

Drug/Medical Device Report

Amgen, Inc. (AMGN)

1. Abstract

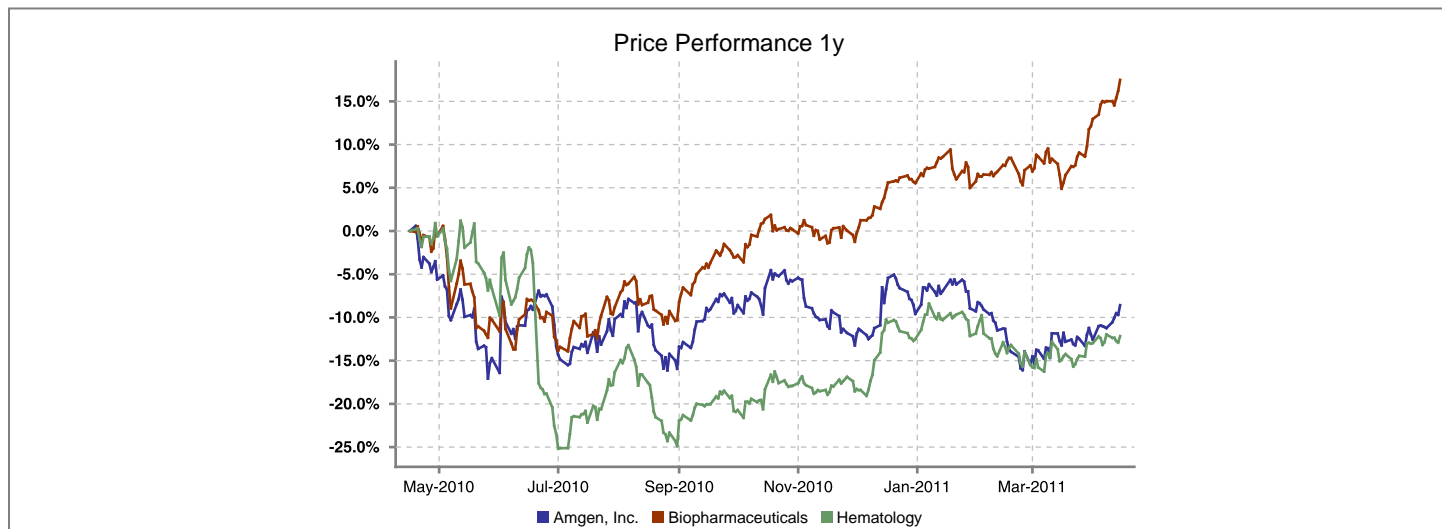
This report examines the Drug/Medical Device pipeline of Amgen, Inc. (AMGN), detailing each drug/device's indication, clinical trial status, and mechanism of action. Furthermore, this report identifies the Focus Sector of Amgen, Inc. (AMGN), and analyzes its pipeline and performance against the Focus 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) is placed in the Focused Sector Healthcare > Biopharmaceuticals > Hematology, where it competes against 5 other focused companies and ranks 1 by market capitalization among these.
- Amgen, Inc. (AMGN) ranks 9 by market cap among the 345 companies focused in Healthcare > Biopharmaceuticals and ranks 14 among all 412 companies participating in Biopharmaceuticals.
- Amgen, Inc. (AMGN) has a Drug pipeline that is diversified across 13 of 21 disease sectors within Biopharmaceuticals.

AMGN: Product Hierarchy Participation	Focus	AMGN Products by Sector	Companies	Focused Companies
I Healthcare	P	45	937	789
■ Biopharmaceuticals	P	45	412	345
◆ Cardiovascular System	-	2	130	14
◆ Dermatology	-	0	81	4
◆ Digestive System	-	1	139	5
◆ Endocrinology/Metabolism	-	6	138	11
◆ Hematology	F	7	94	5
◆ Immunology	-	11	179	4
◆ Musculoskeletal System	-	6	108	4
◆ Neurology	-	1	172	31
◆ Oncology	-	15	206	64
◆ Respiratory System	-	4	91	4
◆ Surgery	-	0	54	3
◆ Transplantation	-	1	40	1
◆ Urology	-	4	85	2

3. Sector Performance



Name	Ticker	Last Price	Daily Return %	1 Month Return %	3 Month Return %	1 Year Return %	YTD Return %
Amgen, Inc.	AMGN	55.51	1.24%	4.74%	-1.75%	-8.46%	1.11%
Biopharmaceuticals	^BPHRM	454.41	1.09%	10.32%	8.21%	16.54%	11.32%
Hematology	^HEMAT	70.40	0.85%	3.41%	-2.08%	-12.41%	0.39%

Recent Leaders and Laggards: Healthcare

Gainers

Name	Ticker	Market Cap.	3 Month Return %
3SBio Inc. (ADR)	SSRX	360.542	3.73%

Decliners

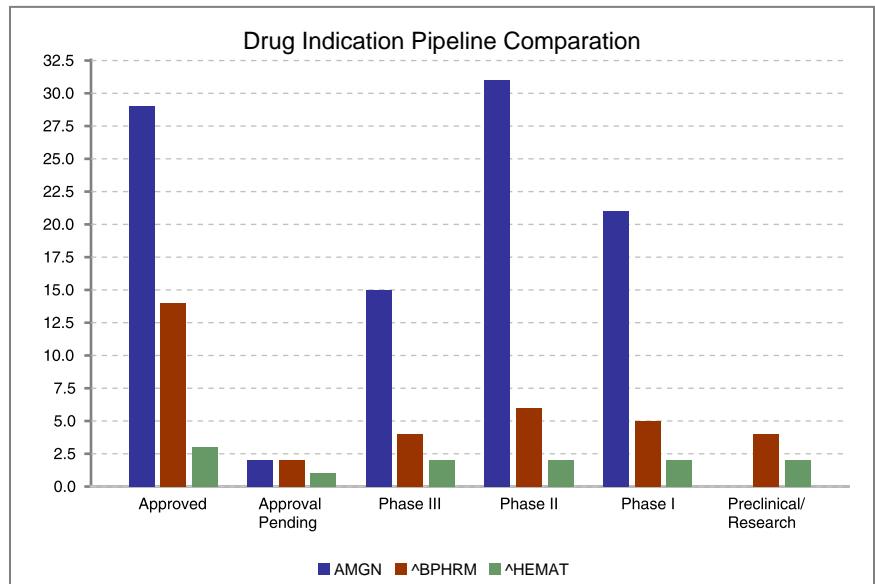
Name	Ticker	Market Cap.	3 Month Return %
Affymax, Inc.	AFFY	225.464	-11.37%
China Biologic Products Inc	CBPO	362.832	-4.97%
Amgen, Inc.	AMGN	51,793.76	-1.75%

4. Pipeline Summary

Biopharmaceuticals

	AMGN	^BPHRM	^HEMAT
Approved	29	14	3
Approval Pending	2	2	1
Phase III	15	4	2
Phase II	31	6	2
Phase I	21	5	2
Preclinical/ Research	0	4	2
Total Indications	84	19	4
Drugs	45	13	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
<p>Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick [Phase III]</p> <p>Indication: Neoadjuvant Breast Cancer In Combination With Standard Preoperative Chemotherapy Regimen</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Oncothyreon Inc. (ONTY) / Stimuvax (BLP25 Liposomal Vaccine) - SuperGen, Inc. (SUPG) / Mitozytrex (Mitomycin) - Pfizer Inc. (PFE) / Aromasin (Exemestane) - Mylan Inc. (MYL) / Tamoxifen Citrate - Sanofi-Aventis SA (ADR) (SNY) / Taxotere (Docetaxel) <p>More: 10 companies; 17 drugs (not shown)</p>	<p>Expected PDUFA: -</p> <p>POMA: Recombinant Human Erythropoietins Proven: no</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Nektar Therapeutics (NKTR) / Mircera (Methoxy Polyethylene Glycol-Epoetin Beta) - Baxter International Inc. (BAX) / Baxter BioScience Epoetin Omega - Roche Holding Ltd. (ADR) (RHHBY) / NeoRecormon (Epoetin Beta) - Johnson & Johnson (JNJ) / Procrit (Epoetin Alfa) - 3SBio Inc. (ADR) (SSRX) / EPIAO (Recombinant Human Erythropoietin) <p>More: 4 companies; 4 drugs (not shown)</p>
<p>Prolia (Denosumab) [BLA Filed]</p> <p>Indication: Treatment And Prevention Of Treatment-Induced Bone Loss (TIBL) Resulting From Hormone Ablation Therapy For Breast And Prostate Cancer</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Teva Pharmaceutical Industries Ltd (ADR) (TEVA) / Teva Parenteral Zoledronic Acid Injection - Novartis AG (ADR) (NVS) / Sandoz Alendronate Sodium - Novartis AG (ADR) (NVS) / SMC021 (Oral Salmon Calcitonin) - Eli Lilly & Co. (LLY) / Evista (Raloxifene Hydrochloride) - Watson Pharmaceuticals, Inc. (WPI) / Cobalt Laboratories Alendronate Sodium <p>More: 17 companies; 34 drugs (not shown)</p>	<p>Expected PDUFA: -</p> <p>POMA: Receptor Activator Of Nuclear Factor-kB Ligand (RANKL) Inhibitors Proven: no</p> <p>Competitors:</p> <ul style="list-style-type: none"> - GlaxoSmithKline plc (ADR) (GSK) / Prolia (Denosumab)
<p>Sensipar (Cinacalcet Hydrochloride) [Phase III]</p> <p>Indication: Elevated Calcium Levels (Hypercalcemia) In Post Kidney Transplant Patients</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Sanofi-Aventis SA (ADR) (SNY) / Genzyme Corporation - Hecetrol Capsules (Doxercalciferol) - Sanofi-Aventis SA (ADR) (SNY) / Genzyme Corporation - Hecetrol Injection (Doxercalciferol) - Roche Holding Ltd. (ADR) (RHHBY) / Rocaltrol (Calcitriol) - Abbott Laboratories (ABT) / Calcijex (Calcitriol) Injection - Abbott Laboratories (ABT) / Zemplar Injection (Paricalcitol) <p>More: 4 companies; 5 drugs (not shown)</p>	<p>Expected PDUFA: -</p> <p>POMA: Calcimimetic Agents Proven: no</p> <p>Competitors:</p> <ul style="list-style-type: none"> - NPS Pharmaceuticals, Inc. (NPSP) / Sensipar (Cinacalcet Hydrochloride) - NPS Pharmaceuticals, Inc. (NPSP) / Preatact (Full-Length Parathyroid Hormone (PTH 1-84))
<p>Sensipar (Cinacalcet Hydrochloride) [Phase III]</p> <p>Indication: Risk Reduction Of Mortality And Cardiovascular Morbidity In Secondary Hyperparathyroidism (HPT) And Chronic Kidney Disease Undergoing Maintenance Dialysis</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Cardinal Health, Inc. (CAH) / Hecetrol Capsules (Doxercalciferol) - Abbott Laboratories (ABT) / Calcijex (Calcitriol) Injection - Abbott Laboratories (ABT) / Zemplar Injection (Paricalcitol) - Abbott Laboratories (ABT) / Zemplar Capsule (Paricalcitol) - NPS Pharmaceuticals, Inc. (NPSP) / Sensipar (Cinacalcet Hydrochloride) <p>More: 1 companies; 2 drugs (not shown)</p>	<p>Expected PDUFA: -</p> <p>POMA: Calcimimetic Agents Proven: no</p> <p>Competitors:</p> <ul style="list-style-type: none"> - NPS Pharmaceuticals, Inc. (NPSP) / Sensipar (Cinacalcet Hydrochloride) - NPS Pharmaceuticals, Inc. (NPSP) / Preatact (Full-Length Parathyroid Hormone (PTH 1-84))

Drug [Stage] Indication Drug Competition by Indication	Expected PDUFA POMA [Proven POMA?] Drug Competition by POMA
Prolia (Denosumab) [Phase III] Indication: Prevention Of Bone Cancer Metastases In Prostate Cancer Competitors: <ul style="list-style-type: none"> - Abbott Laboratories (ABT) / Xinlay (Atrasentan) - Teva Pharmaceutical Industries Ltd (ADR) (TEVA) / Bicalutamide - Regeneron Pharmaceuticals, Inc. (REGN) / VEGF Trap Oncology (Aflibercept) - Astellas Pharma Inc. (ALPMY) / MDV3100 (Androgen Antagonist) - BioSante Pharmaceuticals, Inc. (BPAX) / Cell Genesys GVAX Prostate Cancer <p>More: 13 companies; 19 drugs (not shown)</p>	Expected PDUFA: - POMA: Receptor Activator Of Nuclear Factor-kB Ligand (RANKL) Inhibitors Proven: no Competitors: <ul style="list-style-type: none"> - GlaxoSmithKline plc (ADR) (GSK) / Prolia (Denosumab)
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) - Eisai Co., Ltd (ADR) (ESALY) / Savoris (L-Glutamine) 	Expected PDUFA: - POMA: Keratinocyte Growth Factor (KGF) Proven: no
Vectibix (Panitumumab) [Phase III] Indication: Metastatic And Recurrent Head And Neck Cancer Competitors: <ul style="list-style-type: none"> - Eli Lilly & Co. (LLY) / Alimta (Pemetrexed) - Eli Lilly & Co. (LLY) / Imclone Systems - Erbitux (Cetuximab) - Bristol Myers Squibb Co. (BMY) / Erbitux (Cetuximab) 	Expected PDUFA: - POMA: Monoclonal Antibodies Proven: no Competitors: <ul style="list-style-type: none"> - Bristol Myers Squibb Co. (BMY) / Erbitux (Cetuximab) - Bristol Myers Squibb Co. (BMY) / Yervoy (Ipilimumab) - Roche Holding Ltd. (ADR) (RHHBY) / Herceptin (Trastuzumab) - Roche Holding Ltd. (ADR) (RHHBY) / Genentech - MetMAB - Roche Holding Ltd. (ADR) (RHHBY) / Genentech - Herceptin (Trastuzumab)/Avastin (Bevacizumab) <p>More: 4 companies; 6 drugs (not shown)</p>
BioVex - OncoVex GM-CSF [Phase III] Indication: Locally Advanced Squamous Cell Carcinoma Of The Head And Neck Competitors: <ul style="list-style-type: none"> - Teva Pharmaceutical Industries Ltd (ADR) (TEVA) / Bleomycin Sulfate - Inovio Pharmaceuticals, Inc. (INO) / Electroporation Therapy With Bleomycin - CEL-SCI Corporation (CVM) / Multikine (Interleukin Mixture) - Bristol Myers Squibb Co. (BMY) / Erbitux (Cetuximab) - Bristol Myers Squibb Co. (BMY) / Hydrea (Hydroxyurea) <p>More: 8 companies; 9 drugs (not shown)</p>	Expected PDUFA: - POMA: Vaccines Proven: no Competitors: <ul style="list-style-type: none"> - Antigenics, Inc. (AGEN) / Oncophage (Vitespen) - Oncothyreon Inc. (ONTY) / Stimuvax (BLP25 Liposomal Vaccine) - BioSante Pharmaceuticals, Inc. (BPAX) / Cell Genesys GVAX Prostate Cancer - Dendreon Corporation (DNDN) / Provenge (Sipuleucel-T) - GlaxoSmithKline plc (ADR) (GSK) / MAGE-A3 ASCI (Cancer Vaccine)
Vectibix (Panitumumab) [Phase III] Indication: Second-Line Treatment Of Metastatic Colorectal Cancer In Combination With FOLFIRI (Colon Cancer) Competitors: <ul style="list-style-type: none"> - Regeneron Pharmaceuticals, Inc. (REGN) / VEGF Trap Oncology (Aflibercept) - ADVENTRX Pharmaceuticals, Inc. (ANX) / CoFactor (ANX-510) - Bristol Myers Squibb Co. (BMY) / Erbitux (Cetuximab) - Bristol Myers Squibb Co. (BMY) / BMS-582664 (Brivanib) 	Expected PDUFA: - POMA: Monoclonal Antibodies Proven: no Competitors: <ul style="list-style-type: none"> - Bristol Myers Squibb Co. (BMY) / Erbitux (Cetuximab) - Bristol Myers Squibb Co. (BMY) / Yervoy (Ipilimumab) - Roche Holding Ltd. (ADR) (RHHBY) / Herceptin (Trastuzumab) - Roche Holding Ltd. (ADR) (RHHBY) / Genentech - MetMAB - Roche Holding Ltd. (ADR) (RHHBY) / Genentech - Herceptin

Drug [Stage] Indication Drug Competition by Indication	Expected PDUFA POMA [Proven POMA?] Drug Competition by POMA
<p>Alaninate)</p> <ul style="list-style-type: none"> - Pfizer Inc. (PFE) / Camptosar (Irinotecan Hydrochloride) <p>More: 11 companies; 14 drugs (not shown)</p>	<p>(Trastuzumab)/Avastin (Bevacizumab)</p> <p>More: 4 companies; 6 drugs (not shown)</p>
BioVex - OncoVex GM-CSF [Phase III]	
<p>Indication: Melanoma</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Biogen Idec Inc. (BIIB) / Intron A (Interferon Alfa 2B Recombinant Human) - Antigenics, Inc. (AGEN) / Oncophage (Vitespen) - Synta Pharmaceuticals Corp. (SNTA) / Elesclomol/Formerly STA-4783 - Vical Incorporated (VICL) / Allovectin-7 - Bristol Myers Squibb Co. (BMY) / Yervoy (Ipilimumab) <p>More: 11 companies; 13 drugs (not shown)</p>	<p>Expected PDUFA: -</p> <p>POMA: Vaccines Proven: no</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Antigenics, Inc. (AGEN) / Oncophage (Vitespen) - Oncothyreon Inc. (ONTY) / Stimuvax (BLP25 Liposomal Vaccine) - BioSante Pharmaceuticals, Inc. (BPAX) / Cell Genesys GVAX Prostate Cancer - Dendreon Corporation (DNDN) / Provenge (Sipuleucel-T) - GlaxoSmithKline plc (ADR) (GSK) / MAGE-A3 ASCI (Cancer Vaccine)
Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick [Phase III]	
<p>Indication: Anemia In Heart Failure Patients</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Repros Therapeutics Inc. (RPRX) / Proellex (Progesterone Receptor Blocking Agent) - K-V Pharmaceutical Company (KV/B) / Ther-Rx Niferex Series (Polysaccharide-Iron Complex) - Hi-Tech Pharmacal Co. (HITK) / Ferrous Sulfate/Ferrous Sulfate Elixir - 3SBio Inc. (ADR) (SSRX) / EPIAO (Recombinant Human Erythropoietin) - 3SBio Inc. (ADR) (SSRX) / High Dosage EPIAO (Recombinant Human Erythropoietin (EPO)) <p>More: 14 companies; 20 drugs (not shown)</p>	<p>Expected PDUFA: -</p> <p>POMA: Recombinant Human Erythropoietins Proven: no</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Nektar Therapeutics (NKTR) / Mircera (Methoxy Polyethylene Glycol-Epoetin Beta) - Baxter International Inc. (BAX) / Baxter BioScience Epoetin Omega - Roche Holding Ltd. (ADR) (RHHBY) / NeoRecormon (Epoetin Beta) - Johnson & Johnson (JNJ) / Procrit (Epoetin Alfa) - 3SBio Inc. (ADR) (SSRX) / EPIAO (Recombinant Human Erythropoietin) <p>More: 4 companies; 4 drugs (not shown)</p>
Motesanib Diphosphate/Formerly AMG 706 [Phase III]	
<p>Indication: First Line Non-Small Cell Lung Cancer (NSCLC) In Combination With Carboplatin And Paclitaxel</p> <p>Competitors:</p> <ul style="list-style-type: none"> - DARA BioSciences, Inc. (DARA) / PT-100 (Talabostat) - Oncothyreon Inc. (ONTY) / Stimuvax (BLP25 Liposomal Vaccine) - SuperGen, Inc. (SUPG) / Paclitaxel - Bristol Myers Squibb Co. (BMY) / Erbitux (Cetuximab) - Cell Therapeutics, Inc. (CTIC) / OPAXIO/Previously XYOTAX (Paclitaxel Poliglumex) <p>More: 23 companies; 45 drugs (not shown)</p>	<p>Expected PDUFA: -</p> <p>POMA: VEGFR/PDGFR/SCFR Inhibitors Proven: no</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Takeda Pharmaceutical Company Limited (TKPYY) / Motesanib Diphosphate/Formerly AMG 706
Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick [Phase III]	
<p>Indication: Cardiovascular Disease Reduction In Patients With Chronic Kidney Disease And Type II Diabetes Receiving Aranesp For Treatment Of Anemia</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Repros Therapeutics Inc. (RPRX) / Proellex (Progesterone Receptor Blocking Agent) - K-V Pharmaceutical Company (KV/B) / Ther-Rx Niferex Series (Polysaccharide-Iron Complex) - Hi-Tech Pharmacal Co. (HITK) / Ferrous Sulfate/Ferrous Sulfate Elixir - 3SBio Inc. (ADR) (SSRX) / EPIAO (Recombinant Human Erythropoietin) 	<p>Expected PDUFA: -</p> <p>POMA: Recombinant Human Erythropoietins Proven: no</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Nektar Therapeutics (NKTR) / Mircera (Methoxy Polyethylene Glycol-Epoetin Beta) - Baxter International Inc. (BAX) / Baxter BioScience Epoetin Omega - Roche Holding Ltd. (ADR) (RHHBY) / NeoRecormon (Epoetin Beta) - Johnson & Johnson (JNJ) / Procrit (Epoetin Alfa) - 3SBio Inc. (ADR) (SSRX) / EPIAO (Recombinant Human Erythropoietin)

Drug [Stage] Indication Drug Competition by Indication	Expected PDUFA PMA [Proven PMA?] Drug Competition by PMA
<ul style="list-style-type: none"> - 3SBio Inc. (ADR) (SSRX) / High Dosage EPIAO (Recombinant Human Erythropoietin (EPO)) <p>More: 14 companies; 20 drugs (not shown)</p>	<p>More: 4 companies; 4 drugs (not shown)</p>
<p>Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick [Approvable Letter Received]</p>	<p>Expected PDUFA: -</p>
<p>Indication: Chronic Kidney Disease Patients With Anemia Not On Dialysis</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Johnson & Johnson (JNJ) / Procrit (Epoetin Alfa) - Takeda Pharmaceutical Company Limited (TKPYY) / Hematide (Peginesatid) - Affymax, Inc. (AFFY) / Hematide (Peginesatid) - AMAG Pharmaceuticals, Inc. (AMAG) / Feraheme (Ferumoxytol) - 3SBio Inc. (ADR) (SSRX) / Feraheme (Ferumoxytol) <p>More: 4 companies; 5 drugs (not shown)</p>	<p>POMA: Recombinant Human Erythropoietins Proven: no</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Nektar Therapeutics (NKTR) / Mircera (Methoxy Polyethylene Glycol-Epoetin Beta) - Baxter International Inc. (BAX) / Baxter BioScience Epoetin Omega - Roche Holding Ltd. (ADR) (RHHBY) / NeoRecormon (Epoetin Beta) - Johnson & Johnson (JNJ) / Procrit (Epoetin Alfa) - 3SBio Inc. (ADR) (SSRX) / EPIAO (Recombinant Human Erythropoietin) <p>More: 4 companies; 4 drugs (not shown)</p>
<p>Vectibix (Panitumumab) [Phase III]</p>	<p>Expected PDUFA: -</p>
<p>Indication: First-Line Treatment Of Metastatic Colorectal Cancer (Colon Cancer) In Combination With FOLFIRI</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Regeneron Pharmaceuticals, Inc. (REGN) / VEGF Trap Oncology (Aflibercept) - ADVENTRX Pharmaceuticals, Inc. (ANX) / CoFactor (ANX-510) - Bristol Myers Squibb Co. (BMY) / Erbitux (Cetuximab) - Bristol Myers Squibb Co. (BMY) / BMS-582664 (Brivanib Alaninate) - Pfizer Inc. (PFE) / Camptosar (Irinotecan Hydrochloride) <p>More: 11 companies; 14 drugs (not shown)</p>	<p>POMA: Monoclonal Antibodies Proven: no</p> <p>Competitors:</p> <ul style="list-style-type: none"> - Bristol Myers Squibb Co. (BMY) / Erbitux (Cetuximab) - Bristol Myers Squibb Co. (BMY) / Yervoy (Ipilimumab) - Roche Holding Ltd. (ADR) (RHHBY) / Herceptin (Trastuzumab) - Roche Holding Ltd. (ADR) (RHHBY) / Genentech - MetMAB - Roche Holding Ltd. (ADR) (RHHBY) / Genentech - Herceptin (Trastuzumab)/Avastin (Bevacizumab) <p>More: 4 companies; 6 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			
Intravenous Omecamtiv (Cardiac Myosin Activator)/Formerly CK-1827452	Chronic Heart Failure		Development On Hold/Terminated
Oral Omecamtiv (Cardiac Myosin Activator)/Formerly CK-1827452	Chronic Heart Failure		Phase II
◆ Dermatology			
▲ Lesion/Scaling Disorders			
▲ Psoriasis			
● Tumor Necrosis Factor-Alpha Antagonists (TNF-Alpha Antagonists)			
◆ Digestive System			
▲ Gastrointestinal Tract Disorders			
▲ Stomatognathic Disorders			
▲ Mucositis			
● Keratinocyte Growth Factor (KGF)			
Kepivance (Palifermin)	Oral Mucositis Associated With Radiation Therapy And Chemotherapy For Solid Tumors		Phase III
Kepivance (Palifermin)	Severe Oral Mucositis In Patients With Hematologic Malignancies Associated With Chemotherapy	Skin Rash, Oral Toxicities, Pain Arthralgias, Dysesthesia	Approved
◆ Endocrinology/Metabolism			
▲ Parathyroid Gland Disorders			
▲ Hyperparathyroidism (HPT)			
● Calcimimetic Agents			
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 Post Kidney Transplant Patients		Phase III
● Phase I/Phase II Clinical Stage Products			
AMG 151	Type 2 Diabetes		Phase I
AMG 221	Non-Insulin Dependent Diabetes Mellitus/Type II Diabetes		Phase I
AMG 222/ALS 2-0426 (DPP-IV Inhibitor)	Non-Insulin Dependent Diabetes Mellitus (NIDDM)/Type 2 Diabetes		Phase II
AMG 477	Non-Insulin Dependent Diabetes Mellitus (NIDDM)/Type 2 Diabetes		Phase I

Sector and Product Hierarchy Path	Indications	Side Effects	Stage of Development
Enbrel/Enbrel Once-Weekly (Etanercept)	Insulin Dependent Diabetes Mellitus (IDDM)/Type 1 Diabetes		Phase I/II
Sensipar (Cinacalcet Hydrochloride)	Primary Hyperparathyroidism (HPT)		Phase II
◆ Hematology			
● Phase I/Phase II Clinical Stage Products			
AMG 145	Hypercholesterolemia		Phase I
AMG 223/Formerly ILY101	Hyperphosphatemia In Chronic Kidney Disease (CKD) Patients On Hemodialysis		Phase II
Nplate (Romiplostim)	Myelodysplastic Syndrome (MDS)		Phase II
Nplate (Romiplostim)	Chemotherapy Induced Thrombocytopenia		Phase II
▲ Red Blood Cell (RBC) Disorders			
▲ 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, Increased Risks Of Mortality, Serious Cardiovascular Events, Thromboembolic Events, And Tumor Progression When Used In Off-Label Dose Regimens	Approved
Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick	Once Every 3 Weeks Dosing For The Treatment Of Chemotherapy Induced Anemia	Infection, Hypertension, Hypotension, Myalgia, Headache, Diarrhea, Increased Risks Of Mortality, Serious Cardiovascular Events, Thromboembolic Events, And Tumor Progression When Used In Off-Label Dose Regimens	Approved
Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick	Anemia In Heart Failure Patients		Phase III
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
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, Increased Risks Of Mortality, Serious Cardiovascular Events, Thromboembolic Events, And Tumor Progression When Used In Off-Label Dose Regimens	Approved
▲ White Blood Cell (WBC) Disorders			
▲ Neutropenia			
▲ Colony Stimulating Factors (CSF)			

Sector and Product Hierarchy Path	Indications	Side Effects	Stage of Development
● 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
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, Infection Including Tuberculosis, 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, Infection Including Tuberculosis, 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 (RA)	njection Site Reaction, Infection Including Tuberculosis, 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 (RA), Moderate To Severely Active Polyarticular-Course Juvenile Idiopathic Arthritis (JIA) In Patients 2 Years And Older, Reduce Symptoms/Delay Structural Damage In Patients With Moderate To Severely Active Rheumatoid Arthritis (RA)	Injection Site Reaction, Infection Including Tuberculosis, Headache, Rhinitis, Pharyngitis, Dizziness, Cough, Asthenia	Approved
Enbrel/Enbrel Once-Weekly (Etanercept)	Once-Weekly Dosing For Rheumatoid Arthritis (RA)	njection Site Reaction, Infection Including Tuberculosis, Headache, Rhinitis, Pharyngitis, Dizziness, Cough, Asthenia	Approved
Enbrel/Enbrel Once-Weekly (Etanercept)	Moderate To Severely Active Rheumatoid Arthritis (RA), Moderate To Severely Active Polyarticular-Course Juvenile Idiopathic Arthritis (JIA) In Patients 2 Years And Older, Reduce Symptoms/Delay Structural Damage In Patients With Moderate To Severely Active Rheumatoid Arthritis (RA)	Injection Site Reaction, Infection Including Tuberculosis, Headache, Rhinitis, Pharyngitis, Dizziness, Cough, Asthenia	Approved
▲ Idiopathic Thrombocytopenia Purpura (ITP)			
● Platelet Growth Factors			
Nplate (Romiplostim)	Chronic Immune Thrombocytopenia Pupura (ITP)	Arthralgia, Dizziness, Insomnia, Myalgia, Pain in Extremity, Abdominal Pain, Shoulder Pain, Dyspepsia, Paresthesia	Approved
▲ Psoriasis			
● Tumor Necrosis Factor-Alpha Antagonists (TNF-Alpha Antagonists)			
● Phase I/Phase II Clinical Stage Products			
AMG 108	Rheumatoid Arthritis (RA)		Phase II
AMG 191	Inflammatory Diseases		Phase I
AMG 557	Systemic Lupus Erythematosus (SLE)		Phase I
AMG 714 (Interleukin-15)	Psoriasis		Phase I
AMG 761/KW-0761 (Anti-CCR4 Humanized Monoclonal Antibody)	Inflammatory Diseases		Phase II
AMG 811	Systemic Lupus Erythematosus (SLE)		Phase I
AMG 827	Rheumatoid Arthritis (RA)		Phase II
Prolia (Denosumab)	Rheumatoid Arthritis (RA)		Phase II
◆ Musculoskeletal System			
● Phase I/Phase II Clinical Stage Products			
AMG 108	Rheumatoid Arthritis (RA)		Phase II
AMG 167	Bone-Related Conditions		Phase I
AMG 745	Muscle Wasting Disorders		Phase II
Prolia (Denosumab)	Rheumatoid Arthritis (RA)		Phase II

Sector and Product Hierarchy Path	Indications	Side Effects	Stage of Development
Sclerostin Ab/AMG 785	Bone Loss		Phase II
▲ Skeletal Disorders			
▲ Bone Disorders			
▲ Osteoporosis			
● Receptor Activator Of Nuclear Factor-kB Ligand (RANKL) Inhibitors			
Prolia (Denosumab)	Treatment Of Postmenopausal Women With Osteoporosis At High Risk For Fracture		Approved
Prolia (Denosumab)	Treatment And Prevention Of Treatment-Induced Bone Loss (TIBL) Resulting From Hormone Ablation Therapy For Breast And Prostate Cancer		BLA Filed
▲ Joint Disorders			
▲ Ankylosing Spondylitis			
● Tumor Necrosis Factor-Alpha Antagonists (TNF-Alpha Antagonists)			
Enbrel/Enbrel Once-Weekly (Etanercept)	Ankylosing Spondylitis	Infection Including Tuberculosis, Headache, Abdominal Pain, Nausea, Vomiting	Approved
Enbrel/Enbrel Once-Weekly (Etanercept)	Chronic Moderate-To-Severe Plaque Psoriasis In Pediatric Patients		Complete Response Letter Received
Enbrel/Enbrel Once-Weekly (Etanercept)	Chronic Moderate-To-Severe Plaque Psoriasis	Injection Site Reaction, Infection Including Tuberculosis, Headache, Rhinitis, Pharyngitis, Dizziness, Cough, Asthenia	Approved
Enbrel/Enbrel Once-Weekly (Etanercept)	Chronic Moderate-To-Severe Plaque Psoriasis In Pediatric Patients		Complete Response Letter Received
Enbrel/Enbrel Once-Weekly (Etanercept)	Chronic Moderate-To-Severe Plaque Psoriasis	Injection Site Reaction, Infection Including Tuberculosis, Headache, Rhinitis, Pharyngitis, Dizziness, Cough, Asthenia	Approved
▲ Psoriatic Arthritis			
● Tumor Necrosis Factor-Alpha Antagonists (TNF-Alpha Antagonists)			
▲ Rheumatoid Arthritis (RA)			
▲ Immunotherapy			
● Interleukin-1 Receptor Antagonists (IL-1 Antagonists)			
● Tumor Necrosis Factor-Alpha Antagonists (TNF-Alpha Antagonists)			
◆ Neurology			
● Phase I/Phase II Clinical Stage Products			
AMG 747	Neuroscience		Phase I
◆ Oncology			
▲ Breast Cancer			
▲ Localized			
● Recombinant Human Erythropoietins			

Sector and Product Hierarchy Path	Indications	Side Effects	Stage of Development
Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick	Neoadjuvant Breast Cancer In Combination With Standard Preoperative Chemotherapy Regimen		Phase III
▲ Dermatology			
▲ Malignant Melanoma			
● Vaccines			
BioVex - OncoVex GM-CSF	Melanoma		Phase III
▲ Digestive System			
▲ Colon Cancer/Colorectal Cancer			
▲ Metastatic			
● Monoclonal Antibodies			
Vectibix (Panitumumab)	First-Line Treatment Of Metastatic Colorectal Cancer (Colon Cancer) In Combination With FOLFIRI		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
Vectibix (Panitumumab)	Second-Line Treatment Of Metastatic Colorectal Cancer In Combination With FOLFIRI (Colon Cancer)		Phase III
▲ Endocrinology			
▲ Parathyroid Gland			
▲ Palliative Agents			
● Calcimimetic Agents			
▲ Head/Neck Cancer			
▲ Localized			
● Vaccines			
BioVex - OncoVex GM-CSF	Locally Advanced Squamous Cell Carcinoma Of The Head And Neck		Phase III
▲ Metastatic			
● Monoclonal Antibodies			
Vectibix (Panitumumab)	Metastatic And Recurrent Head And Neck Cancer		Phase III
▲ Musculoskeletal System			
▲ Metastatic			
● Receptor Activator Of Nuclear Factor-κB Ligand (RANKL) Inhibitors			
Prolia (Denosumab)	Prevention Of Skeletal-related Events In Patients With Bone Metastases From Solid Tumor (Cancer)	Dyspnea, Fatigue/asthenia, Hypophosphatemia, And Nausea	Approved
● Phase I/Phase II Clinical Stage Products			
AMG 102	Metastatic Gastric Cancer, Metastatic Esophageal Cancer		Phase I/II
AMG 208	Advanced Cancers		Phase I
AMG 386	Cancer		Phase II

Sector and Product Hierarchy Path	Indications	Side Effects	Stage of Development
AMG 479	Cancer		Phase II
AMG 655 (Conatumumab)	Metastatic Pancreatic Cancer		Phase I/II
AMG 655 (Conatumumab)	Metastatic Colorectal Cancer (Colon Cancer)		Phase II
AMG 655 (Conatumumab)	Non-Small Cell Lung Cancer (NSCLC)		Phase I/II
AMG 655 (Conatumumab)	Unresectable Soft Tissue Sarcoma		Phase II
AMG 820	Various Cancers		Phase I
AMG 888	Various Cancers		Phase I
AMG 900	Various Cancers		Phase I
Dulanermin (rhApo2L/TRAIL)	Colorectal Cancer (Colon Cancer)		Phase I
Dulanermin (rhApo2L/TRAIL)	Non-Hodgkin's Lymphoma (NHL) In Combination With Rituxan (Rituximab)		Phase II
Dulanermin (rhApo2L/TRAIL)	Non-Small Cell Lung Cancer (NSCLC) In Combination With Chemotherapy With/Without Avastin		Phase II
Motesanib Diphosphate/Formerly AMG 706	Advanced Thyroid Cancer		Phase II
Motesanib Diphosphate/Formerly AMG 706	Gastrointestinal Stromal Tumors (GIST)		Phase II
Motesanib Diphosphate/Formerly AMG 706	First Line Metastatic Breast Cancer		Phase II
Panitumumab/Gemcitabine/Carboplatin Triple Combination Therapy	Metastatic Triple-Negative Breast Cancer		Phase II
Prolia (Denosumab)	Multiple Myeloma (MM)		Phase II
Prolia (Denosumab)	Giant Cell Tumor (GCT) Of The Bone		Phase II
Vectibix (Panitumumab)	Metastatic Colorectal Cancer (Colon Cancer) In Combination With FOLFIRI In Patients Who Failed First Line FOLFOX And Avastin (Bevacizumab) Treatment		Phase II
▲ Respiratory System/Thoracic			
▲ Lung Cancer			
▲ Non Small Cell Lung Cancer (NSCLC)			
● VEGFR/PDGFR/SCFR Inhibitors			
Motesanib Diphosphate/Formerly AMG 706	First Line Non-Small Cell Lung Cancer (NSCLC) In Combination With Carboplatin And Paclitaxel		Phase III
▲ Urology			
▲ Prostate Cancer			
▲ Metastatic			
● Receptor Activator Of Nuclear Factor-kB Ligand (RANKL) Inhibitors			
Prolia (Denosumab)	Prevention Of Bone Cancer Metastases In Prostate Cancer		Phase III
◆ Respiratory System			

Sector and Product Hierarchy Path	Indications	Side Effects	Stage of Development
● Phase I/Phase II Clinical Stage Products			
AMG 157	Asthma		Phase I
AMG 317(IL-4/IL-13 Antibody)	Asthma		Phase II
AMG 761/KW-0761 (Anti-CCR4 Humanized Monoclonal Antibody)	Asthma		Phase I
AMG 853	Asthma		Phase II
◆ 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			
AMG 223/Formerly ILY101	Hyperphosphatemia In Chronic Kidney Disease (CKD) Patients On Hemodialysis		Phase II
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, Increased Risks Of Mortality, Serious Cardiovascular Events, Thromboembolic Events, And Tumor Progression When Used In Off-Label Dose Regimens	Approved

Sector and Product Hierarchy Path	Indications	Side Effects	Stage of Development
Aranesp (Darbepoetin Alfa)/Aranesp Prefilled SureClick	Chronic Kidney Disease Patients With Anemia Not On Dialysis		Approvable Letter Received
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, Increased Risks Of Mortality, Serious Cardiovascular Events, Thromboembolic Events, And Tumor Progression When Used In Off-Label Dose Regimens	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, Increased Risks Of Mortality, Serious Cardiovascular Events, Thromboembolic Events, And Tumor Progression When Used In Off-Label Dose Regimens	Approved
▲ Hyperparathyroidism			
● Calcimimetic Agents			
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)	Risk Reduction Of Mortality And Cardiovascular Morbidity In Secondary Hyperparathyroidism (HPT) And Chronic Kidney Disease Undergoing Maintenance Dialysis		Phase III
Sensipar (Cinacalcet Hydrochloride)	Elevated Calcium Levels (Hypercalcemia) In Post Kidney Transplant Patients		Phase III
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)	Elevated Calcium Levels (Hypercalcemia) In Post Kidney Transplant Patients		Phase III
Sensipar (Cinacalcet Hydrochloride)	Secondary Hyperparathyroidism (HPT) In Chronic Renal Insufficiency		Development On Hold/Terminated