

Table 1. Demographics and vaccination details among the three groups

	Healthy (N=273)	Neuropsychiatric conditions (N=217)	Epilepsy (N=491)	P	
Gender (male, %)	128(46.9)	105(48.4)	243(49.5)	0.78	
Ethnic (Han, %)	255(93.4)	205(94.5)	466(94.9)	0.90	
Age (years, Mean±SD)	31.12±8.12	33.2±12.37	30.4±10.90	0.78	
History of Febrile convulsions (%)	7 (2.56%)	6 (2.76%)	89 (18.13%)	<0.0001	
1st injection (%)	253 (92.7%)	183 (84.3%)	204 (41.6%)	<0.0001	
2nd injection (N2/N1*, %)	196 (77.5%)	129 (70.5%)	139 (68.1%)	0.07	
Completed vaccine course (%)	196 (71.8%)	131 (60.4%)	155 (31.6%)	<0.0001	
Vaccine platforms (N1/N2**)	Inactivated vaccine (2 doses required)	236(93.3)	177(96.7)	187(92.2)	0.31
	Subunit vaccine (3 doses required)	15(5.9)	4(2.2)	14(6.9)	
	Viral-vector vaccine (1 dose required)	2(0.8)	2(1.1)	2(0.9)	
Willing to be vaccinated (N4/N5***, %)	70.00	58.82	59.58	<0.0001	

*N1 is the number of participants who had the 1st vaccine, and N2 the number who had the second vaccine, excluding those who had viral vector vaccine which requires only one injection.

**N1=the number of participants injected the regarding vaccine, N2= the number of participants injected the 1st vaccine. One participant from epilepsy group had mRNA vaccine.

***N1= the number of uninjected participants who would be willing to have any kind of vaccine, N2= the number of uninjected participants.

Table 2. The willingness of vaccination among unvaccinated participants with epilepsy or neuropsychiatric conditions

		Neuropsychiatric conditions (N=34)	People with epilepsy (N=287)	P
Willingness		20 (58.8%)	171(59.6%)	0.93
Reason for hesitation (%)	Worried about the potential adverse effects	8(23.5)	153(53.3)	<0.0001
	Unsatisfied with seizure/disease control	17(50.0)	135(47.0)	0.63
	Worried about the interaction between current medication and the vaccine	5(14.7)	16(5.6)	0.04
	Other comorbidity	2(5.9)	42(14.6)	0.18
	Local administration suggested delaying the injection	1(2.9)	12(4.2)	0.75
	Others	8(23.5)	15(5.2)	<0.0001

Table 3. Clinical characteristics in people with epilepsy

	Vaccinated * (N=204)	Unvaccinat ed (N=286)	P
Age (years, Mean±SD)	30.9±11.5	29.9±10.1	0.93
Course of disease (months, Mean±SD)	96.6±99.8	109.3±97.0	<0.0001
Number of current ASMs (Mean±SD)	1.46±0.80	1.83±0.89	0.63
Drug resistant Epilepsy (%)**	58(28.0)	146(50.5)	0.04
Seizure classification (%)			
Focal onset	107(52.5)	138(48.1)	0.18
Generalized onset	51(25.0)	73(25.4)	0.75
Unknown onset	35(17.2)	57(19.9)	<0.0001
Unclassified	11(5.4)	19(6.6)	0.93
Seizure frequency ranking (%)			
Over one year seizure free	80(39.2)	65(22.7)	<0.0001
Once a year	42(20.6)	35(12.2)	0.01
Once every 6 months	17(8.3)	30(10.5)	0.43
Once every 3 months	23(11.3)	38(13.2)	0.52
Once every month	27(13.2)	70(24.4)	0.02
Once every week	12(5.9)	41(14.3)	0.003
Once every day	3(1.5)	8(2.8)	0.331

*All participants had the 1st injection

**Excluding new diagnosed people with epilepsy (Course of the disease less than 3 months)

Table 4. General adverse events among three groups

	Healthy	Neuropsychiatric conditions	Epilepsy	P
Number of participants who had the 1st injection	253	184	204	
Adverse event after 1st injection(%)	46 (18.2)	26 (14.1)	33 (16.2)	0.53
Local injection site skin adverse events	18 (7.1)	5 (2.7)	12 (5.9)	0.13
muscle pain	18 (4.7)	5 (4.9)	12 (2.9)	0.55
Fatigue	10 (4.0)	8 (4.4)	4 (2.0)	0.37
Headache	3 (1.2)	4 (2.2)	4(2.0)	0.70
Drowsiness	5 (2.0)	8 (4.4)	1 (0.5)	0.03
Fever	0	1(0.5)	1 (0.5)	0.52
Others	3 (1.2)	2 (1.1)	9 (4.4)	0.03
Number of participants who had the 2nd injection	196	123	139	
Adverse event after 2nd injection (%)	36 (18.4)	9 (7.3)	19 (13.7)	0.02
Local injection site skin adverse events	13 (6.6)	3 (2.4)	5 (3.6)	0.18
muscle pain	13 (6.6)	1 (0.8)	3(2.2)	0.01
Fatigue	5 (2.6)	2 (1.6)	2 (1.4)	0.73
Headache	0	1 (0.8)	4 (2.9)	0.04
Drowsiness	4 (2.0)	1 (0.8)	1 (0.7)	0.49
Others	3 (1.5)	2 (1.6)	9 (6.5)	0.02

*Adverse event rates were defined as the number of the events/ the number of people who had the 1st/ 2nd injection of vaccines.