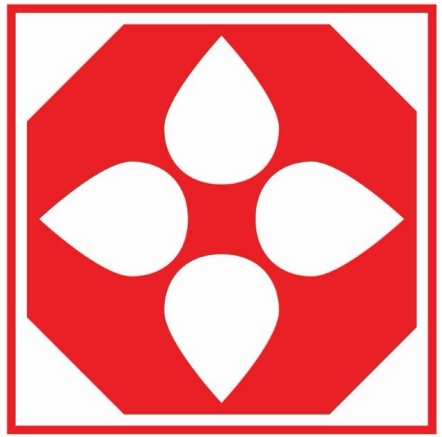


CLL SOCIETY

Smart Patients Get Smart Care™

COVID-19 in 2024: Recommendations and Strategies for Those with CLL and SLL

May 16, 2024

8:30 AM PT, 9:30 AM MT,
10:30 AM CT, 11:30 AM ET

This Program Was Made Possible Through Generous Donors Like You

Speakers

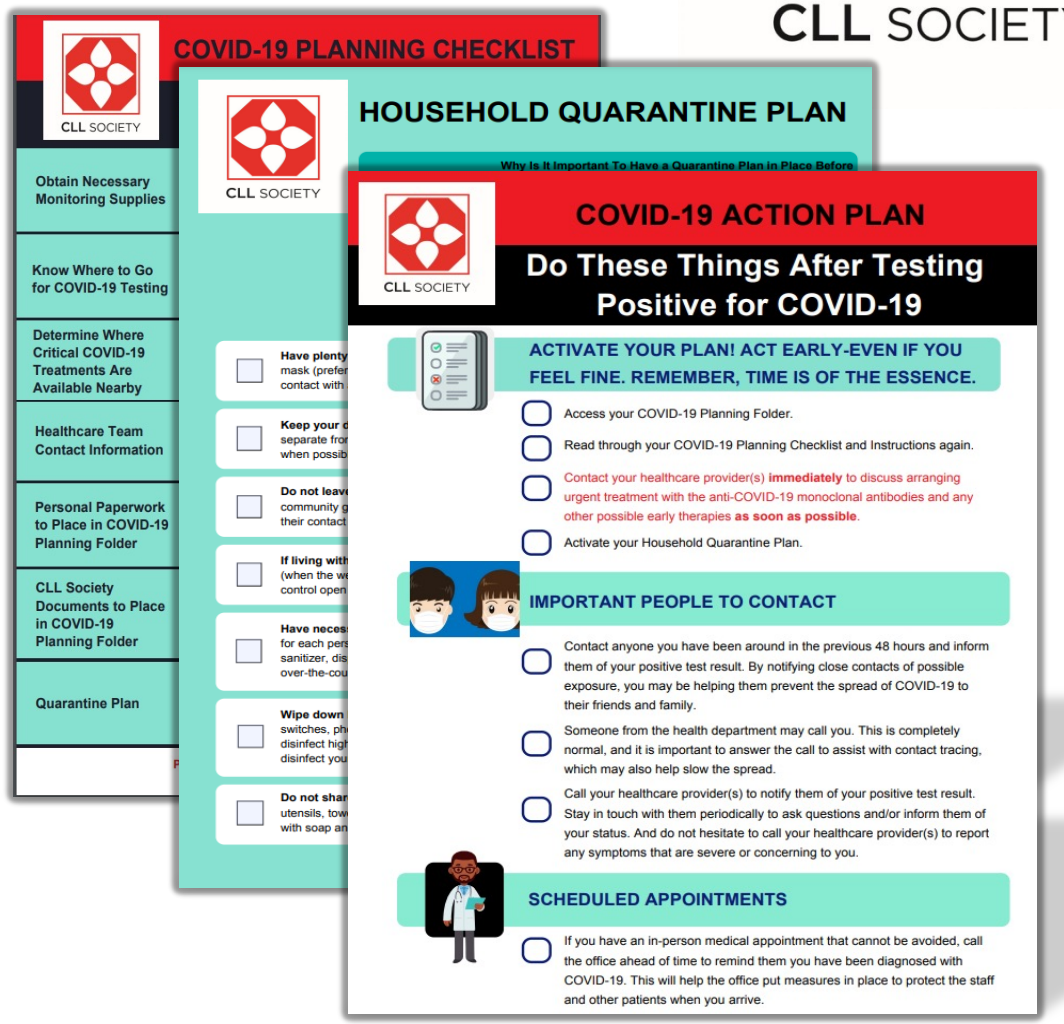
Moderator and Speaker
Robyn Brumble, MSN, RN
Director of Scientific Affairs and Research
CLL Society

Speaker
S. Shazhad Mustafa, MD
Lead Physician – Allergy, Immunology, & Rheumatology, Rochester Regional Health, Clinical Associate Professor of Medicine, University of Rochester School of Medicine and Dentistry

CLL Society's COVID-19 Action Plan

- Encourages individuals to create a plan *ahead of time* to be prepared for when they test positive.
- Includes:
  - Planning Checklist
  - Household Quarantine Plan
  - Checklist for what to do as soon as you test positive

Visit: https://www.cllsociety.org/covid-19-home/action-plan/



CLL SOCIETY

Smart Patients Get Smart Care™

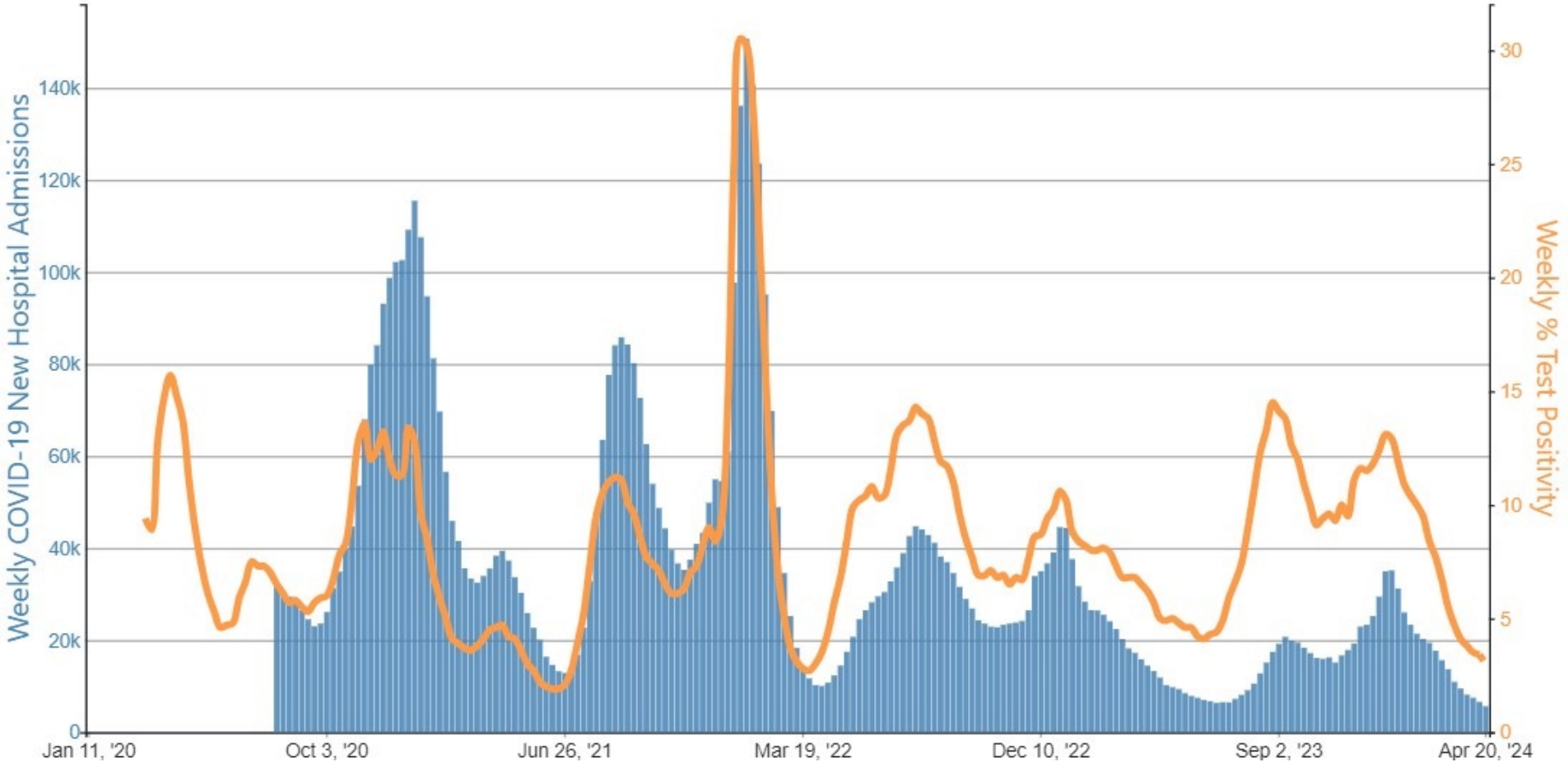
Prevention of COVID-19 in CLL

S Shahzad Mustafa, MD
Chief – Allergy, Immunology, & Rheumatology
Rochester Regional Health
Clinical Associate Professor of Medicine
University of Rochester School of Medicine & Dentistry

May 16, 2024

Learning Objectives

Why Should We Care



https://covid.cdc.gov/covid-data-tracker/#trends_weeklydeaths_testpositivity_00

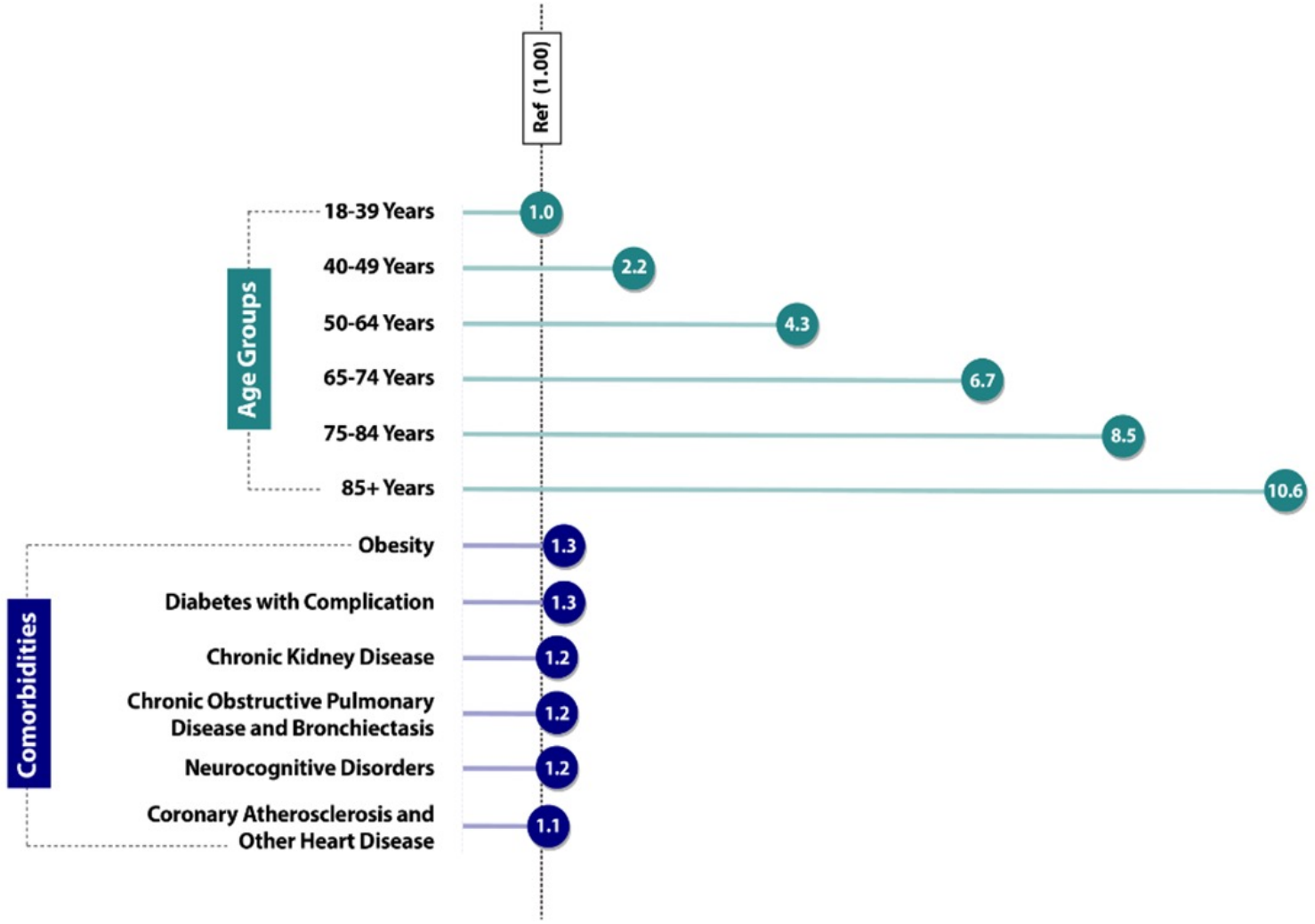
Who is at Risk for Severe COVID-19

Established, probable, and possible risk factors (comorbidities that have been associated with severe COVID-19 in at least 1 meta-analysis or systematic review, in observational studies, or in case series):

- Age ≥65 years¶
- Asthma
- Cancer
- Cerebrovascular disease
- Children with certain underlying conditions$^{\Delta}$
- Chronic kidney disease
- Chronic lung disease (interstitial lung disease, pulmonary embolism, pulmonary hypertension, bronchiectasis, COPD)
- Chronic liver disease (cirrhosis, non-alcoholic fatty liver disease, alcoholic liver disease, autoimmune hepatitis)
- Cystic fibrosis
- Diabetes mellitus, type 1 and type 2
- Disabilities (eg, ADHD, cerebral palsy, congenital malformations, limitations with self-care or activities of daily living, intellectual and developmental disabilities, learning disabilities, spinal cord injuries)
- Heart conditions (such as heart failure, coronary artery disease, or cardiomyopathies)
- HIV
- Mental health disorders (mood disorders including depression, schizophrenia spectrum disorders)
- Neurologic conditions (dementia)
- Obesity (BMI ≥30 kg/m^2) and overweight (BMI 25 to 29 kg/m^2), or ≥95th percentile in children
- Physical inactivity
- Pregnancy or recent pregnancy
- Primary immunodeficiencies
- Smoking (current and former)
- Sickle cell disease or thalassemia
- Solid organ or blood stem cell transplantation
- Substance use disorders
- Tuberculosis
- Use of corticosteroids or other immunosuppressive medications

https://stacks.cdc.gov/view/cdc/116835/cdc_116835_DS1, https://www.cdc.gov/aging/covid19/index.html.

Who is at Risk for Severe COVID-19



https://stacks.cdc.gov/view/cdc/116835/cdc_116835_DS1, https://www.cdc.gov/aging/covid19/index.html.

Role of Masking

Cochrane Library

Cochrane Database of Systematic Reviews

CLL SOCIETY

Physical interventions to interrupt or reduce the spread of respiratory viruses (Review)

Jefferson T, Dooley L, Ferroni E, Al-Ansary LA, van Driel ML, Bawazeer GA, Jones MA, Hoffmann TC, Clark J, Beller EM, Glasziou PP, Conly JM

"wearing a mask may make little to no difference in how many people caught a flu-like illness/COVID-like illness"

"wearing N95/P2 respirators probably makes little to no difference in how many people have confirmed flu"

While masking may not lower the burden of the disease in the community, it can protect the individual behind the mask.

Jefferson et al. Cochrane Database Syst Rev 2023;1:CD006207.

Impact of COVID-19 Vaccination

CLL SOCIETY

TABLE 4

Hospitalization and Death Rates With the Omicron Variant by Age and Vaccination Status in the State of Washington

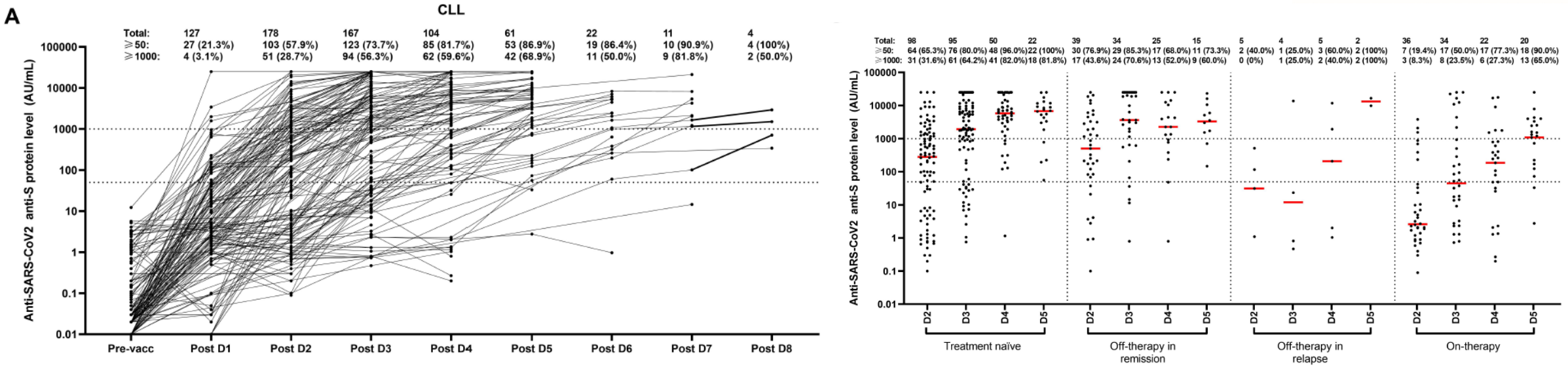
	Unvaccinated		Completed primary series or boosted	
Age group (years)	Hospitalizations per 100,000	Deaths per 100,000	Hospitalizations per 100,000	Deaths per 100,000
12 to 34	13.2	Not reported	3.2	Not reported
35 to 64	42.2	4.5	7.7	0.8
65 and older	233.3	76.2	89.9	26.8

Information from Washington State Department of Health. COVID-19 hospitalizations and deaths by vaccination status in Washington state. February 13, 2023. Accessed March 6, 2023. https://doh.wa.gov/sites/default/files/2022-02/421-010-CasesInNotFullyVaccinated.pdf

Cheng et al. Amer Fam Phys 2023; 107(4): 370.

COVID-19 Vaccination in CLL

CLL SOCIETY



Shen et al. Blood 2022; 140(25): 2709.

Pre Exposure Prophylaxis

CLL SOCIETY

Pemivibart

- Human monoclonal antibody against COVID-19
- EUA as of March 2024

Data

- Based on immuno-bridging studies
- No published peer reviewed studies

Considerations

- Maintains presumed effectiveness against currently circulating variants
- IV infusion

Outpatient Medications

CLL SOCIETY

TABLE I. COVID-19 treatments for nonhospitalized adults

	IV antiviral	Oral antivirals		Blood product
	Veklury (remdesivir)	Paxlovid (nirmatrelvir co-packaged with ritonavir)	Lagevrio (molnupiravir)	High-titer COVID-19 convalescent plasma
NIH recommendations*	Moderate recommendation; moderate quality of evidence (BIIa)	Strong recommendation; moderate quality of evidence (AIIa)	Weak recommendation; moderate quality of evidence (CIIa)	Insufficient evidence to recommend for or against use in hospitalized or nonhospitalized patients
Mechanism of action	Nucleotide analog RNA polymerase inhibitor that halts viral replication	Viral protease inhibitor that halts viral replication	Nucleoside analog that inhibits viral replication by viral mutagenesis	Possible mechanisms of actions include direct neutralization of the virus, control of an overactive immune system (ie, cytokine storm, Th1/Th17 ratio, complement activation) and immunomodulation of a hypercoagulable state
Treatment efficacy per clinical trials	87% reduction in hospitalizations/ deaths	89% reduction in hospitalizations/ deaths	30% reduction in hospitalizations/deaths	Authorization is based on the totality of clinical evidence available in patients with immunosuppressive disease or receiving immunosuppressive treatment and remains limited, data from additional randomized, controlled trials are needed
Prescribing window	Initiate within 7 d of symptom onset	Initiate within 5 d of symptom onset		Not specified

Mustafa et al. JACI IP 2023; 11(11): 3321.

Nirmatrelvir/ritonavir (Paxlovid™)

CLL SOCIETY

Study or Subgroup	Nirmatrelvir/ritonavir Events	Total	Placebo Events	Total	Weight	Risk Ratio M-H, Random, 95% CI	Risk Ratio M-H, Random, 95% CI	Risk of Bias A B C D E F
1.3.2 age < 65 years of age								
EPIC-HR 2021 (1)	7	908	46	909	86.4%	0.15 [0.07 , 0.34]		+ ? + + + ?
Subtotal (95% CI)		**908**		**909**	**86.4%**	**0.15 [0.07 , 0.34]**		
Total events:	7		46					
Heterogeneity: Not applicable								
Test for overall effect: Z = 4.67 (P < 0.00001)								
1.3.3 age ≥ 65 years of age								
EPIC-HR 2021 (1)	1	131	20	137	13.6%	0.05 [0.01 , 0.38]		+ ? + + + ?
Subtotal (95% CI)		**131**		**137**	**13.6%**	**0.05 [0.01 , 0.38]**		
Total events:	1		20					
Heterogeneity: Not applicable								
Test for overall effect: Z = 2.90 (P = 0.004)								

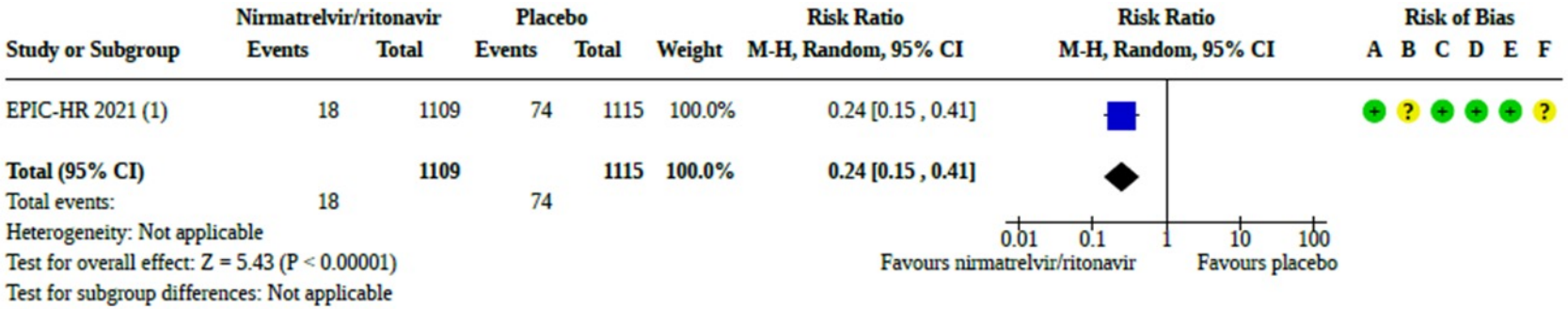
Reis et al. Coch Data Syst Rev 2022; 9(9): CD015395.

Paxlovid™ Tolerability

Adverse Event Category	Standard treatment plus Paxlovid group (N = 132)	Standard treatment group (N = 132)	P value
Total number of adverse events[a] - no. of patients (%)	17 (12.90)	13 (9.80)	0.44
Patients with adverse events[a] - no. of patients (%)			
Any adverse event	14 (10.6)	10 (7.6)	0.39
Serious adverse event	6 (4.5)	5 (3.8)	0.76
Event considered to be related to drug interventions	5 (3.8)	2 (1.5)	0.25
Discontinued drug interventions because of adverse events	4 (3.0)	0 (0)	0.04
Had dose reduction or temporary discontinuation owing to adverse event	1 (0.8)	1 (0.8)	>0.99

[a]Adverse events were defined as newly developed adverse events or progression of prior existed conditions.

Table 3: Summary of adverse events, serious adverse events, and adverse events leading to discontinuation during the treatment period.



Liu et al. Lancet 2023; 33: 100694., Reis et al. Coch Data Syst Rev 2022; 9(9): CD015395.

Outpatient Systemic Steroids

CLL SOCIETY

Table 2. Outcomes.*

Outcome	No. of Included Reports	No. of Glucocorticoid Patients	No. of Control Patients	Odds Ratio	95% CI	P Value for Effect	I^2 (%)
Overall population	6	3704	2930				
Mortality†	6	509/3704 (14%)	294/2930 (10%)	1.56‡	1.27–1.92‡	**<0.001**‡	20
RCTs only	5	90/580 (16%)	145/1130 (13%)	1.34§	1.00–1.78§	**0.05**§	0
Mechanical ventilation¶	4	98/550 (18%)	160/1088 (15%)	1.32‖	1.00–1.74‖	0.05‖	0

Number needed to harm = 27

Covello RD et al. NEJM Evid2023; 2: EVIDoa2200283.

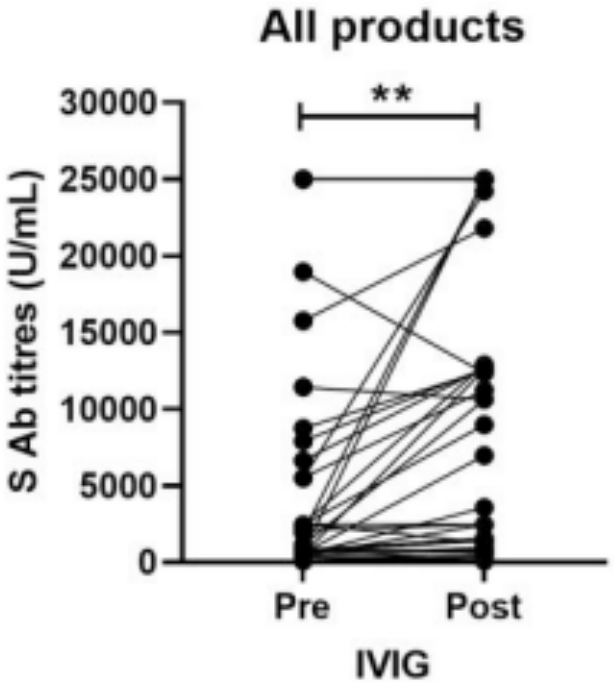
Medications NOT to Use

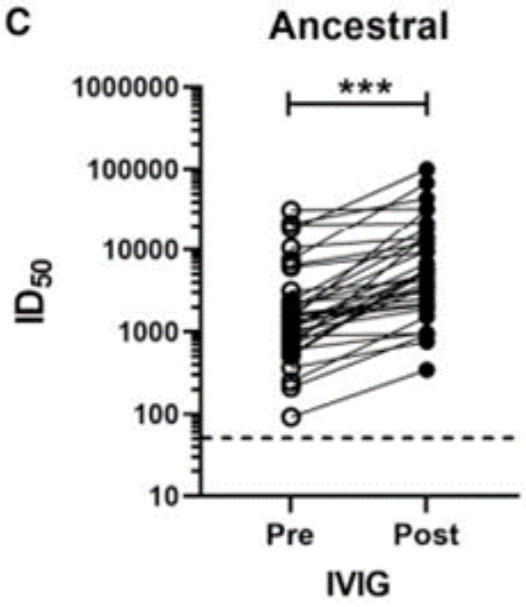
TABLE III. COVID-19 treatments not currently recommended for use

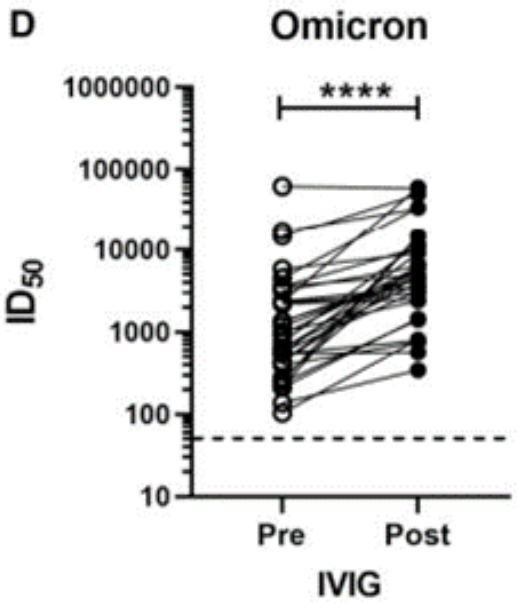
Strong recommendations against
Hydroxychloroquine
Lopinavir-ritonavir
Casirivimab and imdevimab*
Sotrovimab*
Convalescent plasma in immune-competent patients in nonsevere cases
Colchicine in nonsevere cases
Weak or conditional recommendations against
Ivermectin (except in a research setting)
Corticosteroids in nonsevere cases
Fluvoxamine in nonsevere cases (except in a research setting)
Ruxolitinib and tofacitinib (should be considered only if neither baricitinib nor IL-6 receptor blockers are available)
Convalescent plasma in severe or critical cases (except in a research setting)
Remdesivir in critical cases

Mustafa et al. JACI IP 2023; 11(11): 3321.

Ig Replacement

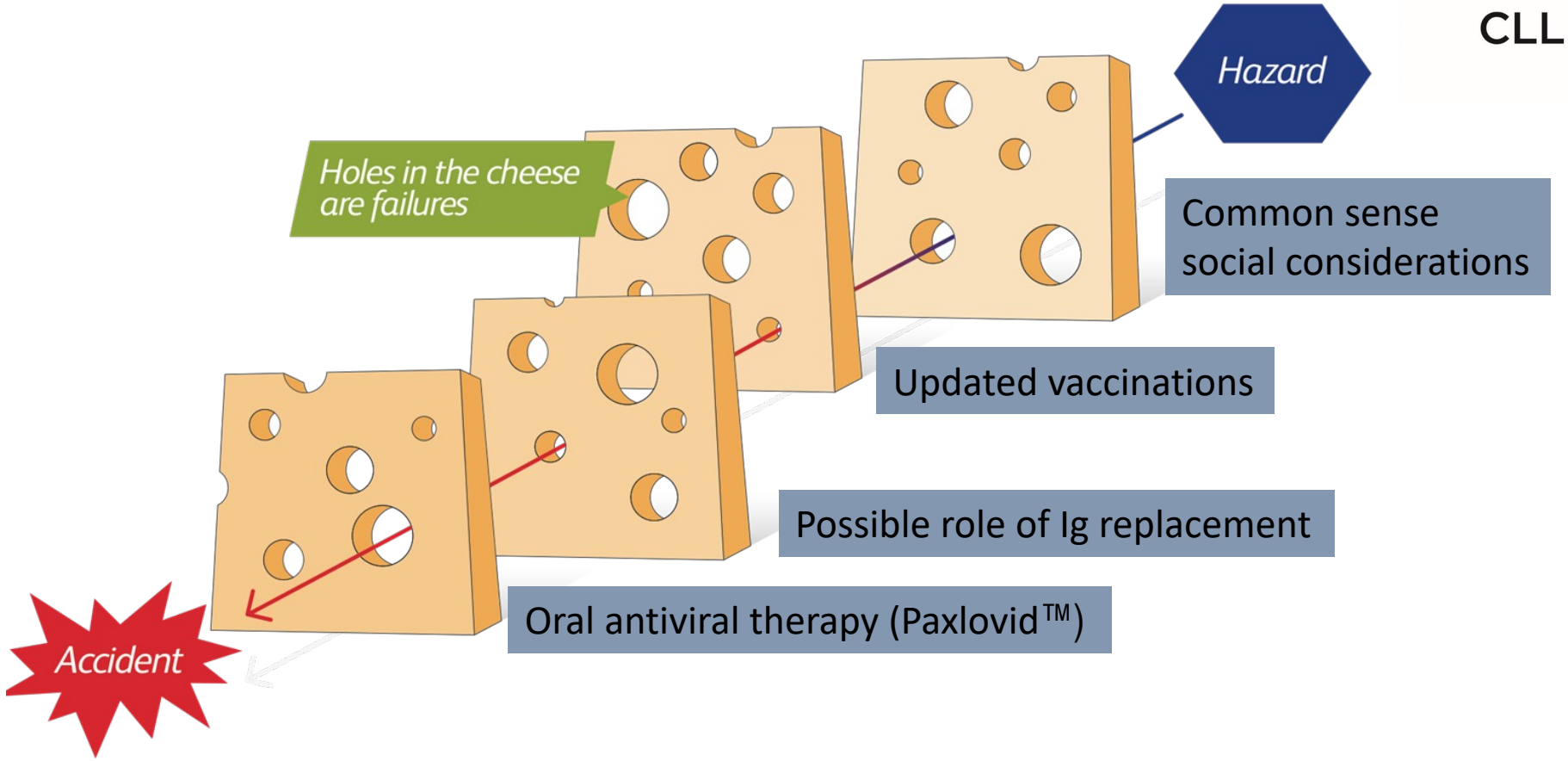






Jordan et al. Am J Trans 2022; 22(10): 2484.

COVID-19 Risk Mitigation



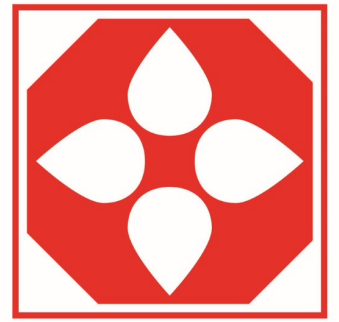
Summary

COVID continues to impact high risk individuals

Vaccination remains cornerstone of risk mitigation

Oral antivirals (Paxlovid™) is the cornerstone of outpatient management

CLL SOCIETY



Thank You

CLL SOCIETY

Audience Questions & Answers

This Program Was Made Possible Through Generous Donors Like You

Thank You for Attending!

Please take a moment to complete our **post-event survey**, your feedback is important to us

If you're question was not answered, please feel free to email asktheexpert@cllsociety.org

Join us on June 3rd for our next webinar on when to treat and common CLL symptoms

CLL Society is invested in your long life. Please invest in the long life of the CLL Society by supporting our work

cllsociety.org/donate-to-cll-society/