Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Letters to the Editor

Administration of Bamlanivimab to Skilled Nursing Facility Residents During a COVID-19 Outbreak, January-February 2021, Arizona

In November 2020, the Food and Drug Administration (FDA) issued an emergency use authorization (EUA) for bamlanivimab, a monoclonal antibody (mAb), for treatment of mild to moderate COVID-19 in nonhospitalized individuals at high risk for severe disease.[1] Since that time, several other mAb therapies, either alone or in combination, have also been issued EUA for use in the treatment of mild-to-moderate COVID-19.[2] Although COVID-19 poses a high morbidity and mortality risk among older adult residents of long-term care facilities, reports on mAb use in the management of COVID-19 in skilled nursing facilities (SNFs) are limited, and perceived logistical barriers to on-site infusion of the mAb therapy may reduce their use in these settings.[3,4] This letter describes the use of bamlanivimab during a large SARS-CoV-2 outbreak at a 270-bed SNF (Facility A).

From January 6 to February 8, 2021, 88 (44%) of 198 residents and 18 of 239 (8%) staff at Facility A tested positive for SARS-CoV-2 infection. As their health care providers had no prior experience administering mAb therapy, Facility A collaborated locally with the county's public health department to coordinate infusion training, obtain infusion supplies, and expeditiously procure and administer bamlanivimab allocated under a federal program sponsored by the US Department of Health and Human Services' Office of the Assistant Secretary for Preparedness and Response.[5] Our team conducted interviews with facility staff and local public health department personnel to understand their process for obtaining and administering bamlanivimab.

Bamlanivimab (700 mg as a single intravenous infusion via gravity) was offered to any resident with mild-to-moderate COVID-19 within 10 days of symptom onset and who was at high risk for severe disease as outlined in the FDA EUA for bamlanivimab.[1,6] To provide infusions, 3 registered nurses from Facility A completed in-person training on bamlanivimab preparation, delivery, and safety offered at a local medical center. Federal bamlanivimab dose allocations to the local health department were adequate to treat the total COVID-19 cases seeking care, although Facility A required a local pharmacy to dilute the medication. Each dose necessitated infusion within 8 hours of dilution, and each resident receiving single-dose bamlanivimab required a total of 2 hours of clinical monitoring during and after infusion.[6]

Overall, bamlanivimab was administered to 56 residents with mild-to-moderate COVID-19. Of note, 3 additional asymptomatic residents diagnosed with SARS-CoV-2 infection received bamlanivimab treatment but did not meet clinical criteria for mild-to-moderate COVID-19. Of the 29 residents who did not receive bamlanivimab, 11 were ineligible to receive bamlanivimab (7 had severe COVID-19, 3 were symptomatic with laboratory-confirmed SARS-CoV-2 infection before supplies were available, and 1 was not at high risk for COVID-19 complications); 4 residents declined therapy; 3 were transferred out of the facility prior to treatment; 2 were under hospice care; and 9 residents did not have a reason specified. No adverse events occurred within 24 hours of infusion. Among those with mild-to-moderate COVID-19 at the time of bamlanivimab treatment, 3 hospitalizations (5%) and 4 deaths (7%) occurred over a 21-day follow-up. Cumulative nursing time to infuse 59 doses was estimated to be 150 hours. Analysis of outcomes in those treated with bamlanivimab is ongoing.

Facility A's success in providing mAb therapy during an outbreak required close coordination with local public health partners to procure and prepare the medication and significant but manageable staff commitments for infusion and patient monitoring. On April 16, 2021, the FDA revoked the EUA for bamlanivimab monotherapy, citing sustained circulation of SARS-CoV-2 variants that are resistant to bamlanivimab.[7] Other combination mAb therapies remain available through the FDA's EUA (bamlanivimab/etesevimab and casirimab/imdevimab) and continue to be funded, allocated, and distributed via the same Department of Health and Human Services programs as bamlanivimab; and these combination mAb therapies received EUAs for the same clinical indications related to COVID-19. Therefore, the authors believe the findings for bamlanivimab monotherapy are also relevant to the administration of current FDA-authorized combination mAb therapies to SNF residents with mild-to-moderate COVID-19. Facility considerations for providing these therapies include obtaining training for clinician and nursing staff in mAb administration and monitoring, as well as navigating access to the therapies and infusion supplies through federal and local partners. Current mechanisms to assist LTCFs with ordering mAb therapies without cost and provisions for reimbursement have been outlined by the US Department of Health and Human Services and continue to evolve.[5,8]

With sufficient access to allocated doses, the use of mAb therapies in SNFs for the management of mild-to-moderate COVID-19 during COVID-19 outbreaks is feasible, but requires advance planning to arrange for adequate staffing, training in mAb administration, and supplies for infusion.

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention. Mention of any company, product, or service is for informational purposes and does not constitute endorsement by the Centers for Disease Control and Prevention.

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Multicomponent Rehabilitation After COVID-19 for Nursing Home Residents

In March 2020, the World Health Organization declared the coronavirus disease 19 (COVID-19) outbreak a global pandemic. Nursing homes were particularly struck by the COVID-19 outbreak, with some authors considering the COVID-19 pandemic as the “ground zero” for these structures.[1] Increasing literature has shown that the consequences of COVID-19 in older people may include malnutrition, sarcopenia, bedridden syndrome, and finally mortality.[2] Nutritional suggestions are therefore important in older people previously affected by COVID-19.[3] The use of oral nutritional supplements in patients with or recovering from COVID-19, particularly if sarcopenia is present, is also suggested.[4] In the case of acute sarcopenia after COVID-19, oral nutritional supplements shall provide ≥400 kcal/d including ≥30 g protein/d and shall be continued for at least 1 month.[5] Even if COVID-19 is a common condition in nursing homes, studies reporting data on the effect of nutritional supplementation in the residents previously affected by COVID-19 are still not available. Therefore, the aim of this study is to report our experience in nursing home residents previously affected by COVID-19 using a nutritional supplementation program together with rehabilitative indications.

This research was conducted in Villa Althea, Spinea, Venice and included residents previously affected by COVID-19. The study was performed between November 2020 and January 2021, within 3 days from the naso-pharingeal swab testing negative. The follow-up period was 30 days. To all the participants, a physical rehabilitation program, supervised by trained physiotherapists, was given. Briefly, this program consists of several gradual steps, from positioning the guest sitting at the edge of the bed, resuming control of the trunk where possible, to sit on a suitable aid as early as possible for at least a couple of hours a day on the first day, to retrain in posture transitions in an active or assisted way, as soon as possible. For residents who walked before COVID-19 phase or were able to perform therapeutic gait, the physiotherapists proposed other tasks such as work for the reacquisition of the upright position with therapeutic verticalizations, pace training, and reacquisition of therapeutic gait in a protected environment in the gym and