

Mount Sinai

MEDICAL CENTER

Comparison of Adverse Effects of COVID Vaccine: Moderna vs Pfizer/BioNTech

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Frequency of Solicited Local Adverse Reactions Within 7 Days Following Either the First or Second Dose of Vaccine					
Moderna			Pfizer/BioNTech		
	Dose 1 N = 11401 (%)	Dose 2 N = 10357 (%)		Dose 1 N=2238; n (%)	Dose 2 N=2045; n (%)
<u>Pain</u>					
Any	86.9	90.1	Any	83.1	77.8
			Mild	51.1	49.5
			Moderate	31	27.1
Grade 3	3.2	4.6	Severe	1	1.2
<u>Redness</u>					
Any	3	9	Any	4.5	5.9
			Mild	3.1	3.5
			Moderate	1.2	1.9
Grade 3	0.3	2	Severe	0.3	0.5
<u>Swelling</u>					
Any	6.7	12.6	Any	5.8	6.3
			Mild	3.8	3.8
			Moderate	1.7	2.1
Grade 3	0.5	1.7	Severe	0.2	0.3
Mild pain: does not interfere with activity; moderate: interferes with activity; severe: prevents daily activity					
Mild redness/swelling: 2.0 to 10.0 cm					
Grade 3 pain: any use of Rx pain medications/prevents daily activity					
Grade 3 redness/swelling: >10cm					

Frequency of Solicited Systemic Adverse Reactions Within 7 Days Following Either the First or Second Dose of Vaccine					
Moderna			Pfizer/BioNTech		
	Dose 1 N=11405; n (%)	Dose 2 N=10358; n (%)		Dose 1 N=2238; n (%)	Dose 2 N=2045; n (%)
Fever	0.9	17.4		7.5	31.4
Headache					
Any	35.4	62.8	Any	41.9	51.7
Grade 3	1.9	5	Mild	27.4	25.6
			Moderate	13.4	22.9
			Severe	1	3.2
Fatigue					
Any	38.5	67.6	Any	47.4	59.4
Grade 3	1.1	10.6	Mild	26.1	21.1
			Moderate	19.9	33.7
			Severe	1.4	4.6
Myalgia					
Any	23.7	6.1	Any	21.3	37.3
Grade 3	0.6	10	Mild	11.2	15.5
			Moderate	9.5	19.5
			Severe	0.6	2.2
Arthralgia					
Any	16.6	45.2	Any	11	21.9
Grade 3	0.4	5.8	Mild	6.4	9.8
			Moderate	4.3	11.2
			Severe	0.2	1
Chills					
Any	9.2	48.2	Any	14	35.1
Grade 3	0.1	1.5	Mild	10	17.1
			Moderate	3.6	15.9
			Severe	0.4	2.1
Mild: does not interfere with activity; moderate: some interference with activity; severe: prevents daily activity					
Grade 3 fatigue, muscle pain, headache, arthralgia, chills defined as preventing normal activities					

References:

1. "Vaccines and Related Biological Products Advisory Committee Meeting December 10, 2020", Pfizer-BioNTech COVID-19 Vaccine
 - a. <https://www.fda.gov/media/144245/download>
2. "Vaccines and Related Biological Products Advisory Committee Meeting December 17, 2020", Moderna COVID-19 Vaccine
 - a. <https://www.fda.gov/media/144434/download>