WHAT IS CLAIMED IS:

1. A dendritic cell comprising one or more heterologous nucleic acid molecules, encoding for CD40L, ~~and~~ CXCL13 and CD93.

~~2. The dendritic cell of claim 1, wherein the one or more heterologous nucleic acid molecules encodes for CD93.~~

~~3.~~2. A dendritic cell comprising ~~a~~ heterologous proteins of CD40L protein, ~~and a heterologous~~ CXCL13 protein, and CD93 protein.

~~4. The dendritic cell of claim 3, further comprising a heterologous CD93 protein.~~

~~5.~~3. An antigen activated dendritic cell, wherein the dendritic cell comprises one or more heterologous nucleic acid molecules encoding for ~~CD40L and CXCL13~~ CD40L, CXCL13, and CD93.

~~6.~~4. The antigen activated dendritic cell of claim ~~5~~3, wherein the one or more heterologous nucleic acid molecules encodes for CD93.

~~7.~~5. The antigen activated dendritic cell of ~~claims 5 or 6~~claim 3, wherein the cell is activated by exposure to one or more antigens.

~~8.~~6. The antigen activated dendritic cell of claim ~~7~~5, wherein the antigen is a tumor antigen.

~~9.~~7. The antigen activated dendritic cell of claim ~~7~~5, wherein the antigen is a viral antigen.

~~10.~~8. The antigen activated dendritic cell of ~~any one of claims 7-9~~claim 5, wherein the antigen is a cell lysate.

~~11.~~9. The antigen activated dendritic cell of claim ~~10~~8, wherein the cell lysate is allogeneic or autologous to the antigen activated dendritic cell.

~~12.~~10. The antigen activated dendritic cell of ~~claims 10 or 11~~claim 8, wherein the cell lysate is a lysate comprising one, or a combination of allogeneic melanoma cell lysates.

~~13. The antigen activated dendritic cell of claim 12, wherein the allogeneic melanoma cell lysate is a DDM-1.7 cell lysate, a DDM-1.13 cell lysate, or a combination thereof.~~

~~14. The antigen activated dendritic cell of any one of claims 10-13, wherein the cell lysate is a whole cell lysate.~~

~~15.~~11. The antigen activated dendritic cell of ~~any one of claims 10-13~~claim 8, wherein the cell lysate is a tumor cell lysate.

~~16.~~12. A composition of comprising a cell of ~~any one of claims 1-15~~claim 2, wherein the composition does not comprise a heterologous antigen.

~~17.~~13. A pharmaceutical composition comprising a cell of ~~any one of claims 1-16~~claim 2.

~~18. A method of treating a solid tumor, cancer, or malignancy in a subject comprising administering to the subject any of the dendritic cells or compositions of claims 1-4 or 16-17.~~

~~19. A method of treating a solid tumor, cancer, or malignancy in a subject comprising administering to the subject any of the dendritic cells or compositions of claims 5-14 or 15-17.~~

~~20. The method of claim 19, further comprising:~~

~~screening a protein expression profile of a resected tumor or biopsy sample from the subject to cross-match a protein expression profile of an allogeneic tumor lysate prior to administration; and~~

administering an allogeneic tumor lysate activated dendritic cell or activated dendritic cell composition if at least three fragments of the protein expression profile of the resected tumor or biopsy sample cross-match the protein expression profile of the allogeneic tumor lysate.

21. The method of claim 20, wherein the allogeneic tumor lysate is derived from an allogeneic melanoma cell line selected from the group consisting of DDM-1.7, DDM-1.13, or a combination thereof.

22. The method of any of claims 18-21, wherein the dendritic cell does not have the same HLA type as the subject.

23. The method of any of claims 18-22, wherein the cancer is a solid tumor selected from the group consisting of fibrosarcoma, myxosarcoma, liposarcoma, chondrosarcoma, osteosarcoma, and other sarcomas, synovioma, mesothelioma, Ewing's tumor, leiomyosarcoma, rhabdomyosarcoma, colon carcinoma/colorectal cancer, lymphoid malignancy, pancreatic cancer, breast cancer, lung cancers, ovarian cancer, prostate cancer, hepatocellular carcinoma, squamous cell carcinoma, basal cell carcinoma, adenocarcinoma, sweat gland carcinoma, medullary thyroid carcinoma, papillary thyroid carcinoma, pheochromocytomas sebaceous gland carcinoma, papillary carcinoma, papillary adenocarcinomas, medullary carcinoma, bronchogenic carcinoma, renal cell carcinoma, hepatoma, bile duct carcinoma, choriocarcinoma, Wilms' tumor, cervical cancer, testicular tumor, seminoma, bladder carcinoma, melanoma, and CNS tumors (such as a glioma (such as brainstem glioma and mixed gliomas), glioblastoma (also known as glioblastoma multiforme) astrocytoma, CNS lymphoma, germinoma, medulloblastoma, Schwannoma craniopharyogioma, ependymoma, pinealoma, hemangioblastoma, acoustic neuroma, oligodendroglioma, menangioma, neuroblastoma, retinoblastoma and brain metastases.

24. The method of any of claims 18-23, wherein the route of administration is via intratumoral, peritumoral, intradermal, subcutaneous, intramuscular, or intraperitoneal, injection.

25. The method of any of claims 18-24, wherein the administering is via subcutaneous, intratumoral or intradermal injection.

~~26. The method of any of claims 18-25, wherein the dendritic cell or composition is cryopreserved and thawed prior to administration.~~

~~27. The method of claim 18, wherein the dendritic cell is not pulsed with an antigen prior to administration.~~

14. Use of a cell of claim 2 in the manufacture of a medicament for treating a solid tumor, cancer, or malignancy in a subject.

15. The use of claim 14, wherein the dendritic cell does not have the same HLA type as the subject.

16. The use of claim 14, wherein the cancer is a solid tumor selected from the group consisting of fibrosarcoma, myxosarcoma, liposarcoma, chondrosarcoma, osteosarcoma, and other sarcomas, synovioma, mesothelioma, Ewing's tumor, leiomyosarcoma, rhabdomyosarcoma, colon carcinoma/colorectal cancer, lymphoid malignancy, pancreatic cancer, breast cancer, lung cancers, ovarian cancer, prostate cancer, hepatocellular carcinoma, squamous cell carcinoma, basal cell carcinoma, adenocarcinoma, sweat gland carcinoma, medullary thyroid carcinoma, papillary thyroid carcinoma, pheochromocytomas sebaceous gland carcinoma, papillary carcinoma, papillary adenocarcinomas, medullary carcinoma, bronchogenic carcinoma, renal cell carcinoma, hepatoma, bile duct carcinoma, choriocarcinoma, Wilms' tumor, cervical cancer, testicular tumor, seminoma, bladder carcinoma, melanoma, and CNS tumors (such as a glioma (such as brainstem glioma and mixed gliomas), glioblastoma (also known as glioblastoma multiforme) astrocytoma, CNS lymphoma, germinoma, medulloblastoma, Schwannoma craniopharyogioma, ependymoma, pinealoma, hemangioblastoma, acoustic neuroma, oligodendroglioma, menangioma, neuroblastoma, retinoblastoma and brain metastases.

17. A dendritic cell of claim 2 for use in the treatment of a solid tumor, cancer, or malignancy in a subject.

18. The dendritic cell of claim 17, wherein the cell does not have the same HLA type as the subject.

19. The dendritic cell of claim 17, wherein the cancer is a solid tumor selected from the group consisting of fibrosarcoma, myxosarcoma, liposarcoma, chondrosarcoma, osteosarcoma, and other sarcomas, synovioma, mesothelioma, Ewing's tumor, leiomyosarcoma, rhabdomyosarcoma, colon carcinoma/colorectal cancer, lymphoid malignancy, pancreatic cancer, breast cancer, lung cancers, ovarian cancer, prostate cancer, hepatocellular carcinoma, squamous cell carcinoma, basal cell carcinoma, adenocarcinoma, sweat gland carcinoma, medullary thyroid carcinoma, papillary thyroid carcinoma, pheochromocytomas sebaceous gland carcinoma, papillary carcinoma, papillary adenocarcinomas, medullary carcinoma, bronchogenic carcinoma, renal cell carcinoma, hepatoma, bile duct carcinoma, choriocarcinoma, Wilms' tumor, cervical cancer, testicular tumor, seminoma, bladder carcinoma, melanoma, and CNS tumors (such as a glioma (such as brainstem glioma and mixed gliomas), glioblastoma (also known as glioblastoma multiforme) astrocytoma, CNS lymphoma, germinoma, medulloblastoma, Schwannoma craniopharyogioma, ependymoma, pinealoma, hemangioblastoma, acoustic neuroma, oligodendroglioma, menangioma, neuroblastoma, retinoblastoma and brain metastases.

~~28.~~20. A kit comprising ~~any of the dendritic cells or compositions of claims 1-17~~a cell of claim 1, wherein the dendritic cell or composition is frozen or cryopreserved in a container, and optionally comprising a cryopreserved allogeneic tumor lysate in a separate container.

~~29. A kit comprising any of the dendritic cells or compositions of claim 1-17, wherein the dendritic cell or composition is frozen or cryopreserved in a container, and optionally comprising a frozen or cryopreserved autologous tumor lysate in a separate container.~~

~~30.~~21. A kit comprising ~~any of the dendritic cells or compositions of claims 10-15, or 17~~a cell of claim 8, wherein the activated dendritic cell or composition is frozen in a container.

22. Use of a cell of claim 1 in the manufacture of a medicament for activating the immune system in a subject in need thereof.

23. A method of producing immature dendritic cells comprising: culturing a cell of claim 2 into immature dendritic cells *in vitro*.

~~31. The kit of claim 29 or 30, further comprising separate containers comprising one or more buffers, and optionally comprising one or more activation agents.~~

~~32. The kit of claim 31, further comprising instructions for incubating and/or processing the dendritic cells or compositions.~~

~~33. A method of treating cancer in a subject comprising:~~

~~screening a protein expression profile of resected tumor or biopsy samples from the subject to cross match a protein expression profile of an allogeneic tumor lysate prior to administration;~~

~~if at least three fragments of the protein expression profile of resected tumor or biopsy samples match with the protein expression profile of the allogeneic tumor lysate, administering to the subject any of the dendritic cells or compositions of claims 1-15; or~~

~~if the at least three fragments of the protein expression profile of resected tumor or biopsy samples do not match the allogeneic tumor lysate protein expression profile, then~~

~~(a) administering to the subject a composition comprising an autologous tumor lysate pulsed with any of the dendritic cells or compositions of claims 1-10, 14, or 16 or~~

~~(b) administering to the subject any of the cells or compositions of claims 1-4 or 16, which has not been pulsed with an antigen.~~

~~34. A method of treating cancer in a subject comprising administering to the subject any of the dendritic cells or compositions of claims 1-4 or 16, wherein the dendritic cell or composition has not been pulsed with a tumor antigen.~~

~~35. A method of treating cancer in a subject comprising administering to the subject any of the dendritic cells or compositions of claims 1-17, wherein the dendritic cell has been pulsed with a tumor antigen or lysate.~~

36. A method of activating the immune system, comprising administering to a subject in need thereof an effective amount of any of the dendritic cells or compositions of claims 1-17.

37. A method of producing immature dendritic cells comprising:

culturing CD14+ and/or CD1a+ monocytes heterologously expressing CD40L, CXCL13, and optionally CD93 into immature dendritic cells *in vitro*.

38. The method of claim 37, further comprising contacting the immature dendritic with a composition comprising one or more of: TNF α, IL 1β, IFN α, IFN γ, and pIC.

39. The method of claim 37, further comprising producing the CD14+ monocytes heterologously expressing CD40L, CXCL13, and optionally CD93.

40. The method of claim 39, wherein the producing comprises contacting CD14+ monocytes with one or more vectors encoding for CD40L, CXCL13, and optionally CD93.

41. The method of claim 40, wherein the vector is a recombinant adenoviral vector, a recombinant retroviral vector, or a recombinant lentiviral vector, or a combination thereof.

42. The method of claim 40, wherein the producing the CD14+ monocytes heterologously expressing CD40L, CXCL13, and optionally CD93 comprises contacting the monocytes with one or more CRISPR constructs that produces CD14+ monocytes heterologously expressing CD40L, CXCL13, and optionally CD93.

43. The method of claim 42, wherein the CRISPR construct is CAS9.

44. The method of any one of claims 40-43, wherein the contacting comprises transfection, transduction, electroporation, infection, or any combination thereof.

45. The method of claim 37, further comprising freezing the immature dendritic cells.

~~46. The method of claim 37, further comprising contacting the immature dendritic cells with an autologous tumor lysate or allogeneic tumor lysate before maturation.~~

~~47. The method of claim 46, further comprising freezing the dendritic cells after maturation.~~

~~48. The method of claim 37, wherein the CD14+ monocytes are further modified to heterologously express CD93.~~

~~49. The method of claim 46, wherein the allogeneic tumor lysate is derived from an allogeneic melanoma cell line selected from the group consisting of DDM-1.7, DDM-1.13, or a combination thereof.~~

~~50. The method of claim 46, wherein the lysate is a whole cell lysate.~~

~~51. The method of any of claims 18-27 or 33-36 wherein graft versus tumor (GVT) response is increased in the patient.~~

~~52. The method of any of claims 18-27 or 33-36, wherein at a time frame of from 4-14 days following administration of the dendritic cells or compositions, the patient is further administered an immune check-point inhibitor, including any one or combination of two check point inhibitors, including an inhibitor of PD-1 or PD-L1 (B7-H1), such as an anti-PD-1 antibody, including nivolumab (Nivolumab from Bristol-Myers Squibb), pembrolizumab/lambrolizumab, also known as MK-3475 (Keytruda from Merck), pidilizumab (Curetech), AMP-224 (Amplimmune), or an anti-PD-L1 antibody, including MPDL3280A (Roche), MDX-1105 (Bristol-Myer-Squibb), MEDI-4736 (AstraZeneca) and MSB-0010718-C (Merck), an antagonist of CTLA-4, such as an anti-CTLA-4 antibody including anti-CTLA4 antibody Yervoy™(ipilimumab, Bristol-Myers Squibb), tremelimumab (Pfizer), Ticilimumab (AstraZeneca) or AMGP-224 (Glaxo-Smith-Kline), or a tumor specific antibody trastuzumab (Herceptin) for breast cancer, rituximab (Rituxan) for lymphoma, or cetuximab (Erbitux).~~

~~53. The method of any of claims 18-27, 33-36, 51, or 52, further comprising administering one or more additional agents commonly used to treat cancer.~~

~~54. The method of claim 53, wherein the additional agent is selected from radiation, chemotherapy, an antibody drug conjugate, and an immune modulating antibody.~~

~~55. The method of claim 54, wherein the chemotherapy is of cisplatin, carboplatin, paclitaxel, docetaxel, gemcitabine, vinorelbine, vinblastine, irinotecan, etoposide, or pemetrexed, or combinations thereof, or a pharmaceutically acceptable salt thereof.~~

~~56. The method of claim 54, wherein the immune modulating antibody is an anti-PD-1 antibody, an anti-PD-L1 antibody, an anti-CD40 antibody, an anti-CTLA-4 antibody, or an anti-OX40 antibody, or any combination thereof.~~

~~57. The method of claim 54, wherein the antibody drug conjugate targets c-Met kinase, LRRC15, EGFR, or CS1, or any combination thereof.~~

~~58. The method of any of claims 18-27, 33-36, 51, or 52-54, wherein the treatment or increasing the immune response is repeated periodically for time frames of from once every 5 days, 10 days, once every 14 days, once every 21 days, once every month, to once every two months, to once every 3 months, to once every 4 months, to once every 5 months, to once every 6 months, or once every 7 months, or once every 8 months, or once every 9 months, or once every 10 months, or once every 11 months, or once annually as a maintenance treatment for as long as the patient exhibits improvement, or stable/non-progressing disease.~~