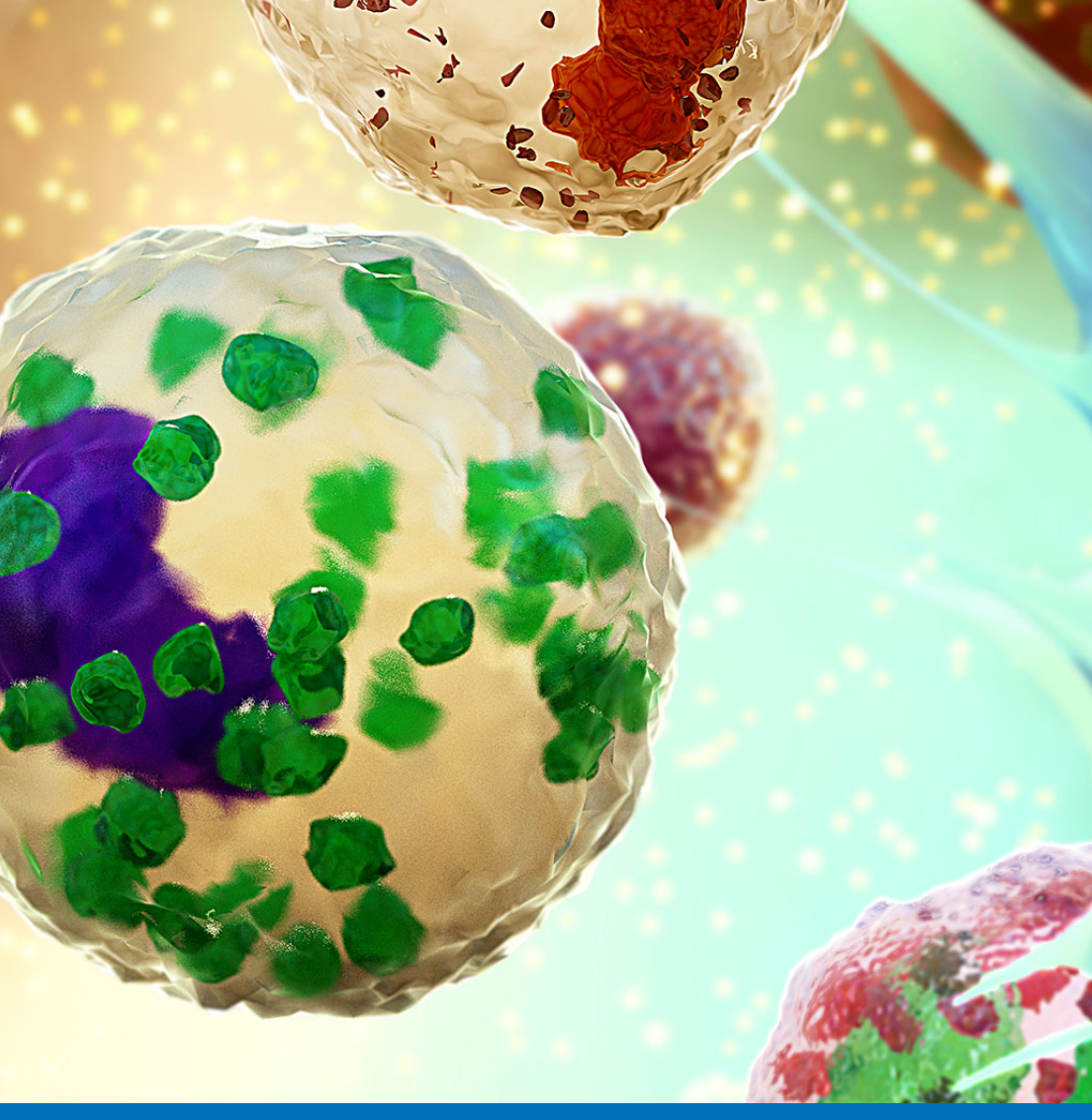


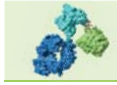
OUR CLINICAL TRIALS

Advancing oncology at the speed of life™

AMGEN®

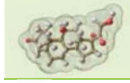
Oncology

MULTIPLE MYELOMA



AMG 701
HLE BiTE® platform (HLE BiTE® molecule targeting BCMA)

NCT:	Amgen ID*:		Status	
NCT: 03287908	Amgen ID*: 20170122	First-in-Human Study of AMG 701 in Multiple Myeloma	R	Phase 1



Carfilzomib†
Small molecule (proteasome inhibitor)

NCT:	Amgen ID*:		Status	
NCT: 03091127	Amgen ID*: 20150262	Real-world Use of Carfilzomib Among Patients With Relapsed MM in Europe	C	Phase *Observational*
NCT: 03512353	Amgen ID*: 20170596	A Study of Carfilzomib Plus Dexamethasone in Subjects With Relapsed or Refractory Multiple Myeloma at US Community Oncology Centers	C	Phase 2
NCT: 03859427	Amgen ID*: 20180015	Study of Once-Weekly vs Twice Weekly Carfilzomib in Combination With Lenalidomide and Dexamethasone in Patients With Relapsed or Refractory Multiple Myeloma (A.R.R.O.W.2)	R	Phase 3
NCT: 03158688	Amgen ID*: 20160275	Study Comparing Carfilzomib, Dexamethasone, and Daratumumab to Carfilzomib and Dexamethasone in Relapsed and/or Refractory Multiple Myeloma (CANDOR)	A	Phase 3
NCT: 04191616	Amgen ID*: 20180117	Study of Carfilzomib Plus Pomalidomide and Dexamethasone in Patients With First or Second Relapse of Multiple Myeloma	N	Phase 2

LEUKEMIA ACUTE MYELOID LEUKEMIA

AMG 330
BiTE® platform (BiTE® molecule targeting CD33)

NCT:	Amgen ID*:		Status	
NCT: 02520427	Amgen ID*: 20120252	First-in-Human Study of AMG 330 in Adult Patients With Relapsed or Refractory AML	R	Phase 1

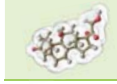
AMG 673
HLE BiTE® platform (HLE BiTE® molecule targeting CD33)

NCT:	Amgen ID*:		Status	
NCT: 03224819	Amgen ID*: 20160377	First-in-Human Study of AMG 673 in Adult Patients With Relapsed or Refractory AML	R	Phase 1

AMG 427
HLE BiTE® platform (HLE BiTE® molecule targeting [FLT3] antigen)

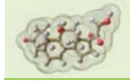
NCT:	Amgen ID*:		Status	
NCT: 03541369	Amgen ID*: 20170528	First-in-Human Study of AMG 427 in Patients With Relapsed/Refractory AML	R	Phase 1

LEUKEMIA ACUTE MYELOID LEUKEMIA (continued)



AMG 176
Small molecule (Intravenous MCL-1 inhibitor)

NCT:	Amgen ID*:		Status	
NCT: 02675452	Amgen ID*: 20150161	First-in-Human Study of AMG 176 in Relapsed or Refractory AML	A	Phase 1



AMG 397
Small molecule (Oral MCL-1 inhibitor)

NCT:	Amgen ID*:		Status	
NCT: 03465540	Amgen ID*: 20170173	Safety, Tolerability, Pharmacokinetics and Efficacy of AMG 397 in Patients With Hematologic Malignancies	A	Phase 1

AMG 553
Anti-FLT3 CAR T

NCT:	Amgen ID*:		Status	
NCT: 03904069	Amgen ID*: 20180091	First in Human Study of AMG 553 in Patients With Relapsed or Refractory Acute Myeloid Leukemia	N	Phase 1

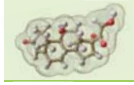
LEUKEMIA ACUTE LYMPHOBLASTIC LEUKEMIA

Blinatumomab
BiTE® platform (BiTE® molecule targeting CD19)

NCT:	Amgen ID*:		Status	
NCT: 02412306	Amgen ID*: 20130265	Study of Blinatumomab in Japanese Patients With Relapsed or Refractory B-Precursor ALL	C	Phase 1b/2
NCT: 02393859	Amgen ID*: 20120215	Blinatumomab vs Standard Chemotherapy in Pediatric Patients With High Risk First Relapse B-Precursor ALL	A	Phase 3
NCT: 03476239	Amgen ID*: 20130316	Study of Blinatumomab in Chinese Adult Patients With Relapsed or Refractory B-precursor ALL	A	Phase 3
NCT: 02783651	Amgen ID*: 20150253	Observational Study of Patients With Philadelphia Chromosome-Negative Relapsed or Refractory ALL in the US	C	Phase *Observational*
NCT: 02187354	Amgen ID*: 20130320	Expanded Access Protocol of Blinatumomab in Pediatric and Adolescent Patients With Relapsed or Refractory B-Precursor ALL (RIALTO)	No longer available	Phase 4
NCT: 03117621	Amgen ID*: 20150136	Observational Study of Blinatumomab	R	Phase 4

N *Not yet recruiting* R *Active, recruiting* A *Active, not recruiting* C *Completed, pending results*

LEUKEMIA ACUTE LYMPHOBLASTIC LEUKEMIA (continued)



Carfilzomib†
Small molecule (proteasome inhibitor)

NCT:	Amgen ID*:		Status	
02303821	CFZ008	Carfilzomib in Combination With Induction Chemotherapy in Children With Relapsed or Refractory ALL	R	Phase 1b

LYMPHOMA NON-HODGKIN LYMPHOMA

ABP 798‡
Monoclonal antibody (rituximab biosimilar)

NCT:	Amgen ID*:		Status	
02747043	20130109	Efficacy and Safety Study of ABP 798 Compared With Rituximab in Treating Non-Hodgkin Lymphoma (JASMINE)	C	Phase 3

AMG 562
HLE BiTE® Platform (HLE BiTE® molecule targeting CD19)

NCT:	Amgen ID*:		Status	
03571828	20170533	First-in-Human Study Evaluating Safety, Tolerability, Pharmacokinetics, and Efficacy of AMG 562 in Patients With Relapsed or Refractory Diffuse Large B-Cell Lymphoma, Mantle Cell Lymphoma, or Follicular Lymphoma	R	Phase 1

Blinatumomab
BiTE® platform (BiTE® molecule targeting CD19)

NCT:	Amgen ID*:		Status	
02961881	20140286	Safety and PK of Subcutaneous Blinatumomab in Relapsed or Refractory Indolent NHL	R	Phase 1b
03340766	20150290	Efficacy and Safety of Blinatumomab in Combination With Pembrolizumab in Adult Patients With Relapsed or Refractory DLBCL (KEYNOTE-348)	A	Phase 1b
03023878	20150288	Efficacy and Safety of Blinatumomab in Patients With Newly Diagnosed High-Risk DLBCL	C	Phase 2
02910063	20150292	Efficacy and Safety of Blinatumomab in Patients With Relapsed or Refractory Aggressive B-Cell NHL	C	Phase 2

OTHER PAROXYSMAL NOCTURNAL HEMOGLOBINURIA

ABP 959‡
Monoclonal antibody (eculizumab biosimilar)

NCT:	Amgen ID*:		Status	
03818607	20150168	Efficacy and Safety of ABP 959 Compared With Eculizumab in Adult Participants With PNH (DAHLIA)	R	Phase 3

OTHER CHRONIC GRAFT VERSUS HOST DISEASE

AMG 592
Protein/Peptibody (IL-2 mutein)

NCT:	Amgen ID*:		Status	
03422627	20160283	Open-label Study Evaluating the Safety, Tolerability, Pharmacokinetics, Pharmacodynamics, and Efficacy of AMG 592 in Adult Patients With Steroid Refractory Chronic Graft Versus Host Disease	R	Phase 1b/2

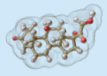
OTHER IMMUNE THROMBOCYTOPENIA

Romiplostim
Protein/Peptibody (thrombopoiesis stimulator)

NCT:	Amgen ID*:		Status	
02279173	20101221	Single-Arm, Open-Label, Long-Term Study of Romiplostim in Thrombocytopenic Pediatric Patients With ITP	C	Phase 3

N *Not yet recruiting* R *Active, recruiting* A *Active, not recruiting* C *Completed, pending results*

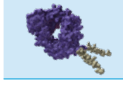
LUNG CANCER NON SMALL CELL LUNG CANCER



Sotorasib (proposed INN for AMG 510)

Small molecule (KRAS^{G12C} inhibitor)

NCT: 03600883 Amgen ID*: 20170543	Status	Phase
CodeBreak 100: Open-Label Study Evaluating AMG 510 Monotherapy and in Combination Therapy With Anti-PD-1/L1 in NSCLC With *KRAS G12C* Mutation	Ⓡ	1/2
NCT: 04185883 Amgen ID*: 20190135	Status	Phase
CodeBreak 101: Open-Label Study Evaluating AMG 510 Monotherapy and in Combination With Other Anti-Cancer Therapies in Advanced Solid Tumors With *KRAS G12C* Mutation	Ⓡ	1b
NCT: 04303780 Amgen ID*: 20190009	Status	Phase
CodeBreak 200: A Phase 3 Study to Compare Sotorasib (proposed INN for AMG 510) With Docetaxel for the Treatment of Previously Treated Locally Advanced and Unresectable or Metastatic NSCLC With *KRAS G12C* Mutation	Ⓡ	3

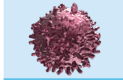


Romiplostim

Protein/Peptibody (thrombopoiesis stimulator)

NCT: 03937154 Amgen ID*: 20170770	Status	Phase
Study of Romiplostim for Chemotherapy Induced Thrombocytopenia in Patients With Non Small Cell Lung, Ovarian or Breast cancer	Ⓡ	3

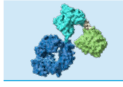
LUNG CANCER SMALL CELL LUNG CANCER



AMG 119

CAR T-Cell therapy (anti-DLL3 CAR-T)

NCT: 03392064 Amgen ID*: 20170124	Status	Phase
First-in-Human Study of AMG 119 to Evaluate the Safety, Tolerability and Efficacy in Patients With RR SCLC	Ⓐ	1

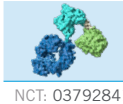


AMG 757

HLE BiTE® platform (HLE BiTE® molecule targeting DLL3)

NCT: 03319940 Amgen ID*: 20160323	Status	Phase
First-in-Human Study Evaluating AMG 757 Monotherapy and in Combination With Anti-PD1 Therapy in SCLC	Ⓡ	1

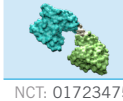
PROSTATE CANCER



AMG 160

HLE BiTE® platform (HLE BiTE® molecule targeting PSMA)

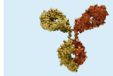
NCT: 03792841 Amgen ID*: 20180101	Status	Phase
Safety, Tolerability, Pharmacokinetics, and Efficacy of AMG 160 in Patients With mCRPC	Ⓡ	1



AMG 212

BiTE® platform (BiTE® molecule targeting PSMA)

NCT: 01723475 Amgen ID*: 15590	Status	Phase
Phase 1 Study of Pasotuximab (BAY 2010112), a PSMA-targeting Bispecific T-cell Engager (BiTE®) Immunotherapy for Metastatic Castration-Resistant Prostate Cancer (mCRPC)	[C]	1

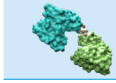


AMG 509

XmAb® Platform (XmAb® targeting STEAP1)

NCT: 04221542 Amgen ID*: 20180146	Status	Phase
Phase 1 Study Evaluating the Safety, Tolerability, Pharmacokinetics, and Efficacy of AMG 509 in Subjects With Metastatic Castration-Resistant Prostate Cancer	Ⓡ	1

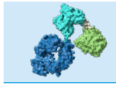
GASTRIC & GASTROESOPHAGEAL JUNCTION CANCER



AMG 910

BiTE® platform (BiTE® molecule targeting CLDN18.2)

NCT: 04260191 Amgen ID*: 20180292	Status	Phase
A Phase 1 Study Evaluating the Safety, Tolerability, Pharmacokinetics, and Efficacy of AMG 910 in Subjects With Claudin 18.2-Positive Gastric and Gastroesophageal Junction Adenocarcinoma	[N]	1

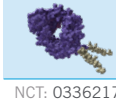


AMG 199

HLE BiTE® Platform (HLE BiTE® molecule targeting MUC17)

NCT: 04117958 Amgen ID*: 20180290	Status	Phase
A Phase 1 Study of AMG 199 in Subjects With MUC17-Positive Gastric and Gastroesophageal Junction Cancer	Ⓡ	1

GASTROINTESTINAL OR COLORECTAL CANCER



Romiplostim

Protein/Peptibody (thrombopoiesis stimulator)

NCT: 03362177 Amgen ID*: 20140346	Status	Phase
Study of Romiplostim for Chemotherapy Induced Thrombocytopenia in Patients With Gastrointestinal or Colorectal Cancer	Ⓡ	3

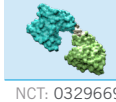
GIANT CELL TUMORS OF THE BONE

Denosumab

Monoclonal antibody (RANK-ligand inhibitor)

NCT: 03301857 Amgen ID*: 20140114	Status	Phase
Long-term Safety Follow-up of Subjects With Giant Cell Tumor of Bone Treated With Denosumab in Study 20062004	Ⓐ	4

GLIOBLASTOMA / MALIGNANT GLIOMA



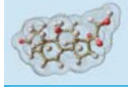
AMG 596

BiTE® platform (BiTE® molecule targeting EGFRvIII)

NCT: 03296696 Amgen ID*: 20160132	Status	Phase
Phase 1/1b Study to Evaluate Safety, Tolerability, Pharmacokinetics and Pharmacodynamics of AMG 596 monotherapy or in combination With AMG 404 in Adult Patients With EGFRvIII positive Glioblastoma or Malignant Glioma	Ⓡ	1

[N] *Not yet recruiting* Ⓡ *Active, recruiting* Ⓐ *Active, not recruiting* [C] *Completed, pending results*

SOLID TUMORS WITH *KRAS G12C* MUTATION



Sotorasib (proposed INN for AMG 510)

Small molecule (KRAS^{G12C} inhibitor)

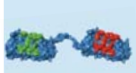
NCT:	Amgen ID*:		Status	
03600883	20170543	**CodeBreak 100:** Open-Label Study Evaluating AMG 510 Monotherapy in Advanced Solid Tumors With *KRAS G12C* Mutation	Ⓡ	Phase 1/2
04185883	20190135	**CodeBreak 101:** Open-Label Study Evaluating AMG 510 Monotherapy and in Combination With Other Anti-Cancer Therapies in Advanced Solid Tumors With *KRAS G12C* Mutation	Ⓡ	Phase 1b

VARIOUS SOLID TUMORS

AMG 256

Bi-functional fusion protein (Targeted IL-21 receptor agonist)

NCT:	Amgen ID*:		Status	
04362748	20180144	A Phase 1 Study to Evaluate Safety, Tolerability, Pharmacokinetics and Pharmacodynamics of AMG 256 in Patients With Advanced Solid Tumors	Ⓝ	Phase 1



AMG 506# (also known as MP0310)

DARPin® protein targeting FAP x 4-1BB

NCT:	Study ID*:		Status	
04049903	MP0310-CP101	A First-In-Human, Single-Arm, Multi-Center, Open-Label, Repeated-Dose, Dose-Escalation Study of MP0310 in Patients With Advanced Solid Tumors	Ⓡ	Phase 1

AMG 404

Monoclonal antibody (Anti-PD1)

NCT:	Amgen ID*:		Status	
03853109	20180143	Safety, Tolerability, Pharmacokinetics and Pharmacodynamics of AMG 404, in Patients With Advanced Solid Tumors	Ⓡ	Phase 1

Pegfilgrastim

Protein (G-CSF)

EU PAS**:	Amgen ID‡:		Status	
24626	20170758	Prospective Observational Study to Estimate Incidence of Febrile Neutropenia in High Risk Patients With Non-myeloid Malignancies Receiving Pegfilgrastim OBI (Onbody Injector) or Physician Choice for Febrile Neutropenia Prophylaxis	Ⓡ	Phase *Observational*

Talimogene laherparepvec††

Oncolytic immunotherapy (oncolytic viral therapy)

NCT:	Amgen ID*:		Status	
02756845	20110261	Study of Talimogene Laherparepvec in Children With Advanced Non-CNS Tumors	Ⓡ	Phase 1
03064763	20140270	Study to Evaluate the Safety/Efficacy of T-VEC in Japanese Subjects With Unresectable Stage IIIB-IV Malignant Melanoma	Ⓐ	Phase 1

NCT:	Amgen ID*:		Status	
02626000	20130232	Talimogene Laherparepvec With Pembrolizumab for Recurrent Metastatic Squamous Cell Carcinoma of the Head and Neck (MASTERKEY-232/ KEYNOTE-137)	Ⓐ	Phase 1b
02509507	20140318	Safety Study of Talimogene Laherparepvec Injected Into Liver Tumors Alone and in Combination With Systemic Pembrolizumab (MASTERKEY-318)	Ⓡ	Phase 1b
03256344	20140299	Safety Study of Talimogene Laherparepvec Combined With Atezolizumab for Triple Negative Breast Cancer and Colorectal Cancer With Liver Metastases	Ⓡ	Phase 1b
01740297	20110264	Ipilimumab With or Without Talimogene Laherparepvec in Unresected Melanoma	Ⓐ	Phase 1b/2
04068181	20180115	T-VEC With Pembrolizumab in Melanoma Following Progression on Prior Anti-PD-1 Based Therapy (MASTERKEY-115)	Ⓡ	Phase 2
02211131	20110266	Efficacy and Safety of Talimogene Laherparepvec Neoadjuvant Treatment Plus Surgery Versus Surgery Alone for Melanoma	Ⓐ	Phase 2
02366195	20120325	Single-Arm Trial to Evaluate the Role of the Immune Response to Talimogene Laherparepvec in Unresected Melanoma	Ⓐ	Phase 2
02263508	20110265	Pembrolizumab With or Without Talimogene Laherparepvec or Placebo in Unresected Melanoma (MASTERKEY-265)	Ⓐ	Phase 3
02910557	20130193	Postmarketing Prospective Study of Melanoma Patients Treated With Talimogene Laherparepvec to Characterize Risk of Herpetic Infection	Ⓡ	Phase 4
02173171	20120139	Registry Study to Evaluate the Survival and Long-Term Safety of Patients With Melanoma Who Previously Received Talimogene Laherparepvec	Registry	*Enrolling by invitation only*

*For more detailed information about the trial, visit www.clinicaltrials.gov or www.amgentrials.com. †Sponsored by Onyx Pharmaceuticals, an Amgen subsidiary. ‡The regulatory approval pathway for biosimilars requires study of a single indication and permits extrapolation to other reference indications with scientific justification. ††Previously referred to as OncoVEX^{GM-CSF}. **For detailed information on this study please visit http://www.encepp.eu/encepp/studiesDatabase.jsp. #AMG 506 (also known as MP0310) is being developed in collaboration with Molecular Partners AG. DARPin® is a registered trademark owned by Molecular Partners AG.

XmAb® is a registered trademark of Xencor.

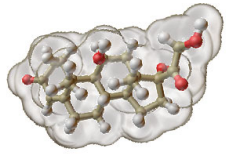
ALL – acute lymphoblastic leukemia; AML – acute myelogenous leukemia; BiTE® – bispecific T cell engager; CD – cluster of differentiation; CLDN – claudin-1; CNS – central nervous system; DARPin® – designed ankyrin repeat proteins; DLBCL – diffuse large B-cell lymphoma; DLL3 – delta-like ligand 3; EGFR – epidermal growth factor receptor; EGFRvIII – epidermal growth factor receptor variant III; FAP – fibroblast activation protein; FLT-3 – fms-like tyrosine kinase 3; G-CSF – granulocyte colony-stimulating factor; HLE – half-life extended; INN – International Nonproprietary Name; ITP – immune thrombocytopenic purpura; IL-21 – interleukin-21, IV – intravenous; KRAS – kirsten rat sarcoma 2 viral oncogene homolog; mAb – monoclonal antibody; mCRPC – metastatic castration-resistant prostate cancer; MCL-1 – myeloid cell leukemia sequence 1; MM – multiple myeloma; MUC – mucin; NHL – non-hodgkin lymphoma; PD-1 – programmed cell death protein-1; PD L1 – programmed death-ligand 1; PK – pharmacokinetics; PNH – paroxysmal nocturnal hemoglobinuria; PSMA – prostate-specific membrane antigen; RANK – receptor activator of nuclear factor kappa B; RR – relapsed or refractory. SCLC – small cell lung cancer; STEAP – six-transmembrane epithelial antigen of the prostate.

Ⓝ *Not yet recruiting* Ⓡ *Active, recruiting* Ⓐ *Active, not recruiting* Ⓒ *Completed, pending results*

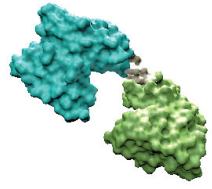
MODALITIES

Amgen has built an array of drug modalities that is unsurpassed in the biopharma industry.

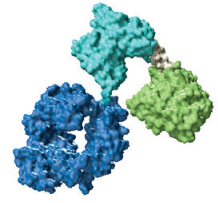
Small Molecule



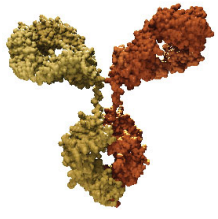
BiTE® Technology



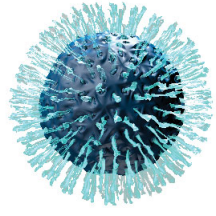
HLE BiTE® Technology



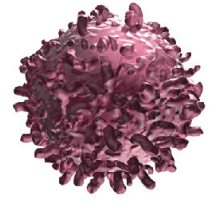
XmAb® Bispecific Antibody



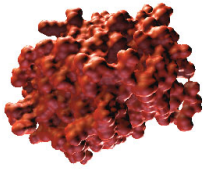
Oncolytic Immunotherapy



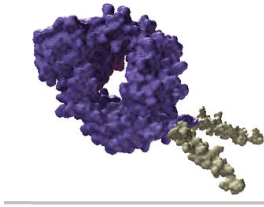
CAR T Cell



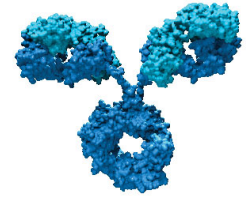
Protein



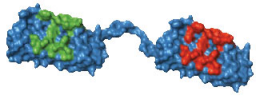
Peptibody



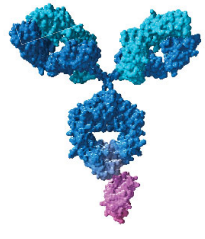
Monoclonal Antibody



DARPin® Peptibody



Bi-functional Fusion Protein



Disclaimer: Amgen's product pipeline will change over time as molecules move through the drug development process, including progressing to market or failing in clinical trials, due to the nature of the development process.
BiTE = bispecific T-cell engager; CAR = chimeric antigen receptor; HLE – half-life extended.

INSIDE BACK COVER

Amgen's Research and Development Guiding Principles

Amgen aspires to be the best human therapeutics company. Achieving this goal starts with building the world's premier R&D organization. Amgen's R&D Guiding Principles were inspired by this pursuit and designed to reinforce our strategic priorities.

Focus on innovative medicines for unmet needs in patients with serious illnesses. While Amgen is always pursuing new opportunities and adapting to challenges, we retain an enduring commitment to the same mission. That mission is to enhance and extend the lives of patients facing serious illness.

Pursue targets that are validated in humans. We believe we are on the threshold of a revolution in science in which population genetics will help to reveal new targets that clearly drive disease risk in humans. By focusing on targets supported by human genetics or other strong human evidence, we aim to increase our clinical success rates, reduce development timelines, and lower the cost of delivering new medicines to patients.

Maintain multiple drug modalities with a focus on biologics. Amgen pursues a "biology-first" approach to drug discovery. We strive to select drug targets based on a deep understanding of disease biology, and then choose the drug modality, or structural template, best suited to the target. We recognize our strength in biologics and the higher clinical success rates for biologic medicines. We also maintain a broad toolkit of modalities, including small molecules, in order to have the right tool for any target we pursue.

Focus on return on investment and operational efficiency. To maximize the value of Amgen's R&D investment, we focus resources on programs that offer a large effect size and more likelihood of success. We maximize the value of lower-priority assets by partnering and out-licensing. Amgen also strives to continually identify operational efficiencies, such as reduced cycle times, leaner clinical trials, and centralized monitoring of clinical study sites.

Harness external innovation. At Amgen, we pursue great innovation wherever we can find it, and roughly half of our current late-stage pipeline comes from collaborations or acquisitions. We appreciate the synergy between in-house and external innovation: To identify and add value to the best external inventions, we need to maintain a high level of in-house scientific talent and capabilities.

Demonstrate the value of our medicines. Patients will not benefit from medicines they cannot access, and increasingly, access depends on meeting evolving standards from regulators and payers. To meet these expectations, we strive to deliver major therapeutic advances—medicines that offer compelling benefits for patients and sound health economics for society.

AMGEN®

Oncology