

OPTN DTAC Quarterly Update

November 2019

Renal Cell Carcinoma

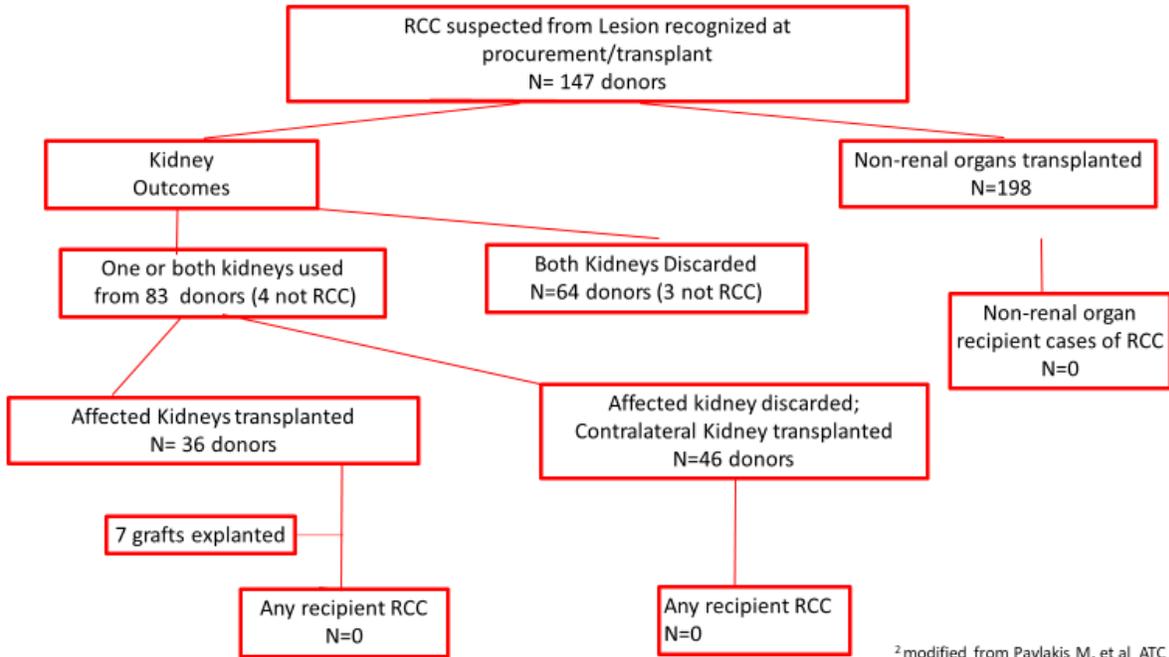
The OPTN Ad Hoc Disease Transmission Advisory committee (DTAC) reviews reported cases of suspected donor derived diseases. While infections are the major disease category evaluated, malignancy is second. Renal cell carcinoma (RCC) is the most frequently evaluated malignancy. To better understand the risk of using organs from a donor with RCC, Pavlakis et al reviewed all reports to the DTAC between Jan 2008 and Dec 2016 ¹.

Overall, 179 cases of RCC were reported to the DTAC for review. While the precise frequency of RCC in the donor population is not known, these data suggest the frequency to be rare being found in <0.2% of deceased donors.

The majority of reports (N= 147) were based on finding suspicious lesions at the time of transplantation whereas 32 reports came from the suspicion of donor derived RCC after transplantation.

Review of the 147 episodes where RCC was suspected at procurement revealed that in 64 cases both kidneys were discarded whereas in 47 cases the affected kidney only was discarded. In 36 cases the affected kidney was transplanted, often due to it being a small lesion that could be resected or due to final pathology not being available at the time of transplant. Seven recipients had the graft explanted after pathology was confirmed and three had partial resection. The decision to use or discard a graft could not always be elucidated, as tumor size and grade were not uniformly available. Despite this limitation some important findings could be ascertained.

Of importance for counseling candidates, RCC was not transmitted to any of the 46 evaluable recipients of the contralateral kidneys. Furthermore, no RCC was transmitted to the 23 recipients who retained the affected kidney graft or had partial resection. In addition, no RCC was transmitted to the 198 recipients of non-renal organs from donors with a proven RCC demonstrating safety for this population. (Figure). These data should assist transplant centers inform candidates of about safety of using non- renal organs and the contralateral kidney to help prevent unnecessary discard. In addition, the affected kidney may be used in some cases particularly if the lesion is amenable to resection. In all cases, risk benefit should be reviewed and follow up assured



² modified from Pavlakis M, et al ATC 2018

1. Pavlakis M, Michaels MG, Tlusty S, et al. Renal cell carcinoma suspected at time of organ donation 2008-2016: A report of the OPTN ad hoc Disease Transmission Advisory Committee Registry. *Clin Transplant*. 33(7):e13597; 2019. <https://doi.org/10.1111/ctr.13597>.
2. Modified from Pavlakis M, Michaels MG, Turgeon N, Wolfe C, Wood P, Nalesnik M, Donor Derived Renal Cell Carcinoma (RCC) Transmission Events 2008-2016: A Report of the OPTN Disease Transmission Advisory Committee (DTAC). Abstract #1324. American transplant Congress 2018 Seattle, WA. June 3, 2018. *Am J Transplant* 2018; 18(suppl 4)