Federal Government Buys Thousands of Bebtelovimab Doses

The US Department of Health and Human Services (HHS) has purchased 600,000 treatment courses of bebtelovimab—a monoclonal antibody that research shows effectively treats the SARS-CoV-2 Omicron variant. Omicron is currently responsible for almost all COVID-19 cases in the US, according to an HHS statement.

“We want to make sure if an American gets sick with COVID-19, they can get a treatment that works,” HHS Secretary Xavier Becerra, JD, said in the statement.

HHS expected to receive about 300,000 treatment courses of bebtelovimab, an Eli Lilly and Company product, in February. The remaining doses were scheduled to arrive in March. Early data suggest that bebtelovimab may be effective against not only Omicron but also the BA.2 Omicron subvariant that is beginning to spread in the US.

HHS’ contract with Eli Lilly stems from a collaboration between the HHS Office of the Assistant Secretary for Preparedness and Response and the US Department of Defense’s Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense. The contract includes an option for 500,000 additional doses.

Bebtelovimab, which received an Emergency Use Authorization from the US Food and Drug Administration (FDA), is being distributed across US states and territories. Since January, HHS has distributed more than 2.5 million COVID-19 therapies and treatments throughout the US, including monoclonal antibodies, antiviral pills, and preexposure prophylaxis.

“We have more COVID-19 treatments than ever before, we are providing a billion free at-home tests, and we have enough vaccines to get everyone vaccinated and boosted,” Becerra added. “If authorized by FDA, this purchase will add an additional 600,000 courses of treatment to our nation’s ‘medicine cabinet’ that could help prevent severe outcomes for Americans who do get sick with COVID-19.”

Melanoma Immunotherapy Responses to Dietary Fiber and Probiotics

An observational study coauthored by researchers at the National Cancer Institute (NCI) indicated that fiber consumption and probiotics supplements may affect how patients with melanoma respond to immunotherapy. The results were published in Science.

Using stool samples, the researchers analyzed the gut microbiomes of 128 patients with melanoma. The patients also reported their dietary habits and consumption of over-the-counter probiotic supplements during the month before they received checkpoint inhibitor immunotherapy.

Overall, high-fiber intake was associated with improved responses to immunotherapy. Patients who reported high-fiber consumption and didn’t take probiotic supplements lived the longest following treatment. The researchers also found that every 5-g increase in daily fiber consumption corresponded with a 30% decreased risk of melanoma progression or death, and probiotic use was associated with a lower survival rate of about 6 months. However, none of the reported associations of fiber intake or probiotic use were statistically significant, and the authors acknowledged that the study may have had insufficient statistical power.

“Many factors can affect the ability of a patient with melanoma to respond to immunotherapy,” coauthor Giorgio Trinchieri, MD, of the NCI said in a statement. “However, from these data, the microbiota seems to be one of the dominant factors. The data also suggest that it’s probably better for people with cancer receiving immunotherapy not to use commercially available probiotics.”

To confirm their findings, the researchers examined how fiber and probiotic intake affected mice with melanoma that were treated with immunotherapy. Compared with mice fed a low-fiber diet, those fed a high-fiber diet had more anticancer immune cells in their tumors and they experienced slower tumor growth. However, fiber intake didn’t affect tumor growth in mice that didn’t have any gut bacteria. Mice that received probiotics developed larger tumors and had a poorer response to immunotherapy than mice that didn’t receive probiotics.

COVID-19 Booster Shot Data Now Available From Nursing Homes

The Centers for Medicare & Medicaid Services (CMS) now provides data on COVID-19 vaccine booster shots among residents and staff at nursing homes. The data, which feature both completed vaccination and booster rates for individual facilities, is accessible via the Medicare.gov Care Compare website. State and national averages of completed vaccination and booster shot uptake for the overall US population are also listed online.

Completed vaccination and booster rates are updated every other Thursday with the most recent data from the Centers for Disease Control and Prevention’s National Healthcare Safety Network (NHSN).

According to a press release, the current rate of booster shot uptake among nursing home staff is less than the national average for adults older than 18 years; however, the rate among residents is similar to the national average for adults older than 65 years.

The CMS has previously required nursing homes to make COVID-19 vaccines available to their residents and staff, although booster shots are not mandatory.

– Melissa Suran, PhD, MSJ

Note: Source references are available through embedded hyperlinks in the article text online.