



April 11, 2007

Aliskiren (Tekturna®)

DESCRIPTION

Aliskiren is a recently-approved, first-in-class antihypertensive agent. It is approved for the treatment of hypertension as monotherapy or in combination with other antihypertensive agents.

WHAT YOU SHOULD KNOW

Aliskiren is a direct renin inhibitor. Renin is a substance that is secreted by the kidney in response to decreased blood flow in the kidney. Renin secretion is the first step in a sequence that results in the generation of angiotensin I, followed by angiotensin II, a substance that causes blood vessel constriction, sodium retention and aldosterone secretion. Other antihypertensives have been developed that work on other steps in this sequence; aliskiren is the first direct renin inhibitor to be marketed. Aliskiren is initiated at 150 mg once daily; the dose may be increased to 300 mg in patients who do not have an adequate response to the initial dose.

WHAT YOU MAY NOT KNOW

High-fat meals reduce the absorption of aliskiren; patients should take the drug consistently with regard to meals. Aliskiren should be discontinued in patients who may be pregnant due to the risk of fetal harm. Concomitant use of atorvastatin increases overall exposure to aliskiren by 50%.

COST CONSIDERATIONS

Drug	Dose	Estimated AWP cost/month
Aliskiren (Tekturna®)	150 mg/day	\$72.90
Aliskiren (Tekturna®)	300 mg/day	\$92.40
Furosemide (generic)	40 mg BID	\$18.00
Enalapril (generic)	10 mg/day	\$32.10
Metoprolol (generic)	100 mg BID	\$39.30
Diltiazem ERC (generic)	180 mg/day	\$43.50
Amlodipine (Norvasc®)	5 mg/day	\$51.90
Ramipril (Altace®)	5 mg/day	\$54.30

AWP is a cost to be used for relative comparisons only and is not reflective of actual cost. The cost does not reflect insurance co-payments as these vary with insurance coverage. The doses of drugs in the cost considerations table are for comparison purposes only and are not intended to be thought of as dose equivalents.

WHAT THE PATIENT NEEDS TO KNOW

Adverse effects associated with aliskiren are for the most part mild. Excessive reductions in blood pressure have occasionally been reported, as has angioedema. Diarrhea is reported in approximately 2.3% of patients who take aliskiren.

CLASS COMPARISON

Aliskiren is the first drug in its class.

COMPARISON TO OTHER TREATMENTS

There are no clinical trials comparing aliskiren to other treatments for hypertension. Most clinical trials evaluate aliskiren in combination with existing therapies. For this reason, aliskiren is likely to be used as add-on therapy, at least initially. A 2004 article in the Journal of the American Society of Nephrology suggests that aliskiren may have synergistic effects with valsartan, so combinations of aliskiren with angiotensin receptor blockers may be advantageous; no other combination appears to be distinctively advantageous. Aliskiren costs at least 35% more than other commonly used antihypertensive therapies. Therefore, patients with prescription insurance will likely be required to try and fail several other medications before coverage for aliskiren will be approved.

RESOURCES

- ❑ Prescribing information: <http://www.pharma.us.novartis.com/product/pi/pdf/tekturna.pdf>
- ❑ Journal of the American Society of Nephrology article suggesting synergy with valsartan: <http://jasn.asnjournals.org/cgi/reprint/15/12/3126>
- ❑ Explanation of the renin-angiotensin system and its effect on blood pressure: <http://www.cvphysiology.com/Blood%20Pressure/BP015.htm>

DISCLAIMER

This publication is intended to provide key practical information regarding this drug product in a brief format. It does not contain sufficient information upon which to base formulary or other medication use policy decisions.



Center for Drug Policy

The information provided was developed by the Center for Drug Policy at the University of Wisconsin Hospitals and Clinics and published by the Pharmacy Society of Wisconsin.