

Table S1. Full questionnaire of Attitudes Toward COVID-19 Vaccination: A Survey in Chinese Patients with Rheumatic Diseases

Section A: Demographic information		
1	Gender	1. Male 2. Female
2	Age	___years old
3	Disease	1. Rheumatoid arthritis 2. Systemic lupus erythematosus 3. Sjogren's syndrome 4. Systemic sclerosis / scleroderma 5. Polymyositis and dermatomyositis 6. Ankylosing spondylitis 7. Psoriatic arthritis 8. Inflammatory bowel disease arthritis 9. Reactive arthritis 10. Adult still disease 11. Juvenile idiopathic arthritis 12. Vasculitis 13. Takayasu arteritis 14. Giant cell arteritis 15. Nodular polyarteritis 16. Behcet's disease 17. Osteoarthritis 18. Antiphospholipid syndrome 19. IgG4 related diseases 20. Rheumatic polymyalgia 21. Fibromyalgia syndrome 22. Undifferentiated connective tissue disease 23. Mixed connective tissue disease 24. other
4	Highest education level	1. Postgraduate degree or above 2. Bachelor's degree 3. High school graduate or junior college 4. Less than high school
5	Monthly income (RMB)	1. >10000 2. 5000-10000 3. 2500-5000 4. <2500 5. Inconvenient to disclose

6	Location	1. City
		2. Countryside
7	Employment status	1. On employment
		2. Not on employment
8	Disease status	1. Inactive disease
		2. Active disease
9	Disease status	Inactive disease
		Active disease

Section B: Attitudes toward COVID-19 vaccine

1	Rate your attitudes toward COVID-19 vaccine from 1-5	1. completely disagree
		2. somewhat disagree
		3. neutral/no opinion
		4. somewhat agree
		5. completely agree

Section C: The reasons for refusing vaccination

1	Rate your attitudes toward concerns about adverse effect from 1-5	1. completely disagree
		2. somewhat disagree
		3. neutral/no opinion
		4. somewhat agree
		5. completely agree
2	Rate your attitudes toward concerns about disease flare from 1-5	1. completely disagree
		2. somewhat disagree
		3. neutral/no opinion
		4. somewhat agree
		5. completely agree
3	Rate your attitudes toward concerns about causing COVID-19 infection from 1-5	1. completely disagree
		2. somewhat disagree
		3. neutral/no opinion
		4. somewhat agree
		5. completely agree
4	Rate your attitudes toward concerns about invalidity of vaccines from 1-5	1. completely disagree
		2. somewhat disagree
		3. neutral/no opinion
		4. somewhat agree
		5. completely agree

Section D: Current status of vaccination and adverse events

1	Have you been vaccinated?	1. Yes 2. No
2	If you have been vaccinated, do you have any adverse effect after vaccination? (multiple choices, open questions)	1. redness, swelling and pain at the inoculation site 2. fever 3. weakness 4. nausea 5. headache 6. Muscle soreness 7. thrombus 8. Other_____
3	If you have been vaccinated, rate the effect of personal willingness on vaccination from 1-5	1. completely disagree 2. somewhat disagree 3. neutral/no opinion 4. somewhat agree 5. completely agree
4	If you have been vaccinated, were you vaccinated because community requirements? Rate it from 1-5.	1. completely disagree 2. somewhat disagree 3. neutral/no opinion 4. somewhat agree 5. completely agree
5	If you have been vaccinated, were you vaccinated because work requirements? Rate it from 1-5.	1. completely disagree 2. somewhat disagree 3. neutral/no opinion 4. somewhat agree 5. completely agree
6	If you have been vaccinated, were you vaccinated because personal willingness? Rate it from 1-5.	1. completely disagree 2. somewhat disagree 3. neutral/no opinion 4. somewhat agree 5. completely agree
7	If you have been vaccinated, were you vaccinated because doctor's recommendation? Rate it from 1-5.	1. completely disagree 2. somewhat disagree 3. neutral/no opinion 4. somewhat agree 5. completely agree

Section E: Confidence of COVID-19 infection in future

1	Do you think you will get COVID-19 in 6 months?	<ol style="list-style-type: none">1. I will not be infected2. I will get a mild case3. I will get seriously ill4. I have already had the coronavirus
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Section F: Knowledge source of the COVID-19 vaccine.

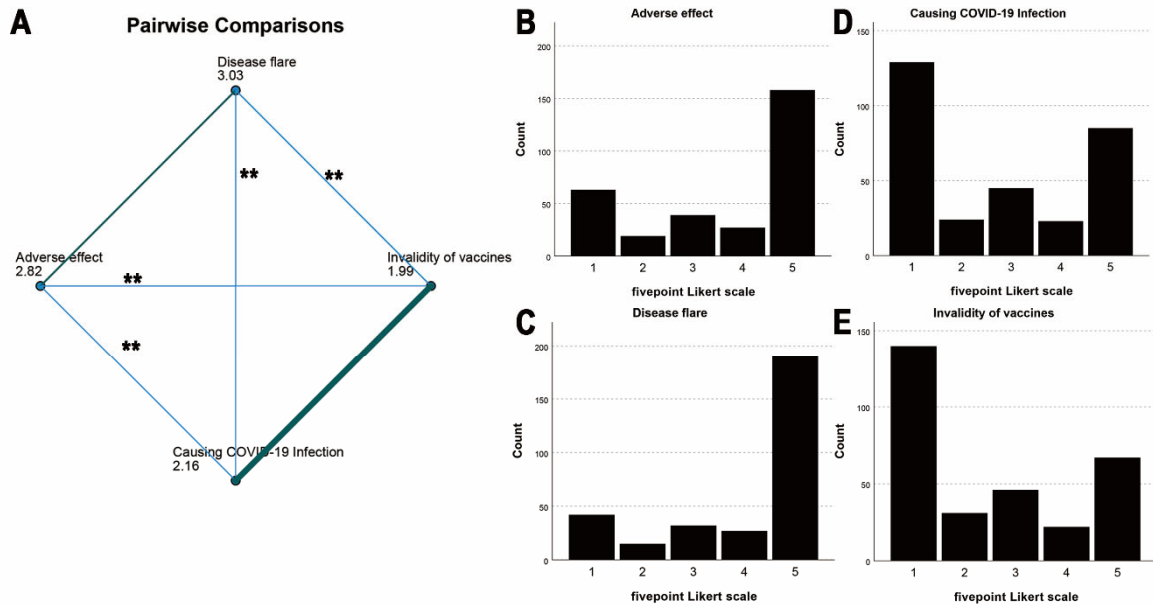
1	Where did you get COVID-19 vaccine knowledge?	<ol style="list-style-type: none">1. Internet2. Television3. Popular science4. Discussion with colleagues or friends5. Propaganda of the community6. Guidance of doctors7. Do not understand any knowledge about vaccine
2	Have you ever consulted a rheumatologist?	<ol style="list-style-type: none">1. Yes2. No
3.	Did the rheumatologist suggest you get vaccinated?	<ol style="list-style-type: none">1. Yes2. No

Table S2. Knowledge source of COVID-19 vaccine and confidence of COVID-19 infection

Knowledge source and Confidence	Data	
Knowledge source*	N=1026	
Internet	716	(69.79%)
Television	316	(30.80%)
Popular science	354	(34.50%)
Discussion with colleagues or friends	267	(26.02%)
Propaganda of the community	366	(35.67%)
Guidance of doctors	304	(29.63%)
Do not understand any knowledge about vaccine	2	(0.19%)
Confidence	N=1026	
Do you think you will get COVID-19 in 6 months?		
I will not be infected	902	(87.91%)
I will get a mild case	73	(7.12%)
I will get seriously ill	51	(4.97%)
I have already had the coronavirus	0	(0.00%)

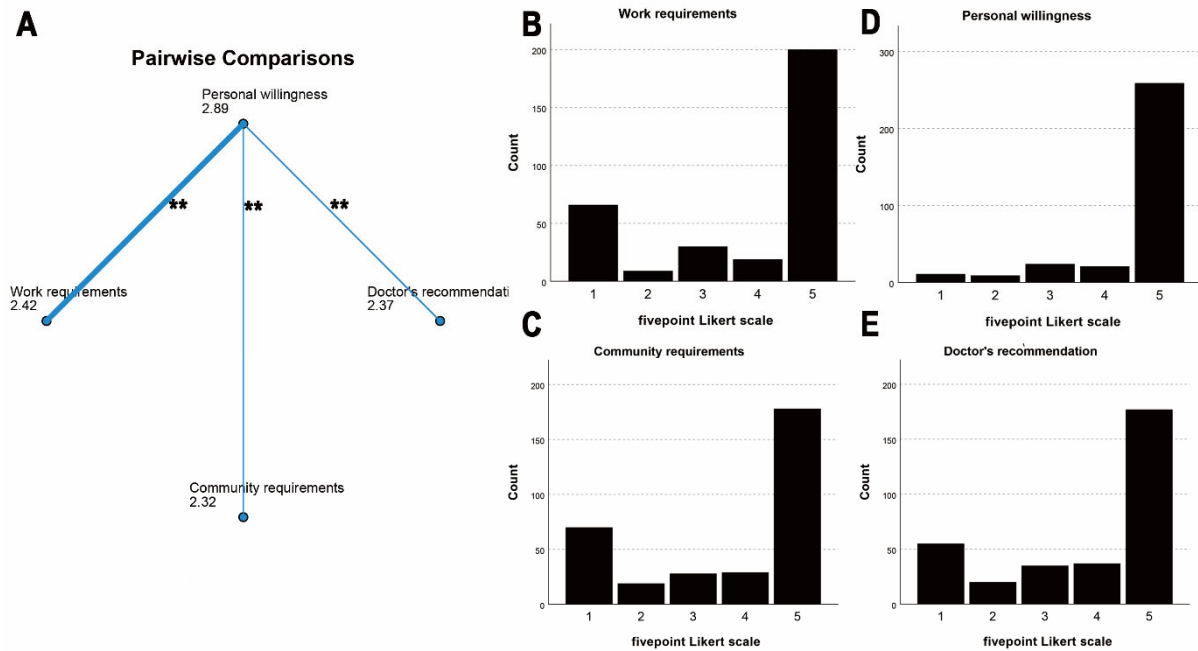
*A patient can choose more than two knowledge sources

Figure S1. The Related-Samples Wilcoxon Signed Rank Test Summary of reasons for refusing vaccination.



A: Pairwise Comparisons of the reasons for refusing vaccination. One asterisk (*) next to the connection indicates statistical difference at $p < 0.05$, and two asterisks (**) indicate statistical difference at $p < 0.01$. B-E: The count of five-point Likert scale of Adverse effect, Disease flare, Causing COVID-19 Infection and Invalidity of vaccines separately.

Figure S2. The Related-Samples Wilcoxon Signed Rank Test Summary of reasons for vaccination.



A: Pairwise Comparisons of the reasons for vaccination. One asterisk (*) next to the connection indicates statistical difference at $p < 0.05$, and two asterisks (**) indicate statistical difference at $p < 0.01$. B-E: The count of five-point Likert scale of Work requirements, Community requirements, Personal willingness and Doctor's recommendation separately.