



**EMERGING APPROACHES TO TREATING  
SPIKE PROTEIN-INDUCED DISEASES**

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 @joevaron

# **Clinical Experiences in Treatment: Long COVID-19 and Vaccine-Related Injury**

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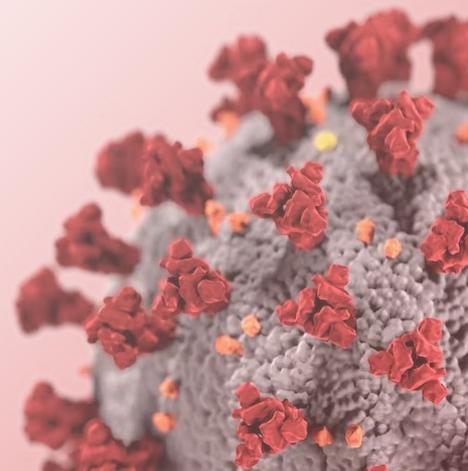
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Associate Dean, Caribbean Medical University

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President, Dorrington Medical Associates, PA

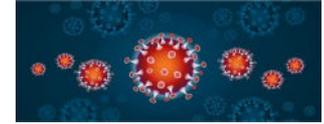
Houston, Texas, USA



# Conflicts of Interest



## Background



- There is no concise description of the symptoms and physiology of post-COVID syndrome.
- Symptoms are broad: Prolonged malaise, headaches, generalize fatigue, sleep difficulties, hair loss, smell disorder, loss of appetite, painful joints, dyspnea, chest pain and cognitive dysfunction.
- 40 to 80% of COVID-19 patients may experience “post-COVID syndrome”

The main theory to explain it remains chronic inflammation caused by viral remanence lingering in the body.

**Post Vaccine Injury** can present with similar symptoms and signs.



Post-COVID syndrome: the aftershock of SARS-CoV-2

Arad Dotan<sup>1,2,\*</sup>, Yehuda Shoenfeld<sup>1,2,3,4</sup>

<sup>1</sup>Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel;

<sup>2</sup>Zilberstein Center for Autoimmune Diseases, Sheba Medical Center, Tel-HaShomer, Ramat-Gan, 52621, Israel

<sup>3</sup>Ariel University, Israel

<sup>4</sup>Laboratory of the Mosaics of Autoimmunity, Saint Petersburg, 199034, Russia



## Christine

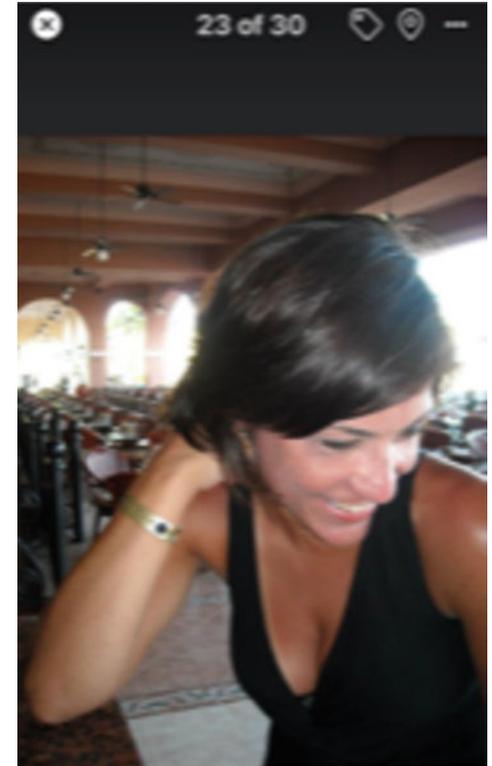
48-year-old lady (**RN**) with history of ICU admission due to COVID-19 in Nov. 2020.

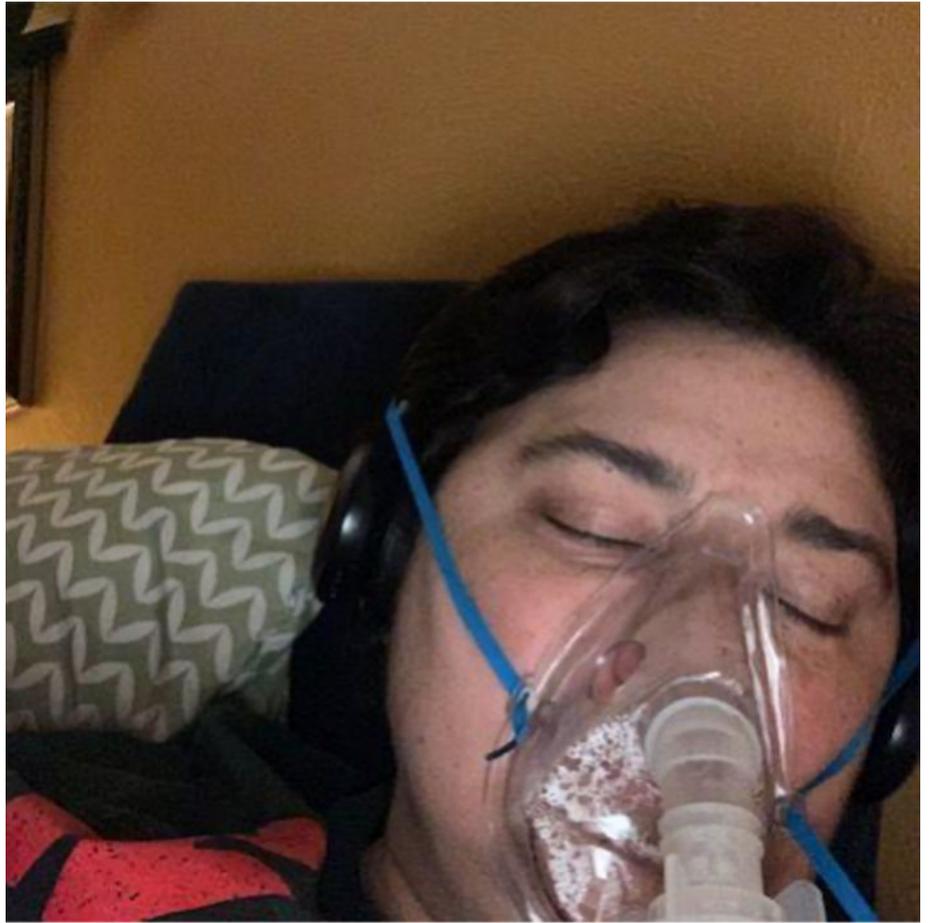
Since then:

- Shortness of breath
- Depression
- Fatigue
- Generalized weakness
- "Brain fog"

Past Medical History:

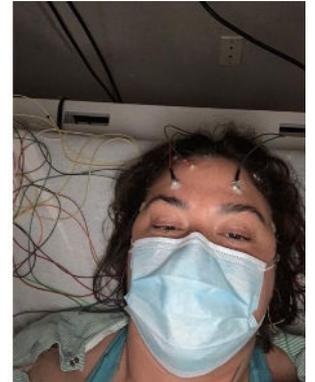
- Type 2 diabetes mellitus
- Hypertension
- Hypothyroidism





# Puzzle – *What is wrong with Christine?*

- Early 2021 (21st ED visit), admitted 3 days later to ICU;
  - Mother found her unconscious on the bathroom floor
  - Head injury from LOC
  - Glucose 1295, K 7, Trop 9,



# COVID-19 Vaccination History

- Pfizer
  - 3/31/21
  - 4/21/21
  - 11/8/21



# Diffuse rash

- No prior history of vasculitis or dermatological problems



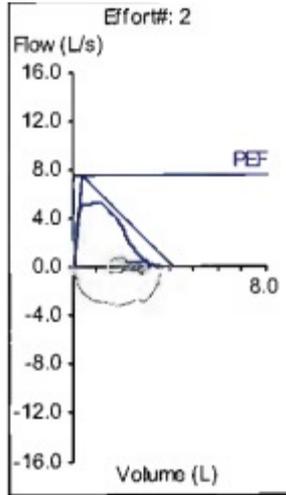
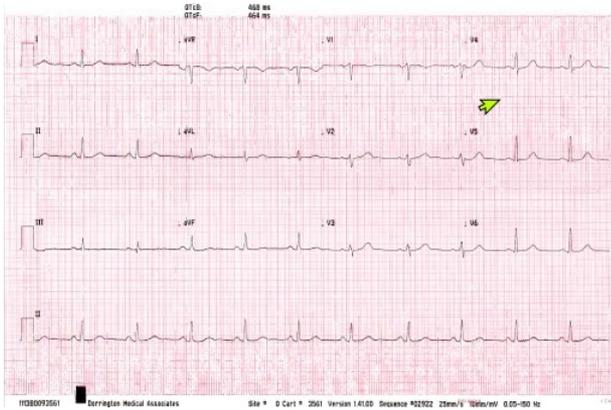


# December 2022

- First visit to my outpatient clinic
  - Similar symptoms and
    - Nausea, vomiting, unable to eat anything
  - Major depression, as she has been seen by a myriad of clinicians that **did not realize what she had.**
- Diagnostic approach
  - Exam
  - Labs
  - Imaging



# Findings



## C-Reactive Protein, Quant

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
▲ C-Reactive Protein, Quant <sup>01</sup>	20 High	12 12/12/2022	mg/L	0-10

# So What Does Christine Have?

## Impact of COVID-19 vaccination on the risk of developing long-COVID and on existing long-COVID symptoms: A systematic review



*Kin Israel Notarte,<sup>a</sup> Jesus Alfonso Catahay,<sup>b</sup> Jacqueline Veronica Velasco,<sup>c</sup> Adriel Pastrana,<sup>c</sup> Abbygail Therese Ver,<sup>c</sup> Flos Carmeli Pangilinan,<sup>c</sup> Princess Juneire Peligro,<sup>c</sup> Michael Casimiro,<sup>c</sup> Jonathan Jaime Guerrero,<sup>d</sup> Ma. Margarita Leticia Gellaco,<sup>c</sup> Giuseppe Lippi,<sup>e</sup> Brandon Michael Henry,<sup>f</sup> and César Fernández-de-las-Peñas<sup>g\*</sup>*

<sup>a</sup>Department of Pathology, Johns Hopkins University School of Medicine, Baltimore, MD, USA

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### Summary

**Background** Although COVID-19 vaccination decreases the risk of severe illness, it is unclear whether vaccine administration may impact the prevalence of long-COVID. The aim of this systematic review is to investigate the

**eClinicalMedicine**  
2022;53: 101624



# FLCCC Treatment Approach

- **Early Intervention:** It is essential to start treatment as early as possible to prevent the development of severe symptoms and complications.
- **Multidisciplinary Approach:** The treatment of Long COVID Syndrome requires a multidisciplinary approach, involving specialists from various fields such as pulmonology, neurology, cardiology, and psychology.
- **Personalized Treatment:** The treatment should be tailored to the individual patient's symptoms and needs.
- **Evidence-based:** The treatment should be based on the latest available evidence and guidelines.



# What did we do?

## Pharmacotherapy

- Ivermectin
- Vitamin C (IV and PO)
- Vitamin D
- Melatonin
- Supplemental Mg (IV and PO)
- Resveratrol
- Curcumin (Turmeric)
- ASA



## Additional Therapies

- Moderate exercise
- TCM
- Intermittent fasting while having a CGM

## Treatment Outcome

- Follow up at 2 weeks:
  - Significant improvement of symptoms
  - She reported having **her first full meal** in a long time
  - Energetic, "**full of life**" and back to everyday life activities.
- She still suffers from some degree of malnutrition and is currently undergoing IV infusions with vitamin supplementation





Christine Coglaiti is with Linda Matherne Coglaiti.



December 31, 2022 · 🧑🏻

Rounding 3rd since I saw Dr. [Joseph Varon](#). I think I can finally whisper it.... I feel like a different person. The desperation I felt on 12/12/2022 scares me looking back. I am still catching myself randomly saying "Mono, CMV AND Parvo?!? WTF?!?" So glad I white knuckled it through the past 2 years. My tribe, I will forever be grateful.

[#twomoreweeks16](#)

[#shelbyDrinkYourJuice](#)

[#longcovidssyndromeshopping](#)



You, Bo Hoffman, Katherena Sangwin- Hoffman and 41 others

11 comments



# 3 months later

**Overall doing much better**



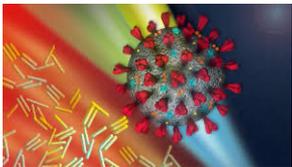
- Continues with all the vitamins, intermittent fasting and exercise
- Starting to look for new career options



Life gets very quiet before  
all the doors open. I'm  
learning that what can feel  
like loneliness is actually  
grace. Rest. Find your  
strength. It will all  
change soon.

J. Lynn





# TJ

- 83-year-old gentleman presented to my clinic January 2023 with:
  - Extreme fatigue, severe cough
  - **COVID-19 PCR positive for 362 days**
- PMHx:
  - Non-Hodgkin's lymphoma (received Chimeric-Antigen Receptor T-cell therapy [CAR-T] in 2021)
  - Mitral valve replacement (porcine)
  - HTN
- **Vaccinated 5 times for COVID-19 (mRNA)**
- Hospitalized 6 times in the past year for COVID-19.
  - Each hospital admission + PCR
- Received **8 rounds of IV Remdesivir** in such admissions.



# The definition of *INSANITY*

Hospitalization	Date
First hospitalization	March 1-7, 2022
Second hospitalization	April 1-13, 2022
Third hospitalization	May 18-27, 2022
Fourth hospitalization	June 21-28, 2022
Fifth hospitalization	July 7-20, 2022
Sixth hospitalization	January 1-14, 2023

**Doing the same thing over and over  
again and expecting a different result**



**INSANITY**

# On Exam

- Febrile (100 F)
- Tachypneic (28/min rpm)
- SaO<sub>2</sub> 92% while breathing 28% FiO<sub>2</sub>
- Pale
- Dry mucous membranes
- Crackles in both lung fields



# Laboratory Evaluation

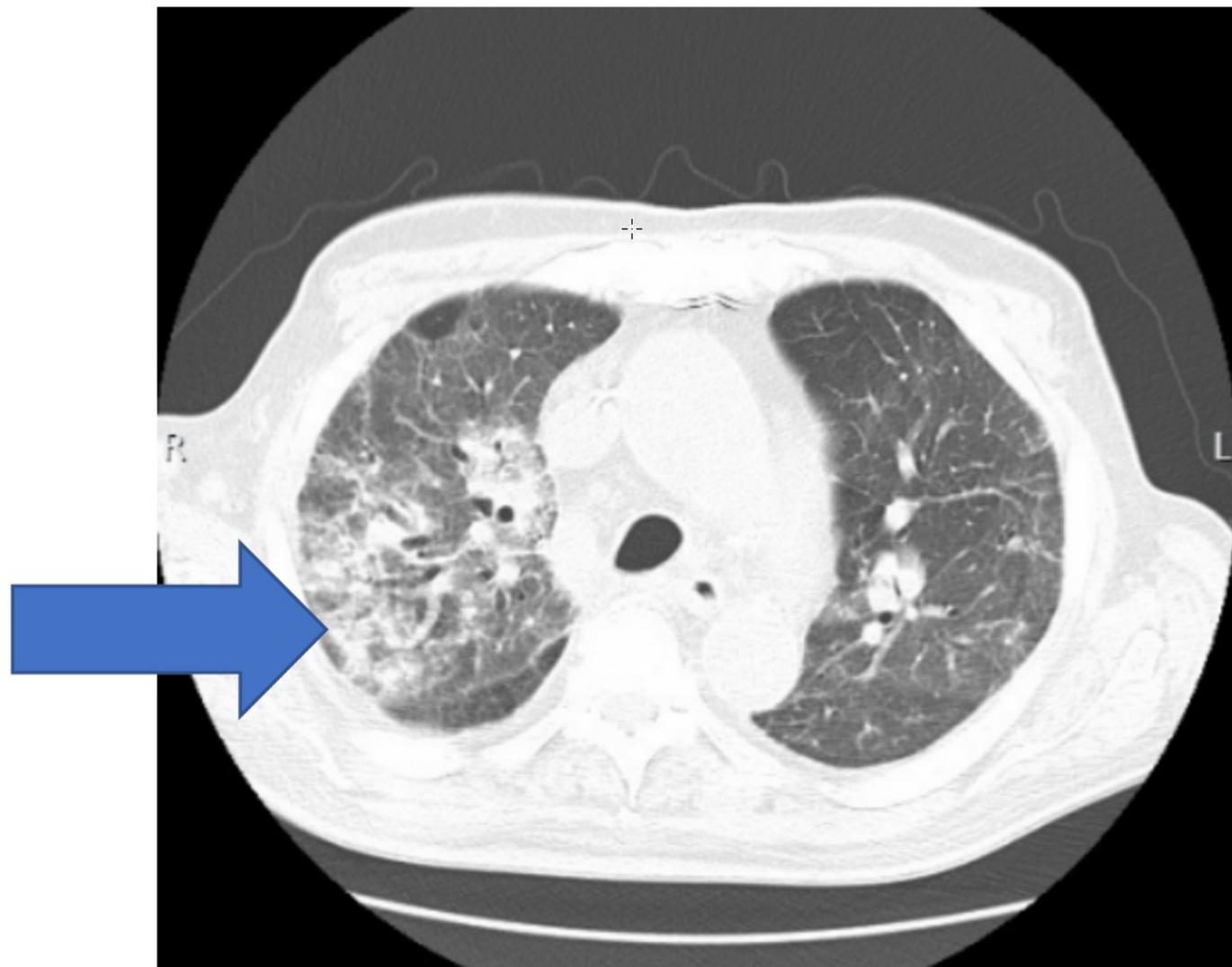
Laboratory investigation	Result	Reference values
RBC (x10 <sup>9</sup> /ul)	3.69x10 <sup>9</sup> /ul	4.14-5.80x10 <sup>9</sup> /ul
Hemoglobin (g/dl)	8.5 g/dl	13.0-17.7 g/dl
Hematocrit (%)	27.9%	37.5-51.0%
MCV (fl)	76 fl	79-97 fl
MCH (pg)	23.0 pg	26.6-33.0 pg
MCHC (g/dl)	30.5 g/dl	31.5-35.7 g/dl
RDW (%)	20.4%	11.6-15.4%
Platelets (x10 <sup>3</sup> /ul)	136x10 <sup>3</sup> /ul	150-450x10 <sup>3</sup> /ul
WBC (x10 <sup>3</sup> /ul)	10.6x10 <sup>3</sup> /ul	3.4-10.8x10 <sup>3</sup> /ul
Neutrophils (x10 <sup>3</sup> /ul)	5.1x10 <sup>3</sup> /ul	1.4-7.0x10 <sup>3</sup> /ul
Lymphocytes (x10 <sup>3</sup> /ul)	1.5x10 <sup>3</sup> /ul	0.7-3.1x10 <sup>3</sup> /ul
Monocytes (x10 <sup>3</sup> /ul)	3.8x10 <sup>3</sup> /ul	0.1-0.9x10 <sup>3</sup> /ul

Glucose (mg/l)	92 mg/l	70-99 mg/l
BUN (mg/l)	11 mg/l	8-27 mg/l
Creatinine (mg/l)	0.48 mg/l	0.76-1.27 mg/l
eGFR (ml/min/1.73 m <sup>2</sup> )	102 ml/min/1.73 m <sup>2</sup>	>59 ml/min/1.73 m <sup>2</sup>
BUN/creatinine ratio	23	10-24
Sodium (mmol/l)	139 mmol/l	134-144 mmol/l
Potassium (mmol/l)	4.3 mmol/l	3.5-5.2 mmol/l
Chloride (mmol/l)	98 mmol/l	96-106 mmol/l
Calcium (mg/l)	8.7 mg/l	8.6-10.2 mg/l
Carbon dioxide (mmol/l)	26 mmol/l	20-29 mmol/l
Phosphorous (mg/l)	3.4 mg/l	2.8-4.1 mg/l
Magnesium (mg/l)	2.1 mg/l	1.6-2.3 mg/l



Ferritin (ng/l)	416 ng/l	30-400 ng/l
Sedimentation rate (Westergren) (mm/hr)	98 mm/hr	0-30 mm/hr
C-reactive protein (mg/l)	152 mg/l	0-10 mg/l
Total protein (g/l)	5.8 g/l	6.0-8.5 g/l
Albumin (g/l)	3.7 g/l	3.6-4.6 g/l
Direct bilirubin (mg/l)	0.5 mg/l	0-1.2 mg/l
Indirect bilirubin (mg/l)	0.25 mg/l	0-0.40 mg/l
Alkaline phosphatase (IU/l)	106 IU/l	44-121 IU/l
AST (IU/l)	33 IU/l	0-40 IU/l
ALT (IU/l)	19 IU/l	0-44 IU/l

COVID-19 PCR +  
 COVID-19 Ig M +  
 COVID-19 Ig G +



# >360 days positive PCR?

- Is this the same initial COVID-19 did he have?
- Different variants?
- Did vaccination had anything to do with this?



<sup>1</sup> Crit Care Shock (2023) 26:63-70

**Persistent positive COVID-19 PCR results for over 360 days: A case report**

*Shreyaa Rajpal<sup>1</sup>, Pritivi Raghavan<sup>1</sup>, Andrea Terrazas<sup>1,2</sup>, Victor A. Gomez<sup>1</sup>, Najia Hussain<sup>1,3</sup>, Joseph Varon<sup>1,3</sup>*

# History of Malignancy, Age, HTN

- **Immunosuppression**
  - High risk of developing longer illness
  - Patients undergoing CAR-T may shed viable SARS-CoV-2 for long time (up to 2 months)
- **Elderly and hypertensive**
  - Gao and coworkers found that patients who presented with prolonged viral shedding were usually elderly and with a history of hypertension
- **Quarantine never worked for him**

Received: 14 October 2020 | Revised: 10 December 2020 | Accepted: 11 December 2020

DOI: 10.1002/cam4.3708

ORIGINAL RESEARCH

Cancer Medicine WILEY

## Time to SARS-CoV-2 clearance among patients with cancer and COVID-19

Wenxin Xu<sup>1,2</sup> | Andrew J. Piper-Vallillo<sup>1</sup> | Poorva Bindal<sup>1</sup> | Jonathan Wischhusen<sup>1</sup> | Jaymin M. Patel<sup>1</sup> | Daniel B. Costa<sup>1</sup> | Mary Linton B. Peters<sup>1</sup> 



Contents lists available at ScienceDirect

Clinical Immunology

journal homepage: [www.elsevier.com/locate/yclim](http://www.elsevier.com/locate/yclim)



Full Length Article

Proinflammatory cytokines are associated with prolonged viral RNA shedding in COVID-19 patients

Chun Gao, Li Zhu, Cheng Cheng Jin, Yi Xin Tong, Ai Tang Xiao, Sheng Zhang\*

Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, China



# How to treat him?



**I-CARE** <sup>SM</sup>

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EARLY COVID  
TREATMENT



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HOSPITAL  
TREATMENT  
PROTOCOL FOR  
COVID-19

**I-RECOVER** <sup>SM</sup>

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LONG COVID  
TREATMENT

# What I did:

- Ivermectin
- High doses of vitamin C (IV)
- Thiamine, ZN, Melatonin,
- Quercetin, Vitamin D
- Methylprednisolone
- Enoxaparin



- Seen again in clinic 5 days later
  - No fever, no chills
  - Less dyspnea, persistent fatigue
  - Improved oxygenation
  - Inflammatory markers improved



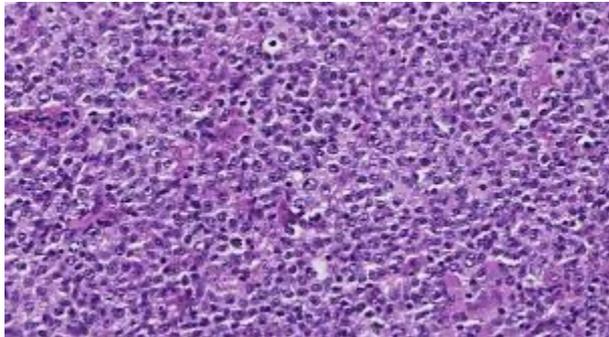
# Follow up

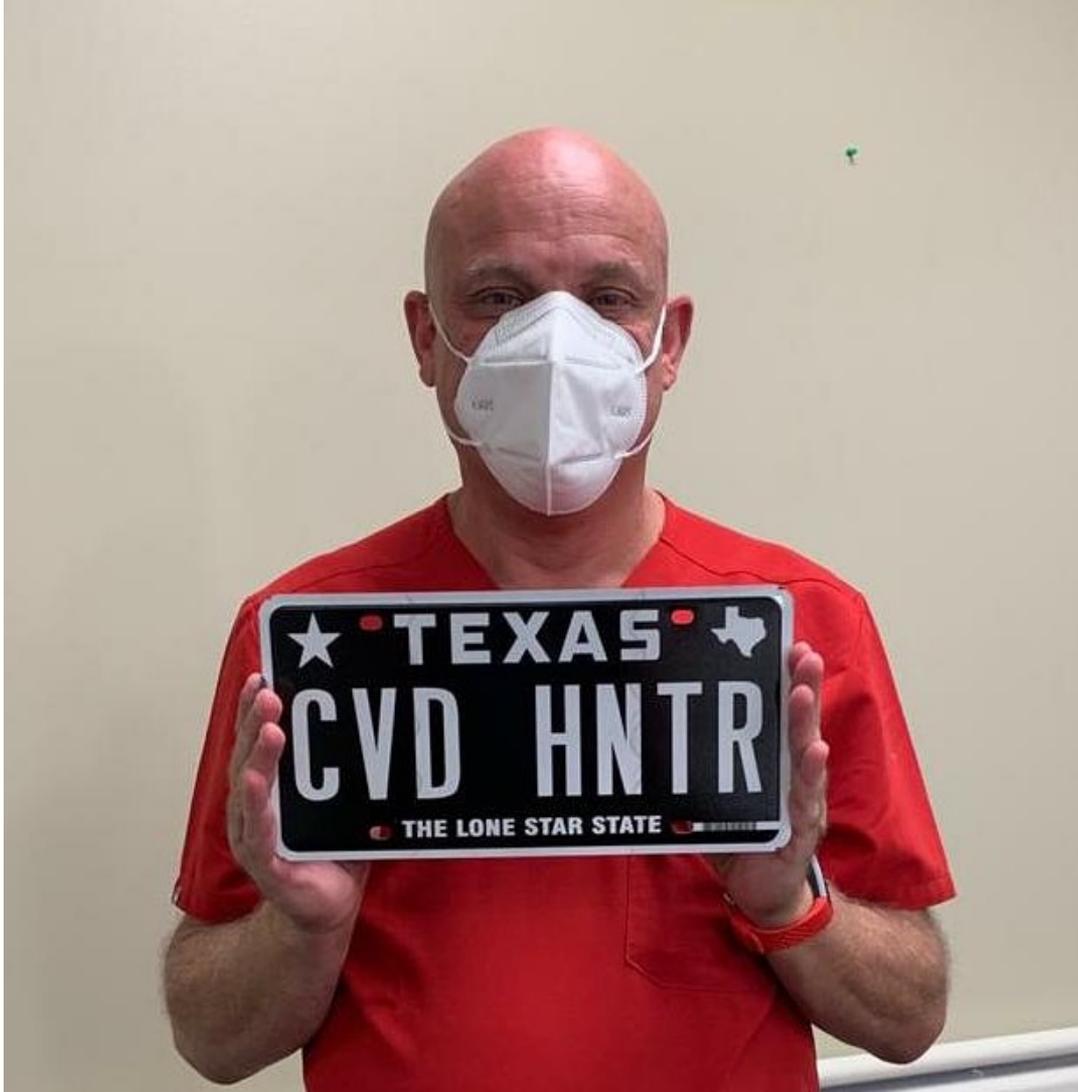
- 2 weeks later
  - Mild dyspnea
  - Now on room air, SaO<sub>2</sub> 91%
  - Persistent fatigue
  - No changes in laboratory data
  - Repeat CT chest unchanged
  - **COVID-19 PCR NEGATIVE**



# The Bad News

- Seen by his oncology clinic 6 weeks after our first encounter
  - Tumor recurrence
    - Very aggressive
  - High likelihood of demise
- Patient and family elected for hospice care





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**THANK YOU**

