PHARMACEUTICALS & BIOLOGICS

FANC: Method of Potentiating Melphalan in Multiple Myeloma by Targeting the	03B097
Fanconi Anemia/BRCA Resistance Pathway	
the Treatment of Cancer or Age-Related Macular Degeneration	03B114
RhoB: Gene Therapy with RhoB Variants to Suppress Cancer Growth	04B102
STAT3: Method of Enhancing Immune Response to Tumor Cells	04B112
MRP1: Compounds for Treating Multidrug Resistance	04MA001
Raf/Mek/P-Erk: Method of Inhibition of the Raf-1/Mek-1/Erk1/2 Pathway by the Beta-2-Adrenergic Receptor Agonist Pirbuterol	05B072
Shp2: Indoline Scaffold Protein Tyrosine Phosphatase Inhibitors	06A038
BCR-ABL: Method of Vorinostat Co-treatment Enhances Dasatanib Efficacy in CML	06B078N
Rho Kinase: Inhibitors as Novel Anti-Cancer Agents	06B134
Glut-1: Method of Using Glucose Transporter Inhibitor Antibodies	07B083
SHIP: Method of SHIP Inhibition for Treating Graft vs. Host Disease and	08MB010
Topoisomerase II: Method of Enhancing Topoisomerase II Inhibition by	08MB014
Inhibiting the Nuclear Export of Topoisomerase II Alpha	10MB078
Rho Kinase: Pyridylthiazole-Based Ureas As Inhibitors of Rho Associated Protein Kinase (ROCK)	09MA015
Aurora: Aurora A Kinase Inhibitors	09MA037
pH: Method of Inhibiting Metastasis with Systemic Non-volatile Buffers to	09MB048
Increase Intratumoral pH	40140401
MCI-1: Asymmetrical Marinopyrroles as Anti-Cancer Agents	10MA018N
Pancreatic Cancer	10MA019N
FT/GGT: Farnesyltransferase/ Geranylgeranyltransferase Dual Inhibitor	10MB048
Proteasome: Non-covalent and Reversible Proteasome Inhibitors with an Oxadiazole-isopropylamide Core	10MB083
HDAC6:Small Molecule Histone Deacetylase 6 Inhibitor with a Substituted Aryl	12MA030
McI-1/BcI-xI : Cyclic, Symmetrical and Asymmetrical Marinopyrroles as Anti-	
Cancer Agents	12MA035N
IRE-1: Novel Small Molecule Inhibitors of IRE-1 for Treatment of B-cell Cancer	12MB089
STAT3: STAT3 Dimerization Inhibitors	12MB098
Anti-infectives: Symmetrical Synthetic Marinopyrroles as anti-MRSA	12MD110
Therapeutics	
BRD4 JAK2: Novel BRD4/JAK2 Dual Inhibitors as Cancer Therapeutics	14MB069
HDAC, BTK: Method of Using HDAC Inhibitors, Alone or in Combination with BTK Inhibitors, for Treating Non-Hodgkin's Lymphoma (NHL)	14MB086N

FOR ADDITIONAL INFORMATION CONTACT

Haskell Adler PhD MBA CLP Sr. Licensing Manager, Registered Patent Agent <u>haskell.adler@moffitt.org</u> (813) 745-6596

PHARMACEUTICALS & BIOLOGICS

WEE1: Small Molecule WEE1 Inhibitor to Treat Cancer that Inhibits WEE1 Phosphorylation of H2B but not Cdc2	14MB092
Ras: Inhibitors of the Binding of GTP to Oncogenic Mutant K-Ras	15MA011
Ras/Raf: Stapled Peptides Designed to Inhibit the K-Ras/Raf Interaction	15MA012
Aurora/JAK2: Dual JAK2 and Aurora A Kinase Inhibitor for GVHD Prophylaxis	16MA005N
HDAC, BTK: Method of Using HDAC Inhibitors, Alone or in Combination with BTK Inhibitors, for Treating Chronic Lymphocytic Leukemia (CLL)	16MA023N
β-catenin/BCL-9: Small Molecule Inhibitors of the Interaction of β-catenin and BCL- 9	17MA014
XBP-1: Method of XBP-1 Inhibition for the Treatment of Acute GVHD and Solid Organ Rejection	17MB051
Ubiquitin Bispecific Antibody: Antibodies that Bring the E3 Ubiquitin Ligase into Close Proximity to Receptors to Induce the Receptor's Degradation	17MB056N
β-catenin/TCF: Small Molecule Inhibitors of the Interaction of β-catenin and T-cell Factor	18MA018N
β-catenin/TCF: Small Molecule Peptidomimetic Inhibitors of the Interaction of β-catenin and T-cell Factor	18MB076
IMMUNOTHERAPIES	
Vaccine Adjuvant: Flagellin-Based Adjuvant for Tumor Cell Vaccines that binds TLR5	04A028
Antibodies: MARCO Antibodies for Enhanced Dendritic Cell Vaccine Efficacy	07MB004
Vaccine: Vaccines Using Synthetic Peptide-Poly IC Complexes that Elicit T-cell Responses Comparable to Live Vaccination	11MA013
HDAC: Method of Using Histone Deacetylase as a Modulator of PDL1 Expression and Activity	14MA027N
HDAC6: Method of Using Histone Deacetylase 6 Inhibition for Enhancing T cell Function During Anti-Tumor Response and Tumor-Peptide Vaccination	14MA037N
TAG72-CD3: Bispecific T-Cell Engager for Targeted Cancer Immunotherapy	14MB072
Cancer Vaccine: Full-Length Variant Survivin Vaccine Potentiates Autologous Hematopoietic Stem Cell Transplantation in Multiple Myeloma	14MB098
TIM3 Ligand Trap: TIM-3-IgG4 Fusion Protein for the Treatment of Anemia in Low- or Intermediate (Int)-risk MDS Patients	16MA001N
TLR9: CAR-T Cell constructs (chimeric antigen receptors) that Recognize TLR9	16MA025
TLS: Method of Using Chitosan Hydrogels with Chemokine-Releasing Microparticles or Stromal Cells to Bioengineer Tertiary Lymphoid Structures to Enhance the Immune System for Cancer Therapy	16MA028N
aAPC: Artificial Antigen-Presenting Cells expressing CD3, CD28 and a Heparin-Binding Domain for Producing CAR-Ts	16MB049
aAPC: Artificial Antigen-Presenting Cells for Expanding TILs/MILs in Cancer Immunotherapy	16MB050

FOR ADDITIONAL INFORMATION CONTACT

Haskell Adler PhD MBA CLP Sr. Licensing Manager, Registered Patent Agent <u>haskell.adler@moffitt.org</u> (813) 745-6596

IMMUNOTHERAPIES

TAG72: CAR-T Cell constructs (chimeric antigen receptors) that Recognize TAG72	16MB057
IL-13R α 2 : CAR-T Cell constructs (chimeric antigen receptors) that Recognize IL-13R α 2	16MB069
CD3-CD28: Bispecific Antibody for the Generation of CAR-T cells for Cancer Immunotherapy	17MA007
TILs: Simple and Rapid Method for Culture of TILs from Melanoma Tumor Fragments or Core Needle Biopsies of Solid Tumors	17MA012
Inflammasome: Stapled Peptides NLRP3 Inflammasome Inhibitors to Neutralize Pyroptotic Cell Death Contributing to MDS Pathogenesis	17MB037N
TILs: Method to Increase TILs by Administering Fucose to a Patient	17MB048
CD83: CAR-T cell constructs (chimeric antigen receptors) that Recognize CD83 to prevent GVHD	18MA007
aAPC : Artificial Antigen-Presenting Cells with Heparin-Binding Domain and Protein L for Producing CAR-T Cells	18MA019N
TILs: TILs modified with CAR constructs result in CAR-TILs for Cancer Therapy	18MA033N
TILs: Method of Using a Demethylating Agent to Enhance STING Expression and TIL Anti- Tumor Activity in Melanoma	18MA034N
Inflammasome: Method of Using Small-molecule Pyrin-domain Targeted NLRP3 Inflammasome Inhibitors to Neutralize Pyroptotic Cell Death Contributing to MDS Pathogenesis	18MB044N
TLR9 Ligand Trap: TLR9-IgG4 Fusion Protein to Neutralize Innate Immune Activation and Chronic Inflammation Contributing to MDS Pathogenesis	18MB048N
Brain Mets: CAR-T Cell Constructs with Phage Display Derived Peptide Oligomers that Recognize Lung Cancer Brain Metastases	18MB059
Antibodies: Fully Human anti-PD1 Antibodies	18MB061
Antibodies: Fully Human anti-LAG3 Antibodies	18MB062N
TILs: Enhancing the anti-tumor immunity of TILs by inhibiting Sirt2	18MB078N
GPC3: Enhancing Carcinoma Infiltration by anti-GPC3 targeted CAR-T Cells by Co- expression of the Chemokine Receptor CX3CR1	19MA012
NKG2D-ligand: Enhancing Carcinoma Infiltration by NKG2D-ligand targeted CAR-T Cells by Co-expression of the Chemokine Receptor CX3CR1	19MA013N
aAPC: Artificial Antigen-Presenting Cells Expressing NKG2D Ligands for Producing anti- NKG2D CAR-T Cells	19MA022N
CD83: CAR-T cell constructs (chimeric antigen receptors) that Recognize CD83 to Treat AML and GVHD for Relapsed AML after Transplant	19MA024N
Bispecific T-Cell Engagers: B Cells Engineered to Express Bispecific T-Cell Engagers Result in Longer Half Lives	19MA029N
EGFR, MUC1: Bispecific CAR-T Cell constructs (chimeric antigen receptors) that Recognize EGFR and MUC1 for the Treatment of Lung Cancer	19MA033N
T-bet: T-bet Transcription Factor Armed CAR-T Cells Maintain Memory Phenotypes and Rescue CD4 Cells Leading to Increased Persistence	19MA035N

FOR ADDITIONAL INFORMATION CONTACT

Haskell Adler PhD MBA CLP Sr. Licensing Manager, Registered Patent Agent <u>haskell.adler@moffitt.org</u> (813) 745-6596

DIAGNOSTICS

Protein Diagnostic: Characterization of Quantum Dots for Ovarian Cancer Detection	04A064
Protein Signature: Discriminating Common Adenocarcinomas	05A014
Genetic Signature: Metastatic Melanoma Stage Identification	06B073
Plasma Protein Biomarker: Diagnosis of Ovarian Cancer	06B098
Protein Biomarker: Predicting Response to Immunosuppression in MDS	07A056
Genetic Signature: Predicting Tumor Aggressiveness	07B108
Protein Biomarker: Diagnostic Marker for AML and MPD	07B113
Genetic Signature: Malignancy Risk Signature to Predict High-Risk Normal Breast Tissues	08A016
Antibody Diagnostic: Monitoring Multiple Myeloma Progression and Recurrence	08MA005
Genetic Signature: Lymph Node Formation for Prognosis of Colorectal Cancer	09MA014
Protein Biomarker/Genetic Signature: Diagnostic for the Classification of Carcinomas of Unknown Primary Site (CUP)	10MA009
Genetic Signature: Predicting High Grade Glioma Outcomes Using Senescence Associated Genes	10MA013
Molecular Imaging Probe: Non-invasive Detection of Breast Cancer in Lymph Nodes	10MA024
Molecular Imaging Probe: Fluorescent and MRI Targeted Probes for the Melanocortin Receptor 1 on Melanomas, and Micelle Complexes for Drug Delivery	10MB069N
Genetic Signature: CREB Pathway Gene Signature to Determine which Ovarian Cancer Patients would have a Survival Benefit from Optimal Surgical Debulking	11MA006
Protein Diagnostic: Protein-Protein Interaction (PPI) Biomarkers	11MA014
Imaging: Digital Pathology Tool to Grade Breast Cancer Histological Images	11MA022
Molecular Imaging Probe: Surrogate Markers for Colon Adenoma and Adenocarcinoma	11MA026N
Genetic Signature: Method of Detecting MDS Using hTERT Activity	11MB061N
Molecular Imaging Probe: Intraoperative Detection of Pancreatic Cancer Using Targeted Fluorescent Probes	11MB064
Genetic Signature: Predicting Response to Cancer Immunotherapy	11MB069
Protein Signature: Method of Diagnosing Chronic Lymphocytic Leukemia	11MB072N
Protein Diagnostic: Mass Spectrometry Diagnostic for BRAF and Heat Shock Proteins	11MB087N
Genetic Signature: Five Gene Signature Predicts Overall and Recurrence-Free Survival in NSCLC	12MA023N

FOR ADDITIONAL INFORMATION CONTACT

Haskell Adler PhD MBA CLP Sr. Licensing Manager, Registered Patent Agent haskell.adler@moffitt.org (813) 745-6596

DIAGNOSTICS

Genetic Signature: O-glycan Pathway Gene Signature to Determine which Ovarian Cancer Patients would have a Survival Benefit from Optimal Surgical Debulking	12MA034
Genetic Signature: Determining Prostate Cancer Recurrence Using Angiogenesis Gene Polymorphisms	12MA045
Molecular Imaging Probe: Probes for Lung Cancer Intraoperative Guidance	12MA050N
Genetic Signature: E2F/Rb Pathway Signature to Predict Benefit from Adjuvant Chemo in NSCLC	12MA069
Molecular Imaging Probe: A Novel ¹⁸ F Scaffold for Preparing Targeted PET Imaging Probes	12MB104
Protein Diagnostic: Phosphorylated STAT3 Protein as a Biomarker of Graft Versus Host Disease	13MA002
Multiplex Diagnostic: RNA Sequencing and Mass Spectrometric Method for Detecting Minimal Residual Disease in Multiple Myeloma	13MA009
Genetic Signature: Predicting Recurrence and Benefit From Adjuvant Chemo in Colorectal Cancer	13MA036
Imaging: Decision Support Tool for Oncology Treatment that Analyzes Radiological Images	13MB047
Cell Imaging: Apparatus and Method for Selecting Cancer Treatment Regimens for Multiple Myeloma	13MB048
Molecular Imaging: Texture Features Low-Dose CT Images for Pulmonary Nodule Diagnosis	13MB054
Molecular Imaging : Novel Imaging Software Diagnostic to Determine Survival in Glioblastoma	13MB055
Molecular Imaging: PET Probes of Radiofluorinated Carboximidamides for IDO- Targeted Imaging	13MB056N
miRNA Diagnostic: Blood Based microRNA Assay to Detect Malignant Intraductal Papillary Mucinous Neoplasms (IPMNs)	13MB078
miRNA Diagnostic: Signature to Predict Progression of Barrett's Esophagus to Esophageal Dysplasia or Adenocarcinoma	13MB080
Protein Biomarker: Expression of WEE1 and PAXIP1 to Predict Respond to WEE1 Inhibitors	14MA001
Genetic Signature: Predicting Distant Metastasis in Stage I Lung Cancer Surgery Patients	14MA008
Genetic Signature: Microarray-based Gene Expression Profiling to Predict Tumor Sensitivity to Radiotherapy	14MA052N
Molecular Imaging : Monoacylated TLR2 Ligand Fluorescent Probe for Detection and Tumor Removal in Pancreatic Cancer Patients	15MA015
Diagnostic : Intracellular S100A9 Alone or NLRP3 Inflammasome Activation as MDS Biomarkers	15MA021N
Diagnostic : S100A9 Serum Concentration Levels Predict Lenalidomide Response Duration	15MA031N
Molecular Imaging Probe: In vivo Positron Emission Tomography-Based Perfusion/Blood Pool Imaging Using Labeled Erythrocytes	15MB042N

FOR ADDITIONAL INFORMATION CONTACT

Haskell Adler PhD MBA CLP Sr. Licensing Manager, Registered Patent Agent <u>haskell.adler@moffitt.org</u> (813) 745-6596

DIAGNOSTICS

Protein Biomarker : Diagnostic for Progression of MDS to AML Using PD-1 or PD- L1 Expression	15MB065
Genetic Signature: Distinguishing Primary Lung Carcinoma from Metastatic Head & Neck Carcinoma	16MB040
Protein Biomarker: Measuring MRE11 in Muscle-Invasive Bladder Cancer to Predict whether Cystectomy (bladder removal) would has a Better Outcome than Bladder-sparing Therapy with Chemoradiation	16MB041
Protein Biomarker: Predicting Restoration of Sensitivity to Erythropoietin in MDS Patients by Lenalidomide	16MB042
Molecular Imaging Probe: Novel IDO1-Targeting Cancer Diagnostic PET Imaging Agent	16MB044
miRNA Diagnostic: Signature to Predict Progression of Barrett's Esophagus to Esophageal Dysplasia or Adenocarcinoma	16MB066
miRNA Diagnostic: miRNA Signature for Non-invasive Early Detection of Malignancy in IPMN	17MA001
Molecular Imaging: Predicting Response to Adjuvant Ipilimumab Treatment in Melanoma Using a Novel Algorithm to Analyze Nitric Oxide Levels in Peripheral Blood Immune Cells	17MA002N
Genetic Biomarker: PTEN Loss of Expression as a Biomarker Response to GGTI- 2418 Treatment	17MA025
Genetic Signature: Distinguishing Urothelial Carcinoma from Squamous Cell Carcinoma (Primary Lung Carcinoma and Metastatic Head & Neck Carcinoma)	17MB044
Mathematical Modeling: Methods for the Treatment of Prostate Cancer Using Intermittent Adaptive Therapy	18MB055N
Mathematical Modeling: Predict Patient-Specific Radiotherapy Responses Using a Proliferation Saturation Index in an Adaptive Bayesian Approach	18MB083N
Mathematical Modeling: Novel algorithm that measures obesity related risks of surgery using segmentation of adiposity on abdominal CT scans	19MA001N

DEVICES, TOOLS & SOFTWARE

Med Device: Objective Imaging Reference Standards	07A049
Med Device: Ventana Inline Dispenser Float Mechanism	09MB053
Med Device: Handheld Radioisotope Identification Device (RIID)	10MB054
Med Device: Muscle Stapler	10MB065N
Med Device: Pump-assisted High Flow Rate Isolated Limb Infusion for Regional Cancer Treatment	11MA017N
Med Device: Minimally Invasive Spinal Fusion Using a Transdiscal Screw System	11MA021
Med Device: Improved Endotracheal Tube to Diagnose Airway Edema (Swelling)	11MA052

FOR ADDITIONAL INFORMATION CONTACT

Haskell Adler PhD MBA CLP Sr. Licensing Manager, Registered Patent Agent <u>haskell.adler@moffitt.org</u> (813) 745-6596

DEVICES, TOOLS & SOFTWARE

Med Device: Vascular Stent for Anastomosis	12MA054N
Med Device: Arterial Line Catheter Modification	12MA067
Med Device: Improved Enteral Feeding Tube and Retention Disc to Reduce Dislodgement & Infection	13MA001
Med Device: Improved Orogastric Tube Guide	13MA030
Med Device: Expandable Intervertebral Cage for Spinal Fusion	14MB067N
Med Device: Improved Pigtail Drainage Catheter for Percutaneous Fluid Aspiration	15MA034
Med Device: IV Catheter Clamp to Eliminate Blood Leaks that Lead to Exposure to Blood-borne Pathogens in the Operating Room	15MB067
Med Device: Safety Catheter with Needle and Blood Exposure Prevention Systems	15MB064
Med Device: Novel Endotracheal Tube Intubating Stylet	16MA021
Med Device: Anesthesia Intra-oral Monitoring System (AIMS) (Replacement for the Nasal Cannula)	16MB046
Med Device: Biopsy Needle with Internal Ridges that Lead to a Higher Tissue Specimen Retrieval Rate	18MB047
Med Device: Snowflake shaped drug infusion device for Brain Cancer	19MA010N
Research Tool: Novel Electroporation Buffer Formulation for Enhanced Efficiency and Viability	05B141
Software : Improved Detection of Lung Function and Management of Lung Cancer Radio Therapy	10MA037N
Software: Method for Improving the Accuracy of Charged Particle Beam Radiotherapy	12MB072
Software : Automated Technique for Generating BIRADS Scores from Mammograms	13MA025
Software: BMT Research Analysis Information Network (BRAIN) Automates Submission of AGNIS/CIBMTR Forms	13MA053
Software: Decision Support Tool for Oncology Treatment using Mathematical Simulations	13MB073
Software : Real-time Visualization Software Enables Surgeons to "see-through" the patient and remove tumors more effectively	14MA004N
Software: A Quantitative Framework to Identify Radiation Targets for Cancer Treatment that Synergize with Immunotherapy (Abscopal Effect)	14MA022
Software: Negative Information Storage Model for Genomic Data	15MA033
Software: Deep Neural Network to Locate and Label Brain Tumors Enables Surgeons to Remove Tumors More Effectively	19MA019
Copyright: Energize mBC: Web-based Program to Treat Fatigue in Metastatic Breast Cancer Patients	17MC003

FOR ADDITIONAL INFORMATION CONTACT

Haskell Adler PhD MBA CLP Sr. Licensing Manager, Registered Patent Agent <u>haskell.adler@moffitt.org</u> (813) 745-6596