In another example, the present disclosure provides a method of treating a human subject suffering from, or at risk for developing graft-versus-host disease (GVHD) comprising administering to the subject a composition comprising an amount of a MASP-2 inhibitory antibody, or antigen-binding fragment thereof, effective to inhibit MASP-2-dependent complement activation. In one example, the subject has previously undergone, or is currently undergoing, or will undergo a hematopoietic stem cell transplant. In one example, the method further comprises identifying a human subject suffering from, or at risk for developing graft-versus-host disease prior to the step of administering to the subject a composition comprising an amount of a MASP-2 inhibitory antibody, or antigen-binding fragment thereof, effective to inhibit MASP-2-dependent complement activation. In one example, the MASP-2 inhibitory antibody is a monoclonal antibody, or fragment thereof that specifically binds to human MASP-2. In one example, the MASP-2 inhibitory antibody or fragment thereof is selected from the group consisting of a recombinant antibody, an antibody having reduced effector function, a chimeric antibody, a humanized antibody, and a human antibody. In one example, the MASP-2 inhibitory antibody does not substantially inhibit the classical pathway. In one example, the MASP-2 inhibitory antibody inhibits C3b deposition in 90% human serum with an IC_{50} of 30 nM or less. In one example, the MASP-2 inhibitory antibody is delivered to the subject systemically. In one example, the subject is suffering from acute GVHD. In one example, the subject is suffering from steroid-resistant GVHD. In one example, the MASP-2 inhibitory antibody or antigen-binding fragment thereof, comprises a heavy chain variable region comprising CDR-H1, CDR-H2 and CDR-H3 of the amino acid sequence set forth as SEQ ID NO:67 and a light chain variable region comprising CDR-L1, CDR-L2 and CDR-L3 of the amino acid sequence set forth as SEQ ID NO:70.

In one aspect, the present disclosure refers to use of a composition comprising an amount of a MASP-2 inhibitory monoclonal antibody, or antigen-binding fragment thereof, effective to inhibit MASP-2-dependent lectin pathway complement activation, in the manufacture of a medicament for the treatment of graft-versus-host disease (GVHD) in a human subject suffering from GVHD, wherein the MASP-2 inhibitory antibody or antigen-binding fragment thereof, comprises a heavy chain variable region comprising CDR-H1, CDR-H2 and CDR-H3 of the amino acid sequence set forth as SEQ ID NO:67 and a light chain variable region comprising CDR-L1, CDR-L2 and CDR-L3 of the amino acid sequence set forth as SEQ ID NO:70.

In another example, the present disclosure provides a method of treating, preventing or amelioriating one or more neurological symptoms associated with graft-versus-host disease or TMA comprising administering to a subject in need thereof a composition comprising an amount of a MASP-2 inhibitory antibody, or antigen-binding fragment thereof, effective to inhibit MASP-2-dependent complement activation. In one example, the one or more neurological symptoms associated with graft-versus-host disease or TMA is selected from the group consisting of asthenia, paresthesias,

CLAIMS

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. Use of a composition comprising an amount of a MASP-2 inhibitory monoclonal antibody, or antigen-binding fragment thereof, effective to inhibit MASP-2-dependent lectin pathway complement activation, in the manufacture of a medicament for the treatment of graft-versus-host disease (GVHD) in a human subject suffering from GVHD, wherein the MASP-2 inhibitory antibody or antigen-binding fragment thereof, comprises a heavy chain variable region comprising CDR-H1, CDR-H2 and CDR-H3 of the amino acid sequence set forth as SEQ ID NO:67 and a light chain variable region comprising CDR-L1, CDR-L2 and CDR-L3 of the amino acid sequence set forth as SEQ ID NO:70.

2. The use of Claim 1, wherein a human subject suffering from graft-versus-host disease is identified prior to the administration to the subject a composition comprising an amount of a MASP-2 inhibitory antibody, or antigen-binding fragment thereof, effective to inhibit MASP-2-dependent complement activation.

3. The use of Claim 1, wherein the subject has previously undergone a hematopoietic stem cell transplant.

4. The use of claim 1, wherein the subject is suffering from acute GVHD.

5. The use of claim 1, wherein the subject is suffering from chronic GVHD.

6. The use of claim 1, wherein the subject is suffering from steroid-resistant GVHD.

7. The use of any of claims 1-6, wherein a composition comprising said MASP-2 inhibitory antibody is to be administered to the subject in a dosage of from 1 mg/kg to 10 mg/kg at least once weekly.

8. The use of claim 1, wherein the subject is suffering from one or more neurological symptoms associated with graft-versus-host disease and a composition comprising an amount of a MASP-2 inhibitory antibody, or antigen-binding fragment thereof, is to be

administered to the subject after receiving a hematopoietic stem cell transplant, effective to treat, prevent or ameliorate one or more neurological symptoms associated with graft-versus-host disease.

9. The use of claim 8, wherein the one or more neurological symptoms associated with graft-versus-host-disease is selected from the group consisting of asthenia, paresthesias, tetraplegia, sensorimotor deficit, dysautonomic polyneuropathy, and/or neurogenic bladder.