Receiving three doses of inactivated or mRNA COVID-19 vaccines was associated with lower odds of long COVID symptoms among people with a history of SARS-CoV-2 infection in Hong Kong, China: A cross-sectional survey study

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Appendix 1

Table S1 Doses and types of COVID-19 vaccines received by the participants prior to the fifth wave of COVID-19 outbreak in Hong Kong (n=1542)

|  |  |  |
| --- | --- | --- |
|  | n | % |
| 0 doses | 82 | 5.3 |
| 1 dose of Pfizer-BioNTech | 54 | 3.5 |
| 1 dose of SinoVac | 26 | 1.7 |
| 1 dose of other vaccine | 1 | 0.1 |
| 2 doses of Pfizer-BioNTech | 757 | 49.1 |
| 2 doses of SinoVac | 130 | 8.4 |
| 1 dose of SinoVac + 1 dose of Pfizer-BioNTech | 1 | 0.1 |
| 1 dose of other vaccine + 1 dose of SinoVac | 1 | 0.1 |
| 3 doses of Pfizer-BioNTech | 345 | 22.4 |
| 3 doses of SinoVac | 98 | 6.4 |
| 2 doses of SinoVac + 1 dose of Pfizer-BioNTech | 32 | 2.1 |
| 2 doses of Pfizer-BioNTech + 1 dose of SinoVac | 11 | 0.7 |
| 1 dose of SinoVac + 2 doses of Pfizer-BioNTech | 1 | 0.1 |
| 4 doses of SinoVac | 3 | 0.2 |

Table S2 Associations between types of COVID-19 vaccines received by the participants and self-reported long COVID symptoms (n=1536) 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | n/N | OR (95%CI) | P values | AOR (95%CI) | P values |
| **1. Self-reported having any long COVID symptoms** |  |  |  |  |  |
| Types of COVID-19 vaccines received by the participants |  |  |  |  |  |
| 2 doses of BioNTech | 331/757 | 1.0 |  | 1.0 |  |
| 2 doses of SinoVac | 56/130 | 0.97  (0.67-1.42) | 0.89 | 0.89  (0.59-1.32) | 0.55 |
| 3 doses of BioNTech | 118/345 | 0.67  (0.51-0.87) | 0.003 | 0.68  (0.52-0.90) | 0.006 |
| 3 doses of SinoVac | 33/98 | 0.65  (0.42-1.02) | 0.06 | 0.57  (0.35-0.90) | 0.02 |
| Mixing doses of SinoVac and BioNTech | 19/44 | 0.98  (0.53-1.81) | 0.94 | 0.98  (0.52-1.85) | 0.95 |
| Not completing primary vaccination series | 73/162 | 1.06  (0.75-1.49) | 0.76 | 0.96  (0.67-1.36) | 0.81 |
|  |  |  |  |  |  |
| **2. Self-reported having ≥3 types of long COVID symptoms** |  |  |  |  |  |
| 2 doses of BioNTech | 124/757 | 1.0 |  | 1.0 |  |
| 2 doses of SinoVac | 26/130 | 1.28  (0.80-2.04) | 0.31 | 1.09  (0.66-1.81) | 0.75 |
| 3 doses of BioNTech | 45/345 | 0.77  (0.53-1.11) | 0.16 | 0.80  (0.55-1.18) | 0.26 |
| 3 doses of SinoVac | 13/98 | 0.78  (0.42-1.44) | 0.43 | 0.64  (0.34-1.24) | 0.19 |
| Mixing doses of SinoVac and BioNTech | 4/44 | 0.51  (0.18-1.45) | 0.21 | 0.47  (0.16-1.40) | 0.18 |
| Not completing primary vaccination series | 36/162 | 1.46  (0.96-2.21) | 0.08 | 1.29  (0.84-1.99) | 0.25 |

1 Six participants were excluded from the analysis, including three participants who received 4 doses of SinoVac, one participant who received other type of vaccine, one participant who received 1 dose of SinoVac and 1 dose of other type of vaccine, and one participant who received 1 dose of SinoVac and 1 dose of Pfizer-BioNTech

AOR: adjusted odds ratios, odds ratios adjusted for variables related to sociodemographic characteristics, health conditions and lifestyles, and COVID-19 infection during the fifth wave of COVID-19 outbreak in Hong Kong listed in Table 2

CI: confidence interval