RATIONALE FOR INCLUSION IN PA PROGRAM

Background
Votrient is used to treat advanced renal cell carcinoma (RCC) and advanced soft tissue sarcoma (STS) in patients who have received prior chemotherapy. Votrient works by blocking certain proteins called kinases that play a role in tumor growth and cancer progression. It has been shown to inhibit receptor tyrosine kinases including vascular endothelial growth factor receptors 1, 2 and 3, platelet-derived growth factor receptors α and β, fibroblast growth factor receptors 1 and 3, cytokine receptor (Kit), interleukin-2 receptor-inducible T-cell kinase (Itk), leukocyte-specific protein tyrosine kinase (Lck), and transmembrane glycoprotein receptor tyrosine kinase (c-Fms). These receptors are implicated in tumor blood vessel generation, tumor growth, and cancer progression (1-5).

Regulatory Status
FDA-approved indication: Votrient is an inhibitor of multiple tyrosine kinases indicated for: (1)

1. Treatment of advanced renal cell carcinoma (RCC)
2. Treatment of patients with advanced soft tissue sarcoma (STS) who have received prior chemotherapy

Limitation of Use: (1)
The efficacy of Votrient for the treatment of patients with adipocytic STS or gastrointestinal stromal tumors has not been demonstrated.

Off Label Uses: (2-5)
According to current oncology practice guidelines, Votrient may also be used for:

1. Metastatic Dermatofibrosarcoma Protuberans (DFSP)
2. Complete remission following primary treatment of Ovarian Cancer Stage II-IV: Epithelial Ovarian Cancer/Fallopian Tube Cancer/ Primary Peritoneal Cancer
3. Gastrointestinal Stromal Tumor after failure of therapy with imatinib, sunitinib, or regorafenib
4. Recurrent/metastatic Thyroid Carcinomas (Follicular/Hürthle Cell/Medullary/Papillary) if clinical trials or other systemic therapies are not available or appropriate.
5. Recurrent or postoperative Uterine Sarcoma

Votrient includes a boxed warning citing the risk of severe and fatal hepatotoxicity; therefore, Votrient should be used with caution in patients with hepatic impairment. Initiation of Votrient is not
recommended in patients with pre-existing hepatic-impairment, defined as total bilirubin > 3 times ULN with any level of ALT. Transaminase and bilirubin levels should be obtained prior to initiation of treatment and regularly throughout therapy (1).

Votrient can cause fatal complications including hemorrhagic events, thromboembolic events, cardiac dysfunction, GI perforation, interstitial lung disease/pneumonitis, reversible posterior leukoencephalopathy syndrome (RPLS), and hypertensive crisis. Use with caution in patients at higher risk of developing these complications. Permanently discontinue Votrient if thrombotic microangiopathy (TMA) or reversible posterior leukoencephalopathy syndrome (RPLS) occurs. Votrient can cause fetal harm when administered to a pregnant woman. Females of reproductive potential should use effective contraception while taking Votrient (1).

The safety and effectiveness of Votrient in pediatric patients have not been established (1).

Summary
Votrient is a multi-tyrosine kinase inhibitor indicated for the treatment of advanced renal cell carcinoma, soft tissue sarcoma after trial of prior chemotherapy, and certain cases of Dermatofibrosarcoma protuberans, ovarian cancer, GI stromal tumors, thyroid carcinoma, and uterine sarcoma. Votrient should be used with caution in patients at risk for hepatic toxicity, cardiac dysfunction, hemorrhagic events, thromboembolic events, gastrointestinal perforation, interstitial lung disease, RPLS, or hypertensive crisis. The safety and efficacy of Votrient in pediatric patients have not been studied (1-5).

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

References