

Valsartan recall

Angiotensin II Receptor Blockers (ARBs) equivalent dosing

- Valsartan (Diovan) is supplied in doses of 40, 80, 160, and 320 mg tablets.
- The ARBs are all Food and Drug Administration (FDA)-approved to treat hypertension in adults. Some
 ARBs have additional indications for heart failure (HF), diabetic nephropathy, or cardiovascular (CV) risk
 reduction in certain high-risk populations.
- All ARBs are available generically with the exception of Edarbi.
- Table 1 outlines FDA-approved indication by ARB:

Table 1. FDA-approved indications for single-entity ARBs

Indication	Atacand (candesartan)	Avapro (irbesartan)	Benicar (olmesartan)	Cozaar (losartan)	Diovan (valsartan)	Edarbi (azilsartan)	eprosartan	Micardis (telmisartan)
Hypertension in adults	>	>	>	>	~	~	~	~
Hypertension in children ages 1 to < 17 years	>							
Hypertension in children ages 6 to 16 years			<	>	>			
Treatment of diabetic nephropathy in hypertensive patients with type 2 DM, an elevated serum creatinine, and proteinuria		>		>				
Heart failure (NYHA Class II to IV) in adults	~				✓			
Reduction in the risk of stroke in patients with hypertension and LV hypertrophy				>				
Post-MI: Reduction of cardiovascular mortality in clinically stable patients with LV failure or LV dysfunction					•			
Cardiovascular risk reduction in patients 55 years of age or older at high risk of developing major cardiovascular events who are unable to take ACE-Is								•

Abbreviations: ACE-I = angiotensin converting enzyme inhibitor; LV = left ventricular; MI = myocardial infarction; NYHA = New York Heart Association

- ARB doses may vary if a patient has certain individual characteristics that may affect response (ie, volume depleted, renal impairment, or other dose-modifying factors). Valsartan FDA-approved indications and dosing include:
 - Congestive heart failure: Initial: 40 mg twice daily. Titrate dose to 80 to 160 mg twice daily, as tolerated. Maximum daily dose: 320 mg.
 - O Hypertension:
 - Adult: Initial: 40 to 160 mg once daily. Titrate dose to 80 to 320 mg once daily, as tolerated. Maximum daily dose: 320 mg.
 - Children (tablet): Initial: 1.3 mg/kg once daily. Titrate dose up to 2.7 mg/kg orally once daily, as tolerated. Maximum daily dose: 160 mg.
 - Left ventricular dysfunction after myocardial infarction: Initial: 20 mg twice daily. Titrate dose to target of 160 mg twice daily as tolerated.



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Table 2 provides general guidance for equivalent ARB dosing:

Table 2. Equivalent ARB daily dosing for valsartan in adults

Generic Name	Valsartan 40 mg*	Valsartan 80 mg*	Valsartan 160 mg	Valsartan 320 mg
Azilsartan [†] (Edarbi)	40 mg	40 mg	40 mg	40 mg
Candesartan* (Atacand)	4 to 8 mg	8 to 16 mg	8 to 16 mg	32 mg
Eprosartan (Tevetan)	400 mg	600 mg	800 mg	800 mg
Irbesartan (Avapro)	75 mg	150 mg	300 mg	300 mg
Losartan* (Cozaar)	25 mg	50 mg	100 mg	
Olmesartan (Benicar)	10 mg	20 mg	20 to 40 mg	40 mg
Telmisartan (Micardis)	20 mg	40 mg	40 to 80 mg	80 mg

Note: **Dose equivalencies are approximate**. Comparable dose based on therapeutic interchange studies, comparative clinical trials, and manufacturers' recommended dosing for hypertension. Doses are to provide general guidance, but not to provide direction for prescribing. Individual patient responses may vary. Equivalent doses may also vary according to indication and based on specific patient factors. Please refer to the prescribing information for further details.

* Initial daily doses recommended in heart failure include: candesartan 4 to 8 mg daily (max: 32 mg daily), losartan 25 to 50 mg daily (max: 50 to 150 mg daily), and valsartan 20 to 40 mg twice daily (max: 160 mg twice daily).

† Available as brand only.

References:

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- Yancy CW, Jessup M, Bozkurt B, et al. 2017 ACC/AHA/HFSA focused update of the 2013 ACCF/AHA guideline for the management of heart failure: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Failure Society of America. *J Card Fail*. 2017;23(8):628-651. doi: 10.1016/j.jacc.2017.04.025.