

WHAT IS CLAIMED IS:

1. ~~Use of A method of treating a disease or disorder in a subject in need thereof, comprising administering to the subject a dose of an Interleukin-2 (IL2) fusion protein in the manufacture of a medicament for the treatment of an infectious disease or an immune-mediated disease in a subject in need thereof,~~ wherein the fusion protein comprises:
 - (a) a first polypeptide comprising an IL2 polypeptide; and
 - (b) a second polypeptide comprising an extracellular domain of an Interleukin-2 Receptor alpha (IL2R α) polypeptide,wherein (i) the extracellular domain of the IL2R α polypeptide has at least one fewer glycosylation compared to the extracellular domain of native IL2R α (SEQ ID NO: 1); and/or (ii) the IL2 polypeptide has at least one fewer glycosylation compared to native IL2 (SEQ ID NO: 2);
wherein the dose is from ~~about~~ 0.1 mg to ~~about~~ 9 mg.
2. The ~~use method~~ of claim 1, wherein the fusion protein is to be administered to the subject via a topical, epidermal, mucosal, intranasal, oral, vaginal, rectal, sublingual, intravenous, intraperitoneal, intramuscular, intraarterial, intrathecal, intralymphatic, intralesional, intracapsular, intraorbital, intracardiac, intradermal, transtracheal, subcutaneous, subcuticular, intraarticular, subcapsular, subarachnoid, intraspinal, epidural or intrasternal route.
3. The ~~use method~~ of claim 1, wherein the fusion protein is to be administered to the subject via an intravenous route.
4. The ~~use method~~ of claim 3, wherein the dose is
 - (a) between ~~about~~ 0.3 mg to ~~about~~ 9 mg;:-
5. ~~(b) The method of claim 3, wherein the dose is between about 3 mg and about 9 mg;:-~~
6. ~~(c) The method of claim 5, wherein the dose is between about 6 mg and about 9 mg;:-~~

7. ~~(d) The method of claim 3, wherein the dose is between about 0.1 mg and about 3 mg;-~~
8. ~~(e) The method of claim 7, wherein the dose is between about 0.1 mg and about 1 mg;-~~
9. ~~(f) The method of claim 8, wherein the dose is between about 0.1 mg and about 0.3 mg;-~~
10. ~~(g) The method of claim 3, wherein the dose is between about 0.3 mg and about 6 mg;
or-~~
11. ~~(h) The method of claim 10, wherein the dose is between about 1 mg and about 3 mg.~~

542. Use of an Interleukin-2 (IL2) fusion protein in the manufacture of a medicament for the treatment of an infectious disease or an immune-mediated disease in a subject in need thereof, wherein the fusion protein comprises:

(a) a first polypeptide comprising an IL2 polypeptide; and

(b) a second polypeptide comprising an extracellular domain of an Interleukin-2 Receptor alpha (IL2R α) polypeptide,

wherein (i) the extracellular domain of the IL2R α polypeptide has at least one fewer glycosylation compared to the extracellular domain of native IL2R α (SEQ ID NO: 1); and/or (ii) the IL2 polypeptide has at least one fewer glycosylation compared to native IL2 (SEQ ID NO: 2),

wherein the fusion protein is to be administered to the subject via an intravenous route, and

~~The method of claim 3, wherein the dose is greater than about 9 mg.~~

613. The use method of claim 1, wherein the fusion protein is to be administered to the subject via a subcutaneous route.

714. The use method of claim 613, wherein the dose is

(a) between about 1 mg and about 8 mg;-

15. (b) ~~The method of claim 14, wherein the dose is between about 3 mg and about 8 mg;~~

16. (c) ~~The method of claim 15, wherein the dose is between about 6 mg and about 8 mg;~~

17. (d) ~~The method of claim 14, wherein the dose is between about 1 mg to about 6 mg;~~

18. (e) ~~The method of claim 17, wherein the dose is between about 1 mg to about 3 mg;~~

19. (f) ~~The method of claim 14, wherein the dose is between about 3 mg to about 6 mg;~~

20. (g) ~~The method of claim 13, wherein the dose is about 1 mg, about 3 mg, about 6 mg, or about 8 mg; or~~

21. (h) ~~The method of claim 13, wherein the dose is greater than about 8 mg.~~

822. ~~The use method of any one of claims 1-721, wherein two or more of the doses are to be administered at a dosing interval between two doses.~~

923. ~~The use method of claim 822, wherein the dosing interval is~~

(a) ~~at least about one day, at least about two days, at least about three days, at least about four days, at least about five days, at least about six days, at least about one week, at least about two weeks, at least about three weeks, at least about four weeks, at least about a month, at least about five weeks, at least about six weeks, at least about seven weeks, at least about eight weeks, at least about two months, at least about nine weeks, at least about ten weeks, at least about eleven weeks, at least about twelve weeks, or at least about three months;~~

24. (b) ~~The method of claim 23, wherein the dosing interval is at least about three weeks; or~~

25. (c) ~~The method of claim 22, wherein the dosing interval is about three weeks.~~

1026. ~~The use method of any one of claims 8 or 922-25, wherein the dosing interval is the same throughout the doses.~~

1127. ~~The use method of any one of claims 8 or 922-25, wherein the dosing interval is different throughout the doses.~~

1228. The ~~use method of any one of~~ claims 8 or 922-25, wherein at least one of the two or more doses is to be administered intravenously and at least one of the two or more doses is to be administered subcutaneously.

1329. The ~~use method of any one of~~ claims 1228, wherein the dose is to be administered intravenously ~~is given before the dose~~ is to be administered subcutaneously.

1430. The ~~use method of any one of~~ claims 8-1322-29, wherein the first dose is to be administered intravenously and the final dose is to be administered subcutaneously.

~~31. The method of any one of claims 1-30, wherein the disease or disorder is an infectious disease or an immune-mediated disease.~~

1532. The ~~use of any one method of~~ claims 1-1431, wherein the immune-mediated disease is an inflammatory disease or an autoimmune disease.

1633. The ~~use of any one method of~~ claims 1-1431, wherein the immune-mediated disease is selected from the group consisting of: type 1 diabetes; multiple sclerosis; rheumatoid arthritis; celiac disease; systemic lupus erythematosus; lupus nephritis; cutaneous lupus; juvenile idiopathic arthritis; Crohn's disease; ulcerative colitis; systemic sclerosis; graft versus host disease (GvHD); psoriasis; alopecia areata; HCV-induced vasculitis; Sjogren's syndrome; Pemphigus; Ankylosing Spondylitis; Behcet's Disease; Wegener's Granulomatosis; Takayasu's Disease; Autoimmune Hepatitis; Sclerosing Cholangitis; Gougerot-sjögren; inflammatory bowel disease; Immune Dysregulation, Polyendocrinopathy, Enteropathy, X-linked (IPEX) syndrome; and Macrophage Activation Syndrome.

1734. The ~~use method of~~ claim 1633, wherein the immune-mediated disease is systemic lupus erythematosus, lupus nephritis, or cutaneous lupus.

1835. The ~~use method of~~ claim 1734, wherein the immune-mediated disease is systemic lupus erythematosus.

1936. The ~~use method of any one of~~ claims 15-1831-35, ~~wherein further comprising administering to the subject~~ a corticosteroid is to be further administered to the subject.

2037. The use method of claim 1936, wherein the corticosteroid is prednisolone.

2138. The use method of claim 1936 or 2037, wherein the corticosteroid is to be administered to the subject via a topical, oral, intravenous, or intramuscular route.

2239. The use method of any one of claims 1936-2138, wherein the corticosteroid is to be administered before, concurrently with, or after each dose of the of the fusion protein.

2340. The use method of any one of claims 2836-3139, wherein two or more doses of the corticosteroid are to be administered to the subject at a dosing interval between each dose.

2441. The use method of any one of claims 1-2340, wherein the extracellular domain of the IL2R α polypeptide has at least one fewer glycosylation, at least two fewer glycosylations, at least three fewer glycosylations, at least four fewer glycosylations, at least five fewer glycosylations, at least six fewer glycosylations, at least seven fewer glycosylations, at least eight fewer glycosylations, or at least nine fewer glycosylations compared to the extracellular domain of native IL2R α (SEQ ID NO: 1).

2542. The use method of any one of claims 1-2441, wherein the IL2 polypeptide has at least one fewer glycosylation compared to native IL2 (SEQ ID NO: 2).

2643. The use method of any one of claims 1-2542, wherein the first polypeptide comprises an amino acid sequence at least ~~about~~ 60%, at least ~~about~~ 70%, at least ~~about~~ 80%, at least ~~about~~ 85%, at least ~~about~~ 90%, at least ~~about~~ 95%, at least ~~about~~ 96%, at least ~~about~~ 97%, at least ~~about~~ 98%, at least ~~about~~ 99% or about 100% identical to SEQ ID NO: 2.

2744. The use method of any one of claims 1-2643, wherein the second polypeptide

(a) comprises an amino acid sequence at least ~~about~~ 60%, at least ~~about~~ 70%, at least ~~about~~ 80%, at least ~~about~~ 85%, at least ~~about~~ 90%, at least ~~about~~ 95%, at least ~~about~~ 96%, at least ~~about~~ 97%, at least ~~about~~ 98%, at least ~~about~~ 99%, or about 100% identical to SEQ ID NO: 3;

45. ~~(b)~~ The method of any one of claims 1-44, wherein the second polypeptide is SEQ ID NO: 4; ~~or:~~

46. ~~(c)~~ The method of any one of claims 1-44, wherein the second polypeptide is SEQ ID NO: 3.