



A Year In Review

PREVIEW

The journey of drug development in 2022

The developments in new novel medicines and their associated activities take an ever-so step forward in their respective development cycles. With this year-end report, we will aim to present a snapshot of all the new developments and trends in the biopharmaceutical industries covered by AdisInsight.

Review
Report

The pandemic which was a major deterrent in multiple pharmaceutical-related activities has started to recede with the globe slowly returning to normalcy. Clinical and late-stage research activities which faced multiple difficulties during the pandemic are now adjusting to the new normal. While COVID-19 remains a topic of focus, developments in indications that require dire intervention such as Cancer and Neurological disorders have taken the spotlight with the predominant drug properties developed being antineoplastics followed by immunotherapies, and small molecules.

With the present review, we will try to cover key drug development metrics that we were able to observe while analysing our AdisInsight database, providing key takeaways on the potential of new and existing medicines, clinical studies, safety data, and key events in the field of pharmaceutical research in 2022.



Most Interesting Drugs in 2022

Top 10 AdisInsight Drug profiles viewed

In 2022, Covid-19 continued to impact drug development discussions.

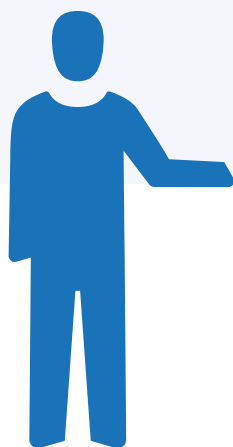
However, there was progress in other disease areas as well. The selection of drugs viewed by AdisInsight users included obesity and type 2 diabetes mellitus drugs in development like Retatrutide, Mazdutide, and Orforglipron. Additional profiles of high interest focused on cancer, chronic obstructive pulmonary disease, and psoriasis.

TABLE 1 - TOP DRUG PROFILES VIEWED GLOBALLY BY ALL USERS OF ADISINSIGHT

	Drug name	Approved indication	Indications in development
1	Retatrutide - Eli Lilly and Company	None	Obesity, Type 2 diabetes mellitus
2	Pembrolizumab - Merck & Co	Breast cancer; Cervical cancer; Colorectal cancer; Diffuse large B cell lymphoma; Gastric cancer; Head and neck cancer; Hodgkin's disease; Liver cancer; Malignant melanoma; Non-small cell lung cancer; Oesophageal cancer; Pancreatic cancer; Renal cell carcinoma; Solid tumours; Squamous cell cancer; Urogenital cancer	Biliary cancer; Bladder cancer; Cancer; Endometrial cancer; Merkel cell carcinoma, Adenocarcinoma, Fallopian tube cancer; Gastrointestinal cancer; Mesothelioma; Multiple myeloma; Nasopharyngeal cancer; Ovarian cancer; Peritoneal cancer; Prostate cancer; Small cell lung cancer, Acute myeloid leukaemia; Adenoid cystic carcinoma; Bone cancer; Brain metastases; Cholangiocarcinoma; Chronic lymphocytic leukaemia; Ewing's sarcoma; Follicular lymphoma; Germ cell and embryonal neoplasms; Glioblastoma; Glioma; Inflammatory breast cancer; Kaposi's sarcoma; Leucoplakia; Liver metastases; Lymphoma; Malignant fibrous histiocytoma; Malignant thymoma; Marginal zone B-cell lymphoma; Meningeal carcinomatosis; Meningioma; Myelodysplastic syndromes; Neuroendocrine tumours; Neurofibrosarcoma; Osteosarcoma; Penile cancer; Peripheral T-cell lymphoma; Rectal cancer; Recurrent respiratory papillomatosis; Richter's syndrome; Sarcoma; Skin cancer; Soft tissue sarcoma; Thyroid cancer; Uveal melanoma, Haematological malignancies; Leiomyosarcoma; Mantle-cell lymphoma; Non-Hodgkin's lymphoma; Precursor cell lymphoblastic leukaemia-lymphoma; T-cell lymphoma, Cutaneous T-cell lymphoma; Gliosarcoma, Human papillomavirus infections

	Drug name	Approved indication	Indications in development
3	Tozorakimab - Astra-Zeneca	None	Chronic obstructive pulmonary disease; Renal failure, Asthma; Atopic dermatitis; COVID 2019 infections; Diabetic nephropathies
4	Nivolumab - Bristol-Myers Squibb/Ono Pharmaceuticals	Colorectal cancer; Gastric cancer; Head and neck cancer; Hodgkin's disease; Liver cancer; Malignant melanoma; Mesothelioma; Non-small cell lung cancer; Oesophageal cancer; Renal cell carcinoma; Squamous cell cancer; Urogenital cancer	Cancer; Small cell lung cancer, Bladder cancer; Breast cancer; Fallopian tube cancer; Glioblastoma; Multiple myeloma; Ovarian cancer; Peritoneal cancer; Prostate cancer, Non-Hodgkin's lymphoma, Acute myeloid leukaemia; Adrenocortical carcinoma; Alveolar soft part sarcoma; Biliary cancer; Brain metastases; Bronchopulmonary dysplasia; Cervical cancer; Cholangiocarcinoma; Chronic lymphocytic leukaemia; Clear cell sarcoma; CNS cancer; Diffuse large B cell lymphoma; Follicular lymphoma; Gastrointestinal stromal tumours; Genitourinary disorders; Glioma; Gynaecological cancer; Leucoplakia; Liver metastases; Meningeal carcinomatosis; Myelodysplastic syndromes; Nasopharyngeal cancer; Pancreatic cancer; Penile cancer; Peripheral T-cell lymphoma; Soft tissue sarcoma; Solid tumours; Testicular cancer; Thyroid cancer; Uterine cancer; Uveal melanoma, Haematological malignancies; Lymphoma; Rectal cancer, Autoimmune disorders; Hepatitis B; Hepatitis D; Neurofibrosarcoma, Chronic myeloid leukaemia; Hepatitis C; Sepsis
5	Atezolizumab - Genentech	Breast cancer; Liver cancer; Malignant melanoma; Non-small cell lung cancer; Small cell lung cancer; Urogenital cancer	Bladder cancer; Cervical cancer; Colorectal cancer; Fallopian tube cancer; Head and neck cancer; Mesothelioma; Oesophageal cancer; Ovarian cancer; Peritoneal cancer; Prostate cancer; Renal cell carcinoma, Adrenocortical carcinoma; Anal cancer; Biliary cancer; Brain metastases; Chronic lymphocytic leukaemia; Cutaneous T-cell lymphoma; Diffuse large B cell lymphoma; Endometrial cancer; Gastric cancer; Gynaecological cancer; HER2 positive breast cancer; Malignant thymoma; Mantle-cell lymphoma; Marginal zone B-cell lymphoma; Penile cancer; Pheochromocytoma; Rectal cancer; Soft tissue sarcoma; Solid tumours; Squamous cell cancer; Thyroid cancer; Waldenstrom's macroglobulinaemia, Acute myeloid leukaemia; Cholangiocarcinoma; Follicular lymphoma; Gallbladder cancer; Glioblastoma; Hodgkin's disease; Neuroendocrine tumours; Non-Hodgkin's lymphoma; Pancreatic cancer, Haematological malignancies; Multiple myeloma
6	Deucravacitinib - Bristol-Myers Squibb		Erythrodermic psoriasis; Plaque psoriasis; Pustular psoriasis, Psoriasis; Psoriatic arthritis; Systemic lupus erythematosus, Crohn's disease; Cutaneous lupus erythematosus; Discoid lupus erythematosus; Lupus nephritis; Ulcerative colitis, Autoimmune disorders; Inflammatory bowel diseases

	Drug name	Approved indication	Indications in development
7	Mazdutide - Eli Lilly and Company	None	Obesity; Type 2 diabetes mellitus
8	Durvalumab - Celgene/MedImmune	Non-small cell lung cancer; Small cell lung cancer	Biliary cancer; Liver cancer; Urogenital cancer, Bladder cancer; Cervical cancer; Endometrial cancer; Fallopian tube cancer; Gastric cancer; Head and neck cancer; Mesothelioma; Oesophageal cancer; Ovarian cancer; Peritoneal cancer; Renal cell carcinoma; Solid tumours; Triple negative breast cancer, Pancreatic cancer, Acute myeloid leukaemia; Brain metastases; Breast cancer; Cholangiocarcinoma; Colorectal cancer; Diffuse large B cell lymphoma; Gallbladder cancer; Germ cell and embryonal neoplasms; Glioblastoma; HER2 negative breast cancer; Malignant melanoma; Multiple myeloma; Myelodysplastic syndromes; Neuroendocrine tumours; Non-Hodgkin's lymphoma; Oropharyngeal cancer; Prostate cancer; Sarcoma; Soft tissue sarcoma; Squamous cell cancer; Uterine cancer, Chronic lymphocytic leukaemia; Cutaneous T-cell lymphoma; Haematological malignancies; Lung cancer; Lymphoma; Peripheral T-cell lymphoma; Renal cancer, CNS cancer; Gastrointestinal cancer; Lymphoproliferative disorders; Thyroid cancer; Vulvovaginal cancer
9	Orforglipron - Eli Lilly and Company	None	Obesity; Type 2 diabetes mellitus
10	Ruxolitinib - Incyte Corporation/Novartis	Atopic dermatitis; Graft-versus-host disease; Myelofibrosis; Polycythaemia vera	Vitiligo, Cytokine release syndrome; Essential thrombocythaemia; SARS-CoV-2 acute respiratory disease, COVID-19 pneumonia, Acute myeloid leukaemia; Alopecia areata; Breast cancer; Breast disorders; Bronchiolitis obliterans; Cachexia; Chronic lymphocytic leukaemia; Chronic myeloid leukaemia; Chronic myelomonocytic leukaemia; Discoid lupus erythematosus; Haematological malignancies; Head and neck cancer; Hidradenitis suppurativa; HIV infections; Hodgkin's disease; Lichen planus; Myelodysplastic syndromes; Precursor cell lymphoblastic leukaemia-lymphoma; Thalassaemia; Vulvar lichen sclerosis, Anaemia; HER2 positive breast cancer; Multiple myeloma, Psoriasis



Overview of 2022 drug launches**

In 2022, there were a total of 139 compounds that were launched for the first time. The majority of the compounds are indicated for cancer, kidney disorders, rheumatoid arthritis, and pain.

***Detailed information about the drugs that were first marketed during the course of 2022 can be found in the attached Newly Launched Drugs 2022*

Overview

Summary of drug development programme failures

For the year 2022, we found 2,171 inactive drug records with one or more indications whose development was stopped (this includes drugs that were withdrawn, suspended or discontinued, or drug development programmes on which no updates have been disclosed for a long time).

**DRUG
DEVELOPMENT
PROFILES**

2,171

were
DISCONTINUED

