

Claims

1. Use of a compound in the manufacture of a medicament for treating a cutaneous, neutrophilic, inflammatory disease in a subject, wherein the compound is an inhibitor of C5a activity, and

wherein the cutaneous, neutrophilic, inflammatory disease is selected from the group consisting of hidradenitis suppurativa (HS); Pyoderma gangrenosum (PG); PAPA (pyogenic arthritis, PG and acne); PASH (PG, acne and hidradenitis suppurativa); PAPASH (pyogenic arthritis, acne, PG and hidradenitis suppurativa); Sweet syndrome (SS); subcorneal pustular dermatosis (SPD); epidermolysis bullosa acquisita, erythema elevatum diutinum (EED); neutrophilic panniculitis; familial Mediterranean fever, cryopyrin-associated disorders, gout, and Schnitzler syndrome, wherein the inhibitor of C5a activity:

 - (a) inhibits the activity or lowers the concentration of a C5a receptor; or
 - (b) inhibits binding between C5a and a C5a receptor, inhibits cleavage of C5 into C5a and C5b or lowers the concentration of C5a.
2. The use of claim 1, wherein the inhibitor of C5a activity is a protein ligand that specifically binds to C5, or to C5a, or to a C5a receptor.
3. The use of claim 2, wherein the protein ligand is selected from the group consisting of

 - (i) antibodies,
 - (ii) antigen-binding fragments of antibodies,
 - (iii) antibody-like proteins,
 - (iv) inhibitory variants of C5a,
 - (v) inhibitory variants of a C5a receptor,
 - (vi) proteins acting on the complement pathway; and
 - (vii) peptides.
4. The use of claim 1, wherein the inhibitor of C5a activity is an oligonucleotide that specifically binds to C5, or to C5a, or to a C5a receptor.
5. The use of claim 4, wherein the oligonucleotide is selected from the group consisting of DNA-aptamers, D-RNA aptamers, and L-RNA aptamers.

6. The use of claim 1, wherein the inhibitor of C5a activity reduces expression of C5 protein or C5a receptor protein.
- 5 7. The use of claim 6, wherein said inhibitor of C5a activity is an oligonucleotide selected from the group consisting of antisense DNA, antisense RNA, siRNA, and miRNA.
8. The use of any one of claims 1 to 7, wherein the C5a receptor is selected from the group consisting of C5aR and C5L2.
- 10 9. The use of any one of claims 1 to 8, wherein the inhibitor of C5a activity is selected from the group consisting of:
 - (a) IFX-1, INab708, MEDI-7814, ALXN-1007, or NOX-D21, or an antigen-binding fragment thereof;
 - 15 (b) an antibody or an antigen-binding fragment thereof, wherein said antibody or antigen-binding fragment thereof competes with one of the antibodies indicated under (a) for binding to C5a;
 - (c) Eculizumab, ALXN1210, ALXN5500, or LFG316, or an antigen-binding fragment thereof;
 - 20 (d) an antibody or an antigen-binding fragment thereof, wherein said antibody or antigen-binding fragment thereof competes with one of the antibodies indicated under (c) for binding to C5;
 - (e) Coversin or RA101495;
 - (f) an antibody or an antigen-binding fragment thereof or a protein or a macrocyclic peptide wherein said antibody or antigen-binding fragment thereof or protein or macrocyclic peptide competes with one of the proteins or peptides indicated under (e) for binding to C5;
 - 25 (g) Zimura;
 - (h) an antibody or an antigen-binding fragment thereof or an aptamer, wherein said antibody or antigen-binding fragment thereof or aptamer competes with Zimura for binding to C5;
 - 30 (i) AMY-201 or Mirococept;
 - (j) an antibody or an antigen-binding fragment thereof or a protein wherein said antibody or antigen-binding fragment thereof or protein competes with one of the proteins indicated under (i) for binding to C3b;
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- (k) Bikaciomab;
 - (l) an antibody or an antigen-binding fragment thereof, wherein said antibody or antigen-binding fragment thereof competes with Bikaciomab for binding to Factor B;
 - (m) Lampalizumab;
 - 5 (n) an antibody or an antigen-binding fragment thereof, wherein said antibody or antigen-binding fragment thereof competes with Lampalizumab for binding to Factor D;
 - (o) ALN-CC5; and
 - (p) Avacopan.
- 10 10. The use of any one of claims 1 to 9, wherein the cutaneous, neutrophilic, inflammatory disease is an auto-inflammatory disease selected from the group consisting of hidradenitis suppurativa (HS); Pyoderma gangrenosum (PG); PAPA (pyogenic arthritis, PG and acne); PASH (PG, acne and hidradenitis suppurativa); PAPASH (pyogenic arthritis, acne, PG and hidradenitis suppurativa); Sweet syndrome (SS); subcorneal pustular dermatosis
- 15 (SPD); epidermolysis bullosa acquisita, erythema elevatum diutinum (EED); and neutrophilic panniculitis.
11. The use of any one of claims 1 to 9, wherein the cutaneous, neutrophilic, inflammatory disease is HS or a HS-related disease selected from the group consisting of Pyoderma gangrenosum (PG); PAPA (pyogenic arthritis, PG and acne); PASH (PG, acne and hidradenitis suppurativa); PAPASH (pyogenic arthritis, acne, PG and hidradenitis suppurativa); Sweet syndrome (SS); and subcorneal pustular dermatosis (SPD).
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12. The use of any one of claims 1 to 9, wherein the cutaneous, neutrophilic, inflammatory disease is an autoimmune disease with cutaneous inflammation selected from the group consisting of familial Mediterranean fever, cryopyrin-associated disorders, gout, and Schnitzler syndrome.
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13. The use of any one of claims 1 to 12, wherein the compound is to be administered at a dose of 800 mg once per week or at a dose of 800 mg twice per week.
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