

Aliskiren (TEKTURNA®)

Criteria for Use

Update November 2014

VA Pharmacy Benefits Management Services, Medical Advisory Panel and VISN Pharmacist Executives

The following recommendations are based on current medical evidence, clinician input, and expert opinion. The content of the document is dynamic and will be revised as new information becomes available. The purpose of this document is to assist practitioners in clinical decision-making, to standardize and improve the quality of patient care, and to promote cost-effective drug prescribing. **THE CLINICIAN SHOULD UTILIZE THIS GUIDANCE AND INTERPRET IT IN THE CLINICAL CONTEXT OF THE INDIVIDUAL PATIENT. INDIVIDUAL CASES THAT ARE EXCEPTIONS TO THE EXCLUSION AND INCLUSION CRITERIA SHOULD BE ADJUDICATED AT THE LOCAL FACILITY ACCORDING TO THE POLICY AND PROCEDURES OF ITS P&T COMMITTEE AND PHARMACY SERVICES.**

The Product Information should be consulted for detailed prescribing information.

EXCLUSION CRITERIA (if ONE is checked, patient is not eligible)

- History of angioedema with an angiotensin-converting enzyme inhibitor (ACEI) or angiotensin II receptor antagonist (ARB) (while not specifically a contraindication, the risk vs. benefit of treatment in these patients should be taken into consideration)
- Diabetes mellitus (DM) on an ACEI or ARB (due to risk of kidney impairment, hypotension, and hyperkalemia)
- Moderate to severe kidney impairment (i.e., where glomerular filtration rate [GFR] < 60 mL/min) and on an ACEI or ARB

INCLUSION CRITERIA FOR ALISKIREN (must fulfill the following to be eligible)

- Treatment of hypertension (HTN) in patients who have documented inadequate response or contraindication to, or inability to tolerate at least three antihypertensive agents on the VA National Formulary, one from each of the following: thiazide-type diuretic, ACEI or ARB, long-acting dihydropyridine (DHP) calcium channel blocker (CCB). Since most patients will require more than one antihypertensive agent to control their blood pressure, if the patient's blood pressure is not at goal despite therapy as recommended above, a trial of at least two additional antihypertensive agents listed on the VA National Formulary (e.g., reserpine, beta-adrenergic blocker, long-acting non-DHP CCB, centrally acting agent, vasodilator, aldosterone antagonist, alpha-blocker) as supplemental therapy should be attempted prior to considering aliskiren*

For women of childbearing potential

- Pregnancy should be excluded prior to receiving aliskiren and the patient provided contraceptive counseling on potential risk vs. benefit of taking aliskiren if patient were to become pregnant

DOSING RECOMMENDATIONS

- The initial recommended total daily dose of aliskiren is 150 mg administered once daily
- The dose may be increased to a maximum of 300 mg once daily after two weeks if the blood pressure goal is not achieved
- It is recommended that aliskiren be administered at a consistent interval in relation to meals as a high fat meal decreased the absorption of the drug, the clinical significance of this is unknown

MONITORING

- As with other agents that act at the renin-angiotensin-aldosterone system (RAAS) (e.g., ACEIs, ARBs, aldosterone antagonists), it is recommended that kidney function be monitored in patients where kidney function depends on the RAAS (e.g., renal artery stenosis, volume depletion, severe heart failure) and in patients with prior kidney dysfunction or DM, or who are receiving non-steroidal anti-inflammatory drugs (NSAIDs). Serum potassium should be monitored in patients receiving potassium-sparing diuretics, potassium supplements, or other medications that may increase serum potassium, and in patients with kidney impairment, DM, or heart failure. The frequency of routine monitoring should take into consideration the patient's concomitant therapy and comorbid conditions
- Symptomatic hypotension may occur in patients who may be sodium or volume depleted (e.g., in patients receiving diuretic therapy), or who are receiving an agent that acts on the RAAS, upon initial therapy with aliskiren; it is recommended to correct the volume depletion prior to starting aliskiren, otherwise therapy should be initiated under close medical supervision
- It has been reported that the blood concentrations of furosemide are significantly reduced when given in combination with aliskiren; therefore, the clinical effects of furosemide may be decreased after initiation of aliskiren

ISSUES FOR CONSIDERATION

- A clinical trial (ALTITUDE) with aliskiren in addition to an ACEI or ARB in patients with type 2 DM and kidney or cardiovascular disease was discontinued early due to an increase in adverse events including hyperkalemia and hypotension (renal impairment was also increased, although not statistically significant) in patients treated with aliskiren compared to placebo, without a significant benefit in major cardiovascular or renal outcomes; use of aliskiren is therefore contraindicated in combination with an ACEI or ARB in patients with DM
- The long-term efficacy and safety of combination therapy with aliskiren and an ACEI or ARB in the treatment of HTN compared to combination with an antihypertensive agent with a different mechanism of action is unknown; therefore, combination therapy with aliskiren and an ACEI or ARB is not advised at this time
- *It is recommended that use of aliskiren be considered only after a trial of other agents with long-term outcome data as monotherapy or in combination, as the benefit on major cardiovascular or renal outcomes with aliskiren in the treatment of HTN has not been established
- The role of aliskiren in influencing long-term outcomes for other indications (e.g., chronic kidney disease, heart failure) has not been established
- It is recommended to avoid concomitant use with cyclosporine or itraconazole due to potential increase in aliskiren blood concentrations

RECOMMENDATIONS FOR DISCONTINUATION

- Administration of medications that act at the RAAS during pregnancy has resulted in neonatal morbidity and mortality; therefore, aliskiren should be discontinued as soon as possible after a patient becomes pregnant (Category D)
- Patient does not experience an improvement in blood pressure control
- Patient experiences a significant drug related adverse event
- Patient develops DM or moderate to severe kidney impairment and is also on an ACEI or ARB

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Updated versions may be found at www.pbm.va.gov or <https://vawww.cmopnational.va.gov/cmop/PBM/default.aspx>