RATIONALE FOR INCLUSION IN PA PROGRAM

Background
Xenazine is the first FDA approved medication for treatment of chorea (involuntary jerky movements) associated with Huntington's disease (HD). HD is a progressive neurological disorder which may cause changes in mood, cognition, chorea, rigidity, and functional capacity over time. Xenazine decreases the amount of dopamine available to interact with certain nerve cells, thereby decreasing involuntary movements (1).

Regulatory Status
FDA-approved indication: Xenazine is a vesicular monoamine transporter 2 (VMAT) inhibitor indicated for the treatment of chorea associated with Huntington’s disease (1).

Xenazine carries a boxed warning regarding the increased risk of depression and suicidal thoughts and behavior (suicidality) in patients with Huntington disease. The risks of depression and suicidality should be balanced with the clinical need of Xenazine therapy for the control of choreiform movements. Xenazine is contraindicated in patients who are actively suicidal, and in patients with untreated or inadequately treated depression (1).

Prescribers should periodically re-evaluate the need for Xenazine in their patients by assessing the beneficial effect on chorea and possible adverse effects, including depression, cognitive decline, parkinsonism, dysphagia, sedation/somnolence, akathisia, restlessness and disability. It may be difficult to distinguish between drug induced side-effects and progression of the underlying disease; decreasing the dose or stopping the drug may help the clinician distinguish between the two possibilities. In some patients, underlying chorea itself may improve over time, decreasing the need for Xenazine (1).

Xenazine is contraindicated in patients with impaired hepatic function. Xenazine is also contraindicated in patients taking MAOIs or reserpine. Concurrent use of reserpine and Xenazine may result in elevated catecholamine levels. When switching a patient from reserpine to Xenazine, wait for chorea to re-emerge and at least 20 days after stopping reserpine before initiating tetrabenazine to avoid overdose and significant depletion of norepinephrine and serotonin in the CNS. Xenazine is also contraindicated in patients taking deutetribenazine (Austedo) or valbenazine (Ingrezza) (1).
Xenazine may prolong the QT interval, although the degree of QT prolongation is not clinically significant at concentrations expected with recommended dosing. In patients taking a strong CYP2D6 or CYP3A4 inhibitor, or who are CYP2D6 poor metabolizers, Xenazine concentrations may be higher and QT prolongation clinically significant. For patients who are CYP2D6 poor metabolizers or are taking a strong CYP2D6 inhibitor, dose reduction may be necessary. Xenazine should be avoided in patients with congenital long QT syndrome or with arrhythmias associated with a prolonged QT interval (1).

Safety and efficacy of Xenazine have not been established in pediatric patients (1).

**Summary**

Xenazine is the first FDA approved medication for treatment of chorea associated with Huntington's disease (HD). Xenazine is a presynaptic dopamine depletor that may have considerable efficacy in tardive dyskinesia (TD), especially tardive dystonia, tic associated with Tourette’s syndrome, dystonia, other choreas, and facial dystonia/dyskinesia. Xenazine carries a boxed warning regarding the increased risk of depression and suicidal thoughts and behavior (suicidality) in patients. Xenazine is contraindicated in patients with impaired hepatic function and is contraindicated in patients taking MAOIs or reserpine, deutetribenazine (Austedo) or valbenazine (Ingrezza) 1).

Prior authorization is required to ensure the safe, clinically appropriate and cost effective use of Xenazine while maintaining optimal therapeutic outcomes.

**References**