

**Emergency Use Authorization (EUA) for bamlanivimab 700 mg and etesevimab 1,400 IV
Center for Drug Evaluation and Research (CDER) Memorandum**

Identifying Information

Application Type (EUA or Pre-EUA) If EUA, designate whether pre-event or intra-event EUA request.	EUA
EUA Application Number(s)	94
Date of Memorandum	September 3rd, 2021
Sponsor (entity requesting EUA or pre-EUA consideration), point of contact, address, phone number, fax number, email address	Eli Lilly and Company: Christine Phillips, PhD, RAC Advisor, Global Regulatory Affairs - NA Mobile: (b) (6) Email: phillips_christine_ann@lilly.com
Manufacturer	Eli Lilly and Company
OND Division / Office	Division of Antivirals (DAV)/Office of Infectious Diseases (OID)
Proprietary Name	n/a
Established Name/Other names used during development	bamlanivimab (LY3819253, LY-CoV555) and etesevimab (LY3832479, LY-CoV016)
Dosage Forms/Strengths	Bamlanivimab 700 mg and etesevimab 1400 mg IV
Therapeutic Class	SARS-CoV-2 spike protein directed human IgG1k monoclonal antibody (mAb)
Intended Use or Need for EUA	mild to moderate COVID-19
Intended Population(s)	treatment of mild to moderate coronavirus disease 2019 (COVID-19) in adults and pediatric patients (12 years of age and older weighing at least 40 kg) with positive results of direct SARS-CoV-2 viral testing, and who are at high risk for progression to severe COVID-19, including hospitalization or death

On August 27th, 2021, a Limitations of Authorized Use for bamlanivimab and etesevimab, administered together, was added to only authorize use in states, territories, and U.S. jurisdictions where combined frequency of variants resistant to bamlanivimab and etesevimab, administered together, is less than or equal to 5%.

Since June 2021, there has been a sustained increase in the circulation of the B.1.617.2/Delta variant. Based on in vitro assays that are used to assess the susceptibility of viral variants to monoclonal antibodies, bamlanivimab and etesevimab, administered together, are expected to retain activity against the Delta variant (B.1.617.2), which is now the dominant variant in the United States. The increase in prevalence of B.1.617.2 has been associated with a concomitant decrease in the frequency of identified variants that are expected to be resistant to bamlanivimab and etesevimab. Based on data made publicly available on the CDC website (<https://covid.cdc.gov/covid-data-tracker/#variant-proportions>) on August 31, 2021, the combined frequency of variants resistant to bamlanivimab and etesevimab is below 5% in all HHS Regions. Therefore, the emergency use of bamlanivimab and etesevimab will now be authorized in all 50 states, as well as in the listed territories and U.S. jurisdictions, as the following criteria have been met:

1. An HHS Region has a combined proportion of variants resistant to bamlanivimab and etesevimab that is less than or equal to 5% over a 4 week period.
2. No state within the HHS Region has a combined proportion of variants resistant to bamlanivimab and etesevimab greater than 5%.
3. The two most recent weeks of data from Nowcast predicts the combined prevalence of variants resistant to bamlanivimab and etesevimab will remain below 5%.

At the present time, based on publicly available information on the [CDC variant proportions website](#), the combined prevalence of AY.1, AY.2, P.1, B.1.351, B.1.621, and B.1.621.1 is being used for consideration of criteria 1 and 3; the combined prevalence of AY.1, AY.2, P.1, and B.1.351 is being used for criterion 2. Of note, these methodologies may change as more data become publicly available.

In order to minimize the burden to health care providers, FDA has provided a listing of states, territories and U.S. jurisdictions in which bamlanivimab and etesevimab currently are authorized (<https://www.fda.gov/media/151719/download>).

FDA, in collaboration with ASPR and CDC, will continue to monitor data as it becomes available and will update the list of states, territories, and U.S. jurisdictions in which bamlanivimab and etesevimab are authorized accordingly.

Regulatory Conclusion:

On August 27, 2021 the bamlanivimab and etesevimab EUA was revised to authorize use of bamlanivimab and etesevimab, administered together, in states, territories, and U.S. jurisdictions in which recent data shows the combined frequency SARS-CoV-2 resistant variants is less than or equal to 5%. Based on in vitro assays that are used to assess the susceptibility of viral variants to monoclonal antibodies, bamlanivimab and etesevimab, administered together, are expected to retain activity against the Delta variant (B.1.617.2), which is now the dominant variant in the United States. The increase in prevalence of B.1.617.2 has been associated with a concomitant decrease in the frequency of identified variants that are expected to be resistant to bamlanivimab and etesevimab. As such, bamlanivimab and etesevimab are now authorized in all 50 states, as well as in territories and U.S. jurisdictions, based on currently available data. This change does not alter the analysis of benefits and risks that underlies the initial authorization of EUA 94.

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/s/

NATALIE M PICA
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WENDY W CARTER
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