With the introduction of targeted therapies, a paradigm shift for the treatment of metastatic renal cell carcinoma has taken place. The use of cytokines as the long-standing standard therapy has declined. New compounds like sunitinib, sorafenib, bevacizumab and temsirolimus have become established as new therapeutic standards. Since mid-2009, these substances have been complemented by everolimus. An interdisciplinary consensus conference was held to discuss what criteria to consider when using these drugs (treatment sequence) and what questions remain unanswered based on the current study situation (open questions). Results from the 2008 conference provided the basis for the 2009 meeting. The results of the 2009 conference are presented as short theses.