Patients suffering from metastasized renal cell carcinoma (mRCC) have a poor prognosis despite current improvements in therapy options. Considering that several targeted therapy options are available, the best possible therapy sequence must be selected for each individual patient in order to achieve a maximum survival time, given that complete remission is a rare occurrence. RAD001 is an active and orally administered derivative of rapamycin which has recently been shown to have mTOR inhibitor activity in pretreated patients with mRCC. In the majority of patients treatment with RAD001 achieves stabilization of the disease. The object of current clinical research on mRCC is among others the identification of the optimum therapy sequence or the best combinations. The positive results of the first phase III study on treatment of patients with mRCC and the failure of a therapy with VEGFr-TKI showed the effectiveness and good tolerability of mTOR inhibition by RAD001.