

**I/We Claim:**

1. A pharmaceutical combination comprising a PD-1 antagonist and a GITR agonist, wherein:

a) the PD-1 antagonist is MK-3475; and

b) the GITR agonist is =

an antibody or antigen-binding fragment that binds GITR comprising:

CDR-L1, CDR-L2 and CDR-L3 of the variable light chain comprising the amino acid sequence set forth in SEQ ID NO: 82 wherein amino acid 31 is Q and amino acid 57 is Q; and

CDR-H1, CDR-H2 and CDR-H3 of the variable heavy chain comprising the amino acid sequence set forth in SEQ ID NO: 81

2. A pharmaceutical composition comprising a PD-1 antagonist and a GITR agonist, wherein:

a) the PD-1 antagonist is MK-3475; and

b) the GITR agonist is an antibody or antigen-binding fragment that binds GITR comprising:

CDR-L1, CDR-L2 and CDR-L3 of the variable light chain comprising the amino acid sequence set forth in SEQ ID NO: 82 wherein amino acid 31 is Q and amino acid 57 is Q; and

CDR-H1, CDR-H2 and CDR-H3 of the variable heavy chain comprising the amino acid sequence set forth in SEQ ID NO: 81.

Dated **February 16, 2016**

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AGENT FOR THE APPLICANT**

To,  
**The Controller of Patents**  
The Patent Office, at **Chennai**

**I/We Claim:**

1. A pharmaceutical combination comprising a PD-1 antagonist and a GITR agonist, wherein:

a) the PD-1 antagonist is ~~selected from the group consisting of BMS-936558, MK-3475, and MPDL3280A~~; and

b) the GITR agonist is ~~selected from the group consisting of:~~

~~i.~~ an antibody or antigen-binding fragment that binds GITR comprising:

CDR-L1, CDR-L2 and CDR-L3 of the variable light chain comprising the amino acid sequence set forth in SEQ ID NO: 82 wherein amino acid 31 is Q and amino acid 57 is Q; and

CDR-H1, CDR-H2 and CDR-H3 of the variable heavy chain comprising the amino acid sequence set forth in SEQ ID NO: 81;

~~ii. TRX518; and~~

~~iii. TRX385.~~

~~2. The pharmaceutical combination of claim 1 wherein the PD-1 antagonist and the GITR agonist are admixed together with a pharmaceutically acceptable carrier or excipient.~~

~~3. The pharmaceutical combination of claim 1 wherein the PD-1 antagonist is MK-3475 and the GITR agonist is an antibody comprising: CDR-L1, CDR-L2 and CDR-L3 of the variable light chain comprising the amino acid sequence set forth in SEQ ID NO: 82 wherein amino acid 31 is Q and amino acid 57 is Q; and CDR-H1, CDR-H2 and CDR-H3 of the variable heavy chain comprising the amino acid sequence set forth in SEQ ID NO: 81.~~

~~4. The pharmaceutical combination of claim 1 which further comprises a chemotherapeutic agent.~~

5. The pharmaceutical combination of claim 4 wherein the chemotherapeutic agent is ~~2-2'2" trichlorotriethylamine; 2-ethylhydrazide; 2-pyrrolino-doxorubicin; 4(5)-imidazoles; 4-hydroxytamoxifen; 5-fluorouracil (5-FU); 6-azauridine; 6-diazo-5-oxo-L-norleucine; 6-mercaptopurine; 6-thioguanine; aceglatone; aelacinomysins; actinomycin; aldophosphamide-glycoside; altretamine; aminoglutethimide; aminolevulinic acid; aminopterin; amsacrine; anastrozole; ancitabine; anguidine; ansamitocins; arabinoside; authramycin; azacitidine; azaserine; benzodopa; bestrabucil; bicalutamide; bisantrene; bleomycins; bryostatin; bullatacin; bullatacinone; busulfan; cactinomycin; calicheamicin; callystatin; calusterone; caminomycin; camptothecin; capecitabine; carabecin; carboplatin; carboquone; carmofur; carmustine; carzinophillin; CC-1065; chlorambucil; chloranbucil; chlornaphazine; chlorozotocin; cholophosphamide; chromomycinis; clodronate; CPT-11; Cremophor-free albumin-engineered nanoparticle formulation of paclitaxel; cryptophycin-1; cryptophycin-8; cyanomorpholino-doxorubicin; cyclophosphamide; cytarabine; dacarbazine; dactinomycin; daunomycin; daunorubicin; defofamine; demecolcine; denopterin; deoxy-doxorubicin; detorubicin; diaziquone; dideoxyuridine; difluoromethylornithine; dolastatin; doxetaxel; doxifluridine; doxorubicin; droloxifene; dromostanolone propionate; duocarmycin; dynemicin; dynemicin-A; edatraxate; edatrexate; eleutherobin; elformithine; elliptinium acetate; eniluracil; enocitabine; epirubicin; epitiostanol; esorubicin; esperamicin; estramustine; etoglucid; etoposide; exemestane; fadrozole; floxuridine; fludarabine; flutamide; formestane; fotemustine; frolinic acid; gacytosine; gallium nitrate; gemcitabine; goserelin; hydroxyurea; ibandronate; idarubicin; ifosfamide; improsulfan; keoxifene; KW-2189; lentinan; letrozole; leuprolide; lomustine; lonidainine; losoxantrone; LY117018; mannomustine; marcellomycin; maytansine; mechlorethamine; mechlorethamine-oxide hydrochloride; megestrol acetate; melphalan; mepitiostane; mercaptopurine; methotrexate; cisplatin; meturedopa; mitobronitol; mitoguazone; mitolactol; mitomycin-C; mitotane; mitoxantrone; mitoxantrone; mopidanmol; morpholino-doxorubicin; mycophenolic acid;~~

~~neocarzinostatin; nilutamide; nimustine; nitraerine; nogalamycin; novantrone; novembichin; olivomycins; onapristone; paclitaxel; pancratistatin; pentostatin; peplomycin; phenamet; phenesterine; pipobroman; piposulfan; pirarubicin; platinum; podophyllinic acid; potfiromycin; prednimustine; procarbazine; pteropterin; puromycin; quelamycin; raloxifene; ranimustine; razoxane; retinoic acid; RFS-2000; rhizoxin; rodorubicin; roridin A; sarcodietin; sizofuran; spirogermanium; spongistatin; streptonigrin; streptozocin; T-2 toxin; tamoxifen; teniposide; tenuazonic acid; testolactone; thiamiprine; thioguanine; thiotepa; topotecan; toremifene; triaziquone; triethylenethiophosphoramidate; triethylenemelamine; triethylenephosphoramidate; trilostane; trimethylolomelamine; trimetrexate; trioxifene; trofosfamide; troxacitabine; tubercidin; ubenimex; uracil mustard; uredopa; urethan; verracurin A; vinblastine; vincristine; vindesine; vinorelbine; vorozole; zinostatin; and zorubicin.~~

~~6. The pharmaceutical combination of claim 4 wherein the chemotherapeutic agent is a vaccine.~~

~~7. The pharmaceutical combination of claim 3 wherein said MK-3475 or said G1TR agonist or both are conjugated.~~

~~8. The pharmaceutical combination of claim 7 wherein said MK-3475 or said G1TR agonist or both are conjugated to a cytotoxic agent or radionuclide.~~

~~9. The pharmaceutical combination of claim 3 wherein said MK-3475 or said G1TR agonist or both are conjugated to ricin, a vinca alkaloid, methotrexate, Pseudomonas exotoxin, saporin, diphtheria toxin, cisplatin, doxorubicin, abrin toxin, gelonin, pokeweed antiviral protein, <sup>125</sup>I, <sup>131</sup>I, <sup>90</sup>Y, <sup>67</sup>Cu, <sup>211</sup>At, <sup>177</sup>Lu, <sup>143</sup>Pr or <sup>213</sup>Bi.~~

2. A pharmaceutical composition comprising a PD-1 antagonist and a GITR agonist, wherein:

a) the PD-1 antagonist is MK-3475; and

b) the GITR agonist is an antibody or antigen-binding fragment that binds GITR comprising:

CDR-L1, CDR-L2 and CDR-L3 of the variable light chain comprising the amino acid sequence set forth in SEQ ID NO: 82 wherein amino acid 31 is Q and amino acid 57 is Q;

and

CDR-H1, CDR-H2 and CDR-H3 of the variable heavy chain comprising the amino acid sequence set forth in SEQ ID NO: 81.