

Supplemental Online Content

Dionne A, Sperotto F, Chamberlain S, et al. Association of myocarditis with BNT162b2 messenger RNA COVID-19 vaccine in a case series of children. *JAMA Cardiol*. Published online August 10, 2021.
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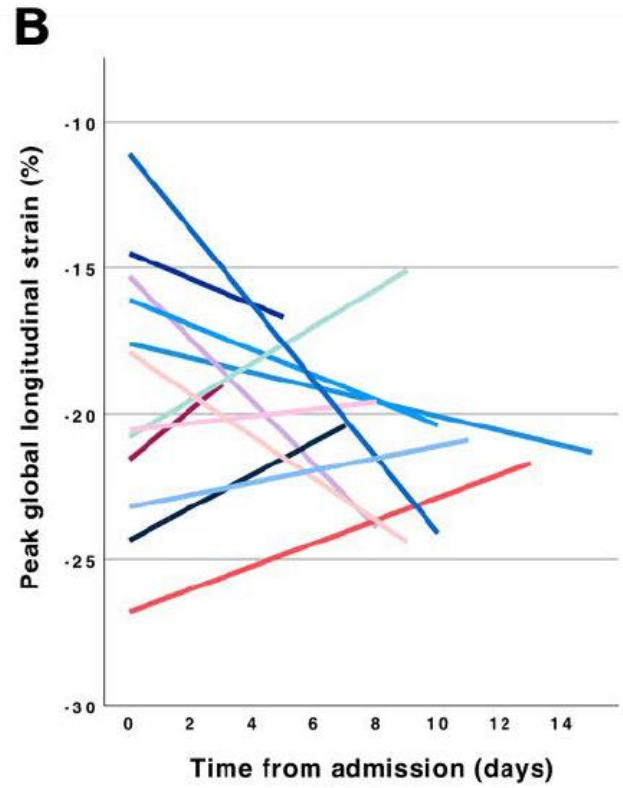
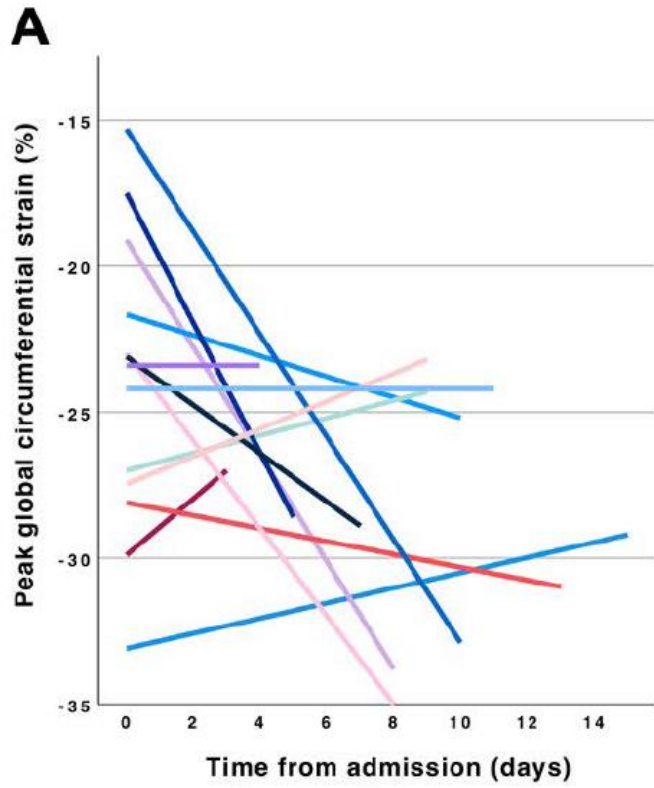
eFigure 1. A), Peak Global Circumferential and B) Peak Global Longitudinal Strain During Hospital Admission and Follow-up

eFigure 2. Cardiac Magnetic Resonance Short and Long-Axis Views Showing Late Gadolinium Enhancement in the Basal Inferolateral Left Ventricular Segment

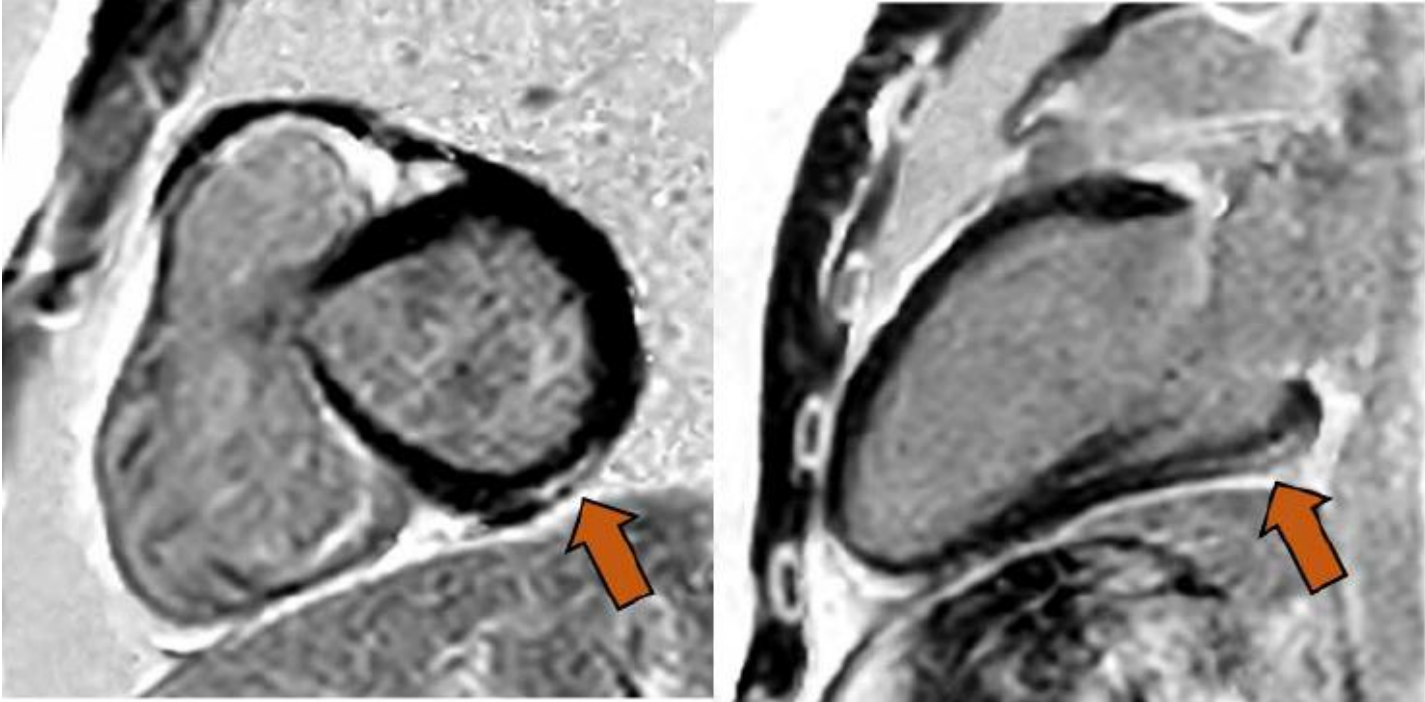
eTable. Detailed Characteristics of Patients With Myocarditis Following COVID-19 Vaccine

This supplemental material has been provided by the authors to give readers additional information about their work.

eFigure 1.A) Peak global circumferential and B) Peak global longitudinal strain during hospital admission and follow-up



eFigure 2. Cardiac magnetic resonance short and long-axis views showing late gadolinium enhancement in the basal inferolateral left ventricular segment.



eTable. Detailed characteristics of patients with myocarditis following COVID-19 vaccine

Patient	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Gender	M	M	M	F	M	M	M	M	M	M	M	M	M	M	M
Vaccine dose	2nd	1st	2nd	2nd	2nd	2nd	2nd	2nd	2nd	2nd	2nd	2nd	2nd	2nd	2nd
Symptoms	Fever, myalgia, chest pain, shortness of breath, headache	Chest pain	Fever, myalgia, chest pain	Myalgia, chest pain, shortness of breath	Fever, chest pain	Fever, chest pain, myalgia, headache	Fever, chest pain, vomiting	Myalgia, chest pain, nausea, fatigue	Fever, chest pain, palpitations	Chest pain, headache	Chest pain, fever	Fever, myalgia, chest pain, headache	Fever, myalgia, chest pain	Fever, fatigue, myalgia, chest pain, headache	Chest pain, headache, fatigue
Day onset symptoms after vaccine	2	4	1	2	3	2	3	2	1	3	4	6	4	2	3
Troponin level at presentation (ng/mL)	0.12	0.12	0.57	0.08	0.55	0.18	0.43	0.08	1.14	0.13	0.19	1.08	0.25	3.15	1.00
CRP (mg/dL)	1.71	5.24	2.07	7.61	0.69	1.54	NA	7.43	10.00	3.00	1.59	7.52	2.74	3.01	7.69
<u>ECG hospitalization</u>	NSSTTWC	ST elevation	ST elevation, T wave inversion	NSSTTWC	ST elevation	Normal	Normal	ST elevation, T wave inversion	ST elevation	PACs	ST elevation	ST elevation	Normal	ST elevation, NSVT	ST elevation
<u>Echocardiogram</u>															
Ejection fraction	59.3	58.3	58.9	55.0	59.7	Normal	64.7	43.7	53.2	60.8	55.1	55.2	61.2	59.0	48.7
Circumferential strain Z-score	1.10	0.80	-1.00	-3.00	-1.90	-1.80	-0.03	-3.50	-4.00	-1.80	-2.30	-0.70	-0.60	-1.60	-2.59
Longitudinal strain Z-score	-0.49	-1.30	-0.34	-1.91	-0.03	0.90	-0.07	-2.56	-3.31		-2.05	-1.37	1.78	0.44	-2.10
Diastolic dysfunction	N	N	N	N	N	N	N	N	Y	N	N	Y	N	N	Y
<u>cMRI</u>															
Late gadolinium enhancement	N	N	Basal and mid-septum, inferior and posterior LV	LV midwall at junction anterolateral and inferolateral segments	Inferolateral, anterolateral, inferior walls	Basal inferolateral segment	N	Basal inferior and anterior, anterolateral midwall, apical lateral	Anterolateral and inferolateral, apical inferior	Basal inferior and inferior-lateral wall	Basal inferolateral	LV free wall	Basal inferolateral LV	Inferior basal and apical anterior free wall	Lateral free wall
Regional hyperintensity on T2-weighted imaging	N	N	N	N	N	N	NA	N	N	N	N	N	N	Y	Y
ECV fraction (%)	29	25	29	28	27	22	31	28	26	24	24	32	27	23	37
LV global T2 (ms)	53.4	51.5	53.3	53.5	47.0	51.0	57.6	53.4	51.4	49.4	49.0	54.7	49.8	47.2	51.5

LV global native T1 (ms)	1084	1040	1062	1106	993	1060	1078	1121	1048	1017	985	1089	1015	963	1012
Immunomodulatory treatment	N	N	N	N	IVIG Steroids	N	N	IVIG Steroids	IVIG Steroids	IVIG Steroids	IVIG Steroids	N	N	IVIG Steroids	IVIG Steroids
Hospital LOS (days)	2	2	2	2	3	1	1	3	4	2	3	2	2	5	5
<u>Follow-up</u>															
Persistent symptoms	Fatigue	N	N	Fatigue	Chest pain	N	N	N	N	Fatigue	N	N	N	N	N
Troponin level at follow-up (ng/mL)	NA	0.01	0.01	0.01	0.01	0.01	0.16	0.02	0.01	0.05	0.01	0.01	0.01	0.01	0.01
ECG follow-up	NA	NSSTTWC	Normal	Normal	Normal	Normal	NSSTTWC	Normal	NSSTTWC	T-wave inversion	Normal	T-wave inversion	Normal	NSSTTWC	T-wave inversion
Echocardiogram follow-up (EF)	NA	59.3	56.0	55.7	65.3	71.5	59.0	62.9	61.2	63.1	57.3	54.4, diastolic dysfunction	66.2	59.3	55.3

M: Male, F: Female, Y:Yes, N: No, NA: not available, CRP: C-reactive protein, ECG: electrocardiogram, NSSTTWC: non-specific ST-T wave changes, cMRI: cardiac MRI, ECV: Extracellular volume fraction, LV: left ventricle

Individual ages are not included to protect patient identity. Ages ranged from 12 to 18 years.