

Drug/Medical Device Report

Amgen, Inc. (AMGN)

1. Abstract

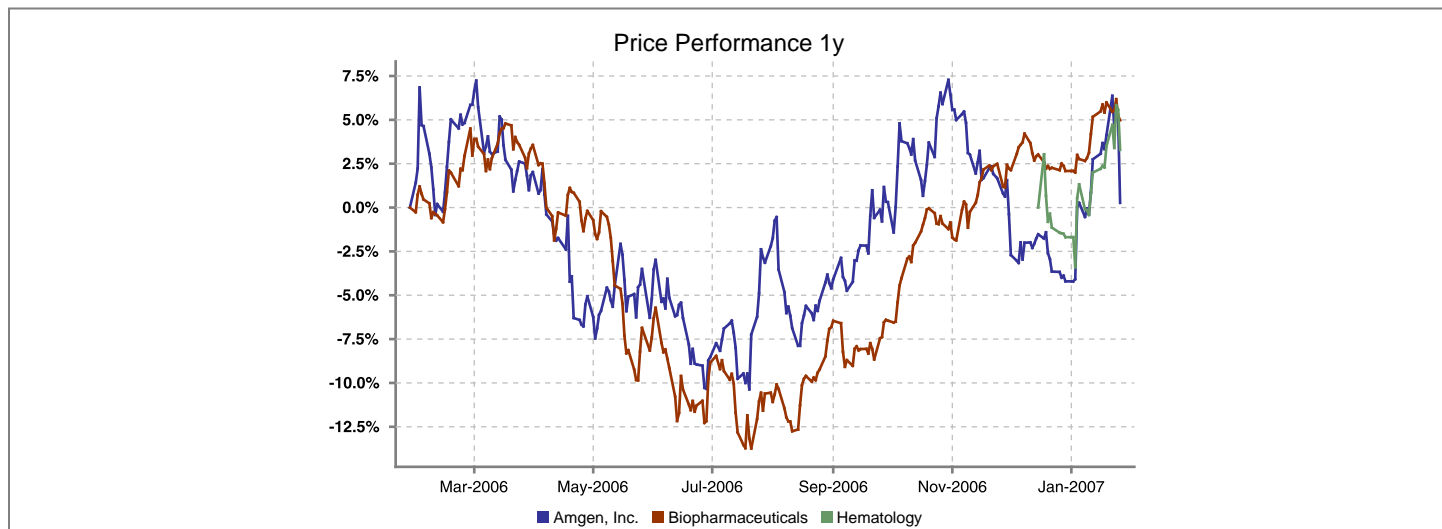
This report examines the Drug/Medical Device pipeline of Amgen, Inc. (AMGN), detailing each drug/device's indication, clinical trial status, and mechanism of action. Furthermore, this report identifies the Focus Sector of Amgen, Inc. (AMGN), and analyzes its pipeline and performance against the Focus Sector to which it belongs. In summary, this Drug/Medical Device Report makes available 3 key pieces of data that help determine the performance and risk of Biotech, Pharmaceutical and Medical Device companies: (1) product/candidate pipeline, (2) product/candidate clinical trial status, and (3) product/candidate pipeline diversification.

2. Lines of Business Summary

- Amgen, Inc. (AMGN) ranks 9 by market cap among the 326 companies focused in *Healthcare > Biopharmaceuticals and ranks 12 among all 437 companies participating in Biopharmaceuticals.
- Amgen, Inc. (AMGN) has a Drug pipeline that is diversified across 14 of 21 disease sectors within Biopharmaceuticals.

AMGN: Product Hierarchy Participation	Focus	AMGN Products by Sector	Companies	Focused Companies
I *Healthcare	P	27	991	865
■ Biopharmaceuticals	P	27	437	326
◆ Cardiovascular System	-	1	159	16
◆ Dermatology	-	1	95	6
◆ Digestive System	-	1	152	3
◆ Endocrinology/Metabolism	-	2	142	10
◆ Hematology	F	6	93	3
◆ Immunology	-	7	193	10
◆ Musculoskeletal System	-	3	125	3
◆ Oncology	-	8	232	77
◆ Pain Management	-	2	119	8
◆ Respiratory System	-	1	114	6
◆ Surgery	-	0	70	3
◆ Transplantation	-	1	33	1
◆ Urology	-	3	92	4
◆ Weight Management	-	1	43	0

3. Sector Performance



Name	Ticker	Last Price	Daily Return %	1 Month Return %	3 Month Return %	1 Year Return %	YTD Return %
Amgen, Inc.	AMGN	71.50	-4.48%	4.09%	-5.90%	-0.56%	4.67%
Biopharmaceuticals	^BPHRM	431.24	-0.26%	2.78%	5.49%	5.82%	2.83%
Hematology	^HEMAT	103.29	-2.16%	4.79%	n/a	n/a	5.06%

Recent Leaders and Laggards: *Healthcare

Gainers

Name	Ticker	Market Cap.	3 Month Return %
Hemosol Corp. (USA)	HML:CA	2.328	18.18%

Decliners

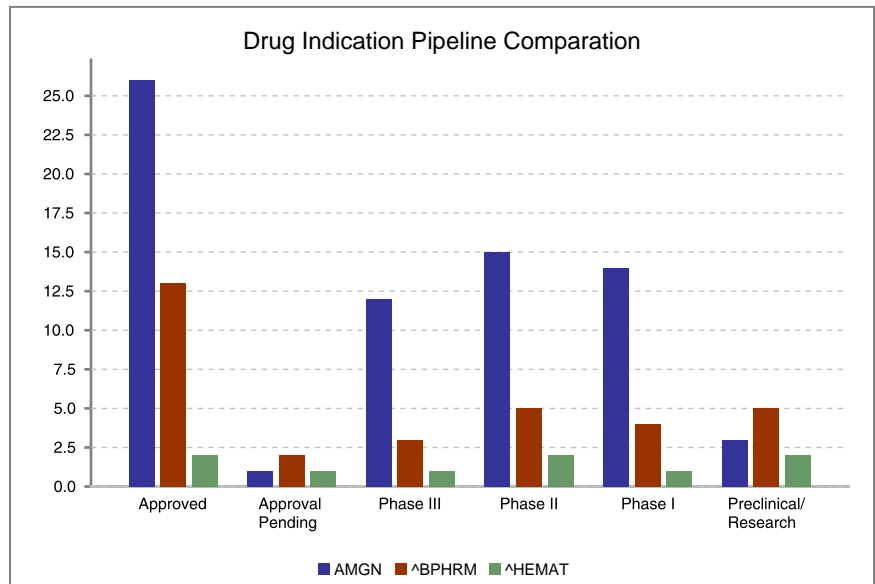
Name	Ticker	Market Cap.	3 Month Return %
Amgen, Inc.	AMGN	83,406.03	-5.90%

4. Pipeline Summary

Biopharmaceuticals

	AMGN	^BPHRM	^HEMAT
Approved	26	13	2
Approval Pending	1	2	1
Phase III	12	3	1
Phase II	15	5	2
Phase I	14	4	1
Preclinical/ Research	3	5	2
Total Indications	55	18	3
Drugs	27	12	3

The chart and table compare the number of drug indications in each stage of development for AMGN to the median number of drug indications in each stage of development for its sectors (Focused companies only).



5. Late Stage Drug Candidates

Drug [Stage] Indication Drug Competition by Indication	Expected PDUFA PMA [Proven PMA?] Drug Competition by PMA
Vectibix (Panitumumab) [Phase III] Indication: First-Line/Second-Line Treatment Of Metastatic Colorectal Cancer (Colon Cancer) In Combination With Bevacizumab (Avastin) And Chemotherapy Competitors: <ul style="list-style-type: none"> - Bristol Myers Squibb Co. (BMY) / Erbitux (Cetuximab) - Pfizer Inc. (PFE) / Camptosar (Irinotecan Hydrochloride) - Genentech, Inc. (DNA) / Avastin (Bevacizumab) - ImClone Systems Incorporated (IMCL) / Erbitux (Cetuximab) - Bayer AG (ADR) (BAY) / Berlex PTK787 (Vatalanib) More: 3 companies; 3 drugs (not shown)	Expected PDUFA: - POMA: Monoclonal Antibodies Proven: no Competitors: <ul style="list-style-type: none"> - Bristol Myers Squibb Co. (BMY) / Erbitux (Cetuximab) - Genentech, Inc. (DNA) / Avastin (Bevacizumab) - Genentech, Inc. (DNA) / Herceptin (Trastuzumab) - Roche Holding Ltd. (ADR) (RHHBY) / Herceptin (Trastuzumab) - Roche Holding Ltd. (ADR) (RHHBY) / Avastin (Bevacizumab) More: 1 companies; 1 drugs (not shown)
Denosumab [Phase III] Indication: Bone Cancer Metastases In Prostate Cancer Competitors: <ul style="list-style-type: none"> - Abbott Laboratories (ABT) / Xinaly (Atrasentan) - Novacea, Inc. (NOVC) / Asentar/DN-101 (Oral Cacitriol) - Cell Genesys, Inc. (CEGE) / GVAX Prostate Cancer - Dendreon Corporation (DNDN) / Provenge (Recombinant Prostatic Acid Phosphatase Antigen) - Teva Pharmaceutical Industries Ltd (ADR) (TEVA) / IVAX Flutamide More: 8 companies; 13 drugs (not shown)	Expected PDUFA: - POMA: Receptor Activator Of Nuclear Factor-kB Ligand (RANKL) Inhibitors Proven: no
Kepivance (Palifermin) [Phase III] Indication: Oral Mucositis Associated With Radiation Therapy And Chemotherapy For Solid Tumors Competitors: <ul style="list-style-type: none"> - Access Pharmaceuticals, Inc. (ACCP) / MuGard (Mucoadhesive Liquid Technology Amlexanox) - MGI Pharma, Inc. (MOGN) / Saforis (L-Glutamine) 	Expected PDUFA: - POMA: Keratinocyte Growth Factor (KGF) Proven: no
Denosumab [Phase III] Indication: Treatment-Induced Bone Loss (TIBL) Competitors: <ul style="list-style-type: none"> - The Procter & Gamble Company (PG) / Actonel (Risedronate Sodium)/Once Weekly Actonel (Risedronate Sodium)/Actonel With Calcium - Unigene Laboratories (UGNE) / Forcaltonin (Injectable Calcitonin) - Unigene Laboratories (UGNE) / Fortical (Nasal Calcitonin) - Akzo Nobel N.V. (ADR) (AKZOY) / Livial (Tibolone) - Teva Pharmaceutical Industries Ltd (ADR) (TEVA) / Risedronate Sodium More: 14 companies; 19 drugs (not shown)	Expected PDUFA: - POMA: Receptor Activator Of Nuclear Factor-kB Ligand (RANKL) Inhibitors Proven: no
Denosumab [Phase III] Indication: Bone Cancer Metastases In Breast Cancer Competitors: <ul style="list-style-type: none"> - Bristol Myers Squibb Co. (BMY) / Ixabepilone (Epothilone) - Bristol Myers Squibb Co. (BMY) / Taxol (Paclitaxel) - YM BioSciences Inc. (USA) (YMI) / Tesmilifene - GTx, Inc. (GTXI) / Fareston (Toremifene) - Savient Pharmaceuticals, Inc. (SVNT) / Soltamox (Tamoxifen Oral Liquid Solution) More: 15 companies; 25 drugs (not shown)	Expected PDUFA: - POMA: Receptor Activator Of Nuclear Factor-kB Ligand (RANKL) Inhibitors Proven: no

Drug [Stage] Indication Drug Competition by Indication	Expected PDUFA POMA [Proven POMA?] Drug Competition by POMA
Sensipar (Cinacalcet Hydrochloride) [Phase III] Indication: Risk Reduction Of Mortality And Cardiovascular Morbidity In Secondary Hyperparathyroidism (HPT) And Chronic Kidney Disease Undergoing Maintenance Dialysis Competitors: <ul style="list-style-type: none"> - Abbott Laboratories (ABT) / Calcijex (Calcitriol) Injection - Abbott Laboratories (ABT) / Zemplar Injection (Paricalcitol) - Abbott Laboratories (ABT) / Zemplar Capsule (Paricalcitol) - Genzyme Corporation (GENZ) / Hectorol Capsules (Doxercalciferol) - Genzyme Corporation (GENZ) / Hectorol Injection (Doxercalciferol) <p>More: 6 companies; 6 drugs (not shown)</p>	Expected PDUFA: - POMA: Calcimimetic Agents Proven: no Competitors: <ul style="list-style-type: none"> - NPS Pharmaceuticals, Inc. (NPSP) / Sensipar (Cinacalcet Hydrochloride)
AMG 531 [Phase III] Indication: Immune Thrombocytopenia Pupura (ITP) Competitors: <ul style="list-style-type: none"> - Bayer AG (ADR) (BAY) / Gamunex (Immune Globulin/Caprylate) - Salix Pharmaceuticals Ltd (SLXP) / Hematrol (FC Receptor Inhibitor) - Ligand Pharmaceuticals Inc. (LGND) / Promacta (Eltrombopag) - Baxter International Inc. (BAX) / Baxter BioScience Gammagard S/D (Immune Globulin Intravenous Solvent/Detergent) - Baxter International Inc. (BAX) / Baxter BioScience IVEEGAM (Immune Globulin) <p>More: 2 companies; 3 drugs (not shown)</p>	Expected PDUFA: - POMA: Platelet Growth Factors Proven: no
Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick [Phase III] Indication: Cardiovascular Disease Reduction In Patients With Chronic Kidney Disease And Type II Diabetes Receiving Aranesp For Treatment Of Anemia Competitors: <ul style="list-style-type: none"> - Teva Pharmaceutical Industries Ltd (ADR) (TEVA) / Sicor Leucovorin Calcium - Nektar Therapeutics (NKTR) / Mircera/CERA (Continuous Erythropoiesis Receptor Activator) - Barr Pharmaceuticals, Inc. (BRL) / Leucovorin - Baxter International Inc. (BAX) / Baxter BioScience Epoetin Omega - Roche Holding Ltd. (ADR) (RHHBY) / NeoRecormon (Epoetin Beta) <p>More: 10 companies; 14 drugs (not shown)</p>	Expected PDUFA: - POMA: Recombinant Human Erythropoietins Proven: no Competitors: <ul style="list-style-type: none"> - Nektar Therapeutics (NKTR) / Mircera/CERA (Continuous Erythropoiesis Receptor Activator) - Baxter International Inc. (BAX) / Baxter BioScience Epoetin Omega - Roche Holding Ltd. (ADR) (RHHBY) / NeoRecormon (Epoetin Beta) - Roche Holding Ltd. (ADR) (RHHBY) / Mircera/CERA (Continuous Erythropoietin Receptor Activator) - sanofi-aventis (ADR) (SNY) / Dynepo (Erythropoietin) <p>More: 2 companies; 2 drugs (not shown)</p>
Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick [Phase III] Indication: Anemia In Cancer Patients Not Receiving Chemotherapy Competitors: <ul style="list-style-type: none"> - Teva Pharmaceutical Industries Ltd (ADR) (TEVA) / Sicor Leucovorin Calcium - Nektar Therapeutics (NKTR) / Mircera/CERA (Continuous Erythropoiesis Receptor Activator) - Barr Pharmaceuticals, Inc. (BRL) / Leucovorin - Baxter International Inc. (BAX) / Baxter BioScience Epoetin Omega 	Expected PDUFA: - POMA: Recombinant Human Erythropoietins Proven: no Competitors: <ul style="list-style-type: none"> - Nektar Therapeutics (NKTR) / Mircera/CERA (Continuous Erythropoiesis Receptor Activator) - Baxter International Inc. (BAX) / Baxter BioScience Epoetin Omega - Roche Holding Ltd. (ADR) (RHHBY) / NeoRecormon (Epoetin Beta) - Roche Holding Ltd. (ADR) (RHHBY) / Mircera/CERA

Drug [Stage] Indication Drug Competition by Indication	Expected PDUFA PMOA [Proven PMOA?] Drug Competition by PMOA
<ul style="list-style-type: none"> - Roche Holding Ltd. (ADR) (RHHBY) / NeoRecormon (Epoetin Beta) <p>More: 10 companies; 14 drugs (not shown)</p>	<p>(Continuous Erythropoietin Receptor Activator)</p> <ul style="list-style-type: none"> - sanofi-aventis (ADR) (SNY) / Dynepo (Erythropoietin) <p>More: 2 companies; 2 drugs (not shown)</p>
<p>Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick [Phase III] Expected PDUFA: -</p>	
<p>Indication: Anemia In Heart Failure Patients</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Teva Pharmaceutical Industries Ltd (ADR) (TEVA) / Sicor Leucovorin Calcium - Nektar Therapeutics (NKTR) / Mircera/CERA (Continuous Erythropoiesis Receptor Activator) - Barr Pharmaceuticals, Inc. (BRL) / Leucovorin - Baxter International Inc. (BAX) / Baxter BioScience Epoetin Omega - Roche Holding Ltd. (ADR) (RHHBY) / NeoRecormon (Epoetin Beta) <p>More: 10 companies; 14 drugs (not shown)</p>	<p>POMA: Recombinant Human Erythropoietins</p> <p>Proven: no</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Nektar Therapeutics (NKTR) / Mircera/CERA (Continuous Erythropoiesis Receptor Activator) - Baxter International Inc. (BAX) / Baxter BioScience Epoetin Omega - Roche Holding Ltd. (ADR) (RHHBY) / NeoRecormon (Epoetin Beta) - Roche Holding Ltd. (ADR) (RHHBY) / Mircera/CERA (Continuous Erythropoietin Receptor Activator) - sanofi-aventis (ADR) (SNY) / Dynepo (Erythropoietin) <p>More: 2 companies; 2 drugs (not shown)</p>
<p>Denosumab [Phase III] Expected PDUFA: -</p>	
<p>Indication: Postmenopausal Osteoporosis</p> <p>Competitors:</p> <ul style="list-style-type: none"> - The Procter & Gamble Company (PG) / Actonel (Risedronate Sodium)/Once Weekly Actonel (Risedronate Sodium)/Actonel With Calcium - Unigene Laboratories (UGNE) / Forcaltonin (Injectable Calcitonin) - Unigene Laboratories (UGNE) / Fortical (Nasal Calcitonin) - Akzo Nobel N.V. (ADR) (AKZOY) / Livial (Tibolone) - Teva Pharmaceutical Industries Ltd (ADR) (TEVA) / Risedronate Sodium <p>More: 14 companies; 19 drugs (not shown)</p>	<p>POMA: Receptor Activator Of Nuclear Factor-kB Ligand (RANKL) Inhibitors</p> <p>Proven: no</p>
<p>Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick [Approvable Letter Received] Expected PDUFA: -</p>	
<p>Indication: Chronic Kidney Disease Patients With Anemia Not On Dialysis</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Advanced Magnetics, Inc. (AMAG) / Ferumoxytol - Advanced Magnetics, Inc. (AMAG) / Combidex (Ferumoxtran-10) - Nektar Therapeutics (NKTR) / Mircera/CERA (Continuous Erythropoiesis Receptor Activator) - Roche Holding Ltd. (ADR) (RHHBY) / Mircera/CERA (Continuous Erythropoietin Receptor Activator) - sanofi-aventis (ADR) (SNY) / Dynepo (Erythropoietin) <p>More: 2 companies; 2 drugs (not shown)</p>	<p>POMA: Recombinant Human Erythropoietins</p> <p>Proven: no</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Nektar Therapeutics (NKTR) / Mircera/CERA (Continuous Erythropoiesis Receptor Activator) - Baxter International Inc. (BAX) / Baxter BioScience Epoetin Omega - Roche Holding Ltd. (ADR) (RHHBY) / NeoRecormon (Epoetin Beta) - Roche Holding Ltd. (ADR) (RHHBY) / Mircera/CERA (Continuous Erythropoietin Receptor Activator) - sanofi-aventis (ADR) (SNY) / Dynepo (Erythropoietin) <p>More: 2 companies; 2 drugs (not shown)</p>

6. Product Lifecycle

Sector and Product Hierarchy Path	Indications	Side Effects	Stage of Development
I *Healthcare			
■ Biopharmaceuticals			
◆ Cardiovascular System			
● Phase I/Phase II Clinical Stage Products			
CK-1827452 (Cardiac Myosin Activator)	Chronic Heart Failure		Phase I
● Research/Preclinical Stage Products			
CK-1827452 (Cardiac Myosin Activator)	Oral Formulation For Chronic Heart Failure		Preclinical
◆ Dermatology			
▲ Lesion/Scaling Disorders			
▲ Psoriasis			
● Tumor Necrosis Factor-Alpha Antagonists (TNF-Alpha Antagonists)			
● Research/Preclinical Stage Products			
AMG 714 (Interleukin-15)	Psoriasis		Preclinical
AMG 714 (Interleukin-15)	Psoriasis		Preclinical
◆ Digestive System			
▲ Gastrointestinal Tract Disorders			
▲ Stomatognathic Disorders			
▲ Mucositis			
● Keratinocyte Growth Factor (KGF)			
Kepivance (Palifermin)	Severe Oral Mucositis In Patients With Hematologic Malignancies Associated With Chemotherapy	Skin Rash, Oral Toxicities, Pain Arthralgias, Dysesthesia	Approved
Kepivance (Palifermin)	Oral Mucositis Associated With Radiation Therapy And Chemotherapy For Solid Tumors		Phase III
◆ Endocrinology/Metabolism			
▲ Parathyroid Gland Disorders			
▲ Hyperparathyroidism (HPT)			
● Calcimimetic Agents			
Sensipar (Cinacalcet Hydrochloride)	Primary Hyperparathyroidism (HPT)		Phase II
Sensipar (Cinacalcet Hydrochloride)	Risk Reduction Of Mortality And Cardiovascular Morbidity In Secondary Hyperparathyroidism (HPT) And Chronic Kidney Disease Undergoing Maintenance Dialysis		Phase III
Sensipar (Cinacalcet Hydrochloride)	Secondary Hyperparathyroidism (HPT) In Chronic Renal Insufficiency		Development On Hold/Terminated
Sensipar (Cinacalcet Hydrochloride)	Secondary Hyperparathyroidism (HPT) In Chronic Kidney Disease (CKD) Patients On Dialysis	Nausea, Vomiting, Diarrhea, Myalgia, Dizziness, Hypertension, Asthenia, Anorexia	Approved
● Phase I/Phase II Clinical Stage Products			

Sector and Product Hierarchy Path	Indications	Side Effects	Stage of Development
AMG 221	Non-Insulin Dependent Diabetes Mellitus/Type II Diabetes		Phase I
Sensipar (Cinacalcet Hydrochloride)	Primary Hyperparathyroidism (HPT)		Phase II
◆ Hematology			
● Phase I/Phase II Clinical Stage Products			
AMG 531	Chemotherapy Induced Thrombocytopenia		Phase II
AMG 531	Myelodysplastic Syndrome (MDS)		Phase II
AMG 623	B-cell Chronic Lymphocytic Leukemia (CLL)		Phase I
▲ Red Blood Cell (RBC) Disorders			
▲ Anemia			
● Recombinant Human Erythropoietins			
Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick	Cardiovascular Disease Reduction In Patients With Chronic Kidney Disease And Type II Diabetes Receiving Aranesp For Treatment Of Anemia		Phase III
Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick	Anemia In Heart Failure Patients		Phase III
Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick	Anemia In Cancer Patients Not Receiving Chemotherapy		Phase III
Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick	Once Every 3 Weeks Dosing For The Treatment Of Chemotherapy Induced Anemia	Infection, Hypertension, Hypotension, Myalgia, Headache, Diarrhea	Approved
Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick	Anemia Associated With Chronic Renal Failure, Treatment Of Anemia In Patients Receiving Chemotherapy	Infection, Hypertension, Hypotension, Myalgia, Headache, Diarrhea	Approved
Epogen (Epoetin Alfa)	Treatment Of Anemia Associated With Chronic Renal Failure, Treatment Of Anemia In Zidovudine-Treated HIV-Infected Patients, Treatment Of Anemia In Patients Receiving Chemotherapy, Reduction Of Allogenic Blood Transfusion In Surgery Patients	Headache, Hypertension, Nausea, Athralgias, Diarrhea	Approved
▲ White Blood Cell (WBC) Disorders			
▲ Neutropenia			
▲ Colony Stimulating Factors (CSF)			
● Granulocyte (rhG-CSF)			
Neulasta (Pegylated Filgrastim)	Decrease Incidence Of Infection As Manifested By Febrile Neutropenia In Patients With Non-Myeloid Cancers Who Are Undergoing Moderately Myelosuppressive Therapy	Bone Pain, Hypoxia	Approved

Sector and Product Hierarchy Path	Indications	Side Effects	Stage of Development
Neupogen (Filgrastim)	Chemotherapy Induced Neutropenia, Severe Chronic Neutropenia, Peripheral Blood Progenitor Cell Collection, Reduce The Duration Of Neutropenia In Bone Marrow Transplant Patients	Nausea, Vomiting, Skeletal Pain, Alopecia, Diarrhea, Neutropenic Fever	Approved
Neupogen (Filgrastim)	Chemotherapy Induced Neutropenia, Severe Chronic Neutropenia, Peripheral Blood Progenitor Cell Collection, Reduce The Duration Of Neutropenia In Bone Marrow Transplant Patients	Nausea, Vomiting, Skeletal Pain, Alopecia, Diarrhea, Neutropenic Fever	Approved
◆ Immunology			
▲ Autoimmune Disorders			
▲ Arthritis			
▲ Psoriatic Arthritis			
● Tumor Necrosis Factor-Alpha Antagonists (TNF-Alpha Antagonists)			
Enbrel/Enbrel Once-Weekly (Etanercept)	Reduce Signs And Symptoms Of Psoriatic Arthritis, Improve Physical Function In Patients With Psoriatic Arthritis	Mild Injection Site Reactions, Respiratory Tract Infections, Headaches, Abdominal Pain, Vomiting, Nausea	Approved
Enbrel/Enbrel Once-Weekly (Etanercept)	Reduce Signs And Symptoms Of Psoriatic Arthritis, Improve Physical Function In Patients With Psoriatic Arthritis	Mild Injection Site Reactions, Respiratory Tract Infections, Headaches, Abdominal Pain, Vomiting, Nausea	Approved
▲ Rheumatoid Arthritis (RA)			
▲ Immunotherapy			
● Interleukin-1 Receptor Antagonists (IL-1 Antagonists)			
Kineret (Anakinra)	Rheumatoid Arthritis In Patients Who Have Failed To Respond To At Least One DMARD	Redness/Swelling/Pain At Injection Site, Serious Infection, Neutropenia	Approved
Kineret (Anakinra)	Rheumatoid Arthritis In Patients Who Have Failed To Respond To At Least One DMARD	Redness/Swelling/Pain At Injection Site, Serious Infection, Neutropenia	Approved
● Tumor Necrosis Factor-Alpha Antagonists (TNF-Alpha Antagonists)			
Enbrel/Enbrel Once-Weekly (Etanercept)	Once-Weekly Dosing For Rheumatoid Arthritis	njection Site Reaction, Infection, Headache, Rhinitis, Pharyngitis, Dizziness, Cough, Asthenia	Approved
Enbrel/Enbrel Once-Weekly (Etanercept)	Moderate To Severely Active Rheumatoid Arthritis, Moderate To Severely Active Polyarticular-Course Juvenile Rheumatoid Arthritis, Reduce Symptoms/Delay Structural Damage In Patients With Moderate To Severely Active Rheumatoid Arthritis	Injection Site Reaction, Infection, Headache, Rhinitis, Pharyngitis, Dizziness, Cough, Asthenia	Approved
Enbrel/Enbrel Once-Weekly (Etanercept)	Once-Weekly Dosing For Rheumatoid Arthritis	njection Site Reaction, Infection, Headache, Rhinitis, Pharyngitis, Dizziness, Cough, Asthenia	Approved

Sector and Product Hierarchy Path	Indications	Side Effects	Stage of Development
Enbrel/Enbrel Once-Weekly (Etanercept)	Moderate To Severely Active Rheumatoid Arthritis, Moderate To Severely Active Polyarticular-Course Juvenile Rheumatoid Arthritis, Reduce Symptoms/Delay Structural Damage In Patients With Moderate To Severely Active Rheumatoid Arthritis	Injection Site Reaction, Infection, Headache, Rhinitis, Pharyngitis, Dizziness, Cough, Asthenia	Approved
▲ Idiopathic Thrombocytopenia Purpura (ITP)			
● Platelet Growth Factors			
AMG 531	Immune Thrombocytopenia Purpura (ITP)		Phase III
▲ Psoriasis			
● Tumor Necrosis Factor-Alpha Antagonists (TNF-Alpha Antagonists)			
● Phase I/Phase II Clinical Stage Products			
AMG 108	Rheumatoid Arthritis (RA)		Phase II
AMG 623	Systemic Lupus Erythematosus (SLE)		Phase I
Avimer Proteins (Interleukin-6 Inhibitor)	Inflammatory/Autoimmune Diseases		Phase I
Denosumab	Rheumatoid Arthritis (RA)		Phase II
● Research/Preclinical Stage Products			
◆ Musculoskeletal System			
● Phase I/Phase II Clinical Stage Products			
AMG 108	Rheumatoid Arthritis (RA)		Phase II
Denosumab	Rheumatoid Arthritis (RA)		Phase II
▲ Skeletal Disorders			
▲ Bone Disorders			
▲ Osteoporosis			
● Receptor Activator Of Nuclear Factor-kB Ligand (RANKL) Inhibitors			
Denosumab	Treatment-Induced Bone Loss (TIBL)		Phase III
Denosumab	Postmenopausal Osteoporosis		Phase III
▲ Joint Disorders			
▲ Ankylosing Spondylitis			
● Tumor Necrosis Factor-Alpha Antagonists (TNF-Alpha Antagonists)			
Enbrel/Enbrel Once-Weekly (Etanercept)	Ankylosing Spondylitis	Infection, Headache, Abdominal Pain, Nausea, Vomiting	Approved
Enbrel/Enbrel Once-Weekly (Etanercept)	Chronic Moderate-To-Severe Plaque Psoriasis	Injection Site Reaction, Infection, Headache, Rhinitis, Pharyngitis, Dizziness, Cough, Asthenia	Approved
Enbrel/Enbrel Once-Weekly (Etanercept)	Chronic Moderate-To-Severe Plaque Psoriasis	Injection Site Reaction, Infection, Headache, Rhinitis, Pharyngitis, Dizziness, Cough, Asthenia	Approved
▲ Psoriatic Arthritis			
● Tumor Necrosis Factor-Alpha Antagonists (TNF-Alpha Antagonists)			
▲ Rheumatoid Arthritis (RA)			

Sector and Product Hierarchy Path	Indications	Side Effects	Stage of Development
▲ Immunotherapy			
● Interleukin-1 Receptor Antagonists (IL-1 Antagonists)			
● Tumor Necrosis Factor-Alpha Antagonists (TNF-Alpha Antagonists)			
◆ Oncology			
▲ Breast Cancer			
▲ Metastatic			
● Receptor Activator Of Nuclear Factor-kB Ligand (RANKL) Inhibitors			
▲ Digestive System			
▲ Colon Cancer/Colorectal Cancer			
▲ Metastatic			
● Monoclonal Antibodies			
Vectibix (Panitumumab)	First-Line/Second-Line Treatment Of Metastatic Colorectal Cancer (Colon Cancer) In Combination With Bevacizumab (Avastin) And Chemotherapy		Phase III
Vectibix (Panitumumab)	Monotherapy For The Treatment Of Metastatic Colorectal Cancer (Colon Cancer) In Patients Who Have Failed Previous Chemotherapy	Dermatitis Acneiform, Pruritus, Erythema, Rash, Skin Exfoliation, Paronychia, Dry Skin, Skin Fissures, Sepsis, Septic Death, Abscesses	Approved
▲ Endocrinology			
▲ Parathyroid Gland			
▲ Palliative Agents			
● Calcimimetic Agents			
● Phase I/Phase II Clinical Stage Products			
AMG 102	Cancer		Phase I
AMG 386	Cancer		Phase I
AMG 479	Cancer		Phase I
AMG 655	Cancer		Phase I
AMG 706 (Motesanib Diphosphate)	First Line Metastatic Breast Cancer		Phase II
AMG 706 (Motesanib Diphosphate)	Advanced Thyroid Cancer		Phase II
AMG 706 (Motesanib Diphosphate)	Imatinib-Resistant Gastrointestinal Stromal Tumors (GIST)		Phase II
AMG 706 (Motesanib Diphosphate)	Non-Small Cell Lung Cancer (NSCLC)		Phase II
AMG 951	Cancer		Phase I
Denosumab	Multiple Myeloma (MM)		Phase II
Vectibix (Panitumumab)	Head And Neck Cancer		Phase II
▲ Urology			
▲ Prostate Cancer			
▲ Metastatic			
● Receptor Activator Of Nuclear Factor-kB Ligand (RANKL) Inhibitors			
Denosumab	Bone Cancer Metastases In Prostate Cancer		Phase III
Denosumab	Bone Cancer Metastases In Breast Cancer		Phase III

Sector and Product Hierarchy Path	Indications	Side Effects	Stage of Development
◆ Pain Management			
● Phase I/Phase II Clinical Stage Products			
AMG 403	Pain		Phase I
AMG 517	Pain		Phase I
◆ Respiratory System			
● Phase I/Phase II Clinical Stage Products			
AMG 317	Asthma		Phase I
◆ Surgery			
▲ General			
▲ Complications			
▲ Hemorrhage			
● Recombinant Human Erythropoietins			
◆ Transplantation			
▲ Bone Marrow			
▲ Complications			
▲ Neutropenia			
▲ Colony Stimulating Factors (CSF)			
● Granulocyte (rhG-CSF)			
▲ Peripheral Blood Progenitor Cell Transplant (PBPCT)			
▲ Preparation			
▲ Colony Stimulating Factors (CSF)			
● Granulocyte (rhG-CSF)			
Neupogen (Filgrastim)	Chemotherapy Induced Neutropenia, Severe Chronic Neutropenia, Peripheral Blood Progenitor Cell Collection, Reduce The Duration Of Neutropenia In Bone Marrow Transplant Patients	Nausea, Vomiting, Skeletal Pain, Alopecia, Diarrhea, Neutropenic Fever	Approved
◆ Urology			
● Phase I/Phase II Clinical Stage Products			
Sensipar (Cinacalcet Hydrochloride)	Primary Hyperparathyroidism (HPT)		Phase II
▲ Urological Disorders			
▲ Kidney (Renal)			
▲ Chronic Renal Failure (CRF)			
▲ Complications			
▲ Anemia			
● Recombinant Human Erythropoietins			
Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick	Anemia Associated With Chronic Renal Failure, Treatment Of Anemia In Patients Receiving Chemotherapy	Infection, Hypertension, Hypotension, Myalgia, Headache, Diarrhea	Approved
Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick	Chronic Kidney Disease Patients With Anemia Not On Dialysis		Approvable Letter Received

Sector and Product Hierarchy Path	Indications	Side Effects	Stage of Development
Epogen (Epoetin Alfa)	Treatment Of Anemia Associated With Chronic Renal Failure, Treatment Of Anemia In Zidovudine-Treated HIV-Infected Patients, Treatment Of Anemia In Patients Receiving Chemotherapy, Reduction Of Allogenic Blood Transfusion In Surgery Patients	Headache, Hypertension, Nausea, Athralgias, Diarrhea	Approved
Epogen (Epoetin Alfa)	Treatment Of Anemia Associated With Chronic Renal Failure, Treatment Of Anemia In Zidovudine-Treated HIV-Infected Patients, Treatment Of Anemia In Patients Receiving Chemotherapy, Reduction Of Allogenic Blood Transfusion In Surgery Patients	Headache, Hypertension, Nausea, Athralgias, Diarrhea	Approved
▲ Hyperparathyroidism			
● Calcimimetic Agents			
Sensipar (Cinacalcet Hydrochloride)	Risk Reduction Of Mortality And Cardiovascular Morbidity In Secondary Hyperparathyroidism (HPT) And Chronic Kidney Disease Undergoing Maintenance Dialysis		Phase III
Sensipar (Cinacalcet Hydrochloride)	Secondary Hyperparathyroidism (HPT) In Chronic Kidney Disease (CKD) Patients On Dialysis	Nausea, Vomiting, Diarrhea, Myalgia, Dizziness, Hypertension, Asthenia, Anorexia	Approved
Sensipar (Cinacalcet Hydrochloride)	Elevated Calcium Levels (Hypercalcemia) In Patients With Parathyroid Cancer	Nausea, Vomiting, Diarrhea, Myalgia, Dizziness, Hypertension, Asthenia, Anorexia	Approved
▲ Renal Insufficiency			
▲ Complications			
▲ Hyperparathyroidism			
● Calcimimetic Agents			
Sensipar (Cinacalcet Hydrochloride)	Secondary Hyperparathyroidism (HPT) In Chronic Renal Insufficiency		Development On Hold/Terminated
◆ Weight Management			
● Phase I/Phase II Clinical Stage Products			
AMG 076	Obesity		Phase I