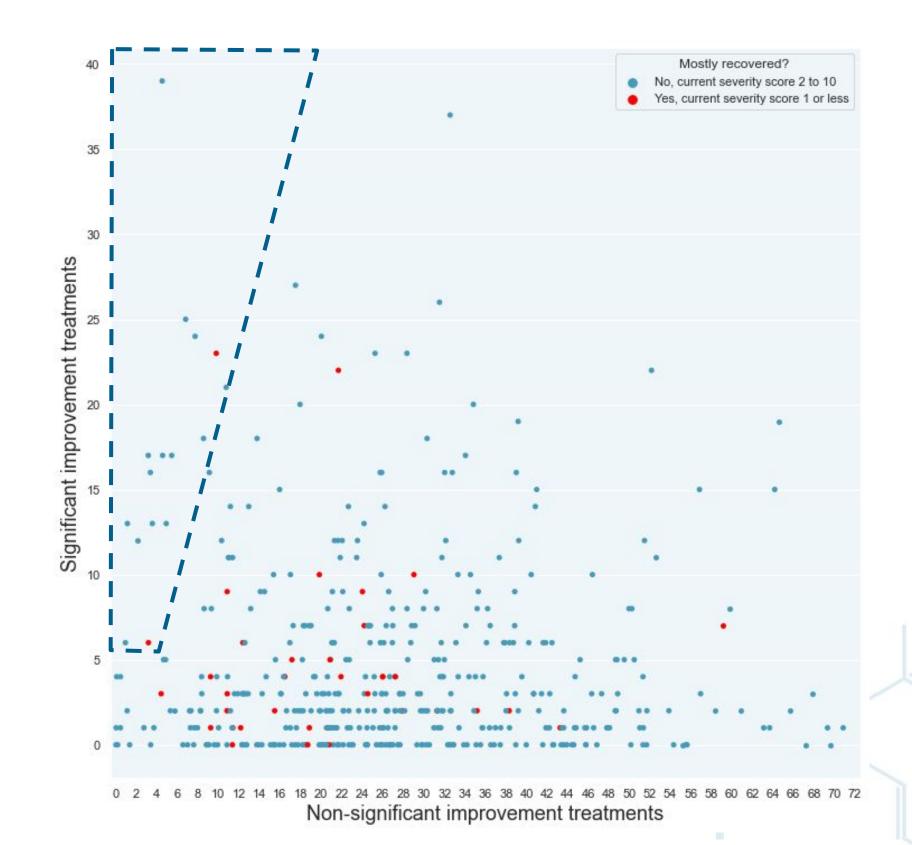
Somebody who has seen little actual improvement from treatment may still rate treatments as leading to "significant improvement". Their perspective on the world is different than somebody who has gotten their life back. Both perspectives are valid but the mostly recovered perspective should be a better indicator of actual medical outcomes.

### **Everything works?!**



The **red** dots on the right show people who are mostly (or fully) recovered.

Those in the dark blue area reported that almost every treatment led to 'significant improvement'. Data from those patients may not necessarily reflect treatment outcomes; these surveyees have a different perspective on the world.



### Why a free-form question was used for treatment outcomes

#### 

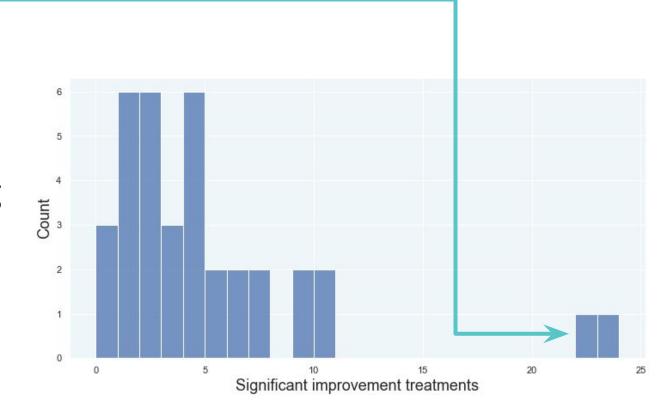
If we simply look at the treatments rated highly among the recovered, the results can be skewed by the pair of participants rating 23 and 22 treatments ——highly. Their data is likely of lower confidence.

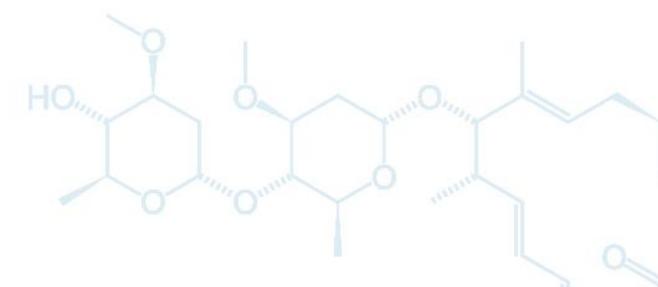
The free-form question shown below restricts the resulting data to only the top treatment(s), allowing us to know what treatments surveyees think the most highly of.

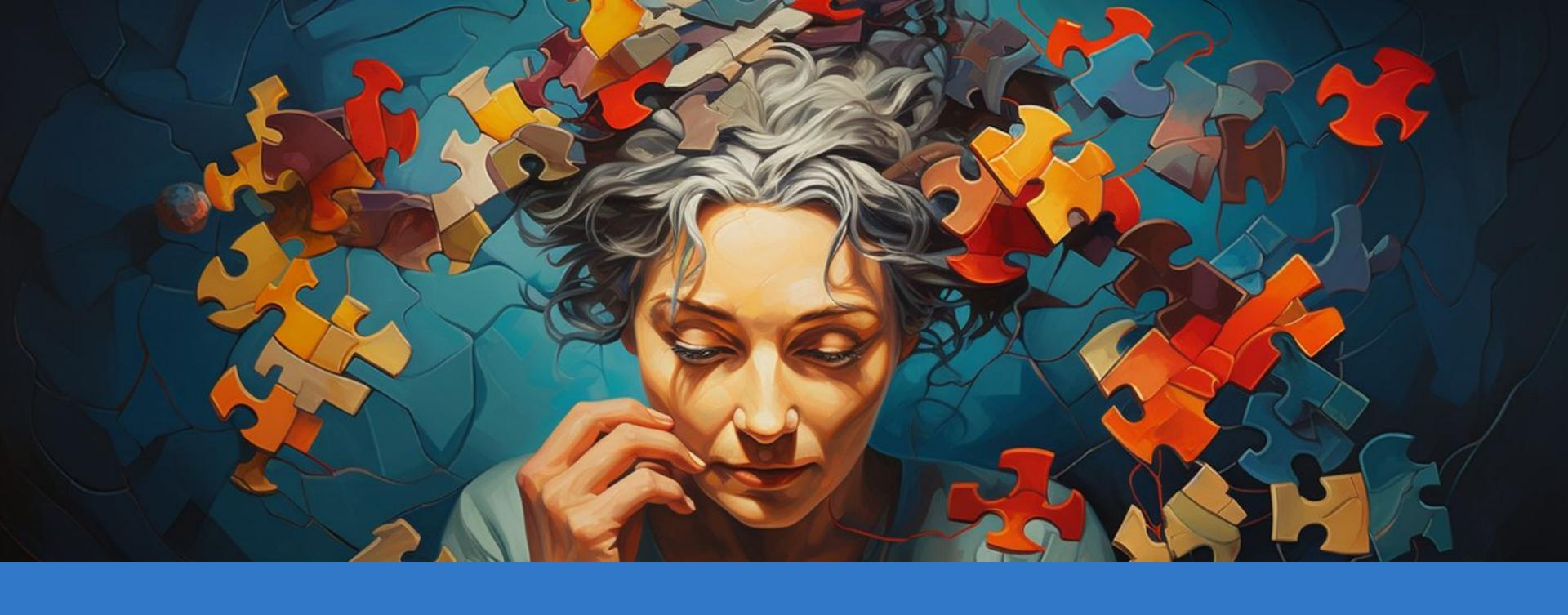
What was the one treatment (or combination of treatments) that helped you the most?

If no treatment helped, then please answer "no treatment helped".

Your answer





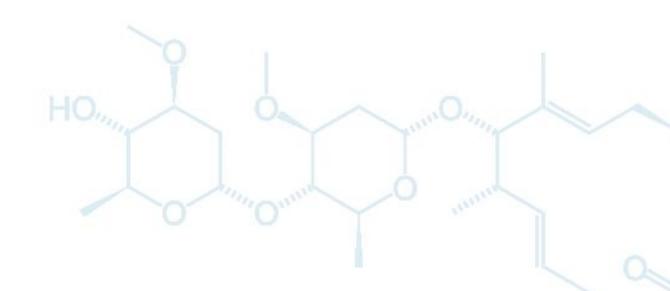


## Treatments Favoured By The Recovered

#### The most frequently cited treatments in the free-form answers

#### 

- Fasting (different forms) 6
- Ivermectin 3
- NAC 3
  - o Note that about half of the people on the survey tried NAC. After adjusting for popularity, it may not be as good as it first appears (e.g. 1% success rate).
- Exercise 2
  - Exercise was even more popular than NAC, so interpret with caution. Most people respond negatively to exercise, even if it is light.
- Nattokinase 3
- LDN (low dose naltrexone) 2
- HBOT (high ATA above 1.5) 2
- Time 4, no answer/treatment 5



## What treatments helped the most? - Long COVID

- 18 day water only fast
- Antivirals and anti-inflammatory meds
  - This person reported results for Valtrex plus diet, LDN, Zyrtec, other NSAID, an unspecified antibiotic, B vitamins
- Consistent gentle exercise and supplements.
- Exercise and time
- HBOT (above 1.5 ATA), LDN, physical therapy
- Hope Biosciences stem cells + vision rehab therapy (concussion protocol)
- Magnesium, black seed oil
- Rest
- Somatic Experiencing, somatic touch work, Electrolytes
- [Time] X 2
- Triple anti-coagulant therapy, HELP apheresis
- [No answer] X 4

## What treatments helped the most? - Vaccine Injured

- ASEA redox, ivermectin.
- Aviv HBoT 3-month protocol. \*Aviv likely refers to this chain of clinics.
- Chlorella \*Type of algae that grows in fresh water.
- Dry fasting 72 hrs
- Fasting \*This person rated 24-48 hour fasting and Multiday juice fasting as mild improvement. Did not try multiday wet/dry fasting.
- Fasting in combination with a well sourced (local farm) carnivore diet.
- Getting covid for the first time (year after vaccine doses)
- Guaifenesin (OTC cough medicine), nattokinase, Resveratrol
- Drug protocol of Maraviroc, Statin and Plavix
- Ivermectin
- Ivermectin, NAC, nattokinase, cardio miracle
- LDN, methylene blue and chlorine dioxide
- NAC and Bromelain together
- Nattokinase and Serrapeptase
- Nicotine, [Augmented/Quantum] NAC and fasting
- Paleo/keto diet.
- Rest, custom liquid herbal tinctures/supplements and low histamine diet.
- Time and fasting (1 meal a day or eating less)
- Vitamin b1
- No treatment (helped the most)

## Raw counts of significant improvement treatments among the recovered

| Treatment               | Count |
|-------------------------|-------|
| Serrapeptase            | 5     |
| Ivermectin              | 5     |
| LDN                     | 5     |
| Nattokinase             | 5     |
| Corticosteroids         | 4     |
| Low histamine diet      | 4     |
| Avoiding exercise       | 4     |
| B vitamins              | 4     |
| Magnesium               | 4     |
| OMAD                    | 3     |
| Graded exercise therapy | 3     |
| Prayer                  | 3     |
| Other NSAID             | 3     |
| Glutenfree diet         | 3     |
| Intermittent fasting    | 3     |
| Pacing strategies       | 3     |
| Zinc                    | 3     |

| Treatment              | Count |
|------------------------|-------|
| Meditation             | 3     |
| Intense exercise       | 3     |
| Light exercise         | 3     |
| Vitamin D              | 3     |
| Stem cells             | 2     |
| Cat's claw             | 2     |
| HBOT >1.5 ATA          | 2     |
| Colchicine             | 2     |
| Statins                | 2     |
| Other brain retraining | 2     |
| VNS                    | 2     |
| Aspirin                | 2     |
| NAC                    | 2     |
| Water and salt         | 2     |
| Probiotics prebiotics  | 2     |
| Vitamin C              | 2     |

Exactly 1 person reported significant improvement from these treatments:

Famciclovir EMDR

Cardio Miracle Nigella sativa capsules

HELP apheresis Lexapro

Tollovid Nigella sativa oil

ASEA Redox Keto diet
Maraviroc Diazepam

Multiday dry fasting Augmented NAC Pamelor Chiropractic

Eliquis Anti inflammatory diet

Clopidogrel Lion's mane
TRT Dandelion
Paleo diet Gabapentin
Aciclovir Resveratrol
St. John's Wort Ashwagandha
Methylene blue K vitamins

Doxepin Benzodiazepines

Carnivore diet Acupuncture
Wim Hof without cold Claritin

AIP diet Drinking water

Plaquenil Massage
Multiday wet fasting Quercetin
Other TCM CoQ10
Valtrex Curcumin
Tetracyclines Advil

Patches

## Significant improvement data



This analysis looked at the percentage who recovered AND reported significant improvement from a treatment.

Treatments with count <= 1 were removed to reduce the size of the table on the right.

The complete Dec 26 data is available at

docs.google.com/spreadsheets/d/1CqKM53
OWFjZHICx95vDzYyhqOjYlFZ7oMa5DEADm514/
edit?usp=sharing. Go to File → Make a
Copy. The filter feature in Google
Sheets can help sift through the data.

|                         | # that tried this treatment | % of surveyees (with recovery data) who tried this | Count | % who mostly recovered AND reported significant improvement |
|-------------------------|-----------------------------|--|-------|---|
| Stem cells              | 4                           | 0.9  |       |   |
| Cat's claw              | 20                          |  |       | 10  |
| HBOT >1.5 ATA           | 23                          |  | 2     |   |
| Colchicine              | 27                          | 5.9  | 2     |   |
| Time                    | 411                         | 89.5   | 21    | 5.1   |
| Serrapeptase            | 101                         | 22   | 5     | 5   |
| Ivermectin              | 109                         | 23.7   | 5     | 4.6   |
| Statins                 | 46                          | 10   | 2     | 4.3   |
| Other brain retraining  | 48                          | 10.5   | 2     | 4.2   |
| LDN                     | 124                         | 27   | 5     | 4   |
| Corticosteroids         | 123                         | 26.8   | 4     | 3.3   |
| OMAD                    | 113                         | 24.6   | 3     | 2.7   |
| Nattokinase             | 194                         | 42.3   | 5     | 2.6   |
| Graded exercise therapy | 114                         | 24.8   | 3     | 2.6   |
| Low histamine diet      | 186                         | 40.5   | 4     | 2.2   |
| Prayer                  | 137                         | 29.8   | 3     | 2.2   |
| Other NSAID             | 146                         | 31.8   | 3     | 2.1   |
| VNS                     | 98                          | 21.4   | 2     | 2   |
| Glutenfree diet         | 169                         | 36.8   | 3     | 1.8   |
| Intermittent fasting    | 188                         | 41   | 3     | 1.6   |
| Avoiding exercise       | 279                         | 60.8   | 4     | 1.4   |
| Pacing strategies       | 215                         | 46.8   | 3     | 1.4   |
| B vitamins              | 313                         | 68.2   | 4     | 1.3   |
| Zinc                    | 236                         | 51.4   | 3     | 1.3   |
| Meditation              | 226                         | 49.2   | 3     | 1.3   |
| Intense exercise        | 226                         | 49.2   | 3     | 1.3   |
| Magnesium               | 323                         | 70.4   | 4     | 1.2   |
| Light exercise          | 302                         | 65.8   | 3     | 1   |
| Aspirin                 | 201                         | 43.8   | 2     | 1   |
| Vitamin D               | 343                         | 74.7   | 3     |   |
| NAC                     | 217                         | 47.3   | 2     | 0.9   |
| Water and salt          | 242                         | 52.7   | 2     | 0.8   |
| Probiotics prebiotics   | 237                         | 51.6   | 2     | 0.8   |
| Vitamin C               | 282                         | 61.4   | 2     | 0.7   |

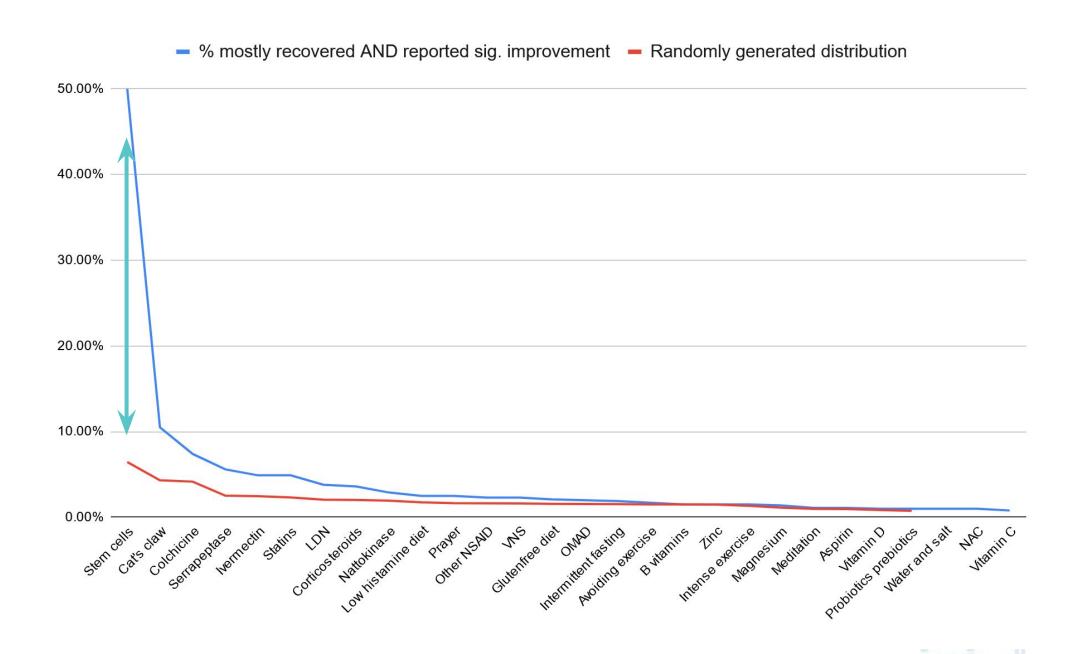
## Is the data due to chance, effective treatment, or survey bias?

#### 

The **red** line on the right shows a randomly generated distribution. The **blue** line on the right shows the actual data (with its treatments labelled correctly).

A large **spread** between the blue and red line suggests that the difference is due to effective treatment and/or a bias in how people answer surveys.

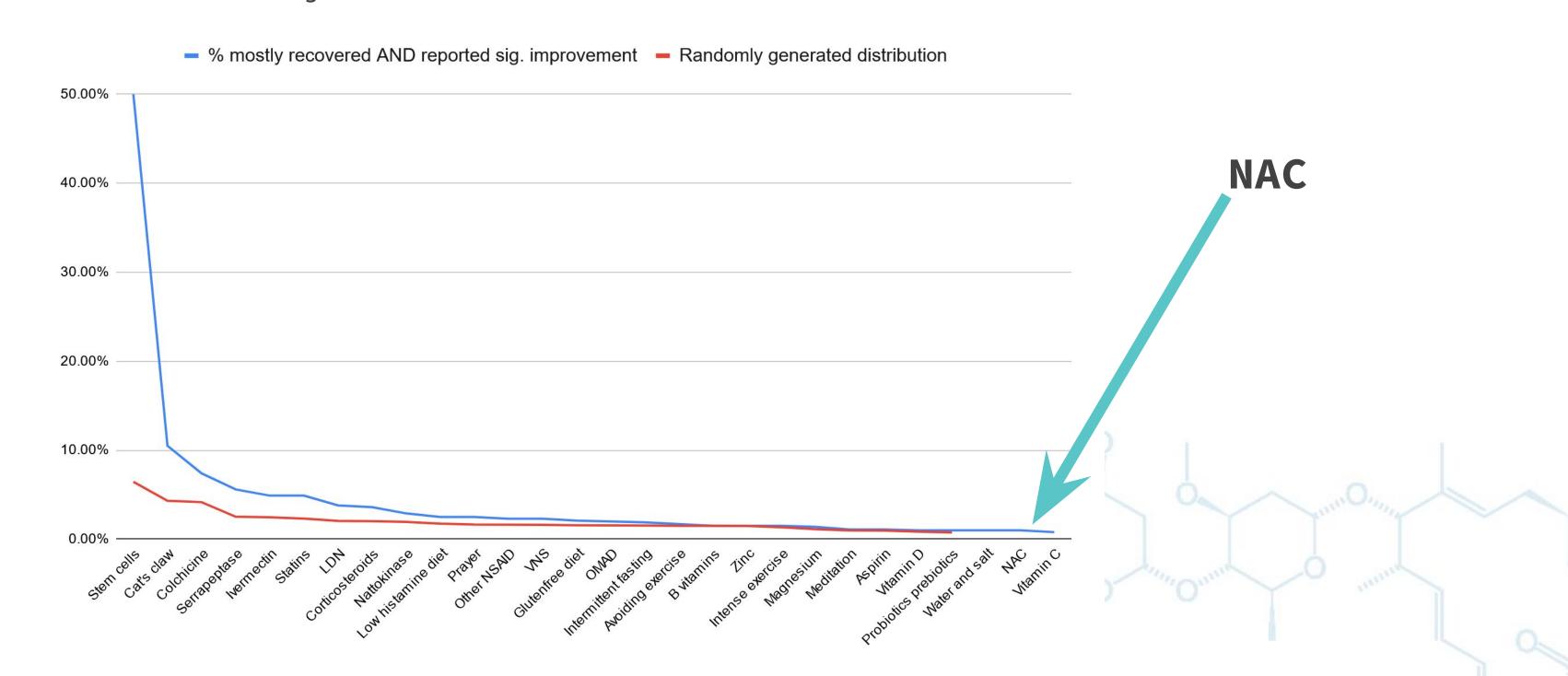
The data can be biased if some people think highly of prayer and therefore rate prayer highly, independent of prayer's medical effect.



## Conflicting results for NAC (N-Acetyl Cysteine)



While the free-form answers may seem to suggest that NAC leads to recovery, the other method does not as it adjusts for how often a treatment was tried.

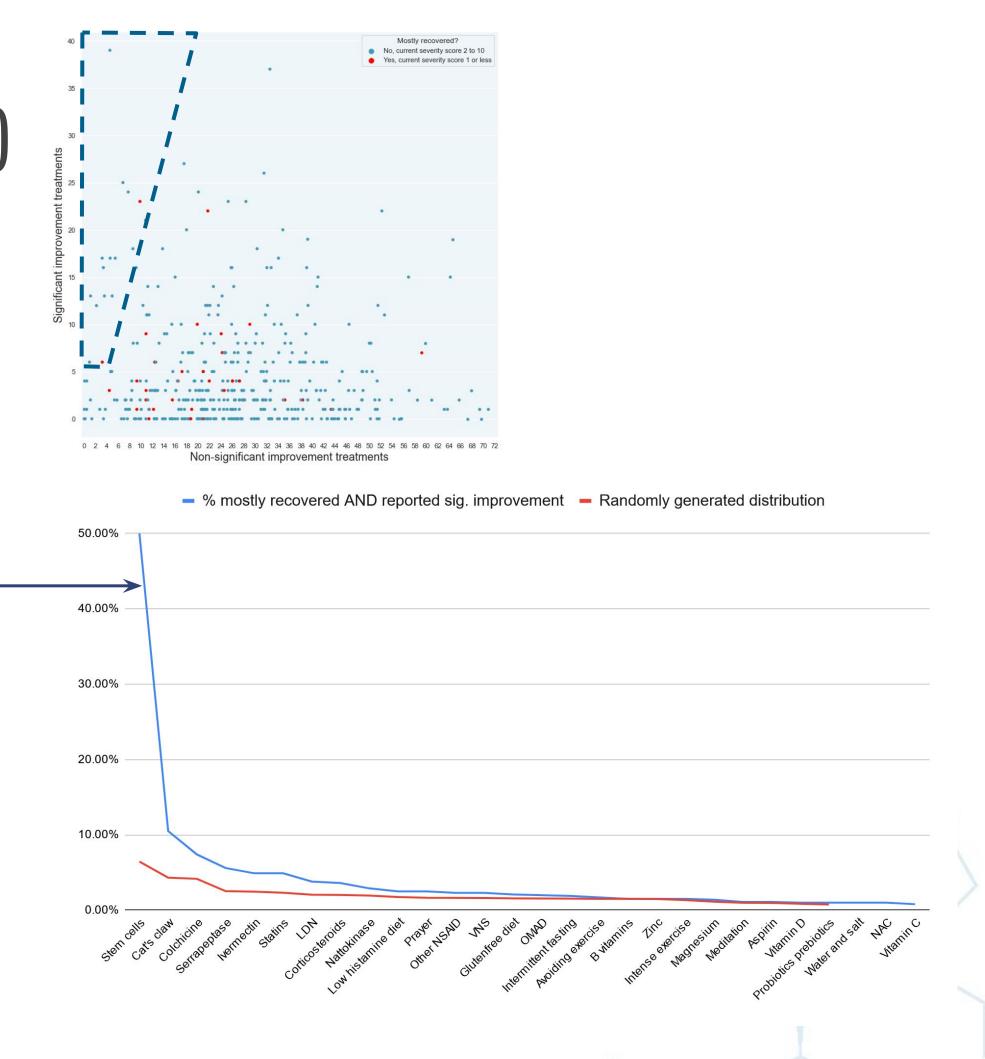


### The 80/20 rule (or Pareto Principle)

#### 

The 80/20 rule states that 80% of outcomes results from 20% of causes. This rule of thumb is a rough approximation of probability distributions that frequently occur in life, where a small minority accounts for the majority of impact.

The blue line on the right shows an 80/20 style probability distribution. The distribution suggests that most treatments do not have a meaningful impact— only a few treatments work. This suggests that the data from 'everything works' surveyees includes survey biases and does not fully reflect their medical outcomes.



## Medical practitioners need to question if patients are accurately reporting treatment outcomes!



Chronic illness is largely based on self-reporting by patients as there are few biomarkers and objective measures (e.g. employment) that track the patient's well-being.

The survey data strongly suggests that patients have reporting biases. Furthermore, some of their reported outcomes are indistinguishable from random noise.

Conversely, patients can ask the same questions about medical professionals— are *they* accurately reporting their patients' medical outcomes? Do they have biases driven by financial pressures or social factors?

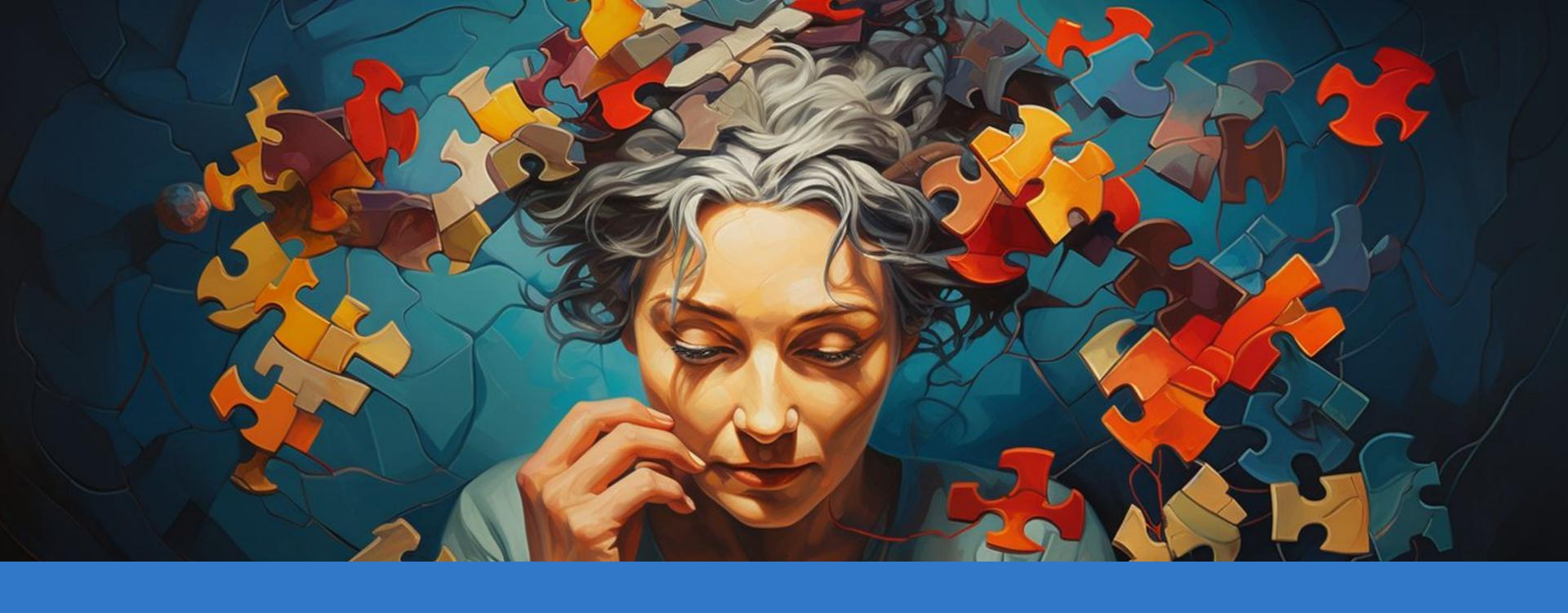
## Applications of the PES dataset

#### 

The data can be used to identify promising treatments as well as treatments that may not be worth trying.

- The full data dump is available at <a href="LongHaulWiki.com/pes/">LongHaulWiki.com/pes/</a>.
- This post explains how you can search through the data dump (which is 200+ pages if printed).

Certain treatments such as homeopathy, osteopathy, chiropractic, acupuncture, and other TCM (Traditional Chinese Medicine) may be riskier than one would expect.

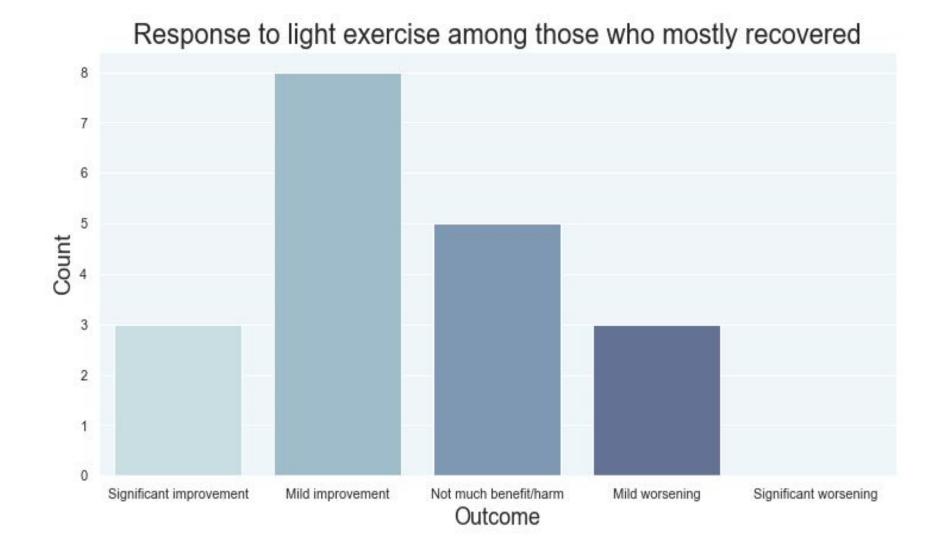


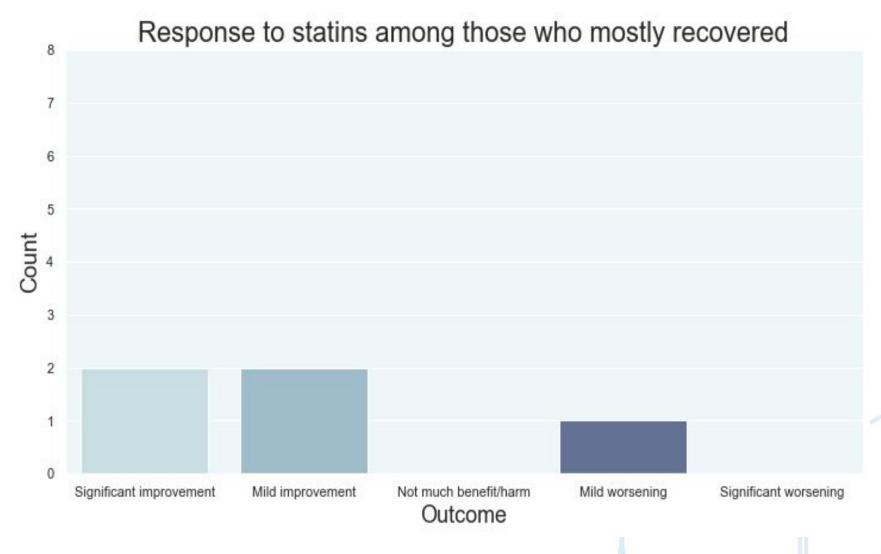
## Other Findings

## Different paths to recovery



Among those who recovered, there were mixed results for light exercise and statins.





## Did higher doses perform better?

#### 

- Black seed oil in oil form (e.g. oil poured out of a bottle) and capsule form was rather higher than the seed form.
- Higher pressure HBOT above 1.5ATA
   outperformed cheaper, lower pressure HBOT.
- There were mixed results for fasting, though intermittent fasting generally underperformed relative to other fasting methods.



|                        | % (of those who tried this) who mostly recovered AND reported significant | % of surveyees (with recovery data) who tried this | Count              | Number who tried this treatment |
|------------------------|---|--|--------------------|---------------------------------|
| Multiday dry fasting   | 7.7   | 2.8  | HO <sub>mm</sub> 1 | 13                              |
| OMAD                   | 2.7   | 24.6   | 3                  | 113                             |
| Multiday wet fasting   | 2.8   | 7.8  | 1                  | 36                              |
| Intermittent fasting   | 1.6   | 41   | 3                  | 188                             |
| Multiday juice fasting | 0   | 3.9  | 0                  | 18                              |

### Are higher doses riskier?

#### 

Unlike the previous Treatment Outcomes survey, the Patient Experiences Survey did not show clear correlations between higher doses and risk:

- Mixed results for nigella sativa.
   Presumably, the oil form is taken at higher dosages than capsules which are taken at a higher dose than the seeds.
- Higher pressure HBOT somehow had lower risk than lower pressure HBOT (!).
- Fasting did show a relationship between dose and risk (see next slide).

#### Anti-microbials

Chronic Lyme treatments such as HBOT, methylene blue, IV ozone, and monolaurin are included Amphotericin, Canesten, Econazole, etc. are anti-fungals.

|    | Treatments with more than 0 data points                | Score | Risk score | # of data points (out of 525 surveyees) |
|----|--|-------|------------|---|
| 1  | [HBOT > 1.5 ATA]                                       | 1.52  | -0.16      | 25                                      |
| 2  | [Rapamycin]  | 1.33  | 0.00       | 3                                       |
| 3  | [Alinia]   | 1.20  | 0.00       | 5                                       |
| 4  | [Monoclonals]  | 1.00  | 0.00       | 11                                      |
| 5  | [Ivermectin]   | 1.00  | -0.14      | 129                                     |
| 6  | [Plaquenil]  | 0.74  | -0.29      | 42                                      |
| 7  | [Oil of oregano]                                       | 0.70  | -0.05      | 56                                      |
| 8  | [Methylene blue]                                       | 0.70  | -0.07      | 27                                      |
| 9  | [Nigella sativa oil]                                   | 0.67  | -0.05      | 66                                      |
| 10 | [IV ozone]   | 0.65  | -0.17      | 23                                      |
| 11 | [Cat's claw]   | 0.61  | -0.13      | 23                                      |
| 12 | [Molnupiravir]   | 0.60  | 0.00       | 5                                       |
| 13 | [Aciclovir, Famciclovir, Valtrex, Valcyte]             | 0.59  | -0.09      | 75                                      |
| 14 | $[{\sf Amphotericin, Canesten, Econazole, Fluconazol}$ | 0.51  | -0.27      | 101                                     |
| 15 | [HBOT <=1.5 ATA]                                       | 0.50  | -0.27      | 26                                      |
| 16 | [Favipiravir]  | 0.50  | 0.00       | 2                                       |
| 17 | [Lion's mane]  | 0.49  | -0.16      | 106                                     |
| 18 | [Nigella sativa capsules]                              | 0,48  | 0.00       | 62                                      |
| 19 | [Lavender]   | 0.48  | -0.08      | 52                                      |
| 20 | [Monolaurin]   | 0.32  | -0.08      | 37                                      |
| 21 | [Paxlovid]   | 0.29  | -0.38      | 34                                      |
| 22 | [Tetracyclines, Fluoroquinolones, Penicillins,         | 0.21  | -0.55      | 220                                     |
| 23 | [Nigella sativa seed]                                  | 0.00  | -0.10      | 10                                      |
| 24 | [Biocidin]   | -0.38 | -0.50      | 8                                       |

## Are higher doses riskier? - fasting

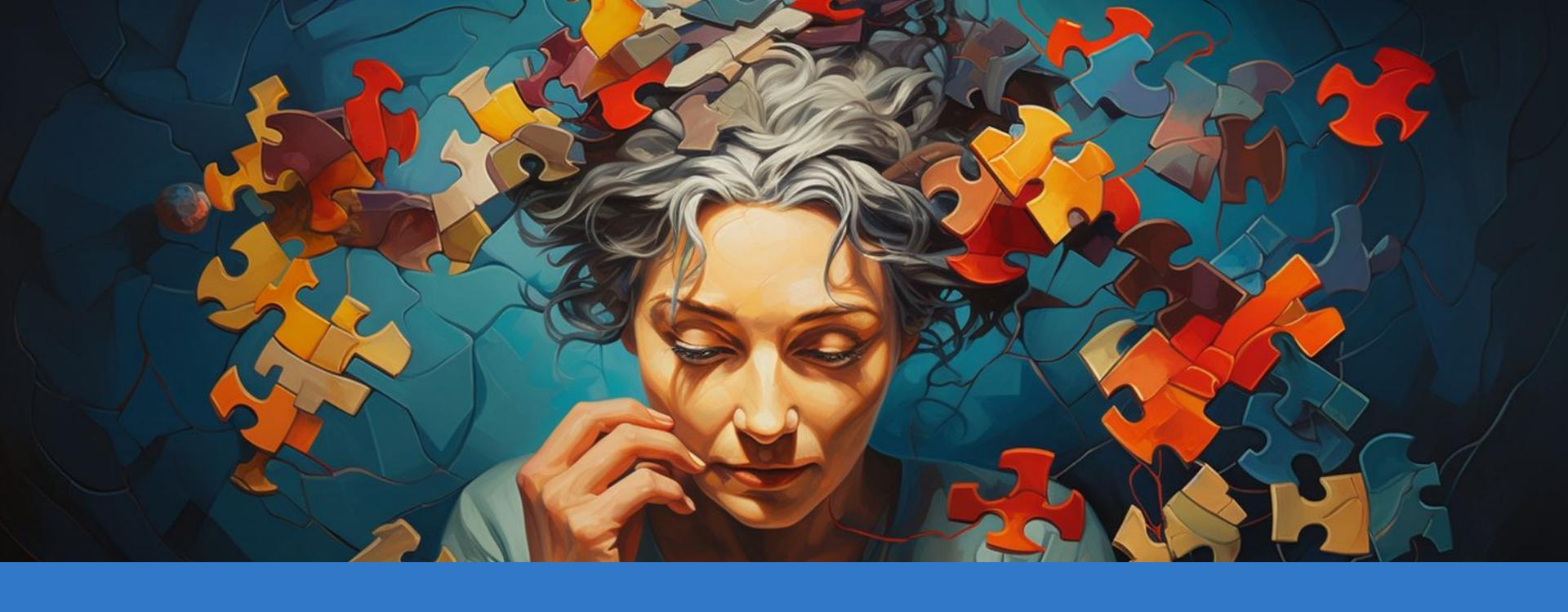
#### 

The least intense forms of fasting, intermittent fasting and one-meal-a-day (OMAD), had the lowest risk compared to other forms of fasting.

#### Fasting and autophagy

Hydroxychloroquine/Plaquenil inhibits autophagy rather than promotes it.

|    | Treatments with more than 0 data points | Score | Risk score | # of data points (out of 525 surveyees) |
|----|---|-------|------------|---|
| 1  | [Multiday wet fasting]                  | 0.82  | -0.26      | 38                                      |
| 2  | [Intermittent fasting]                  | 0.77  | -0.08      | 212                                     |
| 3  | [Plaquenil]                             | 0.74  | -0.29      | 42                                      |
| 4  | [Resveratrol]                           | 0.52  | -0.03      | 126                                     |
| 5  | [Multiday juice fasting]                | 0.45  | -0.35      | 20                                      |
| -6 | [OMAD]                                  | 0.44  | -0.24      | 124                                     |
| 7  | [24-48 hour fasting]                    | 0.43  | -0.42      | 89                                      |
| 8  | [Multiday dry fasting]                  | 0.21  | -0.79      | 14                                      |
| 9  | [Spermidine]                            | 0.09  | -0.09      | 32                                      |

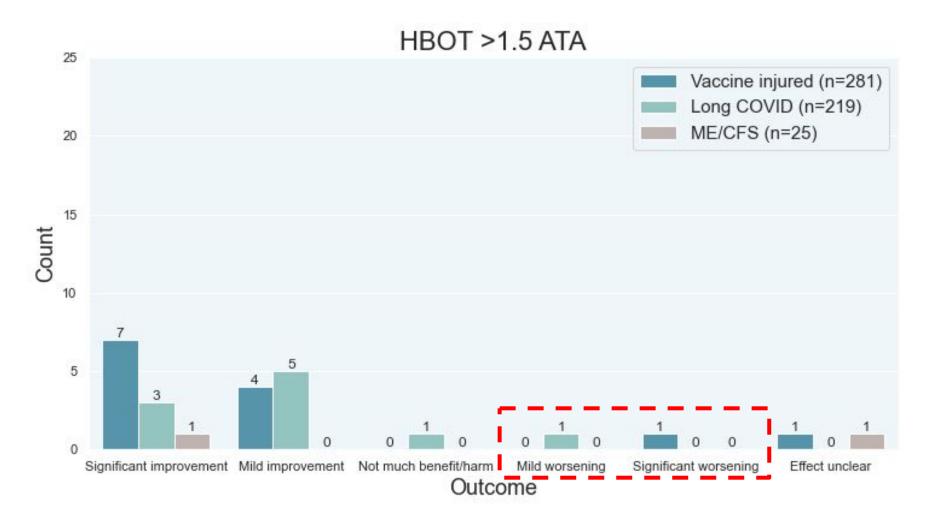


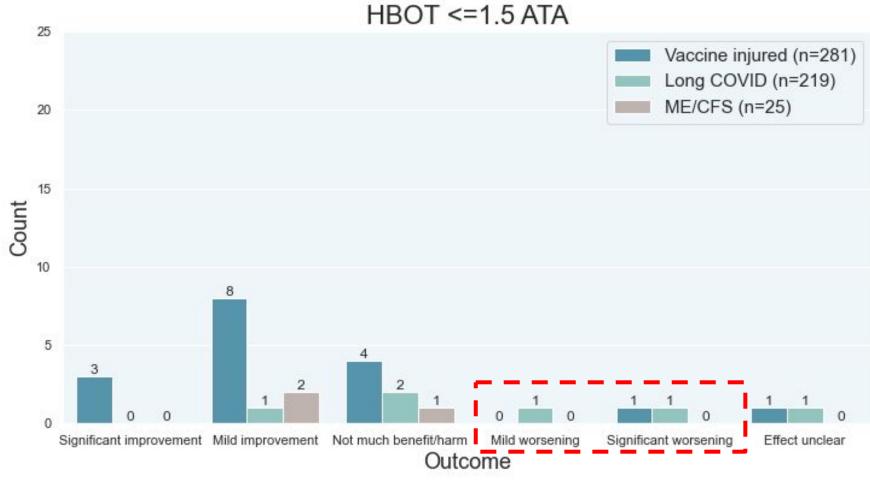
# Many Treatments Helped Some, Worsened Others 3 Examples

## Different responses to HBOT



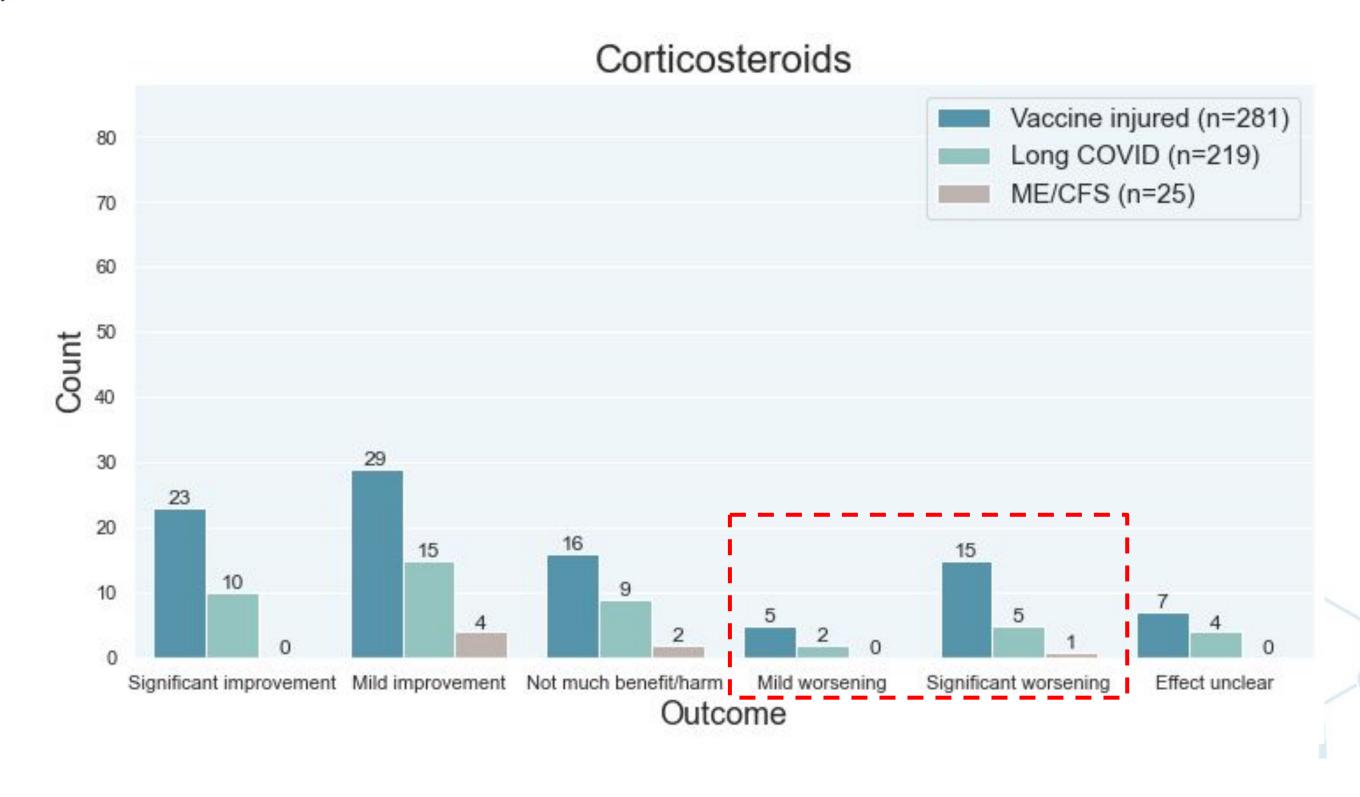
There were multiple people reporting **negative** experiences with HBOT (both high and low ATA). The data below includes the non-recovered.





## Different responses to corticosteroids

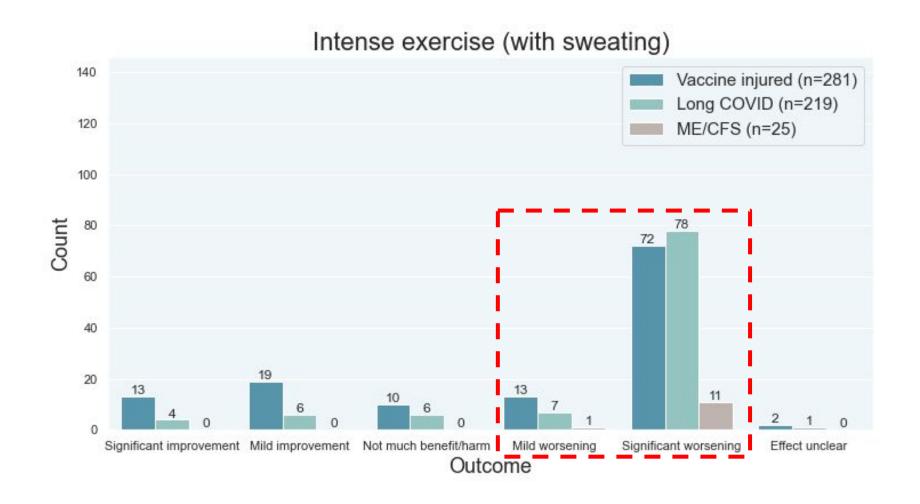


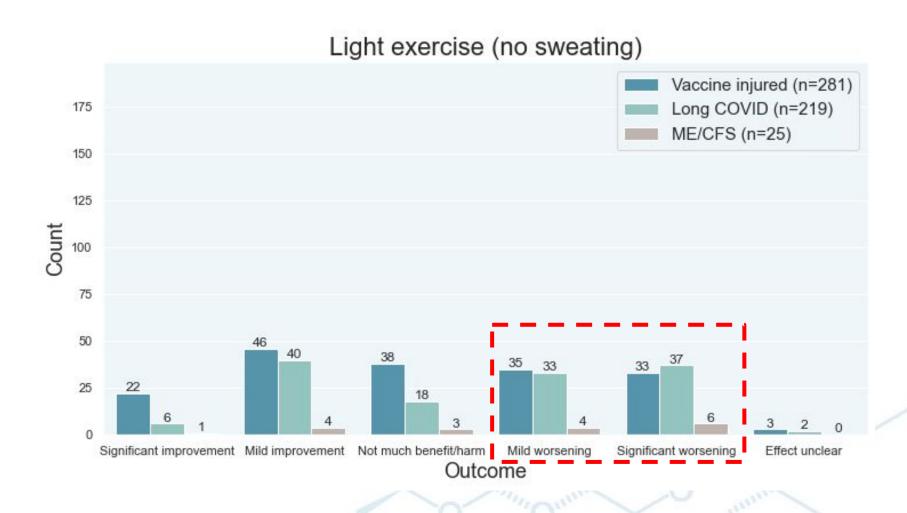


### Different responses to intense and light exercise

#### 

While exercise is generally presumed to be beneficial, most chronic illness patients react very poorly to it (even if it is light exercise). Other treatments such as acupuncture also seem to be much riskier in chronic illness patients (not shown).





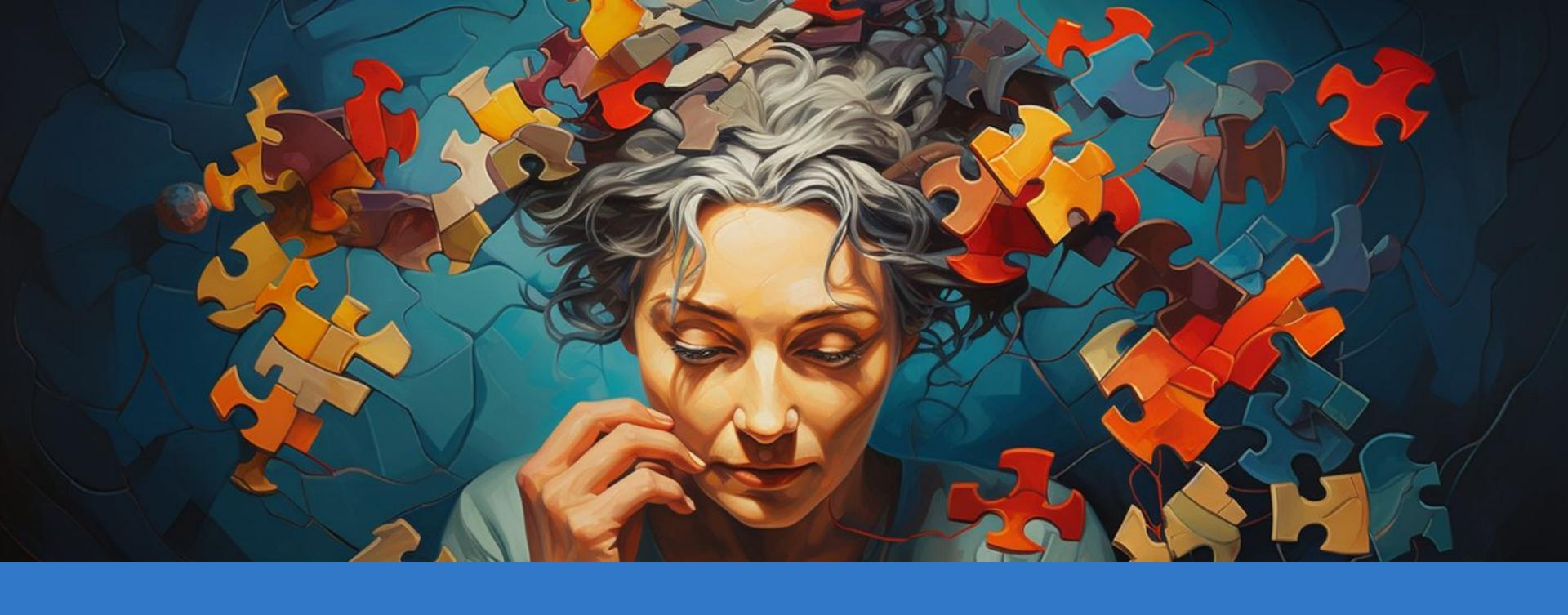
## Double-edged swords



Treatments that were rated highly by those who recovered usually had a medium or high rate of symptom worsening.

There are very few treatments that do not carry the risk of reported worsening and show some potential for facilitating recovery. Exceptions include pacing strategies, prayer, low histamine diet, nattokinase and serrapeptase.

There is currently no test or methodology that would allow one to predict the outcome of treatment beforehand. Due to the riskiness of most treatments, it would be prudent to take a conservative approach that recognizes the harm that these treatments can do.



## **Promising Treatments**

### Selected treatments grouped based on safety and efficacy

Nattokinase Prayer Cat's claw Serrapeptase Ivermectin\* NAC Low histamine diet Statins\* \*Can be considered high risk. Corticosteroids LDN Exercise **HBOT** Fasting Colchicine Stem cells?

## (but typically still risky)

Lower risk

### Risky treatments with lower evidence of efficacy



Corticosteroids and exercise have a high rate of surveyees reporting worsening. Exercise was the riskiest treatment by far, exceeding all prescription drugs.

While it is possible that these treatments helped a few people recover, it is also possible that they cause more harm than good. Without more reliable data, it would not be prudent to recommend these treatments.

#### Risk rankings

Treatments sorted from highest risk score to lowest risk score. May be limited to the 60 riskiest treatments.

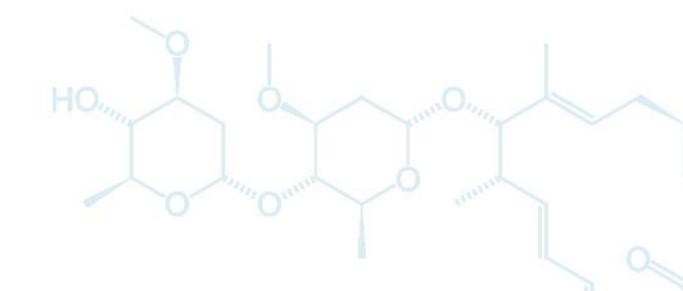
|    | Treatments with more than 90 data points       | Score | Risk score # of data points (out of 525 surveyees) |
|----|--|-------|--|
| 1  | [Intense exercise]                             | -1.76 | -2.07 243  |
| 2  | [Graded exercise therapy]                      | -0.71 | -1.19  |
| 3  | [Light exercise]                               | -0.37 | -0.91 331  |
| 4  | [Remeron, Seroquel, Wellbutrin]                | -0.31 | -0.72  |
| 5  | [Celexa, Lexapro, Fluvoxamine, Prozac, Paxil,  | -0.17 | -0.70 264  |
| 6  | [Tetracyclines, Fluoroquinolones, Penicillins, | 0.21  | r-0 <del>.5</del> 57 220                           |
| 7  | [Corticosteroids]                              | 0.52  | -0.48  |
| 8  | [Beta blockers]                                | 0.66  | -0.37 136  |
| 9  | [CBD with THC]                                 | 0.48  | -0.36 159  |
| 10 | [Time]   | 0.83  | -0.35 465  |
| 11 | [Amphotericin, Canesten, Econazole, Fluconazol | 0.51  | -0.27 101  |
| 12 | [LDN]  | 0.91  | -0.26 140  |
| 13 | [Benadryl]                                     | 0.35  | -0.25  |
| 14 | [Pepcid]                                       | 0.46  | -0.24 157  |
| 15 | [OMAD]   | 0.44  | -0.24 124  |
| 16 | [Other NSAID]                                  | 0.43  | -0.22  |
| 17 | [Acupuncture]                                  | 0.66  | -0.21 165  |
| 18 | [Ashwagandha]                                  | 0.34  | -0.19 139  |
| 19 | [Melatonin]                                    | 0.53  | -0.18 236  |
| 20 | [Advil]  | 0.31  | -0.17 254  |

### Low risk treatments with the most evidence of efficacy

#### 

There is low downside for patients to try these treatments. (Note that ivermectin and statins have risk.)

However, please be aware that the data for efficacy may be unreliable. There is a good chance that at least some of the treatments identified as promising have no benefit.



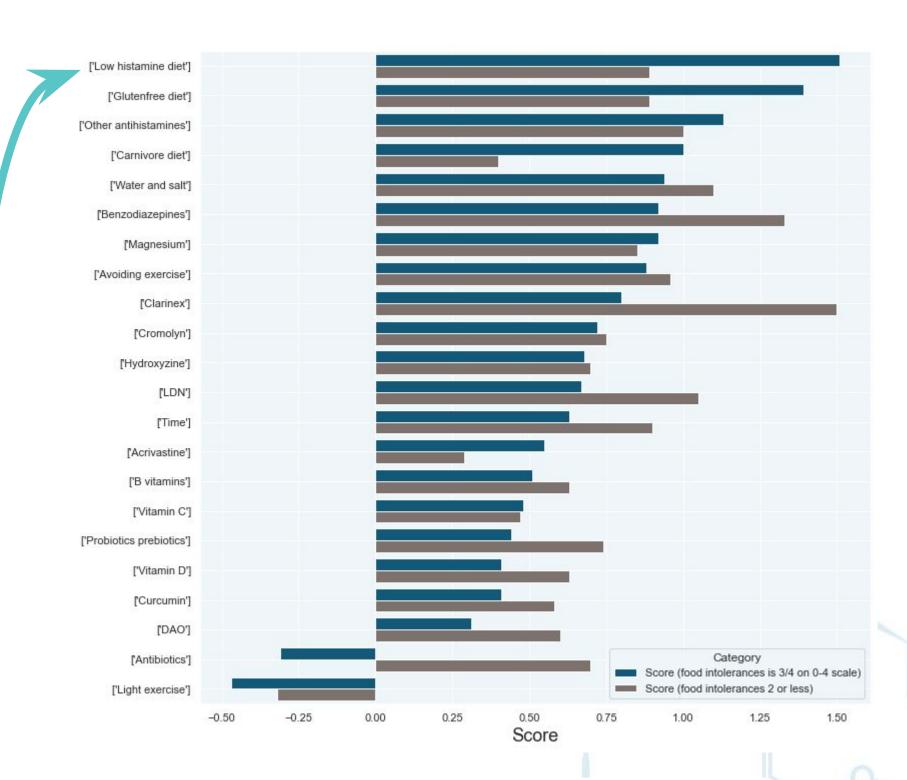
#### Low risk treatments with low evidence of efficacy



These treatments can be worth trying due to their low downside.

**Prayer** may not work for those who are not religious. There is no data as to its effects on the non-religious.

Diets such as the **low histamine diet** may offer rapid symptom relief, especially in those with severe food intolerances. However, such treatments may not necessarily have a meaningful impact on recovery.

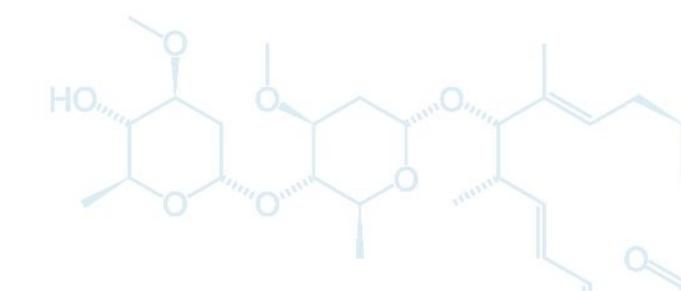


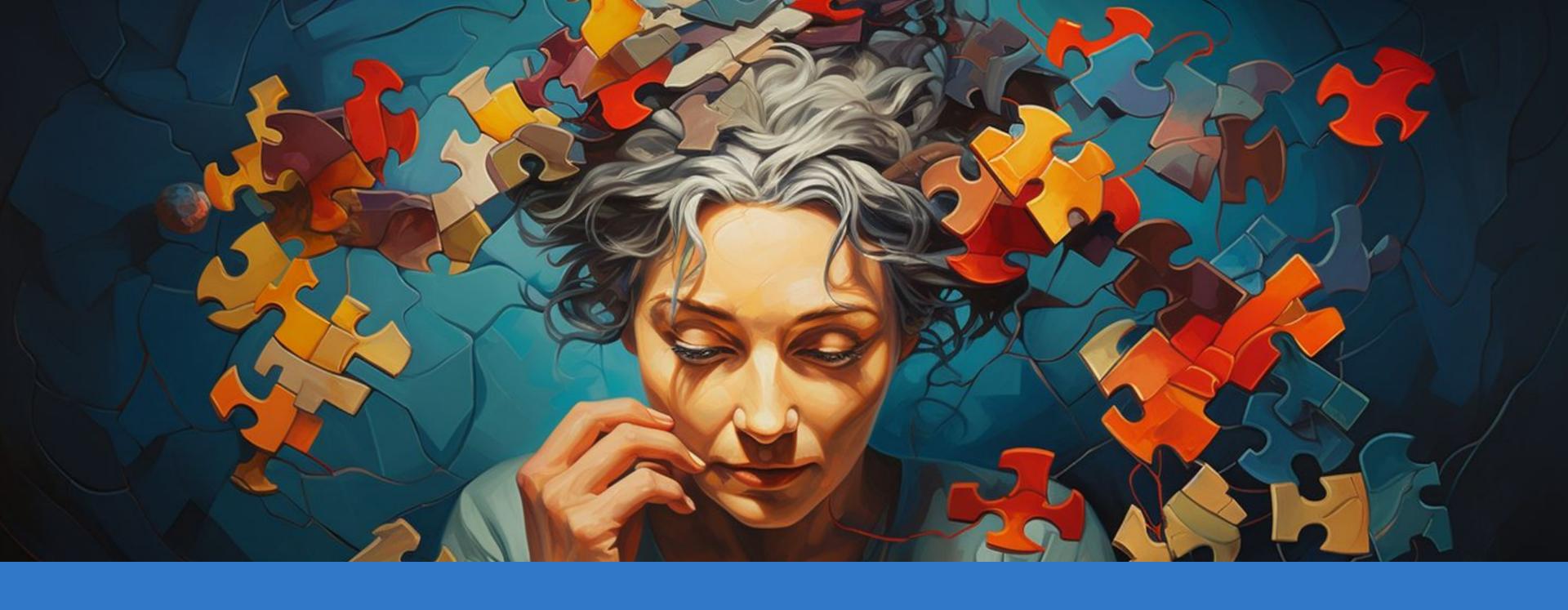
### High risk treatments with the most evidence of efficacy



Ivermectin and statins could be included in this category as they are prescription drugs and do have risk.

It is possible that the *only* effective treatments are the double-edged swords. Most of the potentially effective treatments identified so far exhibit some level of risk, with the exception of nattokinase and serrapeptase.





# Chronic Illness May Have Multiple Underlying Factors

## The 'double edged sword' phenomenon



Chronic illness is full of paradoxes. The treatments with the strongest indications of efficacy have also been reported to cause worsening in some. HBOT, which has strong empirical support from RCT data, leads to negative symptoms in some.

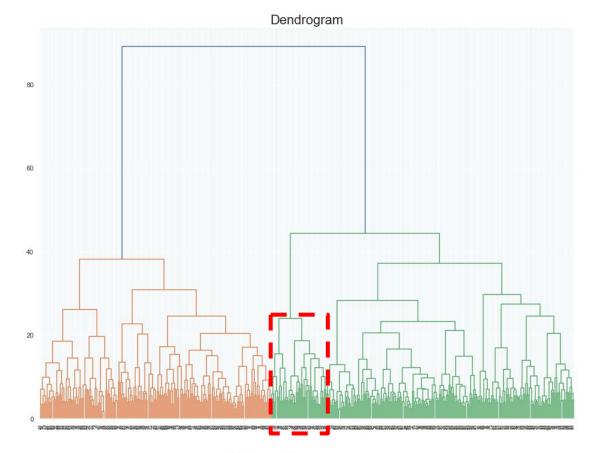
This could be explained by multiple underlying factors that interact with and oppose one another. For example, microbes/pathobionts living in human tissue affect the fitness of other microbes through competition and symbiosis.

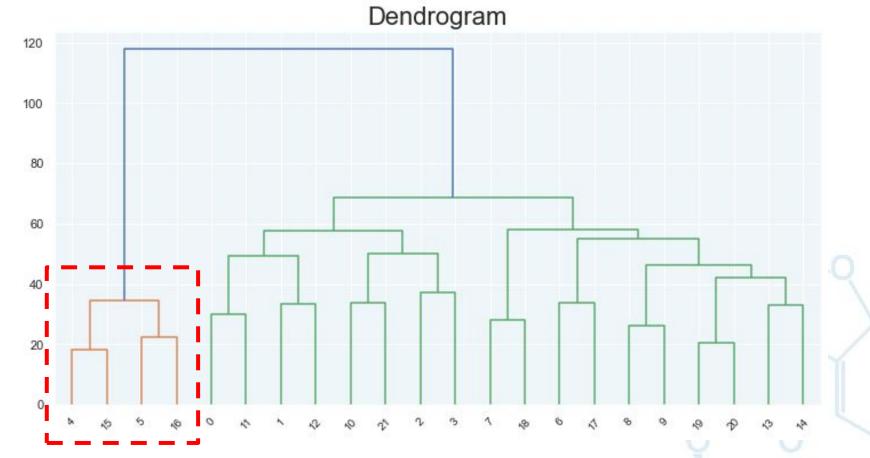
## Symptoms do not exhibit obvious phenotypes

#### 

Hierarchical clustering can be used to detect patterns and phenotypes based on patients' reported symptoms. In practice, it tends to find groups of people who answer surveys differently (rather than medical differences).

In the PES data set, there is a distinct cluster of 45 people. Most of this cluster reported both severe blood clots and bleeding issues, which is medically unlikely given the prevalence of the combination and the low rates of prescription blood thinners being tried.





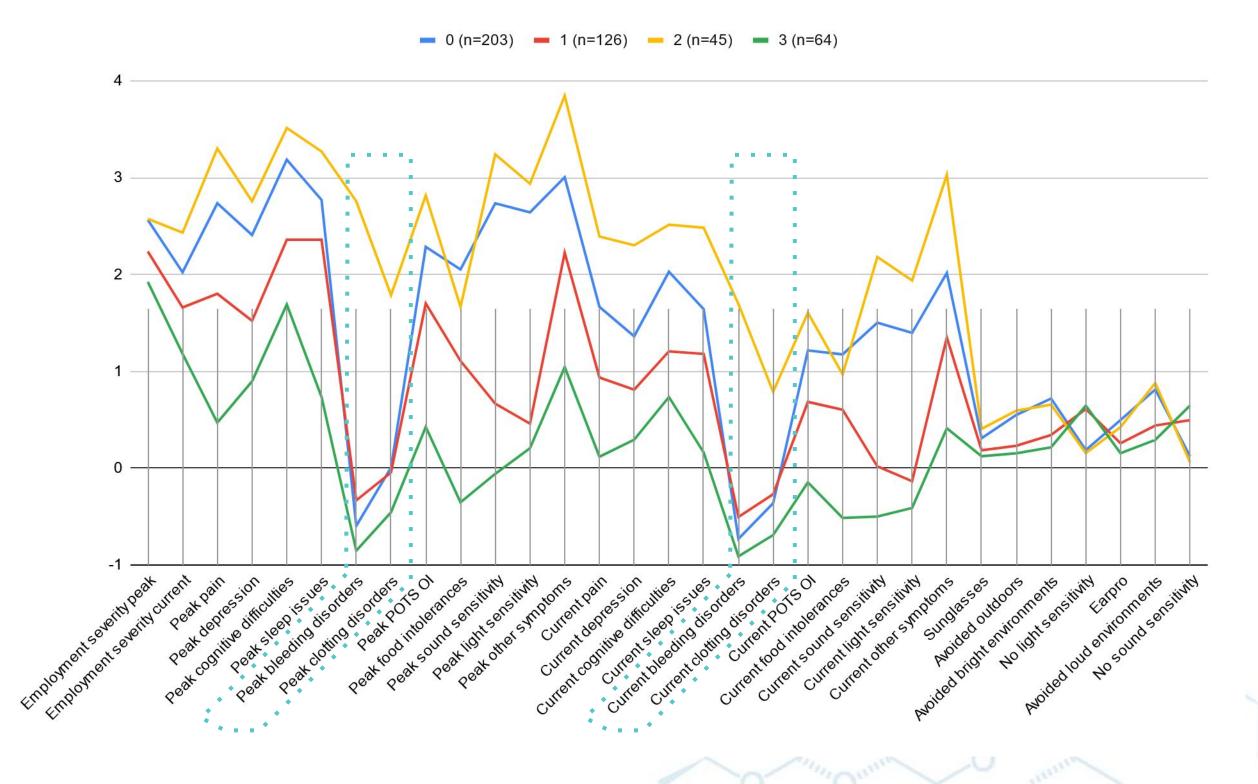
LongHaulWiki.com/pes/

#### Cluster 2

#### 

Cluster 2 in yellow is the one reporting both blood clots and bleeding.

That is the most striking difference between it and cluster 0 in blue, which is the most similar.

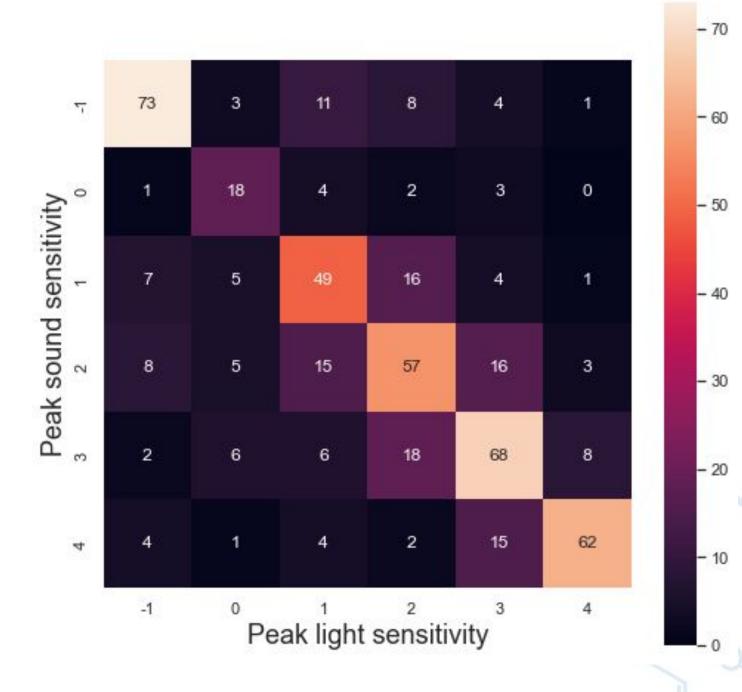


## No obvious phenotypes discovered so far



Clustering analysis of data from other surveys (e.g. see pages 33-34) seems to show that there are no obvious phenotypes. Patients seem to draw from a shared pool of common symptoms but there are no clear patterns.

Certain symptoms such as sound and light sensitivity with each other, perhaps due to a shared underlying cause (e.g. meningitis) that can cause both symptoms.



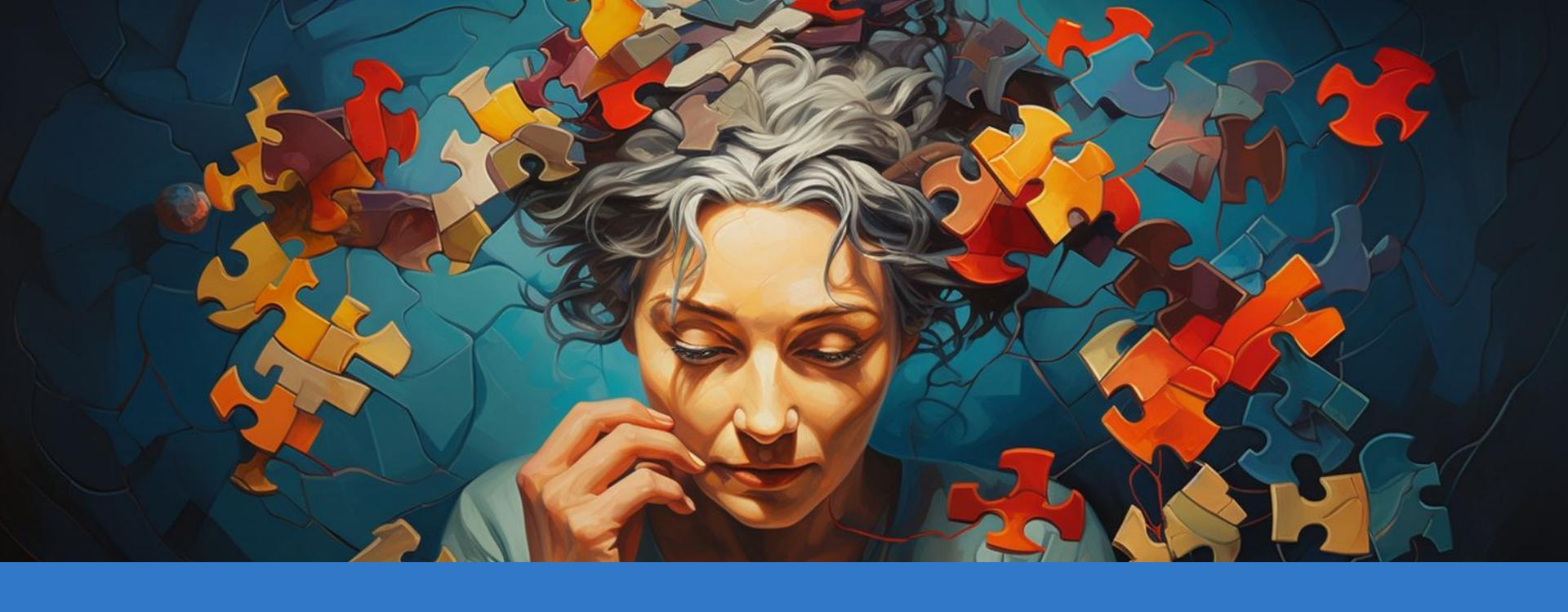
## We lack the missing pieces



Multiple underlying causes would explain why effective treatment is so elusive for most while a lucky few stumble into recovery. The answers seem to be different for each patient.

Without any testing or intuition that can predict treatment outcomes (e.g. based on underlying cause), chronic illnesses can currently only be treated in a blind fashion.





## The Future Of Treating Chronic Illness



### Data will show us the way

#### 

Gathering reliable data is hard, making it easy to develop misconceptions about medical outcomes.

Whereas little progress will be made with unreliable anecdotes from patients or clinicians, big data (large datasets) and careful data collection will move us forward.



#### Data will inform clinical care

#### 

- The double-edged nature of many treatment needs recognition to reduce harm.
- **HBOT** should be considered as a first-line treatment, where feasible. It is the most proven Long COVID treatment so far.
- We should avoid treatments where it is known that the risk/reward is poor.



### Data points towards recovery

#### 

While the efficacy signals are subtle, data points towards promising treatments such as fasting. Patterns among popular treatments (such as antimicrobial effects) can be extrapolated to identify other potential treatments such as anti-parasitics (e.g. Plaquenil). Continued research and/or patient experimentation will inevitably move us forward.

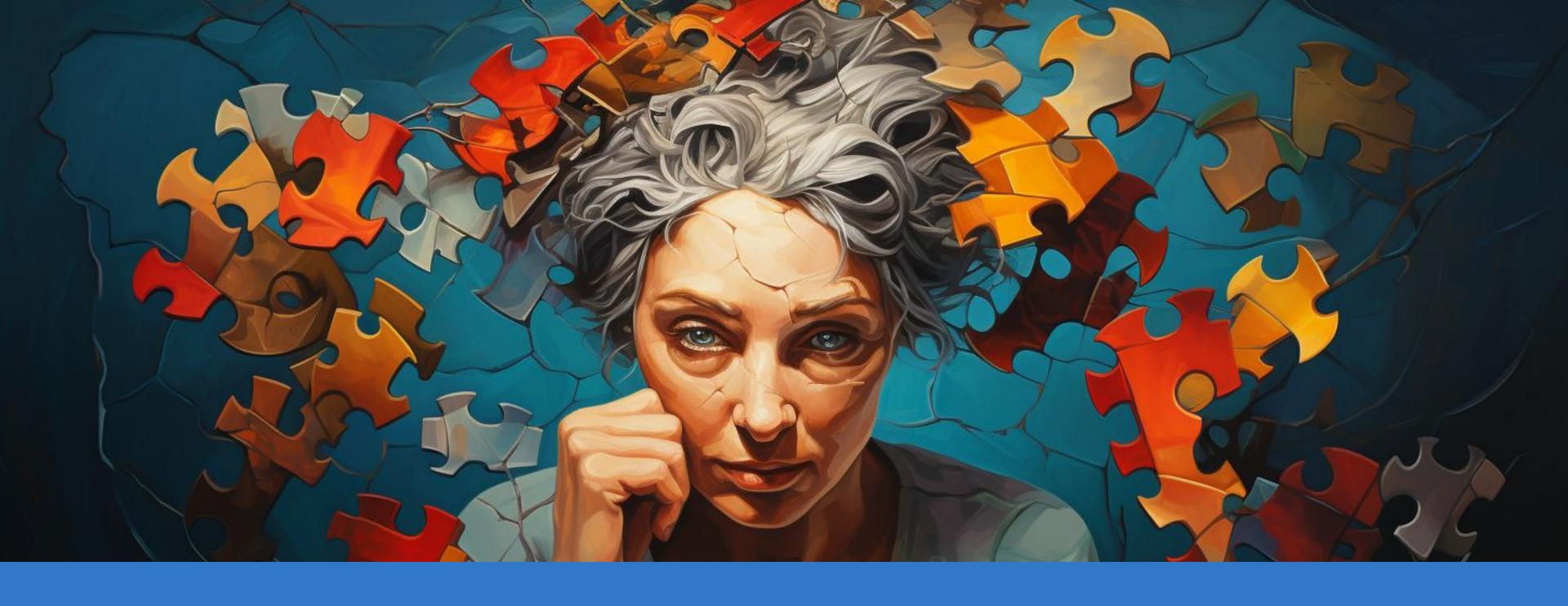


## Thank you

If you have questions, please feel free to ask them at <a href="forum.SickAndAbandoned.com">forum.SickAndAbandoned.com</a>.

Or email:

glennchan /at/ gmail [dot] com



# Appendix - Should Long COVID, Vaccine Injury, And ME/CFS Be Considered Inter-related?

## Similar symptoms



The chronic illnesses Long COVID, ME/CFS, and vaccine injury (Post COVID Vaccination Syndrome) all had similar symptom profiles as self-reported by participants (see next slide).

Participants were recruited from online support groups, where most people suffer from a long list of symptoms and severity is high. This syndrome is likely different than the so-called "Long COVID" or PASC that is far more common in the general population following COVID.

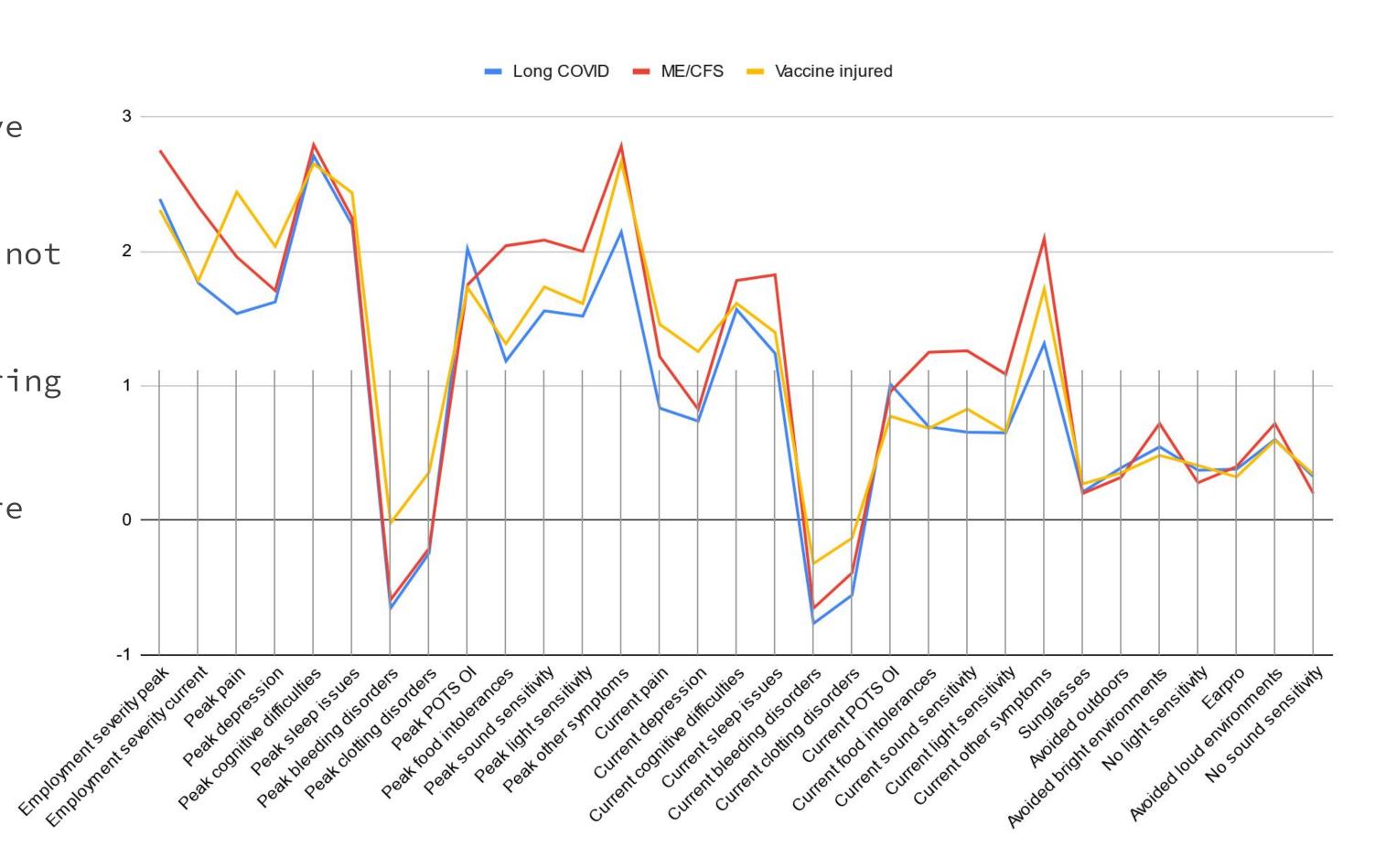
## Symptom profile comparison between illnesses

-1 = "Did not have
these symptoms"

0 = "Symptoms do not bother me"

4 = "Worst suffering
imaginable"

Average values are shown.



## Cluster analysis

#### 

The PES data can be arbitrarily split into 4 clusters. Cluster 2 consists mainly of the vaccine injured. This small cluster of 45 people (10.3% of all participants) often reported severe suffering from both blood clots and bleeding. It is likely not medically driven (see earlier slides).



## Limitations



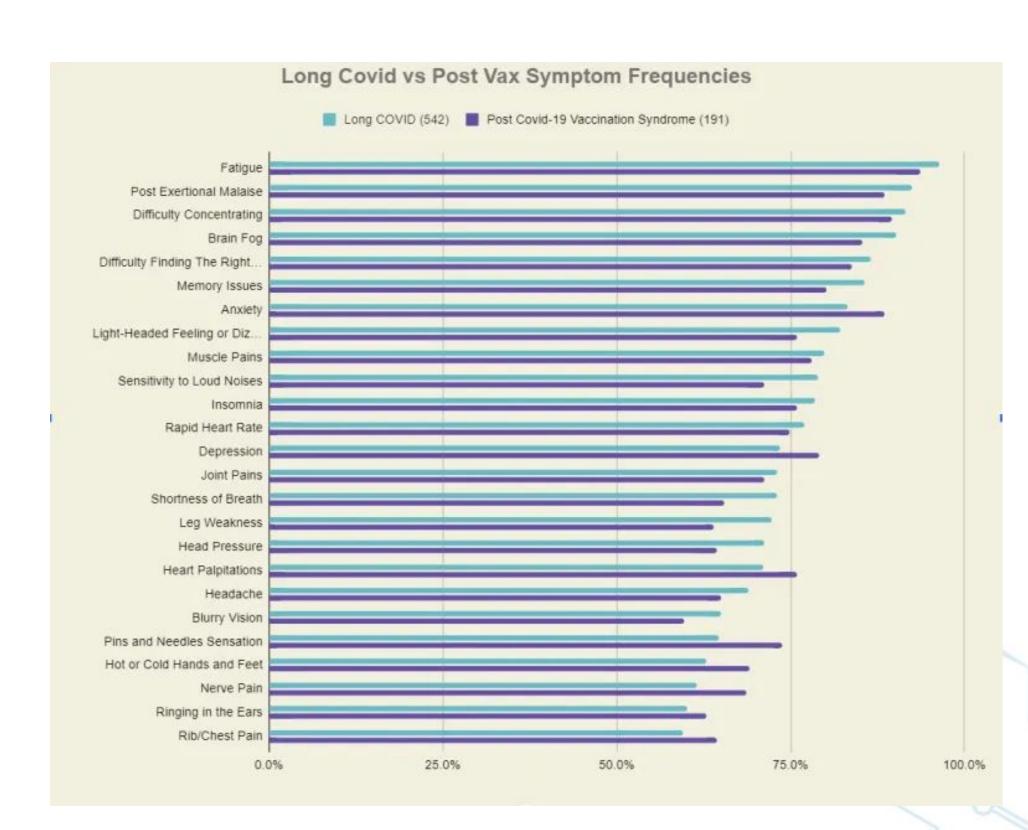
The Patient Experiences Survey was **not** designed to carefully compare the chronic illnesses. It did not ask about potentially distinctive symptoms such as loss of taste or smell. It did not ask about most symptoms (there may be over 200 symptoms).

The survey was not iterated repeatedly to reduce erroneous data from questions being misinterpreted, such as the bleeding/clotting cluster identified in the PES dataset.

## Other datasets- Tom Bunker

A patient-led survey that recruited both Long COVID and the vaccine injured shows a high level of similarity between the 2 chronic illnesses.

RecoverFromLongCovid.com/vaccine-injured-long-covid/



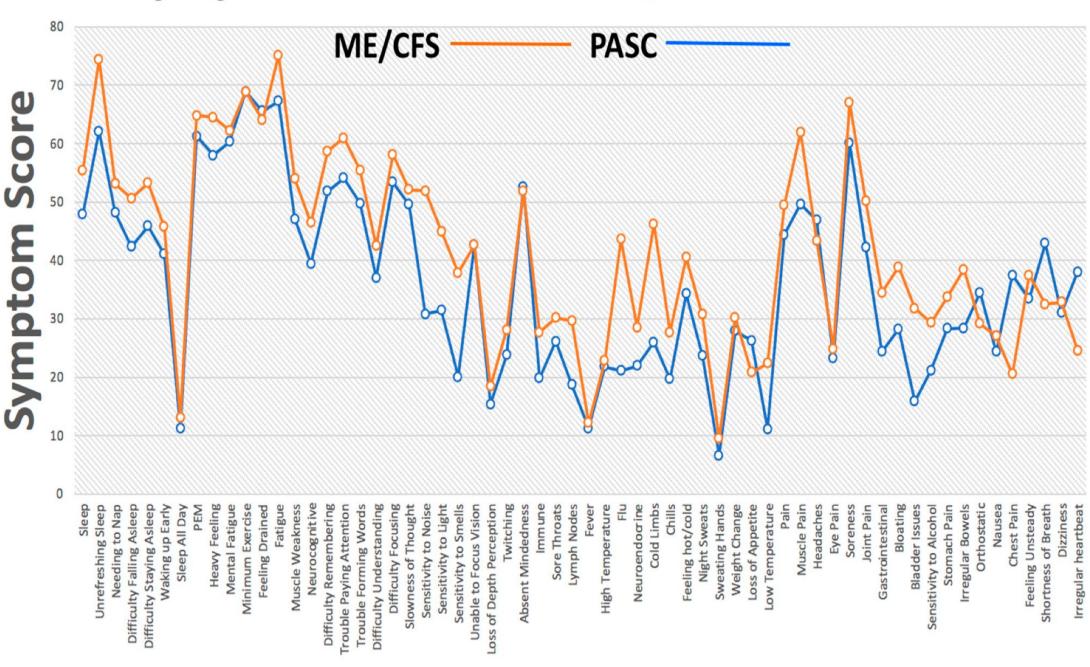
## Other datasets- David Marks



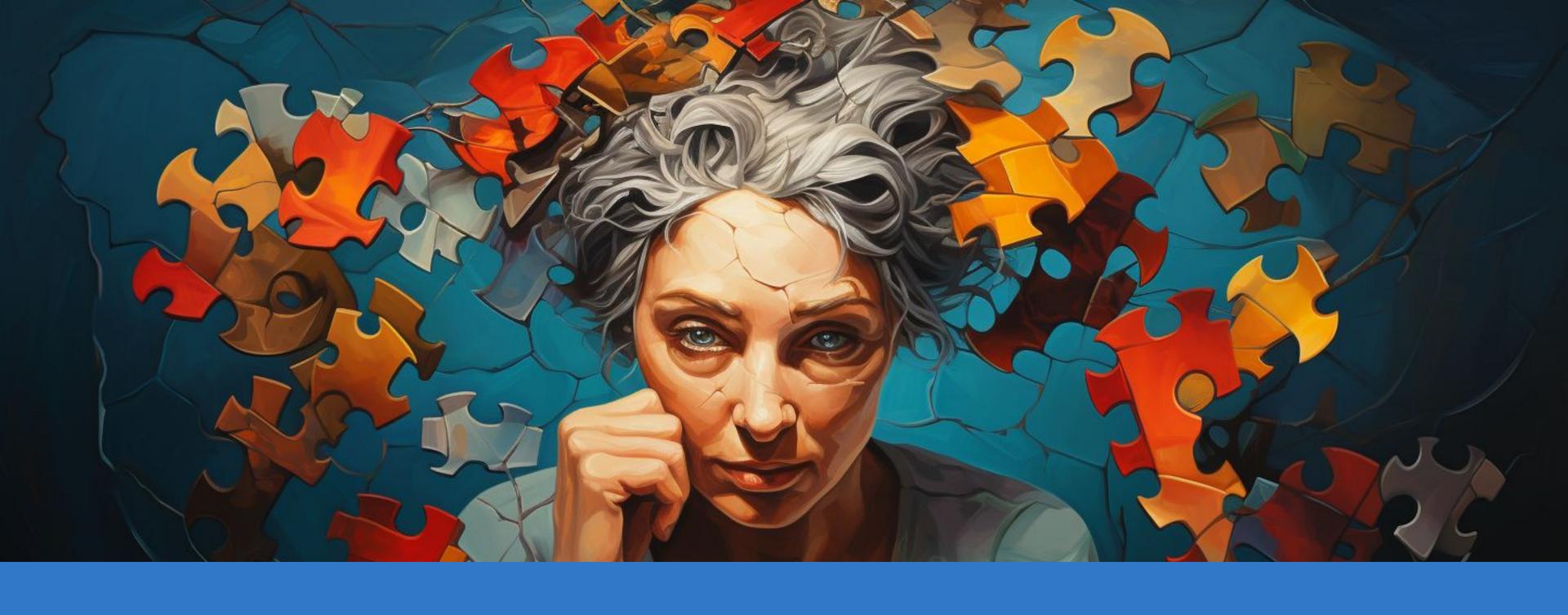
A paper by David
Marks argues that
there is a high
degree of similarity
between ME/CFS and
PASC (Long COVID).

doi.org/10.3390/biome
dicines11010180

#### Symptom Profiles for ME/CFS and PASC



Symptom



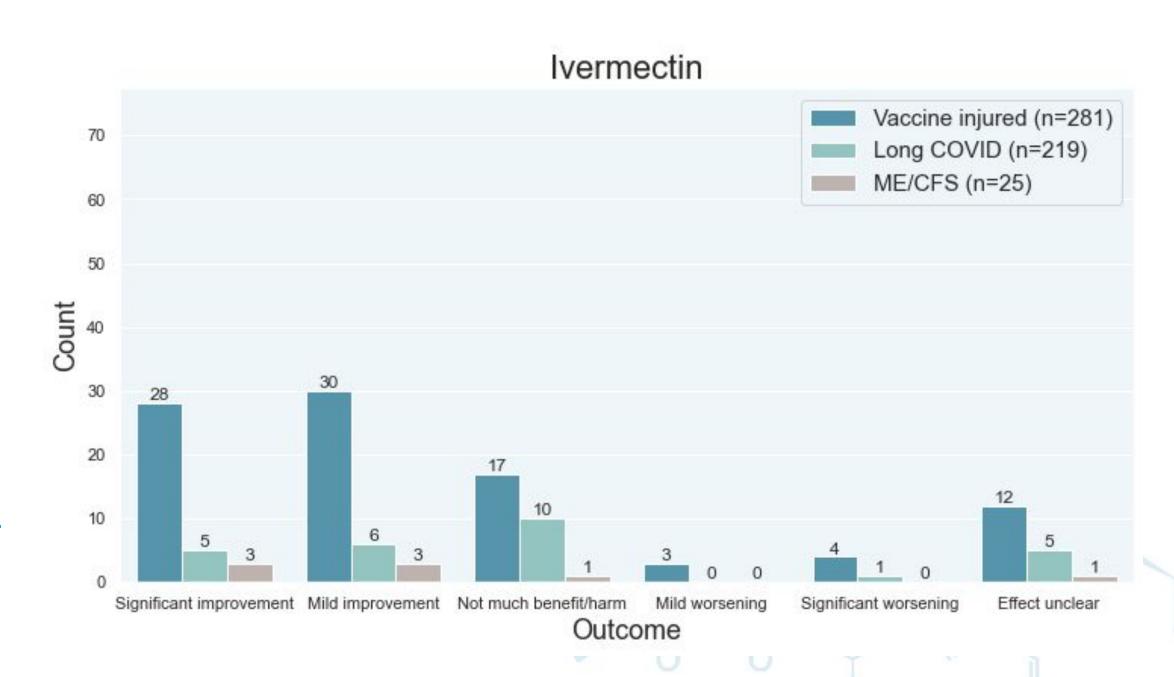
# Appendix - Demographics

# Demographics heavily influenced views on ivermectin

#### 

Long COVID participants rated ivermectin worse than other chronic illness groups. As they were recruited mainly from <a href="r/COVIDLongHaulers">r/COVIDLongHaulers</a>, the political tendencies of that subreddit (e.g. no misinformation, no anti-vaccine content) may have influenced reported outcomes.

Only 12.3% of LC participants tried ivermectin, lower than the <u>Treatment</u> Outcomes Survey (31.0%). That survey recruited LC participants mainly from certain Facebook groups.



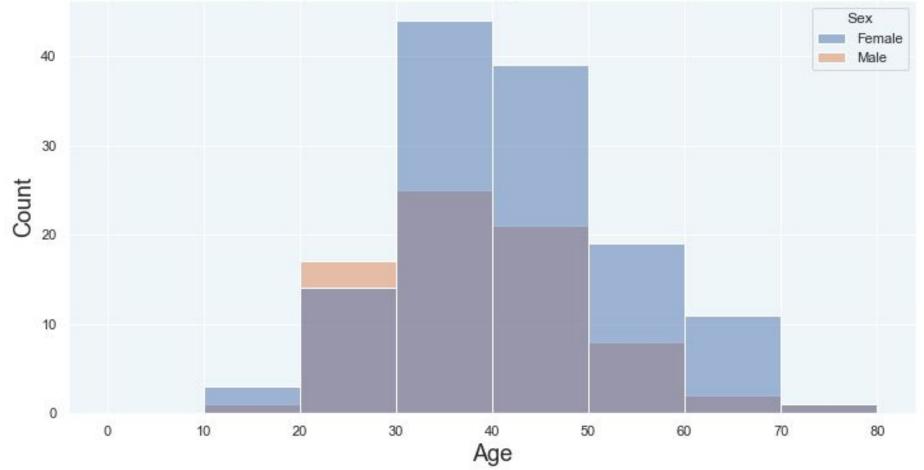
#### Demographics of Long COVID



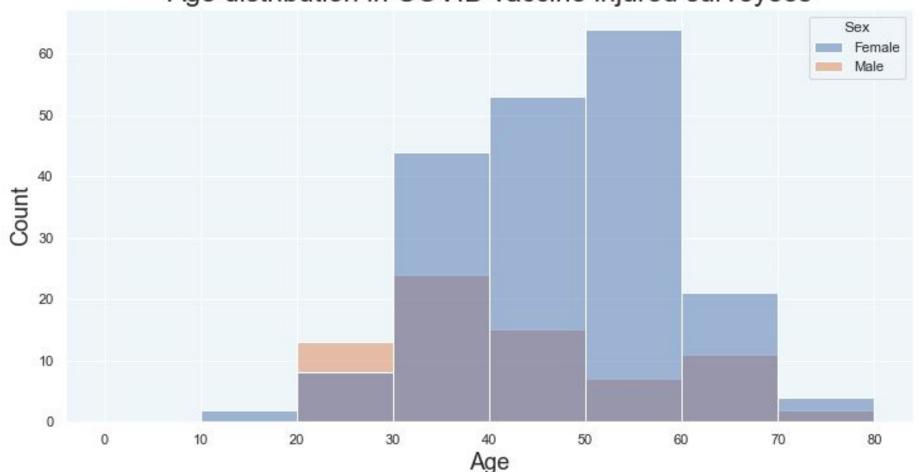
In the PES dataset, it appears that Long COVID skews younger in males than it does in females, similar to vaccine injury.

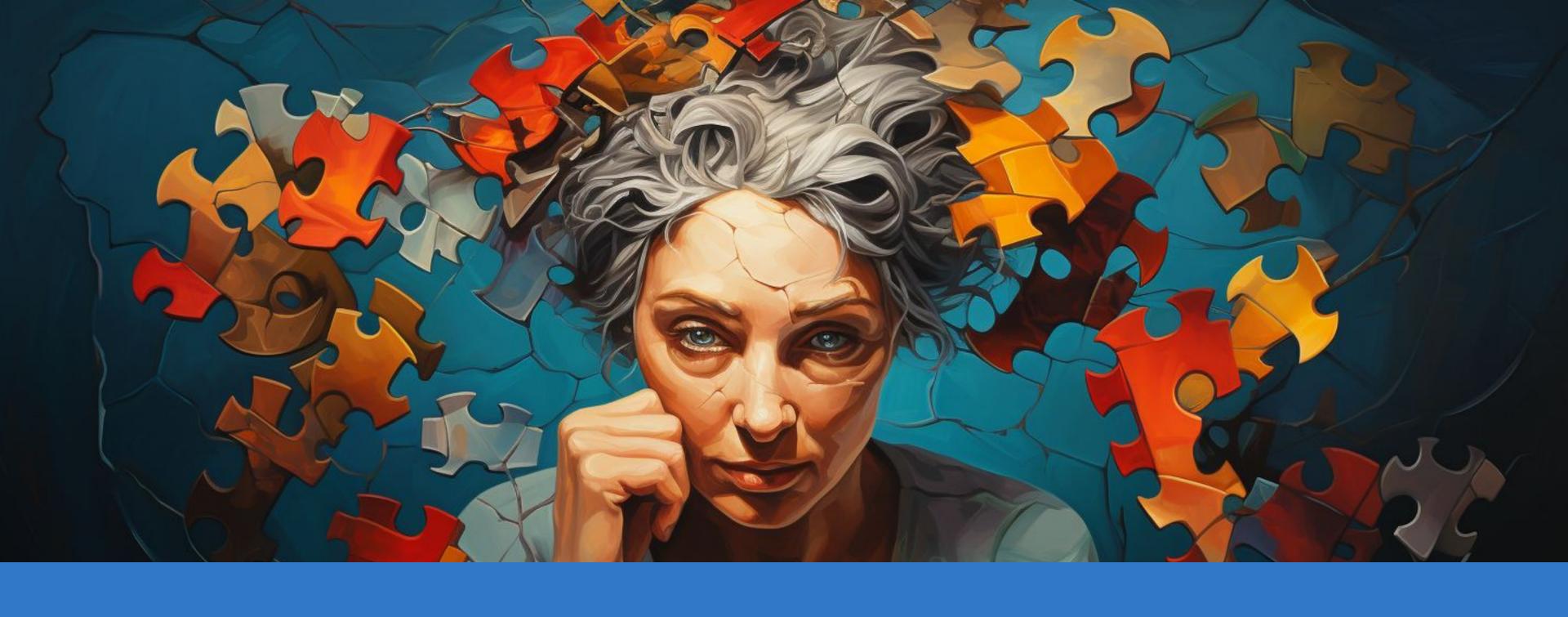
- Blue = biological female
- Orange = biological male





#### Age distribution in COVID vaccine injured surveyees





## Appendix - Survey Design Issues

### Known issues with the dataset

#### 

- Some participants did not answer the question for treatments that they tried— a few free—form answers mentioned treatments such as LDN but the surveyee did not answer elsewhere for LDN. (Trying to fix this issue could cause more issues than it would solve.)
- There are likely memory recall issues for treatments tried years ago.
- Increased intake of 'Water and salt' was tried at much higher rates than other POTS treatments. This perhaps suggests that people without POTS interpreted it as a dietary change that they have tried.