

**Table S1 Full Questionnaire of Vaccination status and attitudes to COVID-19 vaccine**

Section A

**DEMOGRAPHICS, HIV CHATACTERISTICS AND HEALTH STATUS**

| Demographics        |                                                                           |                                                                                                                                                                                            |
|---------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                   | Age                                                                       | _____ years old                                                                                                                                                                            |
| 2                   | Gender                                                                    | [ 1 ] Male<br>[ 2 ] Female                                                                                                                                                                 |
| 3                   | Marital status                                                            | [ 1 ] Unmarried<br>[ 2 ] Married<br>[ 3 ] Divorced/widowed                                                                                                                                 |
| 4                   | Highest education level                                                   | [ 1 ] High school and below<br>[ 2 ] College/undergraduate<br>[ 3 ] Postgraduated and above                                                                                                |
| 5                   | Occupation                                                                | [ 1 ] Business/service staff<br>[ 2 ] Professional and technical personnel<br>[ 3 ] Public official<br>[ 4 ] Farmer/industrial worker<br>[ 5 ] Student<br>[ 6 ] Unemployed<br>[ 7 ] Others |
| HIV characteristics |                                                                           |                                                                                                                                                                                            |
| 6                   | Duration of antiretroviral therapy                                        | _____ years                                                                                                                                                                                |
| 7                   | antiretroviral therapy regimen                                            | _____                                                                                                                                                                                      |
| 8                   | CD4 <sup>+</sup> T cell counts prior to antiretroviral therapy initiation | _____ cells/ $\mu$ L                                                                                                                                                                       |
| 9                   | HIV RNA load to antiretroviral therapy initiation                         | _____ copies/ml                                                                                                                                                                            |
| 10                  | CD4 <sup>+</sup> T cell counts before 6 months                            | _____ cells/ $\mu$ L                                                                                                                                                                       |
| 11                  | HIV RNA load before 6 months                                              | _____ copies/ml                                                                                                                                                                            |
| 12                  | Mode of HIV transmission                                                  | [ 1 ] MSM<br>[ 2 ] Heterosexual sex                                                                                                                                                        |

|                                  |                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                 |
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|                                  |                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/> 3 ] Transfusion<br><input type="checkbox"/> 4 ] Others/unknown                                                                                                                                                                                                                                                         |
| Short Form Health Survey (SF-12) |                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                 |
| 14                               | In general, would you say your health is                                                                                                                                                                                                                                                                                   | <input type="checkbox"/> 1 ] Excellent<br><input type="checkbox"/> 2 ] Very good<br><input type="checkbox"/> 3 ] Good<br><input type="checkbox"/> 4 ] Fair<br><input type="checkbox"/> 5 ] Poor                                                                                                                                                 |
| 15                               | <p>The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?</p> <p>a. Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf</p> <p>b. Climbing several flights of stairs</p>         | <p><input type="checkbox"/> 1 ] Yes, limited a lot<br/> <input type="checkbox"/> 2 ] Yes, limited a little<br/> <input type="checkbox"/> 3 ] No, not limited at all</p> <p><input type="checkbox"/> 1 ] Yes, limited a lot<br/> <input type="checkbox"/> 2 ] Yes, limited a little<br/> <input type="checkbox"/> 3 ] No, not limited at all</p> |
| 16                               | <p>During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health?</p> <p>a. Accomplished less than you would like</p> <p>b. Were limited in the kind of work or other activities</p>                                            | <p><input type="checkbox"/> 1 ] Yes<br/> <input type="checkbox"/> 2 ] No</p> <p><input type="checkbox"/> 1 ] Yes<br/> <input type="checkbox"/> 2 ] No</p>                                                                                                                                                                                       |
| 17                               | <p>During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?</p> <p>a. Accomplished less than you would like</p> <p>b. Did work or other activities less carefully than usual</p> | <p><input type="checkbox"/> 1 ] Yes<br/> <input type="checkbox"/> 2 ] No</p> <p><input type="checkbox"/> 1 ] Yes<br/> <input type="checkbox"/> 2 ] No</p>                                                                                                                                                                                       |
| 18                               | During the past 4 weeks, how much did pain interfere with your normal                                                                                                                                                                                                                                                      | <input type="checkbox"/> 1 ] Not at all<br><input type="checkbox"/> 2 ] A little bit                                                                                                                                                                                                                                                            |

|    |                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                               |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | work (including both work outside the home and housework)?                                                                                                                                                                                                                                                                                                                                  | <input type="radio"/> 3 Moderately<br><input type="radio"/> 4 Quite a bit<br><input type="radio"/> 5 Extremely                                                                                                                |
| 19 | <p>These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling.</p> <p>How much of the time during the past 4 weeks.</p> <p>a. Have you felt calm and peaceful?</p> <p>b. Did you have a lot of energy?</p> <p>c. Did you have a lot of energy?</p> | <div> <input type="radio"/> 1 All <input type="radio"/> 2 Most </div> <div> <input type="radio"/> 3 A good bit <input type="radio"/> 4 Some </div> <div> <input type="radio"/> 5 A little <input type="radio"/> 6 None </div> |
| 20 | During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting friends, relatives, etc.)?                                                                                                                                                                                                               | <input type="radio"/> 1 All<br><input type="radio"/> 2 Most<br><input type="radio"/> 3 A good bit<br><input type="radio"/> 4 Some<br><input type="radio"/> 5 A little<br><input type="radio"/> 6 None                         |

## Section B

### Perception of COVID-19 vaccine

|   |                                                                      |                                                                                                                                                                                                                                                                                                      |
|---|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Have you get vaccinated against COVID-19?                            | <input type="radio"/> 1 Yes<br><input type="radio"/> 2 No                                                                                                                                                                                                                                            |
| 2 | If your answer is no, what's preventing you from getting vaccinated? | <input type="radio"/> 1 Concerns about side effects and/or poor efficacy<br><input type="radio"/> 2 Be waiting to be scheduled<br><input type="radio"/> 3 Contraindications for vaccine<br><input type="radio"/> 4 No perceived need for vaccination<br><input type="radio"/> 5 Scheduling conflicts |

|   |                                                                   |       |
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| 3 | If your answer is yes, do you have any concern after vaccination? | _____ |
|---|-------------------------------------------------------------------|-------|

### Section C (vaccinees only)

#### Status of vaccination against COVID-19

|   |                                                                |                                                                                                                                                                                                                                                                                          |
|---|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | The manufacturer of COVID-19 vaccine                           | [ 1 ] CoronaVac vaccine (Sinovac Life Sciences)<br>[ 2 ] BBIBP-CorV vaccine (Beijing Institute of Biological Products)<br>[ 3 ] Recombinant protein subunit vaccine (Anhui Zhifei Longcom Biopharmaceutical)<br>[ 4 ] Recombinant adenovirus type-5 vectored vaccine (CanSino Biologics) |
| 2 | How many doses have you completed? When did you get vaccinated | [ 1 ] First dose. Date: _____<br>[ 2 ] Second dose. Date: _____<br>[ 3 ] Third dose. Date: _____                                                                                                                                                                                         |

### Section D (vaccinees only)

#### Adverse reactions related to COVID-19 vaccine

| Local adverse reactions |                                                 |                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                       | <input type="checkbox"/> Pain at injection site | [ 1 ] Didn't affect or slightly affect physical activity<br>[ 2 ] Affected physical activity<br>[ 3 ] Affected daily life<br>[ 4 ] Led to loss of self-care ability or needed to be in hospital<br>Duration of symptom: _____ days                                                                                                                                       |
| 2                       | <input type="checkbox"/> Swelling               | [ 1 ] 2.5~<5 cm in diameter / 6.25~<25 cm <sup>2</sup> in area and didn't affect or slightly affected physical activity<br>[ 2 ] ≥10 cm in diameter/≥100 cm <sup>2</sup> in area/got a fester or secondary infection or phlebitis or sterile abscess or wound drainage/seriously affected quality of life<br>[ 3 ] ≥10 cm in diameter/≥100 cm <sup>2</sup> in area/got a |

|                       |                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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|                       |                                                       | <p>fester or secondary infection or phlebitis or sterile abscess or wound drainage/seriously affected quality of life</p> <p>[ 4 ] Abscess / exfoliative dermatitis/dermal or deep tissue necrosis</p> <p>Duration of symptom: _____ days</p>                                                                                                                                                                                                                                                                                              |
| 3                     | <input type="checkbox"/> Redness                      | <p>[ 1 ] 2.5~&lt;5 cm in diameter/6.25~&lt;25 cm<sup>2</sup> in area and didn't affect or slightly affected physical activity</p> <p>[ 2 ] 5~&lt;10 cm in diameter/25~&lt;100 cm<sup>2</sup> in area/affected physical activity</p> <p>[ 3 ] ≥10 cm in diameter/≥100 cm<sup>2</sup> in area/get a fester or secondary infection or phlebitis or sterile abscess or wound drainage/seriously affected quality of life</p> <p>[ 4 ] Abscess/exfoliative dermatitis/dermal or deep tissue necrosis</p> <p>Duration of symptom: _____ days</p> |
| 4                     | <input type="checkbox"/> Itching                      | <p>[ 1 ] Itching at the injection site, resolved spontaneously or resolved within 48 hours after treatment</p> <p>[ 2 ] Itching at the injection site, symptom persisted within 48 hours after treatment</p> <p>[ 3 ] Affected daily life</p> <p>[ 4 ] N.A.</p> <p>Duration of symptom: _____ days</p>                                                                                                                                                                                                                                     |
| System adverse events |                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 5                     | <input type="checkbox"/> Fever (axillary temperature) | <p>[ 1 ] 37.3~&lt;38.0℃</p> <p>[ 2 ] 38.0~&lt;38.5℃</p> <p>[ 3 ] 38.5~&lt;39.5℃</p> <p>[ 4 ] ≥39.5℃, persistent over 3 days</p> <p>Duration of symptom: _____ days</p>                                                                                                                                                                                                                                                                                                                                                                     |
| 6                     | <input type="checkbox"/> Fatigue                      | <p>[ 1 ] Didn't affect daily life</p> <p>[ 2 ] Affected daily life</p> <p>[ 3 ] Severely affected daily activities and unable to work</p> <p>[ 4 ] Went to emergency or needed to be in hospital</p> <p>Duration of symptom: _____ days</p>                                                                                                                                                                                                                                                                                                |
| 7                     | <input type="checkbox"/> Diarrhea                     | <p>[ 1 ] Mild or transient, 3-4 times/day, abnormal stool traits or mild diarrhea &lt;1 week</p> <p>[ 2 ] Moderate or persistent, 5-7 times/day, abnormal stool traits, or diarrhea &gt;1 week</p> <p>[ 3 ] &gt;7 times/day, abnormal stool traits, or</p>                                                                                                                                                                                                                                                                                 |

|    |                                      |                                                                                                                                                                                                                                                                                                                                                                                        |
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|    |                                      | <p>hemorrhagic diarrhea, orthostatic hypotension, electrolyte imbalance, needed for intravenous infusion &gt;2L</p> <p>[ 4 ] Hypotensive shock, needed to be hospitalized</p> <p>Duration of symptom: _____ days</p>                                                                                                                                                                   |
| 8  | <input type="checkbox"/> muscle pain | <p>[ 1 ] Didn't affect daily life</p> <p>[ 2 ] Slightly affected daily life</p> <p>[ 3 ] Severe muscle pain and severely affected daily life</p> <p>[ 4 ] Went to emergency room or needed to be in hospital</p> <p>Duration of symptom: _____ days</p>                                                                                                                                |
| 9  | <input type="checkbox"/> Nausea      | <p>[ 1 ] Transient (&lt;24 hours) or intermittent and had normal intake of food</p> <p>[ 2 ] Persistent nausea led to decreased food intake (24 to 48 hours)</p> <p>[ 3 ] Persistent nausea led to almost no food intake (&gt;48 hours) or intravenous fluid was needed</p> <p>[ 4 ] Threatened life (e.g. hypotensive shock)</p> <p>Duration of symptom: _____ days</p>               |
| 10 | <input type="checkbox"/> Headache    | <p>[ 1 ] didn't affect daily activities and didn't need treatment</p> <p>[ 2 ] Transient, affected daily activities mildly and needed treatment or intervention</p> <p>[ 3 ] Affected daily activities severely and needed treatment or intervention</p> <p>[ 4 ] Symptom was obstinate, went to emergency room or needed to be in hospital</p> <p>Duration of symptom: _____ days</p> |
| 11 | <input type="checkbox"/> Vomiting    | <p>[ 1 ] 1~2 times/24 hours but didn't affected daily activities</p> <p>[ 2 ] 3~5 times/24 hours or activity was restricted</p> <p>[ 3 ] &gt;6 times within 24 hours or iv. fluid was needed</p> <p>[ 4 ] Hypotensive shock led to hospitalization or other means of nutrition was needed</p> <p>Duration of symptom: _____ days</p>                                                   |
| 12 | <input type="checkbox"/> Cough       | <p>[ 1 ] Transient, didn't need any treatment</p> <p>[ 2 ] Persistent, treatment was effective</p> <p>[ 3 ] Paroxysmal, treatment was ineffective</p> <p>[ 4 ] Went to emergency room or needed to be in hospital</p> <p>Duration of symptom: _____ days</p>                                                                                                                           |

|    |                                           |                                                                                                                                                                                                                                                                                                                                                                  |
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| 13 | <input type="checkbox"/> Joint pain       | <p>[ 1 ] Mild pain, didn't affect function</p> <p>[ 2 ] Moderate pain/analgesics were needed and/or affected with function but didn't affect daily activities</p> <p>[ 3 ] Severe pain, analgesics were needed and/or pain affected daily activities</p> <p>[ 4 ] Disabling pain</p> <p>Duration of symptom: _____ days</p>                                      |
| 14 | <input type="checkbox"/> Hypersensitivity | <p>[ 1 ] Localized urticaria, didn't need any treatment</p> <p>[ 2 ] Localized urticaria, needed treatment/mild angioedema, didn't need treatment</p> <p>[ 3 ] Extensive urticaria or angioedema needed treatment, or mild bronchospasm</p> <p>[ 4 ] Allergic shock/life-threatening bronchospasm/edema of the larynx</p> <p>Duration of symptom: _____ days</p> |