

Cooperation offer in the field of Pharmacy

The offer of the Pharmaceutical Products Department in Łukasiewicz – Industrial Chemistry Institute includes comprehensive development and implementation of a technology for the production of medicinal products: development of the synthesis of an active substance; production of an active substance, development of a technology for the production of a drug form; analytical research; admission to trading.



List of API offered by Łukasiewicz Research Network–Industrial Chemistry Institute:

Substance	CAS Number	Therapeutic use	Available Certificates
Alfacalcidol	41294-56-8	Calcium metabolism regulator, vitamin D analogue	CEP, GMP, ASMF
Anastrozole	120511-73-1	Antineoplastic, non-steroidal aromatase inhibitor	GMP, ASMF
Brinzolamide	138890-62-7	Antiglaucoma, carbonic anhydrase inhibitor	ASMF
Calcifediol monohydrate	19356-17-3	Calcium metabolism regulator, vitamin D analogue	CEP, GMP, ASMF
Calcitriol	32222-06-3	Calcium metabolism regulator, vitamin D analogue	ASMF
Carvedilol	72956-09-3	Cardiovascular drug, beta blocking agent	GMP, ASMF
Cilostazol	73963-72-1	Vasodilator, phosphodiesterase PD3 inhibitor	ASMF
Cladribine	4291-63-8	Hairy cell leukemia; chronic lymphocytic leukemia; non-Hodgkin's lymphomas; acute myeloid leukemia	GMP, ASMF
(+)-Clopidogrel Hydrogen sulfate, form I	120202-66-6	Antithrombotic agent, platelet aggregation inhibitor	ASMF
Genistein synthetic	446-72-0	Isoflavone phytoestrogen	ASMF
Imatinib mesylate form α	220127-57-1	Antineoplastic, protein kinase inhibitor	GMP, ASMF
Imatinib mesylate form β	220127-57-1	Antineoplastic, protein kinase inhibitor	ASMF
Latanoprost	130209-82-4	Antiglaucoma, prostaglandin analogue	GMP, ASMF
Nitrendipine	39562-70-4	Antihypertensive, calcium channel blocker	ASMF
Olanzapine form I	132539-06-1	Antipsychotic, serotonin/dopamine antagonist	ASMF
Olmesartan medoxomil	144689-63-4	Hypertension	ASMF
Paricalcitol	131918-61-1	Parathyroid hormone secretion inhibitor, vitamin D analogue	ASMF
Sunitinib malate	341031-54-7	It inhibits numerous tyrosine kinase receptors that are involved in tumor growth, pathological angiogenesis, and spread of metastatic neoplastic disease; RCC kidney cancer, gastrointestinal cancer GIST, gastrointestinal stromal tumors	ASMF
Tacalcitol monohydrate	57333-96-7	Antipsoriatic for topical use, vitamin D analogue	GMP, ASMF

ASMF - Active Substance Master File

GMP – GMP certificate issued by the Main Pharmaceutical Inspectorat

CEP - Certificate of Suitability issued by EDQM (European Directorate for the Quality in Medicines and Healthcare)

API substances marked in green are ready for immediate production.

The remaining active substances listed in the table above can be designated to production after performing process validation, certification or up-scaling.

Production volume of individual active substances is related to restrictions ensuing from integrated permit and Reach regulations.

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List of active substances ready to commercialization:

Substance	Therapeutic use
Aminoglutetimide	Breast cancer
Bicalutamide	A non-steroidal antiandrogen drug for use with propanamide; prostate cancer
Bimatoprost	Increases the outflow of the aqueous humor through the trabecular meshwork and enhances the outflow through the choroid-scleral pathway; high eye pressure, glaucoma; a remedy for the growth of eyelashes and eyebrows
Bosentan	Dual endothelin receptor antagonist (ERA) with affinity for ETA ETB receptors. Reduces pulmonary and systemic vascular resistance; hypertension
Budesonide	Synthetic corticosteroid with a very strong antiallergic and anti-inflammatory effect
Capacetabine	Precursor of the cytotoxic molecule 5-Fluorouracil (5-FU); Metastatic cancer of the colon, colorectal and rectum in combination with docetaxel in patients with locally advanced or disseminated breast cancer after failure of treatment with taxanes and anthracycline-containing regimens
Eplerenone	A synthetic steroid, an aldosterone receptor blocker used to treat heart failure
Erlotinib	Anti-cancer
Flutamide	Anti-cancer, prostate cancer
Lapatinibe	Inhibitor kinazy tyrozynowej receptorów EGFR (ErbB1) i ErbB2 (HER2); rak płuca i sutka, nowotwory piersi z nadekspresją receptora HER2 (ErbB2)
Loteprednol	Synthetic topical glucocorticosteroid, strong anti-inflammatory effect, high affinity for the glucocorticoid receptor; Eye inflammation: allergic conjunctivitis, rosacea, superficial punctate keratitis, herpes zoster, iritis, ciliary body inflammation, selected infectious conjunctivitis
Nepafenac	Precursor non-steroidal anti-inflammatory drug; cataracts: prevention and treatment of postoperative pain and inflammation, reducing the risk of postoperative macular edema
Olopatadine	An antihistamine and anti-inflammatory drug
Oseltamivir (Tamiflu)	Antiviral - Precursor of oseltamivir carboxylate, a selective inhibitor of influenza virus neuraminidases, the activity of which allows the release of freshly produced virus particles from the cell and their further spread throughout the body
Pemetrexed	Folic acid antagonist, which disrupts the basic metabolic processes that use folates necessary for cell division; non-small cell lung cancer
Pramipexole dihydrochloride, monohydrate	Selective dopamine agonist, Parkinson's disease
Prasugrel	Antiplatelet drug (inhibits platelet aggregation); atherosclerosis
Timolol	Glaucoma
Zolmitriptan	It selectively stimulates vascular 5-HT1B receptors and neuronal 5-HT1D receptors; relieves or alleviates migraine pain and symptoms associated with migraine, such as nausea, vomiting, photophobia, hypersensitivity to sounds

Offered technologies:

Substance	Therapeutic use
Exemestane	Irreversible steroidal aromatase inhibitor; breast cancer in postmenopausal women
Moclobemide	Used in antidepressants from the group of MAO inhibitors
Temozolomide	A drug used in cancer chemotherapy, a derivative of dacarbazine from the group of anticancer drugs with alkylating properties; malignant gliomas

Finished product:

Biodribin an anti-cancer drug used in cancer chemotherapy (hairy cell leukemia, chronic lymphocytic leukemia, non-Hodgkin's lymphoma) and acute myeloma leukemia.

For more details about APIs, analytical standards and finished product produced by Łukasiewicz Research Network - Industrial Chemistry Institute please contact:

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