Doxazosin Mesylate

See Also Cardiovascular Drugs

**PHYSICAL AND PHARMACEUTICAL PROPERTIES**

- Authority and Date: USAN
- Synonyms: Doxazosin Mesilate (BANM, rINNM); Doxazosin Methanesulphonate; UK-33274-27.
- Chemical Name: 2-[4-(2,3-Dihydro-1,4-benzodioxin-2-ylcarbonyl)piperazin-1-yl]-6,7-dimethoxyquinazolin-4-ylamine methanesulphonate; 1-(4-Amino-6,7-dimethoxyquinazolin-2-yl)-4-(1,4-benzodioxan-2-ylcarbonyl)piperazine methanesulphonate.
- Molecular Formula: C(23)H(25)N(5)O(5),CH(3)SO(3)H
- Molecular Weight: 547.6
- CAS Registry: 74191-85-8 (doxazosin); 77883-43-3 (doxazosin mesylate).
- Doxazosin mesylate 1.2 mg is approximately equivalent to 1 mg of doxazosin.

**ADVERSE EFFECTS, TREATMENT, AND PRECAUTIONS**

- As for Prazosin Hydrochloride, Ref.

**PHARMACOKINETICS**

- Doxazosin is well absorbed after oral administration, peak blood concentrations occurring 2 hours after a dose. Oral bioavailability is about 65%. It is
extensively metabolised in the liver, and excreted in faeces as metabolites and a small amount of unchanged drug. Elimination from plasma is biphasic, with a mean terminal half-life of about 22 hours. The pharmacokinetics are not altered in patients with impaired renal function. Doxazosin is extensively bound to plasma proteins and is not removed by dialysis.

- 16611/a3/1-h
- Reviews.
- 16611/a1-p

**USES AND ADMINISTRATION**

- Doxazosin is an alpha(1)-adrenoceptor blocker ([Ref.](#)) with actions and uses similar to those of prazosin ([Ref.](#)), but a longer duration of action. It is used in the management of hypertension ([Ref.](#)) and in benign prostatic hyperplasia ([Ref.](#)) to relieve symptoms of urinary obstruction.
- Doxazosin is given by mouth as the mesylate, but doses are usually expressed in terms of the base. Following an oral dose maximum reduction in blood pressure is reported to occur after 2 to 6 hours and the effects are maintained for 24 hours, permitting once daily dosage.
- To avoid the risk of collapse which may occur in some patients after the first dose, the initial dose is 1 mg, preferably at bedtime. Dosage may be increased after 1 or 2 weeks according to response. Usual maintenance doses for hypertension are up to 4 mg daily; doses of 16 mg daily should not be exceeded. For benign prostatic hyperplasia the usual maintenance dose is 2 to 4 mg daily; doses of 8 mg daily should not be exceeded.

- 16611/a1/13-v
- Reviews.

**PROPRIETARY NAMES**

- Alfadil, Benur, Cadex, Cardoral, Cardular, Cardura, Carduran, Dedralen, Diblocin, Doxa-Puren, Doxaloc, Normothen, Progandol, Prostadilat, Supressin

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