

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FORTE BIOSCIENCES, INC.,
Petitioner,

v.

UNIVERSITY OF MASSACHUSETTS,
Patent Owner.

Case No. PGR2023-00014
Patent No. 11,278,505

PATENT OWNER'S UPDATED EXHIBIT LIST

Pursuant to 37 C.F.R. § 42.63(e), Patent Owner University of Massachusetts hereby submits a current listing of Patent Owner exhibits. Exhibit 2118 is being filed today.

Exhibit	Description	Served Not Filed
2001	Harris et al., <i>Rapid Skin Repigmentation on Oral Ruxolitinib in a Patient with Coexisting Vitiligo and Alopecia Areata (AA)</i> (Article in Press), 74(2) J. AM. ACAD. DERMATOL. 370-71 (2015)	
2002	Abul K. Abbas et al., <i>Cellular and Molecular Immunology</i> chs. 4, 5, 9, 11, 19, apps. I, III (9th ed. 2018)	
2003	Press Release, Forte Biosciences, Inc., <i>Forte Biosciences, Inc. Announces \$25 Million Financing and R&D Update for FB-102</i> (Aug. 1, 2023)	
2004	Forte Biosciences Shareholder Presentation (Sept. 1, 2023)	
2005	Declaration of Dr. Damsky	
2006	Curriculum Vitae of Dr. Damsky	
2007	Dr. Abbas Deposition Transcript	
2008	Dr. Plott Deposition Transcript	
2009	September 20, 2023, Forte Response to Interrogatory (EX1036)	
2010	Todd A. Fehniger, Michael A. Caligiuri, <i>Interleukin 15: biology and relevance to human disease</i> . 97 (1) BLOOD 14–32 (2001)	
2011	Cheever MA, <i>Twelve immunotherapy drugs that could cure cancers</i> , 222 IMMUNOL REV. 357-68 (2008)	
2012	Yokoyama S et al., <i>Antibody-mediated blockade of IL-15 reverses the autoimmune intestinal damage in transgenic mice that overexpress IL-15 in enterocytes</i> , 106(37) PROC. NATL. ACAD. SCI. USA 15849-54 (2009)	
2013	WO 2014/191822	
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2015	US Patent Pub. No. 2016/0235762	
2016	Ushio Hiroyuki et al., <i>Phenylpyazoleanilides as Potent Inhibitor of IL-15 Dependent T Cell Proliferation. Part 2: Discovery of a New Drug Candidate, Y-320</i> , 5(4) LETTERS IN DRUG DESIGN & DISCOVERY 292-96 (2008)	

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2017	Ruchatz H et al., <i>Soluble IL-15 receptor alpha-chain administration prevents murine collagen-induced arthritis: a role for IL-15 in development of antigen-induced immunopathology</i> , 160(11) J. IMMUNOL. 5654-60 (1998)	
2018	Kim YS et al., <i>Targeting the IL-15 receptor with an antagonist IL-15 mutant/Fc gamma2a protein blocks delayed-type hypersensitivity</i> , 160(12) J. IMMUNOL. 5742-48 (1998)	
2019	US Patent No. 7,736,638	
2020	WO 03/017935	
2021	Epron G. et al., <i>Monocytes and T cells cooperate to favor normal and follicular lymphoma B-cell growth: role of IL-15 and CD40L signaling</i> , 26 LEUKEMIA 139-48 (2012)	
2022	Wilson CG and Arkin MR, <i>Small-molecule inhibitors of IL-2/IL-2R: lessons learned and applied</i> , 348 CURR. TOP. MICROBIOL. IMMUNOL. 25-59 (2011)	
2023	Liao W et al., <i>Interleukin-2 at the crossroads of effector responses, tolerance, and immunotherapy</i> , 38(1) IMMUNITY 13-25 (2013)	
2024	WO 2015/181394	
2025	WO 2015/044761	
2026	Feldmann, M. and Maini, R, <i>TNF defined as a therapeutic target for rheumatoid arthritis and other autoimmune diseases</i> , 9 NAT. MED. 1245-50 (2003)	
2027	WO 2010/037818	
2028	US Patent No. 10,202,433	
2029	US Patent Pub. No. 2002/0082230	
2030	US Patent No. 5,985,663	
2031	US Patent No. 7,153,507	
2032	US Patent No. 9,133,244	
2033	Antonelli A et al., <i>The role of the Th1 chemokine CXCL10 in vitiligo</i> , 3(Suppl. 1) ANN. TRANSL. MED. S16 (2015)	
2034	Sundberg JP et al., <i>Alopecia areata in aging C3H/HeJ mice</i> , 102(6) J. INVEST. DERMATOL. 847-56 (1994)	
2035	Xing L et al., <i>Supplementary Note for: Alopecia areata is driven by cytotoxic T lymphocytes and is reversed by JAK inhibition</i> , 20(9) NAT. MED. 1043-49 (2014)	

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2036	Manga P et al., <i>Recent advances in understanding vitiligo</i> , 5:F1000 FACULTY REV. 2234 (2016)	
2037	van den Boorn JG et al., <i>Autoimmune destruction of skin melanocytes by perilesional T cells from vitiligo patients</i> , 9(9) J. INVEST. DERMATOL. 2220-32 (2009)	
2038	Cavalié M et al., <i>Maintenance therapy of adult vitiligo with 0.1% tacrolimus ointment: a randomized, double blind, placebo-controlled study</i> , 135(4) J. INVEST. DERMATOL. 970-74 (2015)	
2039	Adachi T et al., <i>Hair follicle-derived IL-7 and IL-15 mediate skin-resident memory T cell homeostasis and lymphoma</i> , 21(11) NAT. MED. 1272-79 (2015)	
2040	Mackay LK et al., <i>The developmental pathway for CD103(+)CD8+ tissue-resident memory T cells of skin</i> , 14(12) NAT. IMMUNOL. 1294-301 (2013)	
2041	US Patent Pub. No. 2009/0123414	
2042	Abbas AK et al., <i>Revisiting IL-2: Biology and therapeutic prospects</i> , 3(25) SCI. IMMUNOL. 1482 (2018)	
2043	US Patent No. 6,468,798	
2044	Hamajima K et al., <i>Intranasal administration of HIV-DNA vaccine formulated with a polymer, carboxymethylcellulose, augments mucosal antibody production and cell-mediated immune response</i> , 88(2) CLIN. IMMUNOL. IMMUNOPATHOL. 205-10 (1998)	
2045	Pipeline, Forte Biosciences, Inc., https://www.fortebiorx.com/pipeline/default.aspx (last visited Oct. 2, 2023)	
2046	Richmond JM et al., <i>Antibody blockade of IL-15 signaling has the potential to durably reverse vitiligo</i> , 10(450) SCI. TRANSL. MED. 7710 (2018)	
2047	US Patent No. 5,591,630	
2048	US Patent No. 9,428,573	
2049	US Patent No. 8,431,524	
2050	WO 2000/002582	
2051	US Patent No. 8,163,879	
2052	Frisoli ML and Harris JE, <i>Vitiligo: Mechanistic insights lead to novel treatments</i> , 140(3) J. ALLERGY. CLIN. IMMUNOL. 654-62 (2017)	

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2053	Rodrigues M et al., <i>New discoveries in the pathogenesis and classification of vitiligo</i> , 77(1) J. AM. ACAD. DERMATOL. 1-13 (2017)	
2054	Rodrigues M et al., <i>Current and emerging treatments for vitiligo</i> , 77(1) J. AM. ACAD. DERMATOL. 17-29 (2017)	
2055	Relke N and Gooderham M, <i>The Use of Janus Kinase Inhibitors in Vitiligo: A Review of the Literature</i> , 23(3) J. CUTAN. MED. SURG. 298-306 (2019)	
2056	The dappled dilemma facing vitiligo science, knowable MAGAZINE, (2019) https://knowablemagazine.org/article/health-disease/2019/dappled-dilemma-facing-vitiligo-science#:~:text=Scientist%20John%20Harris%20doesn't,of%20people%20who%20have%20it. (last visited Oct. 2, 2023)	
2057	Birlea SA et al., <i>Trends in Regenerative Medicine: Repigmentation in Vitiligo Through Melanocyte Stem Cell Mobilization</i> , 37(4) MED. RES. REV. 907-35 (2017)	
2058	Parsad D, <i>A new era of vitiligo research and treatment</i> , 6(2) J. CUTAN. AESTHET. SURG. 63-64 (2013)	
2059	Lei, T et al., <i>Consensus on the Diagnosis and Treatment of Vitiligo in China</i> , 4(1) INT'L. J. OF DERMATOLOGY 10-15 (2021)	
2060	Rashighi M and Harris JE, <i>Vitiligo Pathogenesis and Emerging Treatments</i> , 35(2) DERMATOL. CLIN. 257-65 (2017)	
2061	Oh YJ et al., <i>Narrow-band ultraviolet B treatment for diphenylcyclopropenone-induced vitiliginous lesions</i> , 92(1) ACTA. DERM. VENEREOL. 102-03 (2012)	
2062	Regazzetti C et al., <i>Transcriptional Analysis of Vitiligo Skin Reveals the Alteration of WNT Pathway: A Promising Target for Repigmenting Vitiligo Patients</i> , 135(12) J. INVEST. DERMATOL. 3105-14 (2015)	
2063	Stenn KS and Paus R, <i>Controls of hair follicle cycling</i> , 81(1) PHYSIOL. REV. 449-94 (2001)	
2064	Harries MJ et al., <i>Management of alopecia areata</i> , 341 BMJ. c3671 (2010)	
2065	Bertolini M et al., <i>Hair follicle immune privilege and its collapse in alopecia areata</i> , 29(8) EXP. DERMATOL. 703-25 (2020)	

Exhibit	Description	Served Not Filed
2066	Purwar R et al., <i>Resident memory T cells (T(RM)) are abundant in human lung: diversity, function, and antigen specificity</i> , 6(1) PLOS ONE. e16245 (2011)	
2067	Sanchez Rodriguez R et al., <i>Memory regulatory T cells reside in human skin</i> , 124(3) J. CLIN. INVEST. 1027-36 (2014)	
2068	Liu LY et al., <i>Tofacitinib for the treatment of severe alopecia areata and variants: A study of 90 patients</i> , 76(1) J. AM. ACAD. DERMATOL. 22-28 (2017)	
2069	Nilforoushzadeh MA et al., <i>Diphencyprone induced vitiligo: a case report</i> , 2012 CASE. REP. MED. 356236 (2012)	
2070	Liu LY et al., <i>Repigmentation in vitiligo using the Janus kinase inhibitor tofacitinib may require concomitant light exposure</i> , 77(4) J. AM. ACAD. DERMATOL. 675-82 (2017)	
2071	Blumberg RS et al., <i>Unraveling the autoimmune translational research process layer by layer</i> , 18(1) NAT. MED. 35-41 (2012)	
2072	van der Fits L et al., <i>Imiquimod-induced psoriasis-like skin inflammation in mice is mediated via the IL-23/IL-17 axis</i> , 182(9) J. IMMUNOL. 5836-45 (2009)	
2073	Braegelman C et al., <i>Targeted Therapies in Autoimmune Skin Diseases</i> , 142(3 Pt B) J. INVEST. DERMATOL. 969-75 (2022)	
2074	Abbas AK, <i>The Surprising Story of IL-2: From Experimental Models to Clinical Application</i> , 190(9) AM. J. PATHOL. 1776-81 (2020)	
2075	Chinen T, et al., <i>An essential role for the IL-2 receptor in Treg cell function</i> , 17(11) NAT. IMMUNOL. 1322-33 (2016)	
2076	van den Hoogen MWF and Hilbrands LF, <i>Use of monoclonal antibodies in renal transplantation</i> , 3(7) IMMUNOTHERAPY 871-80 (2011)	
2077	Grabstein KH et al., <i>Cloning of a T cell growth factor that interacts with the beta chain of the interleukin-2 receptor</i> , 264(5161) SCIENCE 965-68 (1994)	
2078	Budagian V et al., <i>IL-15/IL-15 receptor biology: a guided tour through an expanding universe</i> , 17(4) CYTOKINE GROWTH FACTOR REV. 259-80 (2006)	

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2079	Robinson TO and Schluns KS, <i>The potential and promise of IL-15 in immuno-oncogenic therapies</i> , 190 IMMUNOL. LETT. 159-68 (2017)	
2080	Chirifu M et al., <i>Crystal structure of the IL-15-IL-15Ralpha complex, a cytokine-receptor unit presented in trans</i> , 8(9) NAT. IMMUNOL. 1001-07 (2007)	
2081	Intentionally left blank.	
2082	Mishra A et al., <i>Molecular pathways: interleukin-15 signaling in health and in cancer</i> , 20(8) CLIN. CANCER RES. 2044-50 (2014)	
2083	Lu J et al., <i>Interleukin 15 promotes antigen-independent in vitro expansion and long-term survival of antitumor cytotoxic T lymphocytes</i> , 8(12) CLIN. CANCER RES. 3877-84 (2002)	
2084	Mitra S et al., <i>Interleukin-2 activity can be fine tuned with engineered receptor signaling clamps</i> , 42(5) IMMUNITY 826-38 (2015)	
2085	US Patent No. 10,301,384	
2086	US Patent No. 5,844,099	
2087	US Patent Pub. No. 2003/0013668	
2088	WO 2012/061536	
2089	Bernard J et al., <i>Identification of an interleukin-15alpha receptor-binding site on human interleukin-15</i> , 279(23) J. BIOL. CHEM. 313-22 (2004)	
2090	Nomeir AA et al., <i>Pharmacokinetics of SCH 56592, a new azole broad-spectrum antifungal agent, in mice, rats, rabbits, dogs, and cynomolgus monkeys</i> , 44(3) ANTIMICROB. AGENTS CHEMOTHER. 727-31 (2000)	
2091	Frankel WN et al., <i>Unraveling Genetic Modifiers in the Gria4 Mouse Model of Absence Epilepsy</i> , 10(7) PLOS GENET. e1004454 (2014)	
2092	Moy SS et al., <i>Mouse behavioral tasks relevant to autism: phenotypes of 10 inbred strains</i> , 176(1) BEHAV. BRAIN RES. 4-20 (2007)	
2093	Shi W et al., <i>Atherosclerosis in C3H/HeJ mice reconstituted with apolipoprotein E-null bone marrow</i> , 22(4) ARTERIOSCLER. THROMB. VASC. BIOL. 650-55 (2002)	

Exhibit	Description	Served Not Filed
2094	West DB et al., <i>Dietary obesity in nine inbred mouse strains</i> , 262(6 Pt 2) AM. J. PHYSIOL. R1025-32 (1992)	
2095	Regazzetti C et al., <i>Transcriptional Analysis of Vitiligo Skin Reveals the Alteration of WNT Pathway: A Promising Target for Repigmenting Vitiligo Patients</i> , 135(12) J. INVEST. DERMATOL. 3105-14 (2015)	
2096	Form 10Q, Forte Biosciences, Inc., (Mar. 31, 2023)	
2097	Email from Jad A. Mills, Counsel for Petitioner, to Jessica L. Roberts, Counsel for Patent Owner (Sept. 8, 2023, 16:31 EST)	
2098	Rashighi M and Harris JE, <i>Interfering with the IFN-γ/CXCL10 pathway to develop new targeted treatments for vitiligo</i> , 3(21) ANN. TRANSL. MED. 343 (2015)	
2099	Riding RL and Harris JE, <i>The Role of Memory CD8⁺ T Cells in Vitiligo</i> , 203(1) J. IMMUNOL. 11-19 (2019)	
2100	Grimes PE, <i>New insights and new therapies in vitiligo</i> , 293(6) JAMA 730-35 (2005)	
2101	Press Release, Incyte, <i>Incyte Announces Agreement to Acquire Medicxi-backed Villarís Therapeutics and Auremolimab (VM6), an Anti-IL-15Rβ Monoclonal Antibody</i> (Oct. 3, 2022)	
2102	WO 2017/046200	
2103	US Patent No. 7,858,081	
2104	US Patent No. 6,001,973	
2105	US Patent No. 5,795,966	
2106	US Patent Pub. No. 2017/0101452	
2107	US Patent Pub. No. 2006/0236411	
2108	US Patent Pub. No. 2006/0057680	
2109	US Patent Pub. No. 2005/0123542	
2110	US Patent No. 10,150,802	
2111	US Patent No. 7,579,439	
2112	US Patent No. 6,087,172	
2113	Mortier E et al., <i>Soluble interleukin-15 receptor alpha (IL-15R alpha)-sushi as a selective and potent agonist of IL-15 action through IL-15R beta/gamma. Hyperagonist IL-15 x IL-15R alpha fusion proteins</i> , 281(3) J. BIOL. CHEM. 1612-29 (2006) (EX2113)	

Exhibit	Description	Served Not Filed
2114	Ferrari-Lacraz S et al., <i>Targeting IL-15 Receptor-Bearing Cells with an Antagonist Mutant IL-15/Fc Protein Prevents Disease Development and Progression in Murine Collagen-Induced Arthritis</i> , 173(9) J. IMMUNOL. 5818-26 (2004) (EX2114)	
2115	Declaration of Kelley M. Hayes Greenhill	X
2116	Reserved	
2117	Reserved	
2118	Dr. Plott Deposition Transcript (Feb. 23, 2024)	

Respectfully submitted,

Dated: February 28, 2024

/Mark J. Feldstein/
Mark J. Feldstein, Reg. No. 46,693
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Garrett & Dunner, LLP

Lead Counsel for Patent Owner
University of Massachusetts

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing **Patent Owner's Updated Exhibit List** and **Exhibit 2118** were served electronically via email on February 28, 2024, in their entirety on the following:

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Petitioner has consented to electronic service.

Dated: February 28, 2024

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