

Uses and Administration

Troglitazone is a thiazolidinedione oral antidiabetic (see Rosiglitazone Maleate, p.458). It has been given orally for the treatment of type 2 diabetes mellitus (p.431) although as mentioned above it has been withdrawn in most countries owing to hepatotoxicity.

◊ Reviews.

1. Plosker GL, Faulds D. Troglitazone: a review of its use in the management of type 2 diabetes mellitus. *Drugs* 1999; **57**: 409–38.
2. Parulkar AA, *et al.* Nonhypoglycemic effects of thiazolidinediones. *Ann Intern Med* 2001; **134**: 61–71.

Preparations

Proprietary Preparations (details are given in Part 3)

Mex.: Rezulin†.

Vildagliptin (*rINN*)

LAF-237; NVP-LAF-237; Vildagliptina; Vildagliptine; Vildagliptinum. (2S)-[[[3-Hydroxyadamantan-1-yl)amino]acetyl]pyrrolidine-2-carbonitrile.

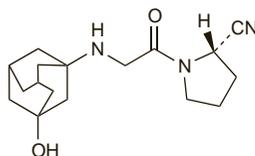
Вильдаглиптин

$C_{17}H_{25}N_3O_2 = 303.4$.

CAS — 274901-16-5.

ATC — A10BH02.

ATC Vet — QA10BH02.

**Profile**

Vildagliptin is an inhibitor of the enzyme dipeptidylpeptidase-4, an enzyme responsible, among other roles, for the degradation of the incretin hormone glucagon-like peptide-1 (GLP-1; insulinotropin), which plays a role in regulating insulin secretion. Vildagliptin is used in the treatment of type 2 diabetes mellitus (p.431); it may be added to metformin, a sulfonylurea, or a thiazolidinedione, when monotherapy with these is insufficient. It is given orally in a dose of 50 mg twice daily when given with metformin or a thiazolidinedione, and in a dose of 50 mg once daily in the morning when given with a sulfonylurea. A total daily dose of more than 100 mg of vildagliptin is not recommended, and in patients taking a combination of vildagliptin with a sulfonylurea, a dose of vildagliptin 100 mg daily is no more effective than vildagliptin 50 mg daily. Vildagliptin may be given with or without food.

Adverse effects of vildagliptin may include dizziness, headache, peripheral oedema, constipation, nasopharyngitis, upper respiratory-tract infection, and arthralgia. Rare cases of hepatic dysfunction, including hepatitis, have been reported. Vildagliptin should not be used in patients with hepatic impairment; liver function should be tested before starting the drug, and monitored during therapy (every 3 months in the first year and periodically thereafter). Vildagliptin should be stopped if there is a persistent increase of 3 or more times the upper limit of normal in alanine aminotransferase (ALT) or aspartate aminotransferase (AST), or if the patient develops jaundice or other signs of liver dysfunction; in such cases, it should not be restarted.

◊ Reviews.

1. Kleppinger EL, Helms K. The role of vildagliptin in the management of type 2 diabetes mellitus. *Ann Pharmacother* 2007; **41**: 824–32.
2. Henness S, Keam SJ. Vildagliptin. *Drugs* 2006; **66**: 1989–2001.

Preparations

Proprietary Preparations (details are given in Part 3)

Cz.: Galvus; **Fr.:** Galvus; **Port.:** Galvus; **UK:** Galvus.

Multi-ingredient: **Cz.:** Eucreas; **Fr.:** Eucreas; **UK:** Eucreas.

Voglibose (*USAN, rINN*)

A-71100; AO-128; Voglibosa; Voglibosum. 3,4-Dideoxy-4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-C-(hydroxymethyl)-D-epi-inositol.

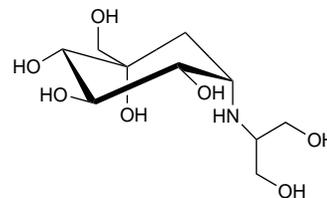
Воглибоза

$C_{10}H_{21}NO_7 = 267.3$.

CAS — 83480-29-9.

ATC — A10BF03.

ATC Vet — QA10BF03.



Pharmacopoeias. In *Jpn*.

Profile

Voglibose is an alpha-glucosidase inhibitor with general properties similar to those of acarbose (p.436). It is used in the treatment of diabetes mellitus (p.431) in oral doses of 200 to 300 micrograms three times daily before meals.

Hepatic encephalopathy. Voglibose has been investigated¹ in the management of hepatic encephalopathy (p.1697).

1. Uribe M, *et al.* Beneficial effect of carbohydrate maldigestion induced by a disaccharidase inhibitor (AO-128) in the treatment of chronic portal systemic encephalopathy: a double-blind, randomized controlled trial. *Scand J Gastroenterol* 1998; **33**: 1099–1106.

Preparations

Proprietary Preparations (details are given in Part 3)

Jpn: Basen; **Philipp.:** Basen; **Thai.:** Basen.