**Presenter:** KARTIK S JHAVERI  
**Title of Abstract:** Imaging of Cystic Renal Cell Cancers: Do they really grow, metastasize or recur?  
**Authors:** Kartik Jhaveri MD 1, Priya Gupta MD 1, Azadeh Elmi MD 2, Lior Flor1, Hadas Moshonov1, Andrew Evans MD, FRCPC 3, Michael Jewett MD, FRCPC 4  
**Modality:** Multi  
**Organ System:** GU  
**Purpose:** To evaluate growth, post treatment recurrence and metastatic disease of cystic renal cell carcinoma (cRCC).  
**Methods Used:** Pre and post treatment imaging of 47 histologically proven cRCC with a minimum of 6 months pre-treatment, and/or >2 years post treatment imaging follow-up was retrospectively reviewed. Tumor morphology, pre-operative growth, histological typing and grading as well as incidence of tumor recurrence or metastasis were evaluated. Growth rate of tumors were compared between various histology subtypes of cRCC as well as in different Fuhrman’s grades.  
**Results of Abstract:** Out of 47 tumors, 43 (91.5%) had both pre and post treatment imaging. 27 (57.4%) tumors were histologically clear cell, 12 (25.5%) multilocular and 8(17.1%) as papillary cRCC. Overall, 27 (57.5%) tumors were graded as Fuhrman 2, 17 (36.1%) were grade 1. Of the 26 tumors with a minimum of 6 months pre treatment imaging follow up, 19 (73.1%) did not show any significant increase in tumor size. The difference in mean growth between the two groups of Fuhrman’s grades and different subtypes was not statistically significant. Average post treatment follow up duration was 51 months. There were no local recurrences amongst the 43 tumors on post treatment imaging on post-treatment surveillance except for one patient who had metastasis at clinical presentation preoperatively.  
**Discussion:** Cystic renal cancers exhibit slow indolent growth and almost no metastatic or recurrence potential with excellent clinical outcomes. We may propose a need for revisiting current imaging protocols that involve frequent pre and post treatment imaging in the  
**Scientific and/or Clinical Significance?** We demonstrate that cystic RCC behaves as an indolent renal neoplasm with majority showing minimal growth and no significant recurrence or metastatic occurrence. There is a need to rethink the imaging frequency before surgery as well as the postoperative surveillance in patients with complex cystic renal masses given their excellent clinical outcomes.  
**Relationship to existing work** Knowledge of this work can help to alter the imaging strategy and reduce frequency of imaging utilization in complex cystic renal lesions as well as revisit the need for post operative surveillance.