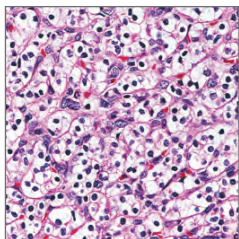
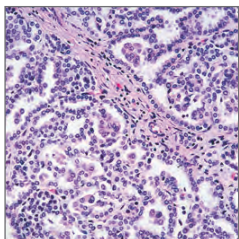
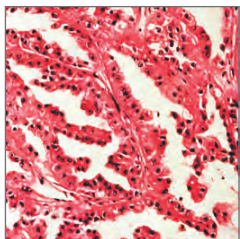
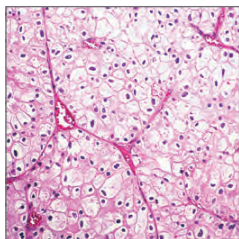
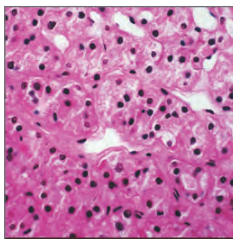


Advanced Renal Cell Carcinoma (RCC): Not a Single Disease

Important Variations Between Different Types of RCC¹

- Histologies
- Genetic causes

5 Different Histologies of RCC and Their Incidence¹

				
Clear cell	Papillary type 1	Papillary type 2	Chromophobe	Oncocytoma
75%	5%	10%	5%	5%
Gene* VHL	Met	FH	BHD	

*von Hippel-Lindau (VHL) is a hereditary form of clear cell renal carcinoma. Hereditary papillary renal carcinoma, Met allele, is a hereditary form of papillary renal carcinoma (papillary type 1). Papillary type 2, fumarate hydratase (FH), is a hereditary form of renal cell carcinoma. Birt Hogg Dubé (BHD) is a hereditary form of chromophobe and oncocytoma of renal cell carcinoma.

Used with permission from Linehan WM, Walther MM, Zbar B. The genetic basis of cancer of the kidney. *J Urol.* 2003;170:2163–2172.



Memorial Sloan-Kettering Cancer Center (MSKCC) Risk Factors

MSKCC Criteria 2002 ²	
Performance status	KPS: <80% ^{2*}
Low serum hemoglobin	Male: ≤13 g/dL ³ Female: ≤11.5 g/dL ³
Time from initial diagnosis to treatment with IFN-α	<12 months ²
High lactate dehydrogenase	>1.5 times the upper limit of normal ²
High corrected serum calcium	>10 mg/dL ²

KPS=Karnofsky performance status.

IFN-α=interferon-alpha.

Impact of the Number of MSKCC Risk Factors on Patient Outcomes^{2†}

No. of Risk Factors	Risk Groups	Median OS
3 or more	Poor	4.9 months
1 or 2	Intermediate	13.8 months
0	Favorable	29.6 months

OS=overall survival.

- >2 years difference in median OS between poor and favorable patients²
- Significant differences in OS across the 3 risk groups ($P<0.0001$)²

*ECOG PS to KPS: Proposed Conversion Table⁴

ECOG PS Score	KPS Score
0,1	100–80
2	70–60
3,4	50–10

ECOG PS=Eastern Cooperative Oncology Group Performance Status Scale.

[†]Retrospective analysis of 463 patients with advanced RCC receiving IFN-α as first-line systemic therapy in 6 prospective clinical trials.²

References: **1.** Linehan WM, Walther MM, Zbar B. The genetic basis of cancer of the kidney. *J Urol.* 2003;170:2163-2172. **2.** Motzer RJ, Bacik J, Murphy BA, et al. Interferon-alfa as a comparative treatment for clinical trials of new therapies against advanced renal cell carcinoma. *J Clin Oncol.* 2002;20:289-296. **3.** Motzer RJ, Bacik J, Schwartz LH, et al. Prognostic factors for survival in previously treated patients with metastatic renal cell carcinoma. *J Clin Oncol.* 2004;22:454-463. **4.** Buccheri G, Ferrigno D, Tamburini M. Karnofsky and ECOG performance status scoring in lung cancer: a prospective, longitudinal study of 536 patients from a single institution. *Eur J Cancer.* 1996;32A:1135-1141.