Claims

1. Use of a monoclonal, humanized IgG1 antibody that binds IL-5R in the manufacture of a medicament for reducing the numbers of eosinophils in a human subject, wherein said antibody is to be parenterally administered to said subject between 0.01 to 0.25 mg/kg and wherein said antibody comprises an immunoglobulin Fc region comprising no fucose, wherein the IL-5R antibody comprises the amino acid sequences of SEQ ID NO: 1 and SEQ ID NO: 3; and wherein the administration of the antibody reduces the number of peripheral blood eosinophils from the human subject's circulation below the limit of detection and the circulating eosinophil count level remains below detection for at least about 28 days after dosing of the antibody.

2. The use of claim 2, wherein said antibody specifically binds to the IL-5R α chain.

3. The use of claim 1 or 2, wherein the reduction of eosinophils takes place within the first 48 hours after administration.

4. The use of any one of claims 1 to 3, wherein the reduction of eosinophils is reversible.

5. The use of any one of claims 1 to 4, wherein the numbers of eosinophils are reduced to a level that is less than 50 eosinophils/mm^3.

6. The use of any one of claims 1 to 5, wherein there is a post-administration reduction in absolute eosinophil count of at least 25, 50, 75, 100, 125, 150, 175, 200, 225, 250, 275, 300, 325, 350, 375, 400, 450, 475 or 500 eosinophils/mm^3.

7. The use of any one of claims 1 to 6, wherein there is a post-administration reduction in absolute eosinophil count of between and including 50 to 500 eosinophils/mm^3.

8. The use of any one of claims 1 to 7, wherein the absolute eosinophil count post-administration is less than 100, less than 75, less than 50, or less than 25 eosinophils/mm^3.

9. The use of any one of claims 1 to 8, wherein said subject's pre-administration absolute eosinophil count is between 50 and 500 eosinophils/mm^3.

10. The use of any one of claims 1 to 9, wherein said subject's pre-administration absolute eosinophil count is 25, 50, 75, 100, 125, 150, 175, 200, 225, 250, 275, 300, 325, 350, 375, 400, 450, 475 or 500 eosinophils/mm^3.

11. The use of any of claims 1-10, wherein said subject's post-administration absolute basophil count is reduced by at least 5, at least 10, at least 15, at least 20, at least 25, at least 30, at least 35, at least 40, at least 45, at least 50, at least 55, at least 60, at least 65, at least 70 basophils/ mm^3.

12. The use of any of claims 1-11, wherein said reduction in eosinophils leads to a reduction in asthma symptoms.

13. The use of any of claims 1-11, wherein said reduction in eosinophils leads to a reduction in COPD symptoms.