Purpose: Sunitinib has demonstrated antitumor activity in metastatic renal cell carcinoma (mRCC) when given at 50 mg/d on a 4-weeks-on 2-weeks-off regimen. Herein, we report results of an open-label, multicenter phase II mRCC study of sunitinib administered on a continuous once-daily dosing regimen.

Patients and Methods: Eligibility criteria included histologically proven mRCC with measurable disease, failure of one prior cytokine regimen, and good performance status. Patients were randomly assigned to a sunitinib starting dose of 37.5 mg/d in the morning (AM) or evening (PM). RECIST-defined objective response rate (ORR) was the primary end point. Secondary end points included progression-free survival (PFS), overall survival (OS), adverse events (AEs), and quality-of-life measures.

Results: One hundred seven patients were randomly assigned to AM (n = 54) or PM (n = 53) dosing and on study for a median 8.3 months. Eighty-three patients discontinued, 65 due to disease progression and 16 because of AEs; two patients withdrew consent. Dosing was reduced to 25 mg/d in 46 patients (43%) due to grade 3/4 AEs. The most common grade 3 treatment-related AEs were asthenia/fatigue (16%), diarrhea...
(11%), hypertension (11%), hand-foot syndrome (9%), and anorexia (8%). ORR was 20% with a 7.2-month median response duration. Median PFS and OS were 8.2 and 19.8 months, respectively, at median follow-up of 26.4 months. Efficacy, tolerability, and quality-of-life results were similar between patients dosed in the AM or PM. CONCLUSION: Sunitinib 37.5 mg, administered on a continuous once-daily dosing regimen, has a manageable safety profile as second-line mRCC therapy, providing flexible dosing, which can be explored in combination studies.