

## CLAIMS

What is claimed is

1. A method of treating rheumatoid arthritis in a subject that was previously ineffectively treated for rheumatoid arthritis with a JAK-inhibitor (JAKi), comprising administering an antibody that specifically binds to a human IL-6 receptor and comprises a heavy chain variable region (VH) and a light chain variable region (VL), wherein the VH comprises the three complementarity determining regions (CDRs) found within the amino acid sequence of SEQ ID NO:2 and wherein the VL comprises the three CDRs found within the amino acid sequence of SEQ ID NO:3.
2. The method of claim 1, wherein the subject is also administered a therapeutically effective amount of methotrexate.
3. The method of any one of claims 1-2, wherein the antibody is administered subcutaneously at a dose from about 150 mg to about 200 mg once every two weeks.
4. The method of claim 2, wherein the methotrexate is administered at a dose from 6 mg to 25 mg every week.
5. The method of any one of claims 1-4, wherein the antibody comprises three heavy chain complementarity determining region (HCDR) sequences comprising SEQ ID NOs: 4, 5, and 6 and three light chain complementarity determining region (LCDR) sequences comprising SEQ ID NOs: 7, 8 and 9.
6. The method of any one of claims 1-5, wherein the antibody is sarilumab.
7. The method of any one of claims 1-6, wherein the subject achieves a DAS28-ESR score below 3.1 after at least 12 weeks of administration of the antibody.

8. The method of any one of claims 1-7, wherein the subject achieves a clinical disease activity index (CDAI) score below 16 after at least 12 weeks of administration of the antibody.
9. The method of any one of claims 1-8, wherein the subject was previously ineffectively treated for rheumatoid arthritis with a JAKi selected from the group consisting of baricitinib, tofacitinib, and upadacitinib.
10. A method of treating rheumatoid arthritis in a subject that was previously ineffectively treated for rheumatoid arthritis with a JAKi, comprising administering a disease modifying antirheumatic drug (DMARD) selected from the group consisting of methotrexate, sulfasalazine, hydroxychloroquine and leflunomide, and an antibody that specifically binds to a human IL-6 receptor and comprises a heavy chain variable region (VH) and a light chain variable region (VL), wherein the VH comprises the three complementarity determining regions (CDRs) found within the amino acid sequence of SEQ ID NO:1 and wherein the VL comprises the three CDRs found within the amino acid sequence of SEQ ID NO:2.
11. The method of claim 10, wherein the antibody comprises three heavy chain complementarity determining region (HCDR) sequences comprising SEQ ID NOs: 4, 5, and 6 and 5, and three light chain complementarity determining region (LCDR) sequences comprising SEQ ID NOs: 7, 8 and 9.
12. The method of any one of claims 10-11, wherein the DMARD that is administered is methotrexate.
13. The method of any one of claims 10-12, wherein the antibody is administered subcutaneously at a dose from about 150 mg to about 200 mg once every two weeks.
14. The method of any one of claims 10-13, wherein the methotrexate is administered at a dose from 6 mg to 25 mg every week.

15. The method of any one of claims 10-14, wherein the antibody is sarilumab.
16. The method of any one of claims 10-15, wherein the subject achieves a DAS28-ESR score below 3.6 after at least 12 weeks of administration of the antibody and DMARD.
17. The method of any one of claims 10-16, wherein the subject achieves a clinical disease activity index (CDAI) score below 16 after at least 12 weeks of administration of the antibody and DMARD.
18. The method of any one of claims 10-17, wherein the subject was previously ineffectively treated for rheumatoid arthritis with a JAKi selected from the group consisting of baricitinib, tofacitinib, and upadacitinib.