



Pfizer Pipeline

October 27, 2020

Breakthroughs that
change patients' lives

Disclaimer

- As some programs are still confidential, some candidates may not be identified in this list. In these materials, Pfizer discloses Mechanism of Action (MOA) information for some candidates in Phase 1 and for all candidates from Phase 2 through regulatory approval. With a view to expanding the transparency of our pipeline, Pfizer is including new indications or enhancements, which target unmet medical need or represent significant commercial opportunities. The information contained on these pages is correct as of October 27, 2020.
- Visit [Pfizer.com/pipeline](https://www.pfizer.com/pipeline), Pfizer's online database where you can learn more about our portfolio of new medicines and find out more about our Research and Development efforts around the world.

Table of Contents

Pfizer Pipeline Snapshot	4
Inflammation and Immunology	5-6
Internal Medicine	7
Oncology	8-10
Rare Diseases	11
Vaccines	12
Hospital (Anti-Infectives)	13
Programs Discontinued Since Last Update	14
Backup: Regulatory Designation Definitions	15-16

Pfizer Pipeline Snapshot



Pfizer Pipeline Snapshot as of October 27, 2020

Pipeline represents progress of R&D programs as of October 27, 2020

- 11 programs advanced or are new
- 7 programs discontinued since last update
- Included are 58 NMEs, 33 additional indications, plus 1 biosimilar



Pfizer Pipeline Snapshot as of July 28, 2020

Pipeline represents progress of R&D programs as of July 28, 2020

- 8 programs advanced or are new
- 1 program discontinued since last update
- Included are 54 NMEs, 35 additional indications, plus 1 biosimilar

Recent Approvals

- BAVENCIO® (avelumab) for the maintenance treatment of patients with locally advanced or metastatic urothelial carcinoma that has not progressed with first-line platinum-containing chemotherapy (U.S.)
- BRAFTOV® (encorafenib) in combination with Erbitux®⁽¹⁾ (cetuximab) for the treatment of adult patients with BRAF^{V600E}-mutant metastatic colorectal cancer who have received prior systemic therapy (E.U.)
- DAURISMO™ (glasdegib), a Hedgehog pathway inhibitor, in combination with low-dose cytarabine (LDAC), a type of chemotherapy, for the treatment of newly diagnosed (de novo or secondary) acute myeloid leukemia (AML) in adult patients who are not candidates for standard chemotherapy (E.U.)
- NYVEPRIA™ (pegfilgrastim-apgf), a biosimilar to Neulasta®⁽²⁾ (pegfilgrastim) is indicated to decrease the incidence of infection, as manifested by febrile neutropenia, in patients with non-myeloid malignancies receiving myelosuppressive anti-cancer drugs associated with a clinically significant incidence of febrile neutropenia (U.S.)

Inflammation and Immunology (1 of 2)



Compound Name	Mechanism of Action	Indication	Phase of Development	Submission Type
► abrocitinib (PF-04965842)	JAK1 Inhibitor	Atopic Dermatitis (PRIORITY REVIEW, BREAKTHROUGH – U.S., E.U.)	Registration	New Molecular Entity
► Xeljanz (tofacitinib)	JAK Inhibitor	Ankylosing Spondylitis (U.S.)	Registration	Product Enhancement
Xeljanz (tofacitinib)	JAK Inhibitor	Ankylosing Spondylitis	Phase 3	Product Enhancement
ritlecitinib (PF-06651600)	JAK3/TEC Inhibitor	Alopecia Areata (BREAKTHROUGH)	Phase 3	New Molecular Entity
ritlecitinib (PF-06651600)	JAK3/TEC Inhibitor	Rheumatoid Arthritis – Monotherapy	Phase 2	Product Enhancement
Dekavil	IL-10	Rheumatoid Arthritis (Biologic)	Phase 2	New Molecular Entity
Dekavil	IL-10	Ulcerative Colitis (Biologic)	Phase 2	Product Enhancement
PF-06480605	TNFSF15 Blocker	Ulcerative Colitis (Biologic)	Phase 2	New Molecular Entity
► PF-06650833 + ritlecitinib + Xeljanz (tofacitinib)	IRAK4 Inhibitor JAK3/TEC Inhibitor JAK Inhibitor	Rheumatoid Arthritis	Phase 2	New Molecular Entity
PF-06650833	IRAK4 Inhibitor			
brepocitinib (PF-06700841)	TYK2/JAK1 Inhibitor	Hidradenitis Suppurativa	Phase 2	Product Enhancement
PF-06826647	TYK2 Inhibitor			
ritlecitinib (PF-06651600)	JAK3/TEC Inhibitor	Ulcerative Colitis	Phase 2	New Molecular Entity
brepocitinib (PF-06700841)	TYK2/JAK1 Inhibitor			
ritlecitinib (PF-06651600)	JAK3/TEC Inhibitor	Crohn's Disease	Phase 2	Product Enhancement
brepocitinib (PF-06700841)	TYK2/JAK1 Inhibitor			
ritlecitinib (PF-06651600)	JAK3/TEC Inhibitor	Vitiligo	Phase 2	Product Enhancement
brepocitinib (PF-06700841)	TYK2/JAK1 Inhibitor			

► Indicates that the project is either new or has progressed in phase since the previous portfolio update of Pfizer.com

• Regulatory Designations – See Definitions in Backup

Inflammation and Immunology (2 of 2)

Compound Name	Mechanism of Action	Indication	Phase of Development	Submission Type
brepocitinib (PF-06700841)	TYK2/JAK1 Inhibitor	Psoriatic Arthritis	Phase 2	Product Enhancement
Eucrisa (crisaborole)	PDE4 Inhibitor	Stasis Dermatitis	Phase 2	Product Enhancement
brepocitinib (PF-06700841)	TYK2/JAK1 Inhibitor	Alopecia Areata	Phase 2	Product Enhancement
brepocitinib (PF-06700841)	TYK2/JAK1 Inhibitor	Lupus	Phase 2	Product Enhancement
brepocitinib (PF-06700841)	Topical TYK2/JAK1 Inhibitor	Atopic Dermatitis	Phase 2	New Molecular Entity
brepocitinib (PF-06700841)	Topical TYK2/JAK1 Inhibitor	Psoriasis	Phase 2	New Molecular Entity
PF-06823859	interferon, beta 1, fibroblast (IFNB1) Blocker	Inflammatory Disorders (Biologic)	Phase 2	New Molecular Entity
PF-06826647	TYK2 Inhibitor	Psoriasis	Phase 2	New Molecular Entity
PF-06826647	TYK2 Inhibitor	Ulcerative Colitis	Phase 1	Product Enhancement
PF-06835375	Chemokine Inhibitor	Lupus (Biologic)	Phase 1	New Molecular Entity
PF-07038124	Topical PDE4 Inhibitor	Atopic Dermatitis	Phase 1	New Molecular Entity
► PF-07054894	CCR6 Antagonist	Inflammatory Bowel Disease	Phase 1	New Molecular Entity

► Indicates that the project is either new or has progressed in phase since the previous portfolio update of Pfizer.com

Internal Medicine



Compound Name	Mechanism of Action	Indication	Phase of Development	Submission Type
tanezumab	Nerve Growth Factor Inhibitor	Chronic Pain due to Moderate-to-Severe Osteoarthritis (OA) (Biologic) (U.S., E.U.)	Registration	New Molecular Entity
tanezumab	Nerve Growth Factor Inhibitor	Cancer Pain (Biologic)	Phase 3	Product Enhancement
PF-06835919	Ketohexokinase (KHK) Inhibitor	Non-Alcoholic Steatohepatitis (NASH) with Liver Fibrosis	Phase 2	New Molecular Entity
PF-05221304 + PF-06865571	Acetyl CoA-Carboxylase (ACC) Inhibitor; Diacylglycerol O-Acyltransferase 2 (DGAT2) Inhibitor	Combination for Non-Alcoholic Steatohepatitis (NASH) with Liver Fibrosis	Phase 2	New Molecular Entity
PF-06865571	Diacylglycerol O-Acyltransferase 2 (DGAT2) Inhibitor	Monotherapy for Non-Alcoholic Steatohepatitis (NASH) with Liver Fibrosis	Phase 2	New Molecular Entity
vupanorsen (PF-07285557)	Angiopoietin Like 3 (ANGPTL3)	Cardiovascular Risk Reduction, Severe Hypertriglyceridemia	Phase 2	New Molecular Entity
▶ danuglipron (PF-06882961)	Glucagon-like peptide 1 receptor (GLP-1R) Agonist	Diabetes Mellitus-Type 2	Phase 2	New Molecular Entity
danuglipron (PF-06882961)	Glucagon-like peptide 1 receptor (GLP-1R) Agonist	Obesity	Phase 1	Product Enhancement
PF-06946860	Growth Differentiation Factor 15 (GDF15) Monoclonal Antibody	Cachexia (Biologic)	Phase 1	New Molecular Entity
PF-06842874	CDK 4,6 Inhibitor	Pulmonary Arterial Hypertension	Phase 1	New Molecular Entity
PF-07081532	Glucagon-like peptide 1 receptor (GLP-1R) Agonist	Diabetes Mellitus-Type 2 and Obesity	Phase 1	New Molecular Entity

• Regulatory Designations— See Definitions in Backup

▶ Indicates that the project is either new or has progressed in phase since the previous portfolio update of Pfizer.com

Oncology (1 of 3)



Compound Name	Mechanism of Action	Indication	Phase of Development	Submission Type
PF-06881894, a potential biosimilar to Neulasta® (pegfilgrastim)	Human Granulocyte Colony Stimulating Factor	Neutropenia in patients undergoing cancer chemotherapy (Biosimilar) (E.U.)	Registration	Biosimilar
Xtandi (enzalutamide)	Androgen receptor inhibitor	Metastatic Castration Sensitive Prostate Cancer (E.U.)	Registration	Product Enhancement
Bavencio (avelumab)	Anti PD-L1	1 st Line Urothelial Cancer (Biologic) (E.U.)	Registration	Product Enhancement
Bavencio (avelumab)	Anti PD-L1	1 st Line Non-Small Cell Lung Cancer (Biologic)	Phase 3	Product Enhancement
Ibrance (palbociclib)	CDK 4,6 kinase inhibitor	ER+/HER2+ Metastatic Breast Cancer	Phase 3	Product Enhancement
sasanlimab (PF-06801591) + Bacillus Calmette-Guerin (BCG)	Anti-PD-1	Non-Muscle-Invasive Bladder Cancer (Biologic)	Phase 3	New Molecular Entity
Lorbrena (lorlatinib)	ALK inhibitor	1 st Line ALK Non-Small Cell Lung Cancer (ORPHAN - U.S.)	Phase 3	Product Enhancement
Talzenna (talazoparib)	PARP inhibitor	Combo w/ Xtandi (enzalutamide) for 1 st Line Metastatic Castration-Resistant Prostate Cancer	Phase 3	Product Enhancement
Xtandi (enzalutamide)	Androgen receptor inhibitor	Non-metastatic High-Risk Castration Sensitive Prostate Cancer	Phase 3	Product Enhancement

- Regulatory Designations– See Definitions in Backup
- Neulasta® is a registered U.S. trademark of Amgen Inc.

Oncology (2 of 3)

Compound Name	Mechanism of Action	Indication	Phase of Development	Submission Type
Bavencio (avelumab)	Anti PD-L1	1 st Line Merkel Cell Carcinoma (Biologic)	Phase 2	Product Enhancement
Bavencio (avelumab)	Anti PD-L1	Combo w/CMP-001 for Head and Neck Cancer	Phase 2	Product Enhancement
Bavencio (avelumab)	Anti PD-L1	Combo w/Talzenna (talazoparib) for Locally Advanced (Primary or Recurrent) or Metastatic Solid Tumors (Biologic)	Phase 2	Product Enhancement
Bavencio (avelumab)	Anti PD-L1	Combo w/Talzenna (talazoparib) for Solid Tumors with a BRCA or ATM defect (Biologic)	Phase 2	Product Enhancement
Braftovi (encorafenib) + Mektovi (binimetinib)	<i>BRAF</i> kinase inhibitor and MEK inhibitor	<i>BRAF</i> -mutant Metastatic Melanoma Brain Metastasis (ORPHAN - U.S.)	Phase 2	Product Enhancement
Braftovi (encorafenib) + Mektovi (binimetinib) + Erbitux® (cetuximab)	<i>BRAF</i> kinase inhibitor and MEK inhibitor	1 st line <i>BRAF</i> -mutant Metastatic Colorectal Cancer	Phase 2	Product Enhancement
Braftovi (encorafenib) + Mektovi (binimetinib)	<i>BRAF</i> kinase inhibitor and MEK inhibitor	1 st line and 2 nd line <i>BRAF</i> -mutant Metastatic Non-Small Cell Lung Cancer	Phase 2	Product Enhancement
Talzenna (talazoparib)	PARP inhibitor	2 nd Line Metastatic Castration-Resistant Prostate Cancer	Phase 2	Product Enhancement
Talzenna (talazoparib)	PARP inhibitor	Germline BRCA Mutated Locally Advanced Triple Negative Breast Cancer	Phase 2	Product Enhancement

- Regulatory Designations— See Definitions in Backup
- Erbitux® is a registered trademark of ImClone LLC

Oncology (3 of 3)

Compound Name	Mechanism of Action	Indication	Phase of Development	Submission Type
Bavencio (avelumab)	Anti PD-L1	Combo w/Talzenna (talazoparib) and binimetinib for Solid Tumors (Biologic)	Phase 1	Product Enhancement
PF-05082566	CD137 Agonist	Combo w/Kite Pharma's Yescarta® (axicabtagene ciloleucel) for Cancer (Biologic)	Phase 1	New Molecular Entity
PF-06647020	protein tyrosine kinase 7 (PTK7) Targeted Cytotoxicity	Cancer (Biologic)	Phase 1	New Molecular Entity
PF-06804103	HER2 Antibody Drug Conjugate	Cancer (Biologic)	Phase 1	New Molecular Entity
PF-06821497	EZH2 Inhibitor	Cancer	Phase 1	New Molecular Entity
PF-06863135	BCMA-CD3 Bispecific Antibody	Multiple Myeloma (Biologic)	Phase 1	New Molecular Entity
PF-06873600	CDK 2,4,6 Inhibitor	Breast Cancer Metastatic	Phase 1	New Molecular Entity
PF-06952229	transforming growth factor, beta receptor 1 (TGFB1) Inhibitor	Cancer	Phase 1	New Molecular Entity
PF-06939999	protein arginine methyltransferase 5 (PRMT5) Inhibitor	Solid Tumors	Phase 1	New Molecular Entity
PF-07062119	GUCY2c CD3 Bispecific Antibody	Solid Tumors (Biologic)	Phase 1	New Molecular Entity
PF-06940434	Integrin alpha-V/beta-8 Antagonist	Solid Tumors (Biologic)	Phase 1	New Molecular Entity
▶ PF-07220060	CDK4 Inhibitor	Breast Cancer Metastatic	Phase 1	New Molecular Entity
▶ PF-07265807	AXL/MERTK Inhibitor	Solid Tumors	Phase 1	New Molecular Entity
▶ PF-07104091	CDK2 Inhibitor	Breast Cancer Metastatic	Phase 1	New Molecular Entity
PF-06936308	Therapeutic Vaccine	Multiple Cancers	Phase 1	New Molecular Entity

▶ Indicates that the project is either new or has progressed in phase since the previous portfolio update of Pfizer.com

- Yescarta® is a registered U.S. trademark of Kite Pharma, Inc.

Rare Diseases



Compound Name	Mechanism of Action	Indication	Phase of Development	Submission Type
PF-07265803	p38 Mitogen-Activated Protein Kinase Antagonist	Dilated Cardiomyopathy due To Lamin A/C Gene Mutation	Phase 3	New Molecular Entity
fidanacogene elaparvec (PF-06838435)	Gene Therapy, coagulation factor IX (F9)	Hemophilia (Biologic) (BREAKTHROUGH, ORPHAN - U.S., E.U., PRIME - E.U.)	Phase 3	New Molecular Entity
► giroctocogene fitelparvec (PF-07055480)	Gene Therapy, coagulation factor VIII (F8)	Hemophilia (Biologic) (RMAT, FAST TRACK, ORPHAN - U.S.; ORPHAN – E.U.)	Phase 3	New Molecular Entity
somatrogon (PF-06836922)	Human Growth Hormone Agonist	Pediatric Growth Hormone Deficiency (Biologic) (ORPHAN - U.S., E.U.)	Phase 3	New Molecular Entity
somatrogon (PF-06836922)	Human Growth Hormone Agonist	Adult Growth Hormone Deficiency (Biologic) (ORPHAN - U.S., E.U.)	Phase 3	Product Enhancement
PF-06730512	SLIT2 antagonist	Focal Segmental Glomerulosclerosis (FSGS) (Biologic)	Phase 2	New Molecular Entity
marstacimab (PF-06741086)	Tissue Factor Pathway Inhibitor (TFPI)	Hemophilia (Biologic) (FAST TRACK – U.S.; ORPHAN - U.S., E.U.)	Phase 2	New Molecular Entity
PF-06755347	Immunomodulation	Chronic Inflammatory Demyelination Polyneuropathy	Phase 1	New Molecular Entity
PF-06939926	Gene Therapy, minidystrophin	Duchenne Muscular Dystrophy (Biologic) (FAST TRACK – U.S.; ORPHAN - U.S., E.U.)	Phase 1	New Molecular Entity
recifercept	Soluble recombinant human fibroblast growth factor receptor 3 (FGFR3) decoy	Achondroplasia (Biologic)	Phase 1	New Molecular Entity
PF-07209326	E-Selectin antagonist	Sickle Cell Disease (Biologic)	Phase 1	New Molecular Entity
► PF-07059013	Hemoglobin, Beta (HBB) Modulator	Sickle Cell Anemia	Phase 1	New Molecular Entity

► Indicates that the project is either new or has progressed in phase since the previous portfolio update of Pfizer.com

• Regulatory Designations – See Definitions in Backup

Vaccines



Compound Name	Mechanism of Action	Indication	Phase of Development	Submission Type
PF-06425090	Prophylactic Vaccine	Primary <i>clostridioides difficile</i> infection (FAST TRACK)	Phase 3	New Molecular Entity
PF-06482077	Prophylactic Vaccine	Invasive and Non-Invasive Pneumococcal infections (adult) (BREAKTHROUGH, FAST TRACK)	Phase 3	New Molecular Entity
PF-06482077	Prophylactic Vaccine	Invasive and Non-Invasive Pneumococcal infections (pediatric) (BREAKTHROUGH, FAST TRACK)	Phase 3	Product Enhancement
PF-06928316	Prophylactic Vaccine	Respiratory Syncytial Virus Infection (maternal) (FAST TRACK)	Phase 3	New Molecular Entity
PF-06886992	Prophylactic Vaccine	Serogroups ABCWY Meningococcal Infections (adolescent and young adults)	Phase 3	New Molecular Entity
PF-07302048 (BNT162)	Prophylactic mRNA Vaccine	COVID-19 Infection (in partnership with BioNTech) (FAST TRACK)	Phase 3 ¹	New Molecular Entity
PF-06842433	Prophylactic Vaccine	Invasive and Non-Invasive Pneumococcal infections (infants and children)	Phase 2	New Molecular Entity
PF-06760805	Prophylactic Vaccine	Invasive Group B Streptococcus Infection (maternal)	Phase 2	New Molecular Entity
PF-07307405	Prophylactic Vaccine	Lyme disease	Phase 2	New Molecular Entity

1. Pivotal Phase 2/3 global study
 • Regulatory Designations– See Definitions in Backup

Hospital (Anti-Infectives)



Compound Name	Mechanism of Action	Indication	Phase of Development	Submission Type
aztreonam-avibactam (PF-06947387)	Beta Lactam/Beta Lactamase Inhibitor	Treatment of infections caused by Gram-negative bacteria for which there are limited or no treatment options	Phase 3	New Molecular Entity
▶ PF-07304814	SARS-CoV-2 3CL protease inhibitor	COVID-19 Infection	Phase 1	New Molecular Entity

▶ Indicates that the project is either new or has progressed in phase since the previous portfolio update of Pfizer.com

Programs Discontinued from Development since July 28, 2020

Compound Name	Mechanism of Action	Indication	Phase of Development	Submission Type
Ibrance (palbociclib)	CDK 4,6 kinase inhibitor	High Risk Early Breast Cancer	Phase 3	Product Enhancement
Daurismo (glasdegib)	SMO (smoothened) antagonist	Combo w/cytarabine and daunorubicin in Acute Myeloid Leukemia (ORPHAN - U.S., E.U.)	Phase 3	Product Enhancement
PF-06650833	IRAK4 Inhibitor	Rheumatoid Arthritis - Monotherapy	Phase 2	New Molecular Entity
PF-05221304	Acetyl CoA-Carboxylase (ACC) Inhibitor	Non-Alcoholic Steatohepatitis (NASH) with Liver Fibrosis (FAST TRACK) - Monotherapy	Phase 2	New Molecular Entity
Daurismo (glasdegib)	SMO (smoothened) antagonist	Myelodysplastic Syndrome	Phase 2	Product Enhancement
PF-06753512	Therapeutic Vaccine	Prostate Cancer	Phase 1	New Molecular Entity
Bavencio (avelumab)	Anti PD-L1	Cancer (Biologic)	Phase 1	Product Enhancement



Back-up

Regulatory Designations

- **Fast Track** (U.S.) is a designation available to a product if it is intended, whether alone or in combination with one or more other drugs, for the treatment of a serious or life-threatening disease or condition, and it demonstrates the potential to address unmet medical needs for such a disease or condition. This designation is intended to facilitate development and expedite review of drugs to treat serious and life-threatening conditions so that an approved product can reach the market expeditiously. More information about the qualifying criteria and features of the Fast Track program can be found on the FDA's website.
- **Breakthrough Designation** (U.S.) may be granted to a drug (alone or in combination with 1 or more other drugs) intended to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. A drug that receives breakthrough designation is eligible for all fast track designation features and an FDA commitment to work closely with the sponsor to ensure an efficient drug development program. More information about the qualifying criteria and features of the Breakthrough program can be found on the FDA's website.
- **Orphan Drug** (U.S.) - Orphan drug status may be granted to drugs and biologics that are intended for the diagnosis, prevention, or treatment of rare diseases/disorders that affect fewer than 200,000 people in the U.S., or that affect more than 200,000 persons but where it is unlikely that expected sales of the product would cover the sponsor's investment in its development. More information about the qualifying criteria, features, and incentives involved in an orphan drug designation can be found on the FDA's website.
- **Orphan Drug** (E.U.) - Orphan drug status may be granted to drugs and biologics that are intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting no more than 5 in 10,000 persons in the European Union at the time of submission of the designation application, or that affect more than 5 in 10,000 persons but where it is unlikely that expected sales of the product would cover the investment in its development. More information about the qualifying criteria, features, and incentives involved in an orphan drug designation can be found on the EMA's website.
- A U.S. drug application will receive a **priority review designation** if it is for a drug that treats a serious condition and, if approved, would provide a significant improvement in safety or effectiveness. A priority designation is intended to direct overall attention and resources to the evaluation of such applications. A priority review designation means that FDA's goal is to take action on the marketing application within 6 months of receipt (compared with 10 months under standard review). More information about the qualifying criteria and features of a priority review designation can be found on the FDA's website.
- **PRIME** (E.U.) - The PRIME scheme is applicable to products under development which are innovative and yet to be placed on the EU market. The scheme aims to support medicinal products of major public health interest and in particular from the viewpoint of therapeutic innovation. Medicines eligible for PRIME must address an unmet medical need, i.e. for which there exists no satisfactory method of diagnosis, prevention or treatment in the Community or, if such a method exists, in relation to which the medicinal product concerned will be of major therapeutic advantage to those affected. A product eligible for PRIME should demonstrate the potential to address, to a significant extent, the unmet medical need, for example by introducing new methods of therapy or improving existing ones. Data available to support the request for eligibility should support the claim to address the unmet medical need through a clinically meaningful improvement of efficacy, such as having an impact on the prevention, onset or duration of the condition, or improving the morbidity or mortality of the disease. EMA will provide early and enhanced support to optimize the development of eligible medicines. Products granted PRIME support are anticipated to benefit from the Accelerated Assessment procedure. More information about the qualifying criteria and features of PRIME and Accelerated Assessment can be found on the EMA's website.
- **Regenerative Medicine Advanced Therapy (RMAT)** (U.S.) is a designation that is granted to regenerative medicine therapies intended to treat, modify, reverse, or cure a serious condition, for which preliminary clinical evidence indicates that the medicine has the potential to address an unmet medical need. The RMAT designation includes all the benefits of the fast track and breakthrough therapy designation programs, including early interactions with FDA.