

Improved cancer treatment response in those with COVID vaccination

	Vaccinated n = 335	Non-vaccinated n = 335
Age, years	47.1 ± 11.6	44.7 ± 11.7
WBC, $\times 10^9/L$	23.3 ± 3.19	23.0 ± 3.17
CRP	88.7 ± 3.98	88.5 ± 4.38
Gender		
Male	288 (77.2)	282 (75.8)
Female	45 (12.8)	52 (14.2)
Comorbidity		
Infection	37 (9.8)	132 (33.3)
Hypertension	37 (9.8)	108 (28.9)
Hepatitis	38 (17.4)	101 (28.4)
Tuberculosis	6 (1.8)	17 (5.1)
Others	21 (5.4)	58 (15.8)
Late effect of vaccination		
Myocardial pain	30 (8.8)	—
Allergy	28 (7.3)	—
Fever	25 (6.2)	—
Rhinitis	15 (4.3)	—
Headache	10 (2.7)	—
Others	17 (4.8)	—
Treatment		
CR (complete remission)	21 (5.4)	118 (33.3)
PR (partial remission)	109 (35.8)	108 (28.9)
SD (stable disease)	109 (35.8)	417 (100.0)
PD (progressive disease)	42 (11.3)	295 (75.3)
CR	298 (88.7)	432 (100.0)
DCR	298 (88.7)	369 (94.7)
Duration	136.6 ± 134.4	211.9 ± 201.3
Grade	232 (75.4)	465 (100.0)
Adverse-related adverse effects		
BCR	112 (30.8)	312 (75.3)
Hepatitis	136 (36.3)	108 (28.9)
Hypertension	40 (12.2)	119 (31.8)
Others	18 (5.4)	108 (28.9)
Anti PD-1 agent		
Toripalimab	149 (38.3)	389 (94.7)
Camelidomab	346 (100.0)	907 (100.0)
Sintilimab	7 (1.8)	15 (4.0)
Tuberculosis	1 (0.3)	18 (5.1)
Headache	1 (0.3)	4 (1.1)
Neutropenia	0 (0.0)	4 (1.1)
Combined chemotherapy	346 (100.0)	1115 (100.0)

In a recent paper which yielded an unexpected result, researchers penned a letter to the editor of the journal *Annals of Oncology* describing the results (Figure 1). In this study, medications that stimulate the body's defenses against the tumor are frequently given to individuals with nasopharyngeal cancer. The study found that when patients received the Chinese vaccine SinoVac instead of being unvaccinated, the cancer medications performed better.

Items	Vaccinated n = 335 n (%)	Non-vaccinated n = 1115 n (%)	P value
Age, years	47.1 ± 11.6	44.7 ± 11.7	0.340
WBC, $\times 10^9/L$	23.3 ± 3.19	23.0 ± 3.17	0.807
CRP	88.7 ± 3.98	88.5 ± 4.38	0.619
Gender			
Male	288 (77.2)	282 (75.8)	
Female	45 (12.8)	52 (14.2)	
Comorbidity			
Infection	37 (9.8)	132 (33.3)	0.006
Hypertension	37 (9.8)	108 (28.9)	
Hepatitis	38 (17.4)	101 (28.4)	
Tuberculosis	6 (1.8)	17 (5.1)	
Others	21 (5.4)	58 (15.8)	
Late effect of vaccination			
Myocardial pain	30 (8.8)	—	
Allergy	28 (7.3)	—	
Fever	25 (6.2)	—	
Rhinitis	15 (4.3)	—	
Headache	10 (2.7)	—	
Others	17 (4.8)	—	
Treatment			
CR (complete remission)	21 (5.4)	118 (33.3)	<0.001
PR (partial remission)	109 (35.8)	108 (28.9)	
SD (stable disease)	109 (35.8)	417 (100.0)	
PD (progressive disease)	42 (11.3)	295 (75.3)	
CR	298 (88.7)	432 (100.0)	<0.001
DCR	298 (88.7)	369 (94.7)	0.011
Duration	136.6 ± 134.4	211.9 ± 201.3	<0.001
Grade	232 (75.4)	465 (100.0)	<0.001
Adverse-related adverse effects			
BCR	112 (30.8)	312 (75.3)	<0.001
Hepatitis	136 (36.3)	108 (28.9)	
Hypertension	40 (12.2)	119 (31.8)	
Others	18 (5.4)	108 (28.9)	
Anti PD-1 agent			
Toripalimab	149 (38.3)	389 (94.7)	<0.001
Camelidomab	346 (100.0)	907 (100.0)	0.905
Sintilimab	7 (1.8)	15 (4.0)	0.000
Tuberculosis	1 (0.3)	18 (5.1)	0.117
Headache	1 (0.3)	4 (1.1)	0.000
Neutropenia	0 (0.0)	4 (1.1)	0.578
Combined chemotherapy	346 (100.0)	1115 (100.0)	0.001

Table 1. Clinical and demographic characteristics of the NPC patient cohort.

Numerous cancer cells can interfere with the immune system's

reaction. They achieve this by activating the PD-1 receptor, which acts as a type of button on immune cells. They successfully disabled these endogenous defense mechanisms in this manner. PD-1 receptors can be blocked using medications. As a result, the immune system can combat the tumor more successfully. The PD-1 receptor is involved in the immunological response that is triggered by the Covid vaccine.

A portion of the 373 afflicted people had received the Chinese Covid vaccination SinoVac. They reacted to anti-PD-1 treatment better than the individuals who were not immunized.

Journal article: Y.J. Hua, Y.J., et al., 2022. Y.L. [Potentially improved response of COVID-19 vaccinated nasopharyngeal cancer patients to combination therapy with anti-PD-1 blockade and chemotherapy.](#) *Annals of Oncology.*

Summary by Stefan Botha