

**Kidney Transplantation from Donors with a History of Malignancy including Small Renal Cell Carcinoma**

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The evolution of kidney transplantation has resulted in extended lifespan as well as better life quality of patients with end-stage renal disease, which in turn causes an increased demand for organs. The organ shortage requires a careful consideration of potential donors that have current or historical malignancies. Malignancy transmission through organ donation is extremely rare, but can be a devastating event for the recipient, donor and transplantation team if it occurs. Individuals with a past history of treated cancer with intermediate (1 to 10 percent) or higher risk of transmission or recurrence should be excluded from live kidney donation. These malignancies include melanoma, choriocarcinoma, hematologic malignancies, monoclonal gammopathy, and testicular, lung, and breast cancers. Live kidney donation from people with a past history of treated malignancies with a low risk (<1 percent) of transmission or recurrence may be considered on a case-by-case basis with informed consent of the recipient and donor.

In recent findings, successful outcomes have been observed using kidneys from deceased and live donors following excision of small incidentally detected renal cell carcinoma. In patients electing radical nephrectomy for small renal masses, the kidney, following excision of the tumor can be used as a novel form of altruistic organ donation. With these donor sources, the risk of tumor recurrence is extremely low with patient survival significantly better than the alternative of long term dialysis and graft outcomes similar to other sources of donor organs.