

THE LANCET

Infectious Diseases

Supplementary appendix

This appendix formed part of the original submission. We post it as supplied by the authors.

This online publication has been corrected. The corrected version first appeared at [thelancet.com/infection](https://www.thelancet.com/infection) on November 15, 2021.

Supplement to: Juthani PV, Gupta A, Borges KA, et al. Hospitalisation among vaccine breakthrough COVID-19 infections. *Lancet Infect Dis* 2021; published online Sept 7. [https://doi.org/10.1016/S1473-3099\(21\)00558-2](https://doi.org/10.1016/S1473-3099(21)00558-2).

A**Hospitalized with COVID-19 PCR+**

Total=969



- Unvaccinated (n=797)
- Partial course (1 dose of Pfizer or Moderna) (n=103)
- Completed course (2 doses of Pfizer or Moderna or 1 dose of Janssen) (n=15)
- Fully vaccinated (14 days after completed course) (n=54)

B**Fully Vaccinated Disease Severity**

Total=54



- Asymptomatic (n=25)
- Mild Disease (n=4)
- Moderate Disease (n=11)
- Severe/Critical Disease (n=14)

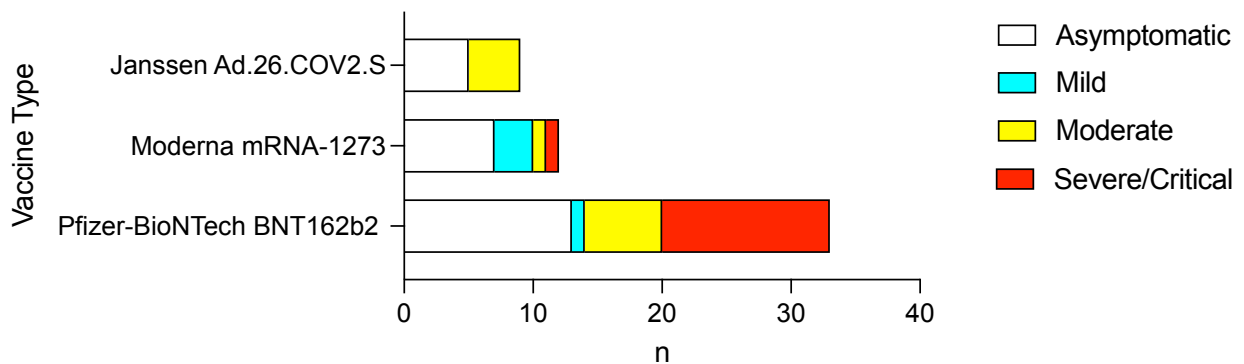
C**Disease Severity by Vaccine Type among Fully Vaccinated**

Figure: A) Classification of all patients admitted to YNHH between March 23, 2021 and July 1, 2021 who tested positive for a SARS-CoV-2 PCR test by their vaccination status.

B) Disease severity among hospitalized patients with positive SARS-CoV-2 PCR test considered to be fully vaccinated. Disease severity in the figure is denoted as asymptomatic, mild disease, moderate disease, and severe/critical disease based on the following: 1)

Asymptomatic: Individuals who test positive for SARS-CoV-2 using a virologic test (i.e., a nucleic acid amplification test or an antigen test) but who have no symptoms that are consistent with COVID-19. 2) Mild: Individuals who have any of the various signs and symptoms of COVID-19 (e.g., fever, cough, sore throat, malaise, headache, muscle pain, nausea, vomiting, diarrhea, loss of taste and smell) but who do not have shortness of breath, dyspnea, or abnormal chest imaging. 3) Moderate: Individuals who show evidence of lower respiratory disease during clinical assessment or imaging and who have saturation of oxygen (SpO₂) ≥94% on room air at sea level. 4) Severe: Individuals who have SpO₂ <94% on room air at sea level, a ratio of arterial partial pressure of oxygen to fraction of inspired oxygen (PaO₂/FiO₂) <300 mm Hg, respiratory frequency >30 breaths/min, or lung infiltrates >50%. 5) Critical: Individuals who have respiratory failure, septic shock, and/or multiple organ dysfunction. C) Distribution of disease severity among fully vaccinated individuals by vaccine type.

Age	Gender	BMI	Vaccine type	COVID-19 severity	No. of days between final vaccine dose & symptom onset or positive COVID-19 test	Highest level of care	Highest vent. support	Inotrope support	Outcome	CV	Lung	Malign.	DM II	Immuno sup. agent
71	M	19.55	P	severe	47	non-ICU	2L NC	N	discharged	Y	Y	N	N	N
76	M	26.79	P	severe	18	non-ICU	4L NC	N	discharged	Y	Y	N	Y	Y
78	F	31.91	P	severe	79	non-ICU	2L NC	N	discharged	Y	N	N	Y	N
79	F	31.98	P	severe	55	non-ICU	3L NC	N	discharged	Y	N	Y	N	Y
81	F	39.55	P	severe	72	non-ICU	2L NC	N	discharged	Y	Y	N	Y	N
85	F	26.2	P	severe	52	non-ICU	4L NC	N	discharged	Y	N	N	N	N
85	M	21.35	P	severe	54	non-ICU	4L NC	N	deceased*	N	Y	Y	Y	Y
90	F	21.46	P	severe	68	non-ICU	4L NC	N	discharged	Y	N	N	N	N
91	F	33.38	P	severe	87	non-ICU	2L NC	N	discharged	Y	N	N	N	N
95	M	26.2	P	severe	93	non-ICU	3L NC	N	discharged	Y	N	Y	Y	N
65	F	44.44	M	critical	26	ICU	NIPPV	N	deceased	Y	Y	N	Y	Y
76	M	19.53	P	critical	34	ICU	4L NC	Y	deceased	N	N	N	N	N
80	M	23.49	P	critical	70	ICU	HFNC	N	discharged	Y	Y	N	Y	N
84	M	26.91	P	critical	58	ICU	MV	Y	deceased	Y	Y	Y	N	N

Table: Demographics and comorbidities of patients fully vaccinated for SARS-CoV-2 who are hospitalised with a positive SARS-CoV-2

PCR test. Patients are listed in the order of worsening disease severity. BMI: body mass index. NC: nasal cannula. NIPPV: non-invasive positive pressure ventilation. HFNC: high flow nasal cannula. MV: mechanical ventilation. CV: history of coronary artery disease or congestive heart failure. Lung: history of lung disease. Malign: history of malignancy. DM II: history of diabetes mellitus type II. Immunosup. agent: outpatient immunosuppressive agent use. P: Pfizer-BioNTech BNT162b2, M: Moderna mRNA-1273. *Patient was discharged from his COVID-19 related hospitalisation, but was subsequently readmitted for non-COVID-19 infection related illness and died during the second hospitalisation.