

Selected development projects

Project/ product	Common name	Mechanism of action	Potential indication/ disease area	Business franchise	Formulation/ route of administration	Year project entered current development phase	Planned filing dates/current phase
ABL001	asciminib	BCR-ABL inhibitor	Chronic myeloid leukemia, 3rd line	Oncology	Oral	2016	2021/III
			Chronic myeloid leukemia, 1st line	Oncology	Oral	2017	≥2023/I
ACZ885	canakinumab	Anti-interleukin-1 beta monoclonal antibody	2nd line non-small cell lung cancer	Oncology	Subcutaneous injection	2017	2021/III
			1st line non-small cell lung cancer	Oncology	Subcutaneous injection	2017	2021/III
			Adjuvant non-small cell lung cancer	Oncology	Subcutaneous injection	2017	2022/III
AVXS-101 (Zolgensma)	onasemnogene abeparvovec-xxxx	Survival motor neuron (SMN) gene replacement therapy	Spinal muscular atrophy type 1 (IV formulation)	Neuroscience	Intravenous infusion	2018	US/EU registration
			Spinal muscular atrophy type 2/3 (IT formulation)	Neuroscience	Intrathecal injection	2016	2020/I
AVXS-201	TBD	Methyl-CpG binding protein 2 (MECP2) gene replacement therapy	Rett syndrome	Neuroscience	Intrathecal injection	2018	2022/I
BAF312 (Mayzent)	siponimod	Sphingosine-1-phosphate receptor modulator	Secondary progressive multiple sclerosis	Neuroscience	Oral	2018	US/EU registration
BYL719	alpelisib	PI3K-alpha inhibitor	Hormone receptor-positive (HR+)/human epidermal growth factor receptor 2-negative (HER2-) advanced breast cancer (postmenopausal women), 2nd line (+ fulvestrant)	Oncology	Oral	2018	US/EU registration
CAD106	amilomotide	Beta-amyloid-protein therapy	Alzheimer's disease	Neuroscience	Intramuscular injection	2009	≥2023/II/III
CFZ533	iscalimab	Blocking, non-depleting, anti-CD40 monoclonal antibody	Solid organ transplantation	Immunology, Hepatology and Dermatology	Intravenous infusion	2017	≥2023/II
			Sjögren's syndrome	Immunology, Hepatology and Dermatology	Intravenous infusion	2018	≥2023/II
CNP520	TBD	BACE inhibitor	Alzheimer's disease	Neuroscience	Oral	2016	≥2023/II/III
Cosentyx	secukinumab	Anti-interleukin-17 monoclonal antibody	Non-radiographic axial spondyloarthritis	Immunology, Hepatology and Dermatology	Subcutaneous injection	2015	2019/III
			Psoriatic arthritis head-to-head study versus Humira® (adalimumab)	Immunology, Hepatology and Dermatology	Subcutaneous injection	2015	2020/III
			Ankylosing spondylitis head-to-head study versus Sandoz biosimilar Hyrimoz (adalimumab)	Immunology, Hepatology and Dermatology	Subcutaneous injection	2015	2022/III
			Hidradenitis suppurativa	Immunology, Hepatology and Dermatology	Intravenous infusion	2017	2022/III
CSJ117	TBD	Anti-thymic stromal lymphopoietin monoclonal antibody fragment	Severe asthma	Respiratory	Inhalation	2018	≥2023/II
ECF843	TBD	Boundary lubricant	Dry eye	Ophthalmology	Eye drops	2017	2022/II
EMA401	olodanrigan	Angiotensin II type 2 receptor antagonist	Peripheral neuropathic pain	Neuroscience	Oral	2015	≥2023/II
Entresto	valsartan and sacubitril (as sodium salt complex)	Angiotensin receptor/nepriylsin inhibitor	Chronic heart failure with preserved ejection fraction	Cardio-Metabolic	Oral	2012	2019/III
			Post-acute myocardial infarction	Cardio-Metabolic	Oral	2015	2020/III
HDM201	TBD	p53-HDM2 inhibitor	Acute myeloid lymphoma	Oncology	Oral	2017	≥2023/II
INC280	capmatinib	c-MET inhibitor	Non-small cell lung cancer	Oncology	Oral	2014	2019/II
			Non-small cell lung cancer (EGFR mutation)	Oncology	Oral	2016	2022/II
Jakavi	ruxolitinib	JAK1/2 inhibitor	Acute graft-versus-host disease	Oncology	Oral	2016	2020/III
			Chronic graft-versus-host disease	Oncology	Oral	2016	2020/III
KAE609	cipargamin	PfATP4 inhibitor	Malaria	Established Medicines	Oral	2012	≥2023/II

Item 4. Information on the Company

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KAF156	ganaplacide	Imidazolopiperazines derivative	Malaria	Established Medicines	Oral	2014	≥2023/II
<i>Kisqali</i>	ribociclib	CDK4/6 inhibitor	HR+/HER2- breast cancer (adjuvant)	Oncology	Oral	2018	≥2023/III
<i>Kymriah</i>	tisagen- lecleucel	CD19-targeted chimeric antigen receptor T-cell immunotherapy	Relapsed/refractory follicular lymphoma	Oncology	Intravenous infusion	2017	2021/II
			Chronic lymphocytic leukemia	Oncology	Intravenous infusion	2017	2022/II
			Relapsed/refractory diffuse large B-cell lymphoma in 1 st relapse	Oncology	Intravenous infusion	2018	2021/III
			Relapsed/refractory diffuse large B-cell lymphoma (+ pembrolizumab)	Oncology	Intravenous infusion	2017	≥2023/I
LAM320	clofazimine	Mycobacterial DNA binding	Multidrug-resistant tuberculosis	Established Medicines	Oral	2016	2021/III
LCI699	osilodrostat	Cortisol synthesis inhibitor	Cushing's disease	Oncology	Oral	2018	EU registration US 2019/III
LJC242	tropifexor, cenicriviroc (in fixed-dose combination)	FXR agonist and CCR2/5 inhibitor	Nonalcoholic steatohepatitis	Immunology, Hepatology and Dermatology	Oral	2017	≥2023/II
LJN452	tropifexor	FXR agonist	Nonalcoholic steatohepatitis	Immunology, Hepatology and Dermatology	Oral	2015	≥2023/II
LMI070	branaplam	SMN2 RNA splicing modulator	Spinal muscular atrophy	Neuroscience	Oral	2017	≥2023/II
LNP023	TBD	Factor B inhibitor	IgA nephropathy	Cardio-Metabolic	Oral	2018	≥2023/II
			Membranous nephropathy	Cardio-Metabolic	Oral	2018	≥2023/II
LOU064	TBD	BTK inhibitor	Chronic spontaneous urticaria	Immunology, Hepatology and Dermatology	Oral	2017	≥2023/II
¹⁷⁷ Lu- PSMA-617	TBD	Targeted DNA destruction via beta-particle radiation	Metastatic castration-resistant prostate cancer	Oncology	Intravenous infusion	2018	2020/III
<i>Lucentis</i>	ranibizumab	Anti-VEGF monoclonal antibody fragment	Retinopathy of prematurity	Ophthalmology	Intravitreal injection	2018	EU registration
			Diabetic retinopathy	Ophthalmology	Intravitreal injection	2018	EU registration
MOR106	TBD	Anti-interleukin-17C monoclonal antibody	Atopic dermatitis	Immunology, Hepatology and Dermatology	Subcutaneous injection	2018	≥2023/II
OMB157	ofatumumab	Anti-CD20 monoclonal antibody	Relapsing multiple sclerosis	Neuroscience	Subcutaneous injection	2015	2019/III
PDR001	spartalizumab	Anti-PD-1 monoclonal antibody	Metastatic BRAF V600+ melanoma (w/ <i>Tafinlar</i> + <i>Mekinist</i>)	Oncology	Intravenous infusion	2017	2019/III
			Malignant melanoma (combo)	Oncology	Intravenous infusion	2017	2022/II
<i>Promacta/ Revolade</i>	eltrombopag	Thrombopoietin receptor agonist	Severe aplastic anemia, 1st line	Oncology	Oral	2018	US approved EU registration
QAW039	fevipiprant	DP2 antagonist (CRTH2 antagonist)	Asthma	Respiratory	Oral	2015	2020/III
QBW251	TBD	CFTR potentiator	Chronic obstructive pulmonary disease	Respiratory	Oral	2017	≥2023/II
QGE031	ligelizumab	High-affinity anti-IgE monoclonal antibody	Chronic spontaneous urticaria/ chronic idiopathic urticaria	Immunology, Hepatology and Dermatology	Subcutaneous injection	2017	2021/III
QMF149	indacaterol, mometasone furoate (in fixed-dose combination)	Long-acting beta ₂ - adrenergic agonist and inhaled corticosteroid	Asthma	Respiratory	Inhalation	2015	2019/III

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QVM149	indacaterol, mometasone furoate, glyco- pyrrolonium bromide (in fixed-dose combination)	Long-acting beta ₂ - adrenergic agonist, long-acting muscarinic antagonist and inhaled corticosteroid	Asthma	Respiratory	Inhalation	2015	2019/III
RTH258	brolicizumab	Anti-VEGF single-chain antibody fragment	Neovascular age-related macular degeneration	Ophthalmology	Intravitreal injection	2014	2019/III
			Diabetic macular edema	Ophthalmology	Intravitreal injection	2017	2020/III
			Retinal vein occlusion	Ophthalmology	Intravitreal injection	2018	2022/III
<i>Rydapt</i>	midostaurin	Signal transduction inhibitor	Acute myeloid leukemia (FLT3 wild type)	Oncology	Oral	2016	2022/III
SEG101	crizanlizumab	P-selectin inhibitor	Sickle cell disease	Oncology	Intravenous infusion	2016	2019/II
UNR844	TBD	Reduction of disulfide bonds	Presbyopia	Ophthalmology	Eye drops	2017	2022/II
VAY736	lanalumab	Anti-BAFF (B-cell- activating factor) monoclonal antibody	Autoimmune hepatitis	Immunology, Hepatology and Dermatology	Subcutaneous injection	2016	≥2023/II
			Primary Sjögren's syndrome	Immunology, Hepatology and Dermatology	Subcutaneous injection	2015	≥2023/II
VAY785	emricasan	Pan-caspase inhibitor	Nonalcoholic steatohepatitis	Immunology, Hepatology and Dermatology	Oral	2017	≥2023/II
VPM087	TBD	Interleukin-1 beta neutralization monoclonal antibody	Colorectal cancer, 1 st line; renal cell carcinoma, 1 st line	Oncology	Intravenous infusion	2018	≥2023/I
<i>Xolair</i>	omalizumab	Anti-IgE monoclonal antibody	Nasal polyps	Respiratory	Subcutaneous injection	2017	2019/III
ZPL389	adriforant	Histamine H4 receptor antagonist	Atopic dermatitis	Immunology, Hepatology and Dermatology	Oral	2017	2022/II