Innovation Review

Benefiting from our continued focus on innovation, Novartis has one of the industry's most innovative and inventive pipelines with more than 160 projects in clinical development.

Selected Innovative Medicines approvals: US, EU and Japan in Q4

| Product | Active ingredient/ Descriptor | Indication | Region | |
|----------|-------------------------------|-----------------------------|----------|--|
| Scemblix | asciminib | 3L Chronic myeloid leukemia | US - Oct | |
| Cosentyx | secukinumab | JPsA & ERA | US - Dec | |
| Leqvio | inclisiran | Hyperlipidemia | US - Dec | |

Selected Innovative Medicines projects awaiting regulatory decisions

| | | Completed submissions | | | |
|----------------------------|--|-----------------------|----------|---------|---|
| Product | Indication | US | EU | Japan | News update |
| Cosentyx | JPsA & ERA | Approved | Q2 2021 | | |
| Cosentyx | Cosentyx 300mg auto-injector and pre-filled syringe | Q4 2020 | Approved | Q3 2021 | - CRL issued by FDA |
| Jakavi | Acute graft-versus-host disease (GvHD) | | Q1 2021 | Q1 2021 | - US filing by Incyte |
| | Chronic GvHD | | Q1 2021 | Q1 2021 | - US filing by Incyte |
| ABL001 (asciminib) | 3L Chronic myeloid leukemia | Approved | Q2 2021 | Q3 2021 | |
| Beovu | Diabetic macular edema | Q3 2021 | Q3 2021 | Q3 2021 | |
| ¹⁷⁷ Lu-PSMA-617 | Metastatic castration-resistant prostate cancer, post-taxane | Q3 2021 | Q4 2021 | | - FDA priority review |
| VDT482 (tislelizumab) | 2L Esophageal cancer (ESCC) | Q3 2021 | | | - BLA submitted by BeiGene to FDA |
| Kymriah | Relapsed/refractory follicular lymphoma | Q3 2021 | Q3 2021 | Q4 2021 | - FDA priority review granted |
| BYL719 (alpelisib) | PIK3CA-related overgrowth spectrum | Q4 2021 | | | US filing based on RWE dataFDA priority review granted |

Selected Innovative Medicines pipeline projects

| Compound/ product | Potential indication/ Disease area | First planned submissions | Current Phase | News update |
|-------------------------|--|------------------------------|------------------|---|
| ABL001 (asciminib) | 1L Chronic myeloid leukemia | 2025 | 3 | |
| ACZ885 (canakinumab) | Adjuvant NSCLC | 2023 | 3 | - Enrollment completed |
| Aimovig | Migraine, pediatrics | ≥2026 | 3 | |
| AVXS-101 (OAV101) | Spinal muscular atrophy (IT formulation) | 2025 | 3 | -Pivotal confirmatory study initiating |
| Beovu | Diabetic retinopathy | 2025 | 3 | |
| BYL719 (alpelisib) | Triple negative breast cancer | 2023 | 3 | |
| | Human epidermal growth factor receptor 2-positive (HER2+) advanced breast cancer | 2025 | 3 | |
| | Ovarian cancer | 2023 | 3 | |
| CEE321 | Atopic dermatitis | | 1 | Program discontinued unfavorable benefit/risk profile |
| CFZ533 (iscalimab) | Liver transplantation | ≥2026 | 2 | |
| | Sjögren's syndrome | ≥2026 | 2 | |
| Coartem | Malaria, uncomplicated (<5 kg patients) | 2024 | 3 | - Submission planned in Switzerland |

| Compound/ product | Potential indication/ Disease area | First planned submissions | Current Phase | News update |
|---|---|---------------------------|------------------|--|
| Cosentyx | Ankylosing spondylitis head-to-head study versus Sandoz biosimilar <i>Hyrimoz</i> (adalimumab) | 2022 | 3 | |
| | Hidradenitis suppurativa | 2022 | 3 | |
| | Giant cell arteritis | 2024 | 3 | |
| | Lichen planus | 2025 | 2 | |
| | Lupus nephritis | ≥2026 | 3 | |
| | Psoriatic arthritis (IV formulation) | 2022 | 3 | |
| | Ankylosing spondylitis (IV formulation) | 2023 | 3 | |
| CPK850 | Retinitis pigmentosa | ≥2026 | 2 | |
| CSJ117 | Asthma | ≥2026 | 2 | |
| JDQ443 | Non-small cell lung cancer, 2/3L | 2024 | 3 | - Ph3 to be initiated in H2 2022 |
| | Non-small cell lung cancer (combos) | ≥2026 | 2 | |
| KAE609 (cipargamin) | Malaria, uncomplicated | ≥2026 | 2 | |
| | Malaria, severe | ≥2026 | 2 | |
| KAF156 (ganaplacide) | Malaria, uncomplicated | ≥2026 | 2 | |
| Kisqali + endocrine therapy | Hormone receptor-positive (HR+)/human epidermal growth factor receptor 2-negative (HER2-) early breast cancer (adjuvant) | 2023 | 3 | |
| Leqvio | Secondary prevention of cardiovascular events in patients with elevated levels of LDL-C | ≥2026 > | 3 | - Ph3 VICTORION-2P initiated |
| LJN452 (tropifexor + licogliflozin) | Nonalcoholic steatohepatitis | ≥2026 | 2 | |
| LMI070 (branaplam) | Huntington's disease | ≥2026 | 2 | - FDA Orphan Drug designation- FDA Fast Track designation granted |
| LNA043 | Osteoarthritis | ≥2026 | 2 | - FDA Fast Track designation |
| LNP023 (iptacopan) | Paroxysmal nocturnal hemoglobinuria | 2023 | 3 | - FDA, EU Orphan Drug designation- FDA Breakthrough Therapy designation |
| | IgA nephropathy | 2023 | 3 | - EU Orphan Drug designation |
| | C3 glomerulopathy | 2023 | 3 | EU Orphan Drug designationEU PRIME designationFDA Rare Pediatric designation |
| | Membranous nephropathy | ≥2026 | 2 | |
| | Atypical haemolytic uraemic syndrome | 2025 | 3 | |
| LOU064 (remibrutinib) | Chronic spontaneous urticaria | 2024 | 3 | - Ph3 initiated |
| | Multiple sclerosis | 2025 | 3 | - Ph3 initiated |
| | Sjögren's syndrome | ≥2026 | 2 | |
| Lutathera | Gastroenteropancreatic neuroendocrine tumors, 1st line in G2/3 tumors | 2023 | 3 | |
| ¹⁷⁷ Lu-PSMA-617 | Metastatic castration-resistant prostate cancer pre-taxane | 2023 | 3 | |
| | Metastatic hormone sensitive prostate cancer | 2024 | 3 | |
| 177Lu-NeoB | Multiple solid tumors | ≥2026 | 1 | |
| LXE408 | Visceral leishmaniasis | ≥2026 | 2 | |
| MBG453 (sabatolimab) | Myelodysplastic syndrome | 2022/2023 | 3 | FDA Fast Track designationEU Orphan Drug designation |
| | Unfit acute myeloid leukemia | 2024 | 2 | |
| MIJ821 | Depression | ≥2026 | 2 | |
| NIS793 | 1L Pancreatic cancer | 2025 | 3 | - FDA Orphan Drug designation |

| Compound/ product | Potential indication/ Disease area | First planned submissions | Current Phase | News update |
|--------------------------|--|---------------------------|------------------|--|
| QBW251 (icenticaftor) | Chronic obstructive pulmonary disease | 2025 | 2 | |
| QGE031 (ligelizumab) | Chronic spontaneous urticaria | TBD | 3 | FDA Breakthrough Therapy designation Ligelizumab demonstrated superiority compared with placebo PEARL 1 and PEARL 2 trials, but not versus omalizumab further evaluating PEARL data |
| | Chronic inducible urticaria | 2025 | 3 | - Ph3 initiated |
| | Food allergy | 2025 | 3 | - Ph3 initiated |
| SAF312 (libvatrep) | Chronic ocular surface pain | ≥2026 | 2 | |
| SKO136 (ensovibep) | Corona virus infection | 2022 | 2 | - Positive topline data from Ph2 |
| TQJ230 (pelacarsen) | Secondary prevention of cardiovascular events in patients with elevated levels of lipoprotein(a) | 2025 | 3 | Enrollment ongoingFDA Fast Track designationChina Breakthrough Therapy designation |
| UNR844 | Presbyopia | 2024 | 2 | |
| VAY736 (ianalumab) | Auto-immune hepatitis | ≥2026 | 2 | |
| | Sjögren's syndrome | ≥2026 | 2 | - FDA Fast Track designation |
| VDT482 (tislelizumab) | NSCLC | 2022 | 3 | |
| | 1L Nasopharyngeal carcinoma | 2022 | 3 | |
| | 1L Gastric cancer | 2023 | 3 | |
| | 1L ESCC | 2023 | 3 | |
| | Localized ESCC | 2023 | 3 | |
| | 1L Hepatocellular carcinoma | 2023 | 3 | |
| | 1L Small cell lung cancer | 2024 | 3 | |
| | 1L Bladder urothelial cell carcinoma | 2024 | 3 | |
| VPM087 (gevokizumab) | Colorectal cancer, 1st line | ≥2026 | 1 | |
| Xolair | Food allergy | 2023 | 3 | |
| YTB323 | 2L Diffuse large B-cell lymphoma | 2024 | 3 | - Ph3 to be initiated in 2022 |
| | | | | |

Selected Sandoz approvals and pipeline projects

| Project/ | Potential indication/ | |
|-------------------------------------|--|-------------------------------------|
| Compound | Disease area | News update |
| GP2411 (denosumab) | Osteoporosis (same as originator) | - In Ph3 |
| SOK583 (aflibercept) | Ophthalmology (same as originator) | – In Ph3 |
| Insulin glargine, lispro, aspart | Diabetes | - Collaboration with Gan & Lee |
| Natalizumab | Multiple sclerosis and Crohn's disease | - Collaboration Polpharma Biologics |
| Trastuzumab | HER2-positive cancer tumors | - Collaboration EirGenix |
| Bevacizumab | Solid tumors | - Bio-Thera Solutions |