Efficacy & Toxicity of Sunitinib in mRCC patients in Egypt

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Introduction

- Renal cell carcinoma (RCC) accounts for 2–3% of all adult cancers.

- At diagnosis, a third of the patients present with locally advanced or metastatic disease and a third of patients undergoing nephrectomy will eventually develop metastasis.

- Understanding the molecular pathogenesis of RCC has identified many targets for therapeutic intervention.

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Introduction

- The rapid development of agents blocking the vascular endothelial growth factor (VEGF) pathway (eg, Sunitinib, Sorafenib, Bevacizumab, Pazopanib, Axitinib) or the mTOR pathway (Temsirolimus, Everolimus) has established molecularly-targeted therapy as the preferred treatment approach for most patients with advanced clear cell renal cell carcinoma.

- Here we present our data regarding the efficacy and toxicity of Sunitinib among Egyptian patients with metastatic RCC.

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Patients and methods

- Between January 2010 and December 2013, patients with metastatic RCC presented to Clinical Oncology department, Cairo University who received Sunitinib as 1st line treatment were enrolled in this retrospective analysis.

- The medical records were reviewed, and data on both the patient and tumor characteristics were collected.

- The patients were analyzed with respect to the demographic profile, MSKCC risk scoring, dose of Sunitinib, response rate, adverse events, and survival.

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Patients and methods

- PFS was calculated from date of diagnosis of metastatic disease till date of progression or death from any cause.

- OS was calculated from the date of diagnosis of metastatic disease till date of last follow-up or death from any cause.

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Results

Baseline characteristics		Number	%
Total number of included patients		44	100
Age	Median (range)	53 years (19 – 78)	
Gender	male	32	73
	Female	12	27
Pathological subtype	Clear cell	40	91
	papillary	1	2
	sarcomatoid	3	7
ECOG P.S	0-1	41	93
	2	3	7
Nephrectomy		37	84
Metastatic at 1st presentation		22	50

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Results

Baseline characteristics		Number	%
MSKCC scoring	Favorable	11	25
	Intermediate	29	66
	Poor	4	9
Site of metastasis	Lung	29	66
	Lymph nodes	16	36
	Bone	14	32
	Liver	11	25
	Brain	3	7
	Local recurrence	3	7

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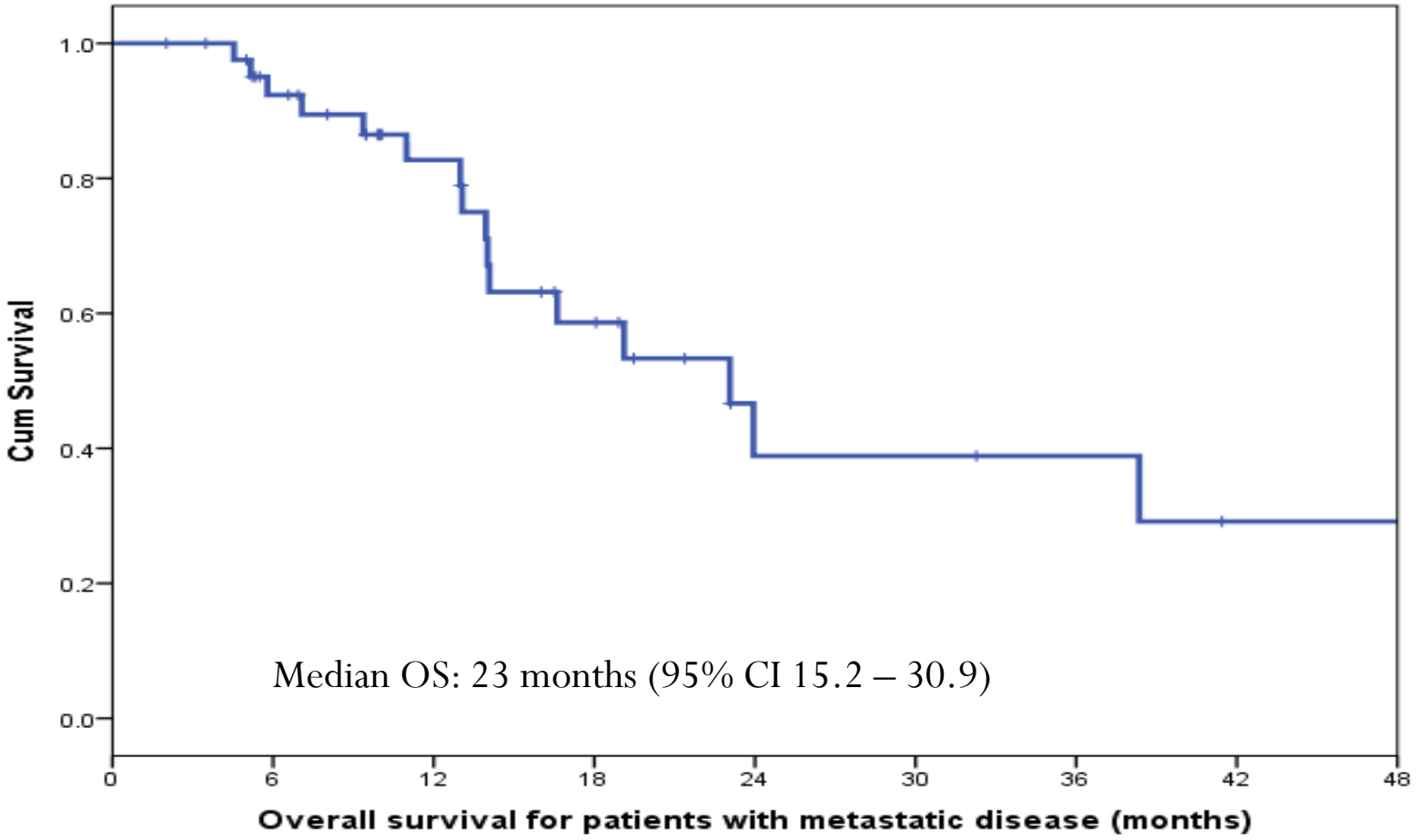
Results

- At median follow up of 19 months:
  - 9 patients (21%) achieved PR
  - 20 patients (45%) had SD
  - 7 patients (16%) had DP,
  - 4 patients (9%) had discontinued therapy due to repeated G3 toxicity (Fatigue or Hand & Foot syndrome)
  - 4 (9%) lost follow up

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Results

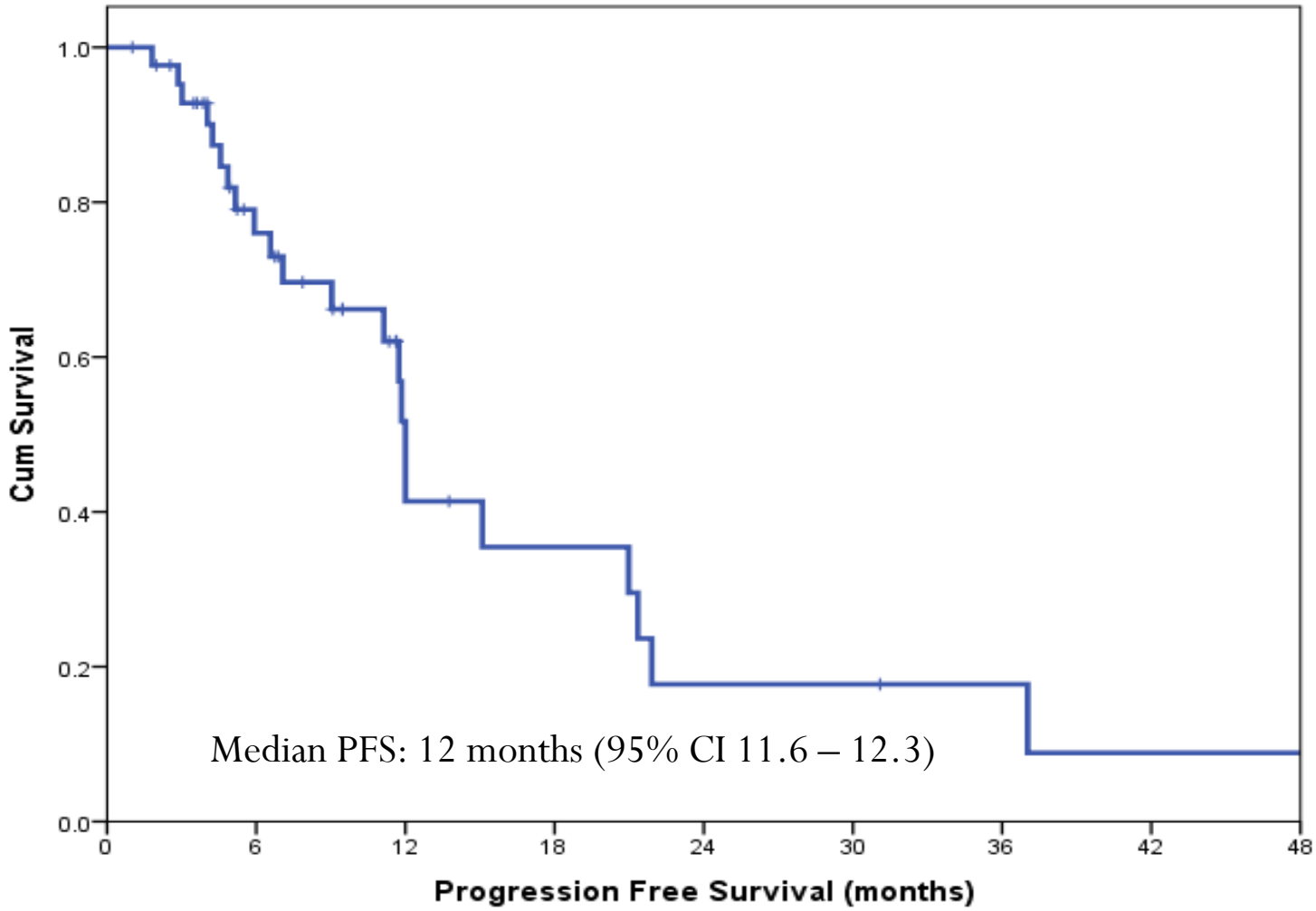


Median OS: 23 months (95% CI 15.2 – 30.9)

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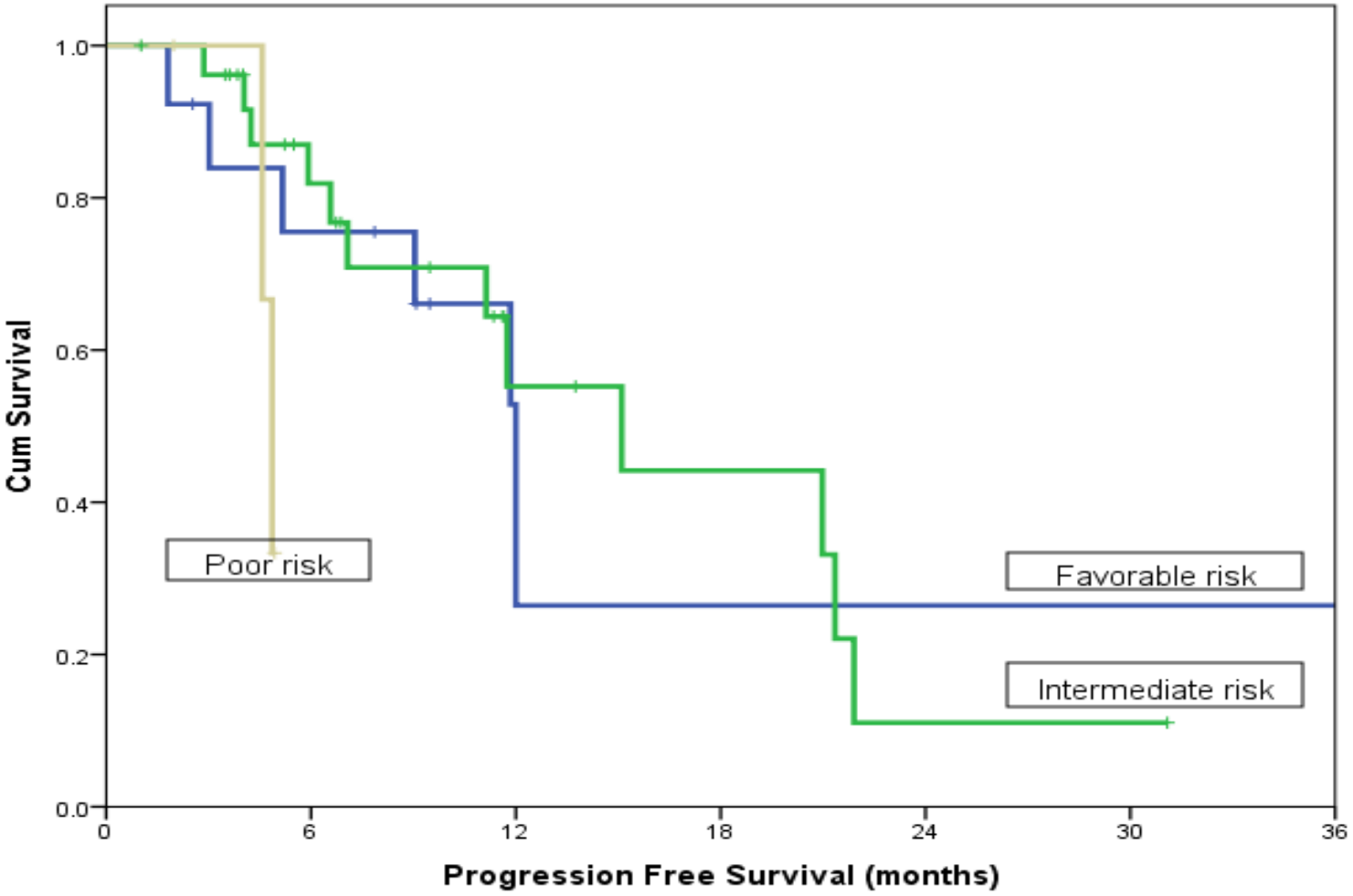
Results



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Results



PFS according to Memorial Sloan Kettering Cancer Center risk score

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Adverse events

- All patients started Sunitinib at the standard dose 50 mg orally once daily on a 4 weeks on, 2 weeks off dosing schedule.
- The median treatment duration was 8.75 months,
- dose reduction was necessary in 21 (47.7%) patients.
- The dose was decreased to 37.5 mg/day in 18 (86%) patients and to 25 mg/day in 3 (14%) patients.
- Sunitinib was interrupted in 4 patients due to grade 3 toxicity.
- Most of the patients had their dose reduction at the second cycle (70%) followed by the third one (20%).

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Adverse events

Adverse events	All gardes (%)	Grade 3-4 (%)
Fatigue	25 (65.8)	4 (9)
Vomiting	22 (50)	3 (6.8)
Mucositis	21 (47.7)	7 (15.9)
Hand and foot syndrome	20 (45.4)	6 (13.6)
Hypertension	17 (38.6)	1 (2.2)
Diarrhea	16 (36.3)	3 (6.8)
Heart burn	11(25)	0
Skin rash	10 (22.7)	0
Hypothyroidism	4 (9)	0
Bleeding	3 (6.8)	0
Decline in EF	2 (4.5)	0

Adverse events

Lab abnormalities	All gardes (%)	Grade 3-4 (%)
Anemia	22 (50)	2(4.5)
Leucopenia	21(47.7)	1(2.2)
Neutropenia	12(27.2)	3(6.8)
Thrombocytopenia	7(15.9)	1(2.2)
Liver enzymes elevation	4 (9)	1(2.2)

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Conclusions

- In our study, median PFS of 12 months & median OS was 23 months coincide with published literature.
- The most common non hematological adverse events in our Egyptian patients were fatigue, vomiting while most frequent G3 toxicity were mucositis and hand & foot.
- Our toxicity profile is quite different from the western literature, where diarrhea was the dominant adverse event (61%), while hypertension (12%) and fatigue (11%) were the most frequent grade 3 non hematological toxicity.

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Conclusions

- Different toxicity profile were seen in Asian population where the most common adverse events were fatigue (81%), stomatitis (60%), thrombocytopenia (56%), anemia (55%) and hand–foot syndrome (48%) . Grade 3 or 4 events were for hand–foot syndrome (16%), thrombocytopenia (16%) and stomatitis (10%).
- In conclusion, it seems that the toxicity profile in our Egyptian patients is more close to the Asian people rather than the western countries, a phenomenon that obviously needs further validation by a large prospective trial.

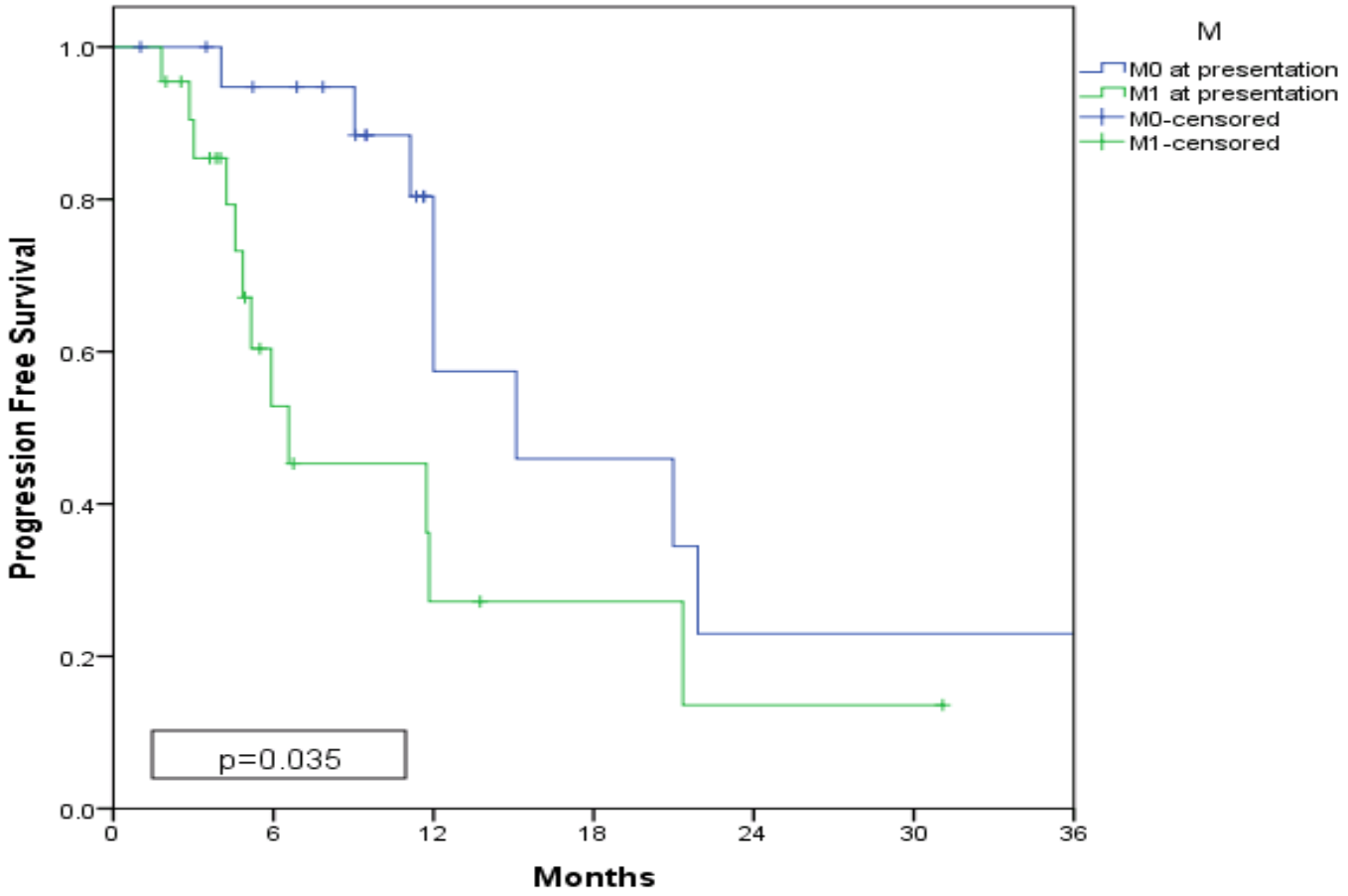
Thank You

for your attention

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Results



PFS according to status at presentation