

MOGAMULIZUMAB

Expert review and updated by Wei Ai MD, University of California San Francisco February 2023

WHAT IS MOGAMULIZUMAB?

Brand Name: Poteligeo®

Mogamulizumab is a humanized monoclonal antibody (mAb) directed against CC chemokine receptor 4 (CCR4), which is frequently expressed on leukemic cells of certain blood cancers including CTCL. Using the proprietary POTELLIGENT® technology, the amount of fucose in the sugar chain structure of Poteligeo® is reduced, which enhances the antibody dependent cellular cytotoxicity (ADCC).

It is used to treat adult patients with relapsed or refractory mycosis fungoides (MF) or Sézary syndrome (SS) after at least one prior systemic therapy.

HOW IS IT DELIVERED?

Mogamulizumab is administered by intravenous infusion. The first 5 doses are delivered weekly, then reduced to every other week.

Once in the blood, monoclonal antibodies travel throughout the body and attach themselves to their specific target. Antibodies are thought to work by stopping or slowing the growth of cancer cells, or by making it easier for the person's immune system to destroy the tumor cell. Healthy cells can also be affected by the antibody, but the body can usually replace these cells after the treatment with biologic therapy has stopped.

WHAT IS THE EXPECTED RESULT?

In clinical trials with mogamulizumab in CTCL patients, 37% of Sézary patients and 21% of mycosis fungoides patients responded to mogamulizumab. The response lasted on average approximately 1 -1.5 years.

ARE THERE SPECIAL CONSIDERATIONS TO BE AWARE OF?

Mogamulizumab can cause a rash with or without itchiness. Sometimes it is difficult to determine whether the rash represents a side effect of mogamulizumab, or CTCL progression. Talk to your doctor if you develop a rash while on mogamulizumab treatment.

WHAT ARE COMMON SIDE EFFECTS?

The following is not an exhaustive list of the possible side effects. For a complete list of possible side effects, please see the manufacturer's available information on the specific therapy.

The most common side effects reported were rash, infusion reactions, edema (swelling), fatigue, diarrhea, musculoskeletal pain/weakness, and upper respiratory infection.