Selected development projects

Compound/ product	Common name	Mechanism of action	Potential indication	Category	Formulation/ route of administration	Year project entered current development phase	Planned filing dates/current phase
AVXS-101 (OAV101)	onasemno-gene abepar-vovec	Survival motor neuron (SMN) gene therapy	Spinal muscular atrophy (IT formulation)	Neuroscience	Intrathecal injection	2021	2025/III
Beovu	brolucizumab	VEGF inhibitor	Diabetic retinopathy	Global Health	Intravitreal injection	2024	Registration
Coartem	artemether + lumefantrine	PGH-1 (artemisinin combination therapy)	Malaria, uncomplicated (<5 kg patients)	Global Health	Oral	2024	Registration [1]
Cosentyx	secukinumab	IL-17A inhibitor	Giant cell arteritis	Immunology	Subcutaneous injection	2021	2025/III
			Polymyalgia rheumatica	Immunology	Subcutaneous injection	2023	2026/III
DAK539 [2]	pelabresib	BET inhibitor	Myelofibrosis	Oncology	Oral	2024	TBD / III
EXV811	atrasentan	ETA receptor antagonist	IgA nephropathy	Cardiovascular, Renal and Metabolic	Oral	2024	US registration
Fabhalta (LNP023)	iptacopan	CFB inhibitor	C3 glomerulopathy	Cardiovascular, Renal and Metabolic	Oral	2024	US, EU registration
			IC-MPGN	Cardiovascular, Renal and Metabolic	Oral	2023	≥2028/III
			Atypical hemolytic uremic syndrome	Oncology	Oral	2021	≥2028/III
			Myasthenia gravis [3]	Neuroscience	Oral	2024	2027/III
FUB523	zigakibart	Anti-APRIL monoclonal antibody	IgA nephropathy	Cardiovascular, Renal and Metabolic	Subcutaneous injection	2023	2027/III
KAE609	cipargamin	PfATP4 inhibitor	Malaria, uncomplicated	Global Health	Oral	2017	≥2028/II
			Malaria, severe	Global Health	Intravenous infusion	2022	≥2028/II
KLU156	ganaplacide + lumefantrine	Non-artemisinin plasmodium falciparum inhibitor	Malaria, uncomplicated	Global Health	Oral	2024	2026/III
Leqvio	inclisiran	siRNA (regulation of LDL-C)	Secondary prevention of cardiovascular events in patients with elevated levels of LDL-C	Cardiovascular, Renal and Metabolic	Subcutaneous injection	2018	2027/III
			Primary prevention cardiovascular risk reduction	Cardiovascular, Renal and Metabolic	Subcutaneous injection	2023	≥2028/III
LOU064	remibrutinib	BTK inhibitor	Chronic spontaneous urticaria	Immunology	Oral	2021	2025/III
			Chronic inducible urticaria	Immunology	Oral	2023	2026/III
			Multiple sclerosis	Neuroscience	Oral	2021	2027/III
			Myasthenia gravis [3]	Neuroscience	Oral	2024	≥2028/III
Lutathera	lutetium Lu 177 dotatate/ lutetium (^{177}Lu) oxodotreotide	Radioligand therapy targeting SSTR	Gastroenteropancreatic neuroendocrine tumors, 1st line in G2/3 tumors	Oncology	Intravenous infusion	2024	EU registration
LXE408	TBD	Proteasome inhibitor	Visceral leishmaniasis	Global Health	Oral	2022	≥2028/II
Pluvicto	lutetium Lu 177 vipivotide tetraxetan/ lutetium (^{177}Lu) vipivotide tetraxetan	Radioligand therapy targeting PSMA	Metastatic castration-resistant prostate cancer, pre-taxane	Oncology	Intravenous infusion	2024	US registration
			Metastatic hormone-sensitive prostate cancer	Oncology	Intravenous infusion	2021	2025/III
			Oligometastatic prostate cancer [3]	Oncology	Intravenous infusion	2024	≥2028/III
TQJ230	pelacarsen	ASO targeting lipoprotein(a)	Secondary prevention of cardiovascular events in patients with elevated levels of lipoprotein(a)	Cardiovascular, Renal and Metabolic	Subcutaneous injection	2019	2026/III

[1] Submission will use the MAGHP procedure in Switzerland to facilitate rapid approvals in the developing countries who are included in the MAGHP procedure
[2] Entered confirmatory development following the acquisition of MorphoSys AG
[3] Project added to selected development projects table in 2024 – entered Confirmatory Development

Compound/ product	Common name	Mechanism of action	Potential indication	Category	Formulation/ route of administration	Year project entered current development phase	Planned filing dates/current phase
VAY736	ianalumab	BAFF-R inhibitor	Lupus nephritis	Immunology	Subcutaneous injection	2022	≥2028/III
			Sjögren's syndrome	Immunology	Subcutaneous injection	2022	2026/III
			Systemic lupus erythematosus	Immunology	Subcutaneous injection	2023	≥2028/III
			Systemic scleroderma [3]	Immunology	Subcutaneous injection	2024	≥2028/II
			Immune thrombocytopenia, 1st line	Oncology	Intravenous infusion	2023	2027/III
			Immune thrombocytopenia, 2nd line	Oncology	Intravenous infusion	2023	2027/III
			Warm autoimmune hemolytic anemia (wAIHA)	Oncology	Intravenous infusion	2022	2027/III
Vijoice	alpelisib	PI3K-alpha inhibitor	Lymphatic malformations	Oncology	Oral	2023	≥2028/III
YTB323	rapcabtagene autoleucel	CD19 CAR-T	Severe refractory lupus nephritis/ systemic lupus erythematosus	Immunology	Intravenous infusion	2023	≥2028/II
			High-risk large B-cell lymphoma, 1st line	Oncology	Intravenous infusion	2023	≥2028/II
			Systemic scleroderma [3]	Immunology	Intravenous infusion	2024	≥2028/II
			Myositis [3]	Immunology	Intravenous infusion	2024	≥2028/II

[1] Submission will use the MAGHP procedure in Switzerland to facilitate rapid approvals in the developing countries who are included in the MAGHP procedure
[2] Entered confirmatory development following the acquisition of MorphoSys AG
[3] Project added to selected development projects table in 2024 – entered Confirmatory Development

Projects removed from the development table since 2023

Compound/product	Potential indication	Change	Reason
Fabhalta	IgA nephropathy	Commercialized	
Kisqali	Hormone receptor-positive (HR+)/human epidermal growth factor receptor 2-negative (HER2-) early breast cancer (adjuvant)	Commercialized	
Scemblix	Chronic myeloid leukemia, 1st line	Commercialized	
Xolair	Food allergy	Commercialized	
Cosentyx	Rotator cuff tendinopathy	Removed	Development discontinued
CFZ533	Sjögren's syndrome	Removed	Development discontinued
JDQ443	Non-small cell lung cancer (monotherapy and/or combination therapy)	Removed	Development discontinued
LNA043	Osteoarthritis	Removed	Development discontinued
QGE031	Food allergy	Removed	Development discontinued
XXB750	Hypertension	Removed	Development discontinued

Principal markets

Novartis sells products in approximately 120 countries worldwide. Net sales are primarily concentrated in the US and Europe. The following table sets forth aggregate net sales by region for each of the last three years:

	2024 net sales to third parties		2023 net sales to third parties		2022 net sales to third parties	
	USD millions	%	USD millions	%	USD millions	%
United States	21 146	42	17 959	40	15 935	38
Europe	15 557	31	14 997	33	14 371	34
Asia, Africa, Australasia	10 021	20	9 308	20	8 978	21
Canada and Latin America	3 593	7	3 176	7	2 922	7
Total	**50 317**	**100**	**45 440**	**100**	**42 206**	**100**
Of which in established markets [1]	37 371	74	33 725	74	31 386	74
Of which in emerging growth markets [1]	12 946	26	11 715	26	10 820	26

[1] Emerging growth markets comprise all markets other than the established markets of the US, Canada, Western Europe, Japan, Australia and New Zealand. Novartis definition of Western Europe includes Austria, Belgium, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Many of our products are used for chronic conditions that require patients to continue dosing of the product over long periods of time, ranging from months to years. However, certain of our marketed products and development projects, such as cell and gene therapies, are administered only once. Net sales of the vast majority of our products are not subject to material changes in seasonal demand.