Monoclonal Antibody Therapy for COVID-19

High-risk outpatients with COVID-19 may benefit from receiving monoclonal antibodies. This therapy may reduce the need for hospitalization.

WHAT IS MONOCLONAL ANTIBODY THERAPY?
- Neutralizing antibodies target the receptor-binding domain of SARS-CoV-2 spike protein
- Prevents viral entry into human cells

Approved monoclonal antibodies:
- Bamlanivimab
- Bamlanivimab/etesevimab
- Casirivimab/imdevimab

WHAT THE RESEARCH SAYS
- 1.6% of patients given bamlanivimab required hospitalization/ED visit compared with 6.3% with placebo
- 3% of patients given casirivimab/imdevimab required medically-attended visits compared with 6% with placebo
- Patients receiving bamlanivimab/etesevimab had greater reductions in SARS-CoV-2 viral load than bamlanivimab monotherapy or placebo
- Bamlanivimab did not show benefit in hospitalized patients

WHO IS HIGH-RISK?
- **BMI ≥35**
- Chronic kidney disease
- Diabetes mellitus
- Immunosuppressive disease
- Receiving immunosuppressive treatment
- Age ≥65 years

- **Age ≥55 years AND**
  - Cardiovascular disease
  - Hypertension
  - COPD/other chronic respiratory disease

- **Age 12-17 years AND**
  - BMI ≥85th percentile OR
  - Sickle cell disease OR
  - Congenital heart disease OR
  - Neurodevelopmental disorders OR
  - Medical technological dependence OR
  - Asthma, reactive airway disease, or chronic respiratory disease on daily medication for control

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CONTRAINDICATIONS
- Hospitalization due to COVID-19
- Need for oxygen therapy
- If on chronic oxygen therapy, need for an increase over baseline oxygen flow

ADMINISTRATION
- Given intravenously over 1 hour
- Monitor for 1 hour after administration to watch for reactions, including anaphylaxis

INDICATIONS
- Mild to moderate COVID-19 in adults and children at high risk for progressing to hospitalization


*For more information on these medications, refer to FDA Fact Sheet for Health Care Providers. (Similar information as package insert.)