BACKGROUND/KEY POINTS

1. Older adults with COVID-19 are at risk of adverse outcomes including severe illness, hospitalisation and death (1, 2). Frailty is an important predictor for the development of critical illness amongst older adults with COVID-19 (3).

2. Following the approval of vaccines via the Pandemic Special Access Route by the Health Sciences Authority (HSA) and recommendations of the Ministry of Health (MOH) Expert Committee on COVID-19 Vaccination (EC19V) (3), a nationwide vaccination programme against COVID-19 is underway, with older adults being one of the groups prioritised for vaccination.

3. However, the evidence of the risks and benefits of vaccination in the subgroup of frail older adults is still limited. The Chapter of Geriatricians therefore seeks to address the question of suitability of COVID-19 vaccination in frail older adults.

METHODOLOGY AND RESULTS

1. A workgroup was convened by the Chairman of Chapter of Geriatricians.

2. The workgroup adopted a modified Delphi methodology, which is a well-established, robust and iterative process to achieve consensus from a panel of experts (4). Given the limitations in time, two rounds of questionnaire surveys were conducted in total.

3. Round 1 was preceded by a rapid scoping review using literature found on Medline and Web of Science between February and March 2021. Twenty statements were constructed based on the literature review, principles of ethics, expert opinion, and clinical experience. Twenty geriatricians who were representative of the cohort of Geriatric Medicine specialists in Singapore were invited to be part of the panel. The survey was electronically administered to the panel members, and they rated the statements on a 7-point Likert scale, with 1 being “strongly disagree” to 7 being “strongly agree”. Panel members could additionally furnish comments to each statement if there were any. The response rate was 75% (n=15) for Round 1.

4. Twelve statements fulfilled the following criteria in Round 1: a) consensus level of 75% or more on ratings 6-7 (“agree” and “strongly agree”) or 1-2 (“disagree” and “strongly disagree”) on the Likert scale, and b) an inter-quartile range (IQR) ≤ 1.

5. Eight statements with IQR>1 or not reaching the 75% cut-off were refined based on the comments given and entered Round 2 of the Delphi process. The 15 members who responded in Round 1 were invited to participate in Round 2, with the response rate being 100%. Four statements further met the criteria for consensus in Round 2.

6. Altogether, sixteen statements which achieved consensus in the modified Delphi process were considered by the workgroup in the development of recommendations for the position statement.
The final nine recommendations of the Chapter of Geriatricians are as follows:

1. COVID-19 vaccination in older adults is generally effective and safe compared to the general population.

2. Older adults should not be excluded from COVID-19 vaccination on the sole basis of age.

3. Frail older adults, including those residing in long term care facilities, should be prioritised to receive COVID-19 vaccinations because they are vulnerable to the deleterious consequences of COVID-19.

4. Frail older adults who are vaccinated should be carefully monitored and supported based on individual needs.

5. For frail older adults with mental capacity, the decision on whether to receive the COVID-19 vaccination should be voluntary and without coercion.

6. For frail older adults with limited or no decision-making capacity, the donee(s), nominated healthcare spokesperson(s) and/or the next-of-kin should be involved in the decision-making process regarding COVID-19 vaccination.

7. For frail older adults with limited or no decision-making capacity, and without available and/or contactable next-of-kin, the healthcare team should make the decision regarding COVID-19 vaccination based on the best interest of the older adult.

8. The benefits of receiving COVID-19 vaccination generally outweigh the risks for frail older adults except for those with limited life expectancies of less than six months.

9. Frail older adults should continue to be included in future research and clinical trials of COVID-19 vaccination.

REFERENCES


## ACKNOWLEDGEMENT

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