COVID-19 Vaccine Reactogenicity and Vaccine Attitudes among Children and Parents/Guardians after Multisystem Inflammatory Syndrome in Children or COVID-19 Hospitalization— September 2021─May 2022

Supplemental Material

Supplemental Table 1. Characteristics and vaccination status of children with a history of COVID-19 who were COVID-19 vaccine-eligible[1] at time of interview and/or chart abstraction, N=70

	Vaccinated, n, (%) (n=34)	Unvaccinated, n, (%) (n=36)	P value[2]
Age group (years)[3]			
5-11	0 (0)	7 (19)	0.021
12-15	6 (18)	8 (22)	0.863
16-20[4]	28 (82)	21 (58)	0.053
Sex			
Male	14 (41)	11 (31)	0.354
Race/Ethnicity[5]			
Hispanic	11 (32)	10 (28)	0.516
Non-Hispanic Black	11 (32)	15 (42)	0.336
Non-Hispanic White	9 (26)	10 (28)	0.821
Non-Hispanic Other Race[6]	1 (3)	1 (3)	1.000
Location			
Institution 1	24 (71)	22 (61)	0.404
Institution 2	10 (29)	12 (33)	0.724
Institution 3	0 (0)	2 (6)	0.163
Underlying medical conditions			
None	2 (6)	4 (11)	0.435
Obesity	22 (65)	20 (56)	0.435
Other[7]	19 (56)	23 (64)	0.293
Severity of previous MIS-C illness			
Cardiac MIS-C involvement[8]	2 (6)	1 (3)	0.609
Intensive care unit admission	6 (18)	6 (17)	0.913
Life support[9]	3 (9)	5 (14)	0.711
Median hospital length of stay, days (IQR)	4.5 (3-9)	4.5 (2-9)	0.719
Median time from COVID-19 hospital discharge to initial interview for those interviewed, months (IQR)	16 (15-22)	15 (9–15)	p=0.26

[1]Defined as age ≥12 years if interviewed or abstracted before 11/2/21 and age ≥5 years if interviewed or abstracted on or after 11/2/21. For those interviewed, date of most recent interview used to calculate eligibility.
[2]Chi square or Fisher's Exact two-sided P value if cell <5 for categorical variables; Kruskal-Wallis for continuous variables
[3]Age calculated at time of most recent interview or chart abstraction
[4]One person included in this age group was hospitalized at age 20 but was age 22 at time of interview and abstraction
[5]Race and/or ethnicity unknown for 2 individuals in vaccinated group
[6]Other race = Asian, multiple
[7]Conditions in the vaccinated group: chronic lung disease (n=9, one also with an immunocompromising condition, one with neurofibromatosis, one with an immunocompromising condition and seizures, one with type 1 diabetes, one with fatty liver, one with developmental delay and tracheostomy dependence, and one with sickle cell disease);

scoliosis (n=1), immunocompromising conditions (n=2), congenital heart disease (n=2, one also with seizures), intellectual disability and seizures (n=1), cerebral palsy, seizures, and hydrocephalus (n=1), type 2 diabetes (n=3, one also with Prader Wili syndrome and obstructive sleep apnea, and one also with panhypopituitarism, hypothyroidism, adrenal insufficiency, and obstructive sleep apnea). Conditions in the unvaccinated group: chronic lung disease (n=11, one also with developmental delay, one with an immunocompromising condition, congenital heart disease, and obstructive sleep apnea, one with type 1 diabetes mellitus, seizures, and congenital malformation, and one also with an immunocompromising condition and seizures), immunocompromising condition (n=8, one also with Zellweger syndrome, two with seizures, one with seizures and global developmental delay, one with type 1 diabetes mellitus, one person with Myeloperoxidase-ANCA Vasculitis and end stage renal disease on peritoneal dialysis, and one person status post lung transplant), type 1 diabetes mellitus (n=2, one also with asthma), sickle cell disease (n=1), cerebral palsy, seizures, and tracheostomy dependence (n=1).

[8]Cardiac involvement defined as congestive heart failure, myocarditis, pericarditis noted in the chart or the any of the following echocardiogram findings: coronary aneurysm, coronary artery dilation, or cardiac dysfunction.

[9]Life support was defined by receipt of vasopressors, intubation/mechanical ventilation, or extracorporeal membranous oxygenation (ECMO)

Supplemental Table 2. COVID-19 vaccine data for children hospitalized for MIS-C or COVID-19 and subsequently vaccinated.

	MIS-C, n, (%) (n=51)	Acute COVID-19, n, (%), (n=34)
# Vaccine doses		
1	6 (12)	6 (18)
2	39 (76)	25 (74)
>2	6 (12)	3 (9)
Vaccine manufacturer		
Pfizer-BioNTech	46 (90)	24 (71)
Moderna	2 (4)	5 (15)
Unknown	3 (6)	5 (15)
Time from hospital discharge to first vaccine dose, median mo. (IQR)	10 (6-13)	9 (8-12)