WHAT IS CLAIMED IS:

1. Use of one or more agent(s) that result(s) in a decrease in the activation of a TGF-β receptor in the manufacture of a medicament for killing or reducing the number of naturally-occurring and/or treatment-induced senescent cells in a subject.

2. Use of one or more agent(s) that result(s) in a decrease in the activation of a TGF-β receptor in the manufacture of a medicament for decreasing the accumulation of naturally-occurring and/or treatment-induced senescent cells in a subject.

3. Use of one or more agent(s) that result(s) in a decrease in the activation of a TGF-β receptor in the manufacture of a medicament for decreasing a level of a marker of naturally-occurring and/or treatment-induced senescent cells in a subject.

4. Use of one or more agent(s) that result(s) in a decrease in the activation of a TGF-β receptor in the manufacture of a medicament for reducing the activity of naturally-occurring and/or treatment-induced senescent cells in a subject.

5. Use of one or more agent(s) that result(s) in a decrease in the activation of a TGF-β receptor in the manufacture of a medicament for decreasing levels and/or activity of one or more SASP factor(s) derived from naturally-occurring and/or treatment-induced senescent cells in a subject.

6. The use of any one of claims 1-5, wherein the subject has been previously diagnosed or identified as having an aging-related disease or an inflammatory disease.

7. The use of claim 6, wherein the aging-related disease is inflamm-aging related.

8. The use of claim 6, wherein the aging-related disease is selected from the group consisting of: Alzheimer's disease, aneurysm, cystic fibrosis, fibrosis in pancreatitis, glaucoma, hypertension, inflammatory bowel disease, intervertebral disc degeneration,

osteoarthritis, type 2 diabetes mellitus, adipose atrophy, lipodystrophy, atherosclerosis, cataracts, COPD, idiopathic pulmonary fibrosis, kidney transplant failure, liver fibrosis, loss of bone mass, myocardial infarction, sarcopenia, wound healing, alopecia, cardiomyocyte hypertrophy, osteoarthritis, Parkinson's disease, age-associated loss of lung tissue elasticity, age-related macular degeneration, cachexia, glomerulosclerosis, liver cirrhosis, NAFLD, osteoporosis, amyotrophic lateral sclerosis, Huntington's disease, spinocerebellar ataxia, multiple sclerosis, neurodegeneration, stroke, cancer, dementia, vascular disease, infection susceptibility, chronic inflammation, and renal dysfunction.

9. The use of claim 6, wherein the aging-related disease is a cancer selected from the group consisting of: solid tumor, hematological tumor, sarcoma, osteosarcoma, glioblastoma, neuroblastoma, melanoma, rhabdomyosarcoma, Ewing sarcoma, osteosarcoma, B-cell neoplasms, multiple myeloma, B-cell lymphoma, B-cell non-Hodgkin's lymphoma, Hodgkin's lymphoma, chronic lymphocytic leukemia (CLL), acute myeloid leukemia (AML), chronic myeloid leukemia (CML), acute lymphocytic leukemia (ALL), myelodysplastic syndromes (MDS), cutaneous T-cell lymphoma, retinoblastoma, stomach cancer, urothelial carcinoma, lung cancer, renal cell carcinoma, gastric and esophageal cancer, pancreatic cancer, prostate cancer, breast cancer, colorectal cancer, ovarian cancer, non-small cell lung carcinoma, squamous cell head and neck carcinoma, endometrial cancer, cervical cancer, liver cancer, and hepatocellular carcinoma.

10. The use of claim 6, wherein the inflammatory disease is selected from the group consisting of: rheumatoid arthritis, inflammatory bowel disease, lupus erythematosus, lupus nephritis, diabetic nephropathy, CNS injury, Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, Crohn's disease, multiple sclerosis, Guillain-Barre syndrome, psoriasis, Grave's disease, ulcerative colitis, nonalcoholic steatohepatitis, mood disorders and cancer treatment-related cognitive impairment.

11. The use of any one of claims 1-10, wherein the treatment-induced senescent cells are chemotherapy-induced senescent cells.

12. The use of any one of claims 1-11, wherein the administration of the one or more agent(s) that result(s) in a decrease in the activation of a TGF-β receptor results in a decrease in the number or activity of naturally-occurring senescent cells and/or treatment-induced senescent cells in a target tissue in the subject.

13. The use of any one of claims 1-12, wherein at least one of the one or more agent(s) that result(s) in a decrease in the activation of a TGF-β receptor is a soluble TGF-β receptor, an extracellular domain of TGF-β receptor, an antibody that binds specifically to TGF-β, an antagonistic antibody that binds to a TGF-β receptor, an agent that binds to a LAP, or an agent that binds to a TGF-β/LAP complex.

14. The use of claim 13, wherein the one or more agent(s) that result(s) in a decrease in the activation of a TGF-β receptor decrease(s) the activation of a TGF-β receptor through binding to a LAP, or to a TGF-β/LAP complex.

15. The use of any one of claims 1-12, wherein at least one of the one or more agent(s) that result(s) in a decrease in the activation of a TGF-β receptor is a multi-chain chimeric polypeptide comprising:

(a) a first chimeric polypeptide comprising:
    (i) a first target-binding domain;
    (ii) a soluble tissue factor domain; and
    (iii) a first domain of a pair of affinity domains;
(b) a second chimeric polypeptide comprising:
    (i) a second domain of a pair of affinity domains; and
    (ii) a second target-binding domain,

wherein one or both of the first target-binding domain and the second target-binding domain binds specifically to a ligand of a TGF-β receptor; or

one or both of the first target-binding domain and the second target-binding domain is an antagonistic antigen-binding domain that binds specifically to a TGF-β receptor.

16. The use of any one of claims 1-12, wherein at least one of the one or more agent(s) that result(s) in a decrease in the activation of a TGF-β receptor is a single-chain chimeric polypeptide comprising:

(i) a first target-binding domain;

(ii) a soluble tissue factor domain; and

(iii) a second target-binding domain,

wherein one or both of the first target-binding domain and the second target-binding domain binds specifically to a ligand of a TGF-β receptor; or

one or both of the first target-binding domain and the second target-binding domain is an antagonistic antigen-binding domain that binds specifically to a TGF-β receptor.

17. Use of one or more common gamma-chain family cytokine receptor activating agent(s) in the manufacture of a medicament for killing or reducing the number of naturally-occurring and/or treatment-induced senescent cells in a subject.

18. Use of one or more common gamma-chain family cytokine receptor activating agent(s) in the manufacture of a medicament for decreasing the accumulation of naturally-occurring and/or treatment-induced senescent cells in a subject.

19. Use of one or more common gamma-chain family cytokine receptor activating agent(s) in the manufacture of a medicament for decreasing a level of a marker of naturally-occurring and/or treatment-induced senescent cells in a subject.

20. Use of one or more common gamma-chain family cytokine receptor activating agent(s) in the manufacture of a medicament for reducing the activity of naturally-occurring and/or treatment-induced senescent cells in a subject.

21. Use of one or more common gamma-chain family cytokine receptor activating agent(s) in the manufacture of a medicament for decreasing levels or activity of SASP factors derived from naturally-occurring and/or treatment-induced senescent cells in a subject.

22. The use of any one of claims 17-21, wherein the subject has been previously diagnosed or identified as having an aging-related disease or an inflammatory disease.

23. The use of any one of claims 17-22, wherein at least one of the one or more common gamma-chain family cytokine receptor activating agent(s) is a complex of a common gamma-chain family cytokine or a functional fragment thereof and an antibody or antibody fragment that binds specifically to the common gamma-chain family cytokine or the functional fragment thereof.

24. The use of any one of claims 17-22, wherein at least one of the one or more common gamma-chain family cytokine receptor activating agent(s) is a single-chain chimeric polypeptide comprising:

(i) a first target-binding domain;

(ii) a soluble tissue factor domain; and

(iii) a second target-binding domain,

wherein one or both of the first target-binding domain and the second target-binding domain is a soluble common gamma-chain family cytokine, an agonistic antigen-binding domain that binds specifically to a common gamma-chain family cytokine receptor, a soluble common gamma-chain family cytokine receptor, or an antigen-binding domain that binds specifically to a common gamma-chain family cytokine.

25. The use of any one of claims 17-22, wherein at least one of the one or more common gamma-chain family cytokine receptor activating agent(s) is a multi-chain chimeric polypeptide comprising:

(a) a first chimeric polypeptide comprising:

(i) a first target-binding domain;

(ii) a soluble tissue factor domain; and

(iii) a first domain of a pair of affinity domains;

(b) a second chimeric polypeptide comprising:

(i) a second domain of a pair of affinity domains; and

(ii) a second target-binding domain,

wherein one or both of the first target-binding domain and the second target-binding domain is a soluble common gamma-chain family cytokine, an agonistic antigen-binding domain that binds specifically to a common gamma-chain family cytokine receptor, a soluble common gamma-chain family cytokine receptor, or an antigen-binding domain that binds specifically to a common gamma-chain family cytokine.

26. The use of any one of claims 17-22, wherein one of the one or more common gamma-chain family cytokine receptor activating agent(s) is a soluble IL-2 or an IL-2 agonist.

27. The use of any one of claims 17-22, wherein one of the one or more common gamma-chain family cytokine receptor activating agent(s) is an antibody or an antigen-binding antibody fragment that binds specifically to a common gamma-chain family cytokine.

28. The use of any one of claims 17-27, wherein at least one or more agent(s) that result(s) in a decrease in the activation of a TGF-β receptor is to be further administered to the subject.

29. The use of claim 28, wherein the one or more agent(s) that result(s) in a decrease in the activation of a TGF-β receptor is a soluble TGF-β receptor, an extracellular domain of TGF-β receptor, an antibody that binds specifically to TGF-β, an antagonistic antibody that binds to a TGF-β receptor, an agent that binds to a LAP, or an agent that binds to a TGF-β/LAP complex.

30. The use of claim 29, wherein the one or more agent(s) that result(s) in a decrease in the activation of a TGF-β decrease(s) the activation of a TGF-β receptor through binding to a LAP, or to a TGF-β/LAP complex.

31. The use of any one of claims 1-30, wherein an additional therapeutic agent selected from the group of: combinations of agents, such as checkpoint inhibitors, chemotherapy drugs, and therapeutic antibodies, is to be further administered.