Reviewer's report

**Title:** Older renal cell cancer patients experience increased rates of venous thromboembolic events: a retrospective cohort study of SEER-Medicare data

**Version:** 2 **Date:** 4 November 2012

**Reviewer:** Charles Rosser

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In this interesting article by Connelly-Frost, et al. entitled older renal cell cancer patients experience increased rates of venous thromboembolic events: a retrospective cohort study of SEER-Medicare data, the authors describe a) the incidence of VTE in older patients with a recent diagnosis of RCC and b) assess key risks factors linked to the incidence of VTE. As the authors state, limited studies have looked at VTE in this population thus this study is quite unique. VTE usually occurred the first 90 days after the diagnoses and that this RCC population is 2-4 times more likely to have a VTE in the 12 months after the cancer diagnosis compared to age matched controls. Lastly, the authors linked the increased incidence to a history of VTE. This is a well-balanced, well written, informative article describing the increased rates of VTE in older RCC patients recently diagnosed with RCC. Below is a point-by-point critique of the manuscript.

**TITLE:** No issues

**ABSTRACT:** No issues

**INTRODUCTION:** No issues

**METHODS:**

Duration of follow-up after diagnosis was a maximum of 12 months?

Why were only older patients (>/- 65 years studied)? It would have been interesting to see if younger patients with RCC had a higher incidence of VTE than their age-matched controls as well.

**RESULTS:**

Controls are not matched sex. Can this be a problem? Do older women have higher VTE rates since they have hormonal imbalance?

VTE and its development can be very complex (multifactorial), i.e., genetic, lifestyle, pharmacology, cancer, etc. The authors have done a good job of explaining/addressing this.

Patients with history of VTE had higher rates of VTE after RCC diagnosis. Patients with higher stage had higher rates of VTE after RCC diagnosis, i.e., tumor burden can increase your rates.
However patients who had nephrectomy (i.e., lower tumor burden and better performance status) had lower rates of VTE. (Interesting results.)
Few patients had conventional chemotherapy but some must have had immunotherapy during this study time period.

DISCUSSION:
First paragraph needs reference.
Page 11 near the bottom of the page, perhaps write out cumulative.
Page 12 perhaps write out first instead of 1st

CONCLUSION: No issues

REFERENCES: No issues

TABLES: No issues

FIGURE: No issue