Investigator:	**Denise Courtney** Phone: (404) 321-6111 ext. 4740 Email: Denise.Ross2@va.gov
Primary Research Interest:	Pharmacy
Description of Research:	Introduction and Background Gout is a painful, inflammatory condition caused by monosodium urate deposition in the joints1. Therapies to treat chronic gout are limited. Allopurinol and febuxostat (Uloric®) are the two available xanthine oxidase inhibitors approved by the Food and Drug Administration for the chronic treatment of hyperuricemic gout. Allopurinol has several concerning adverse effects including gastrointestinal intolerance, rash, and hypersensitivity syndrome2. Dosing to avoid adverse effects, especially in renal dysfunction, often makes it difficult to achieve efficacy3. The recommended initial dose for febuxostat is 40mg daily and can be increased to 80mg daily if serum uric acid levels of less than 6 mg/dL are not achieved after two weeks. Febuxostat has been reported to cause liver enzyme abnormalities in 4.6% to 6.6% of patients. Dose adjustments of febuxostat are not required in patients with mild or moderate renal impairment (CrCl 30-89 mL/min). The manufacturer states that there is insufficient data to recommend the use of febuxostat in patients with severe renal impairment (CrCl
Relevance to VA:	Relevance to the VA The Atlanta Veterans Affairs Medical Center (VAMC) cares for thousands of veterans each year with gout. Many patients at the Atlanta VAMC with severe renal impairment or renal failure require treatment with febuxostat due to the inability to tolerate allopurinol. Very little is known about the risk of adverse effects and efficacy from febuxostat in this patient population. To the researcher’s knowledge, there are no large studies evaluating the safety and efficacy of febuxostat in patients with several renal impairment or renal failure. Answering this clinical question has the potential to change treatment decisions in the future and to increase patient safety. Results of this study could be applied to other Veterans Affairs medical centers as well.