# Dpp 4 Inhibitors List

ACE inhibitors inhibit the activity of angiotensin-converting enzyme, an important component of the renin–angiotensin system which converts angiotensin I to angiotensin II, and hydrolyzes bradykinin. Therefore, ACE inhibitors decrease the formation of angiotensin II, a vasoconstrictor, and increase the level of bradykinin, a peptide vasodilator. This combination is synergistic in lowering blood pressure. de734479fc Type 1 diabetes is an endocrine disorder characterized by hyperglycemia due to autoimmune destruction of insulin-secreting pancreatic beta cells. Insulin is a hormone needed by cells to take in glucose from the blood. Insufficient levels of insulin due to Type 1 diabetes can lead to chronic hyperglycemia and eventual multiorgan damage, resulting in renal, neurologic, cardiovascular, and other serious complications. The treatment for Type 1 diabetes involves regular insulin injections. de734479fc Frequently prescribed ACE inhibitors include benazepril, zofenopril, perindopril, trandolapril, captopril, enalapril, lisinopril, and ramipril... de734479fc

Dipeptidyl peptidase-4 Barnett A (November 2006). ISBN 978-0-387-29058-4. "DPP-4 inhibitors and their potential role in the management of Dipeptidyl peptidase-4 (DPP4 or DPPIV), also known as adenosine deaminase complexing protein 2 or CD26 (cluster of differentiation 26) is a protein that, in humans, is encoded by the DPP4 gene. DPP4 is related to FAP, DPP8, and DPP9. The enzyme was discovered in 1966 by Hopsu-Havu and Glenner, and as a result of various studies on chemism, was called dipeptidyl peptidase IV [DP IV]. 1007/0-387-32824-6_3. PMID 16700505 de734479fc

Saxagliptin is used as monotherapy or in combination with other drugs for the treatment of type 2 diabetes. It does not appear to decrease the risk of heart attacks or strokes. One study showed a 3.5% risk of hospitalization for heart failure compared to 2.8% in a placebo-controlled group. Like other DPP-4 inhibitors, it has relatively modest HbA1c lowering ability, is associated with a relatively low risk of hypoglycemia... de734479fc

Linagliptin Linagliptin belongs to a class of drugs called DPP-4 inhibitors. Linagliptin is the international nonproprietary name (INN). severe joint pain. It is taken by mouth. It is generally less preferred than metformin and sulfonylureas as an initial treatment. Linagliptin is a dipeptidyl peptidase-4 inhibitor that works by increasing the production of insulin and decreasing the production of glucagon by the pancreas. Brand Linagliptin, sold under the brand name Tradjenta among others, is a medication used to treat type 2 diabetes (but not type 1) in conjunction with exercise and diet de734479fc

Sitagliptin It is also available in the fixed-dose combination medication sitagliptin/metformin (Janumet, Janumet XR). It is taken by mouth. It is in the dipeptidyl peptidase-4 (DPP-4) inhibitor class and works by increasing the production of insulin and decreasing the production of glucagon by the pancreas. It is in the dipeptidyl peptidase-4 (DPP-4) inhibitor class and works by increasing the production of insulin and decreasing Sitagliptin, sold under the brand name Januvia among others, is an anti-diabetic medication used to treat type 2 diabetes. used to treat type 2 diabetes. In the United Kingdom it is listed as less preferred than metformin or a sulfonylurea de734479fc

Sitagliptin was developed by Merck & Co. and approved for medical use in the United States in 2006. In 2023, it was the 123rd most commonly prescribed medication in the United States, with more than 5 million prescriptions. It is available as a generic medication, but not in the United States. de734479fc

Saxagliptin DPP-4 is an enzyme that breaks down incretin hormones. As a DPP-4 inhibitor, saxagliptin slows down the Saxagliptin, sold under the brand name Onglyza, is an oral hypoglycemic (anti-diabetic drug) of the dipeptidyl peptidase-4 (DPP-4) inhibitor class. Early development was solely by Bristol-Myers Squibb; in 2007 AstraZeneca joined with Bristol-Myers Squibb to co-develop the final compound and collaborate on the marketing of the drug. called dipeptidyl peptidase-4 (DPP-4) inhibitors de734479fc

Sitagliptin is used to treat type 2 diabetes. It is generally less preferred than metformin or sulfonylureas... de734479fc Common side effects include inflammation of the nose and throat. Serious side effects may include angioedema, pancreatitis, joint pain. Use in pregnancy and breastfeeding is not recommended. de734479fc

Janus kinase inhibitor Some JAK1 inhibitors are based on a benzimidazole core. the first JAK inhibitor, ruxolitinib, to treat a skin condition. JAK3 inhibitors target the catalytic de734479fc

Type 2 diabetes, the most common type... de734479fc

ACE inhibitor Angiotensin-converting-enzyme inhibitors (ACE inhibitors) are a class of medication used primarily for the treatment of cardiovascular and kidney diseases Angiotensin-converting-enzyme inhibitors (ACE inhibitors) are a class of medication used primarily for the treatment of cardiovascular and kidney diseases. This class of medicine works by causing relaxation of blood vessels as well as a decrease in blood volume, which leads to lower blood pressure and decreased oxygen demand from the heart de734479fc

== Medical uses == de734479fc == Medical uses == de734479fc

SGLT2 inhibitor Apart from blood sugar control, gliflozins have been shown to provide significant cardiovascular benefit in people with type 2 diabetes. The foremost metabolic effect of this is to inhibit reabsorption of glucose in the kidney and therefore lower blood sugar. As of 2014, several medications of this class had been approved or were under development. meta-analysis comparing SGLT-2 inhibitors, GLP-1 agonists, and DPP-4 inhibitors demonstrated that use of SGLT2 inhibitors was associated with a 1% reduction SGLT2 inhibitors (also called gliflozins or flozins) are a class of medications that inhibit sodium-glucose transport proteins in the nephron (the functional units of the kidney), unlike SGLT1 inhibitors that perform a

similar function in the intestinal mucosa. In studies on canagliflozin, a member of this class, the medication was found to enhance blood sugar control as well as reduce body weight and systolic and diastolic blood pressure. They act by inhibiting sodium/glucose cotransporter 2 (SGLT2). SGLT2 inhibitors are used in the treatment of type 2 diabetes de734479fc

Linagliptin was approved for medical use in the United States, Japan, the European Union, Canada, and Australia in 2011. In 2023, it was the 254th most commonly prescribed medication in the United States, with more than 1 million prescriptions. From August 2021, linagliptin became available as a generic medicine in the US. de734479fc DPP-4 is known to cleave a broad range of substrates including growth... de734479fc The protein encoded by the DPP4 gene is an enzyme expressed on the surface of most cell types and is associated with immune regulation, signal transduction, and apoptosis. It is a type II transmembrane glycoprotein, but a soluble form, which lacks the intracellular and transmembrane part, is present in blood plasma and various body fluids. DPP-4 is a serine exopeptidase that cleaves X-proline or X-alanine dipeptides from the N-terminus of polypeptides. Peptide bonds involving the cyclic amino acid proline cannot be cleaved by the majority of proteases and an N-terminal X-proline "shields" various biopeptides. Extracellular proline-specific proteases therefore play an important role in the regulation of these biopeptides. de734479fc

Gemigliptin Glucose lowering effects of DPP-4 inhibitors are mainly mediated by GLP-1 and Gemigliptin (rINN), sold under the brand name Zemiglo, is an oral anti-hyperglycemic agent (anti-diabetic drug) of the dipeptidyl peptidase-4 inhibitor (DPP-4 inhibitor) class of drugs. drug) of the dipeptidyl peptidase-4 inhibitor (DPP-4 inhibitor) class of drugs. Glucose lowering effects of DPP-4 inhibitors are mainly mediated by GLP-1 and gastric inhibitory polypeptide (GIP) incretin hormones which are inactivated by DPP-4 de734479fc

Linagliptin is indicated as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes. de734479fc

Diabetes medication (Semaglutide is available both as a pill and as an injection. Other anti-diabetes medications (including semaglutide as Rybelsus) are administered orally and are thus called oral hypoglycemic agents or oral antihyperglycemic agents. dipeptidyl peptidase-4 inhibitors were used with sulfonylureas; effects on long-term health and morbidity rates are still unknown. Most GLP-1 receptor agonists (liraglutide, exenatide, tirzepatide, pramlintide and others) are administered by injection. ) There are different classes of hypoglycemic drugs, and selection of the appropriate agent depends on the nature of the diabetes (Type I vs Type II), the age and situation of the person, as well as other patient factors. DPP-4 inhibitors increase blood Drugs used in diabetes treat types of diabetes mellitus by decreasing glucose levels in the blood de734479fc

Common side effects include headaches, swelling of the legs, and upper respiratory tract infections. Serious side effects may include angioedema, low blood sugar, kidney problems, pancreatitis, and joint pain. Whether use in pregnancy or breastfeeding is safe is unclear. de734479fc

Cathepsin C Brensocatib, a DPP-I inhibitor, was approved in 2025 by the FDA and the EMA to treat bronchiectasis. overlap. Newer DPP-I inhibitors include florensocatib de734479fc

The 2022 American Diabetes Association (ADA) standards of medical care in diabetes include SGLT2 inhibitors as a first line pharmacological therapy for type 2 diabetes (usually together with metformin), specifically in patients with chronic kidney disease, cardiovascular... de734479fc As a result of inhibiting the ACE enzyme in the bradykinin system, the ACE inhibitor drugs allow for increased levels of bradykinin which would normally be degraded. Bradykinin produces prostaglandin. This mechanism can explain the two most common side effects seen with ACE Inhibitors: angioedema and cough. de734479fc == Medical uses == de734479fc In April 2016, the U.S. FDA added a warning about increased risk of heart failure. This was based on data in an article that concluded "DPP-4 inhibition with saxagliptin did not increase or decrease the rate of ischemic events, though the rate of hospitalization for heart failure was increased. Although saxagliptin improves glycemic control, other approaches are necessary to reduce cardiovascular risk in patients with diabetes." de734479fc == Function == de734479fc Gemigliptin was initially developed solely by LG Life Sciences. In 2010, Double-Crane Pharmaceutical Co. (DCPC) joined with LGLS to co-develop the final compound and collaborate on the marketing of the drug in China. LGLS also announced in November 2010 that NOBEL Ilac has been granted rights to develop and commercialize gemigliptin in Turkey. de734479fc A new drug application (NDA) for gemigliptin in the treatment of type 2 diabetes was submitted to the Korea Food & Drug Administration (KFDA) in July 2011. In June 2012, the KFDA approved the manufacture and distribution of LG Life Sciences' diabetes treatment, Zemiglo, the main substance of which is gemigliptin. LG Life Sciences signed a licensing agreement with multinational pharmaceutical companies such as Sanofi (Paris, France) and Stendhal (Mexico City, Mexico) for 104 countries. Currently, gemigliptin... de734479fc == Medical uses == de734479fc