Kidney Donor Contrast Exposure and Recipient Outcomes Shivani Bajpai, MS2; Richard S. Mangus, MD MS FACS Indiana University School of Medicine and Indiana Clinical and Translational Sciences Institute

The use of contrast media in hospital procedures has been increasing since its conception in 1923. Despite developments in utility and safety overtime, contrast media has been associated with inducing kidney injury in patients. Several studies have investigated contrast-induced nephropathy (CIN) in hospital patients and kidney recipients post-transplant. However, there are few studies that connect donor contrast exposure to recipient kidney outcomes. This was a single-center, retrospective study on single-organ deceased kidney donors and recipients (n=1585) to explore the impact of pre-transplant contrast procedures on post-transplant kidney outcomes. The results indicated that the first, peak, and last serum creatinine values were not useful markers of CIN in kidney donors. An analysis of those donors who had contrast exposure and those who did not, as well as the amount of contrast exposure in the donor prior to transplant did not conclude significant impact on the recipient kidney outcomes at time points ranging from 7 days to 1-year post transplant. This data provides the largest statistical evidence currently available on this topic; it establishes the foundation for various research developments moving forward.