Patients with metastatic renal cell carcinoma have a life-limiting prognosis. Therefore, the aim of therapy is normally palliative care. Nevertheless, substantial achievements have been made in the past years. Cytokines as long-term standard therapy have been more and more replaced by new targeted therapies. Sunitinib, the combination of bevacizumab+interferon alfa, pazopanib and temsirolimus are now approved for first-line therapy. Sunitinib and pazopanib can also be applied as second-line options - for pazopanib the use is restricted to cases of cytokine failure. Everolimus (after TKI therapy) and sorafenib (after cytokines) are other compounds available for second-line therapy. In addition, axitinib was recently approved for second-line therapy after failure of sunitinib or cytokines. For questions regarding the optimal sequence, first study results are now available from the phase III trial. The purpose of an interdisciplinary expert meeting held in 2012 was to debate upon which criteria should influence the therapy decision. The members discussed several aspects of treating patients with the disease. Results from the 2011 conference provided the basis for the 2012 meeting 1. As in previous years, the experts intended to provide common recommendations for clinical practice. The results of the 2012 conference are presented as short theses and a current therapy algorithm.