



LEGEND

- 1 These recommendations are to be followed only if non-neoplastic causes of a renal mass (e.g., infections and fat-containing angiomyolipomas) have been excluded; see Ref. 48 for details. The recommendations are offered as general guidance and do not necessarily apply to all patients.
- 2 Differential diagnosis includes renal cell carcinoma, oncocytoma, angiomyolipoma. Benign entities are more likely in small renal masses than large ones.
- 3 Limited life expectancy and co-morbidities that increase the risk of treatment.
- 4 Interval and duration of observation may be varied (e.g., shorter interval if the mass is enlarging).
- 5 Probable diagnosis renal cell carcinoma, provided there is no detectable fat at CT or MRI using protocols designed to evaluate renal masses.
- 6 If hyperattenuating and homogeneously enhancing, consider MRI and percutaneous biopsy to diagnose angiomyolipoma with minimal fat.
- 7 Surgical options include open or laparoscopic nephrectomy and partial nephrectomy; both provide a tissue diagnosis. Open, laparoscopic, and percutaneous ablation may be considered where available, but biopsy would be needed to achieve a tissue diagnosis. Long-term (5- or 10-year) results of ablation are not yet known.
- 8 Observation may be considered for a solid renal mass of any size in a patient with limited life expectancy or co-morbidities that increase the risk of treatment, particularly when the mass is small. It may be safe to observe a solid renal mass beyond 1.5 cm; however, there are insufficient data to provide definitive recommendations on the risks and benefits of observation. Thin ( $\leq 3$  mm) sections help confirm enhancement.
- 9 Probable diagnosis renal cell carcinoma. Angiomyolipoma with minimal fat, oncocytoma, and other benign neoplasms may be found at surgery.
- 10 Percutaneous biopsy can be utilized preoperatively to confirm renal cell carcinoma.