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**Project title:** The Effectiveness of UroVysion in Screening for Squamous Cell Carcinoma in Chronically Catheterized Spinal Cord Injury Patients

**Introduction/Objectives:** The objective of this study is to determine whether UroVysion, a non-invasive screening tool for bladder cancer, is effective compared to cystoscopy and cytology in detecting squamous cell bladder carcinoma in spinal cord injury patients with chronic in-dwelling catheters, a population at increased risk for this cancer.

**Methods and Materials:** From January 1, 2007 to September 10, 2007 a total of 43 spinal cord injury patients with in-dwelling catheters underwent routine screening cystoscopy at the Augusta VA Medical Center. These patients' records were examined for current and previous results of cystoscopy, cytology, and UroVysion. Positive findings on cystoscopy were compared cytology, UroVysion, and surgical pathology results.

**Results:** Of the 43 patients with chronic in-dwelling catheters, 4 patients had a positive cystoscopy during the time frame of the study, and one of those patients had a positive cystoscopy on two different visits. Of these 5 separate positive findings, none were positive on cytology or UroVysion. Surgical procedures were performed in 3 of the 5 incidences of positive cystoscopy findings, and all 3 surgical specimens were negative for malignancy on pathology. During the time frame of the study, only one positive UroVysion was reported in the study population. The patient, who had negative cystoscopy and cytology results, was shown to be positive for squamous cell carcinoma on further evaluation.

**Summary/Discussion:** These study results are inconclusive because only one positive UroVysion test was reported during the time frame of the study. More positive UroVysion results and pathology studies are necessary. This prospective study will continue in order to gather more data and further evaluate UroVysion as a screening tool for squamous cell bladder cancer in the spinal cord injury population.