

Table S1: Sample metadata.

Sample ID	Tissue Merbidity	AGE	GENDER	Viability (%)	Input (No of cells)	Mean Reads per Cell	Median Genes per Cell	Number of Reads	Valid Barcodes	Sequencing Saturation	Q30 Bases in Barcode	Q30 Bases in RNA Read	Q30 Bases in Sample Index	Q30 Bases in UMI	Reads Mapped to Genome	Reads Mapped Confidently to Genome	Reads Mapped Confidently to Intergenic Regions	Reads Mapped Confidently to Intronic Regions	Reads Mapped Confidently to Exonic Regions	Reads Mapped Confidently to Transcripts	Reads Mapped Antisense to Gene	Fraction Reads in Cells	Total Genes Detected	Median UMI Counts per Cell	
Singleplex samples																									
2582	Transplant Nephrectomy	28	F	80	20,000	69,381	1,279	434,053,263	96.40%	65.10%	95.70%	88.00%	94.80%	95.70%	84.00%	78.00%	4.80%	25.70%	47.50%	44.60%	1.20%	46.20%	22,546	3,420	
2584	Transplant Nephrectomy	31	M	79	20,000	61,260	696	391,638,256	96.30%	83.80%	95.80%	88.20%	94.80%	95.70%	84.70%	79.90%	4.40%	25.00%	50.50%	47.70%	1.30%	44.70%	20,700	1,474	
2585	Native Nephrectomy	57	M	73	10,000	44,344	529	440,207,021	97.00%	76.30%	95.80%	87.80%	93.00%	95.80%	84.90%	80.90%	5.20%	22.00%	53.70%	50.80%	1.60%	35.90%	22,113	1,427	
2586	Native Nephrectomy	59	F	65	20,000	73,231	1,378	383,734,189	96.60%	69.50%	95.70%	87.80%	93.10%	95.70%	83.60%	79.20%	4.90%	22.60%	51.80%	48.60%	1.30%	40.50%	23,175	3,023	
18-142-6	Native Nephrectomy	68	F	45	10,000	29,537	352	409,886,274	96.90%	84.30%	95.70%	88.40%	90.60%	95.60%	83.10%	77.60%	4.60%	20.60%	52.40%	50.10%	0.90%	47.90%	21,719	825	
18-162-6	Native Nephrectomy	64	F	45	5,000	9,076	31	351,605,116	97.10%	92.10%	96.00%	88.60%	90.70%	95.90%	85.90%	83.00%	7.20%	8.10%	67.80%	65.80%	0.70%	70.20%	19,526	250	
18-312-6	Native Nephrectomy	71	M	50	6,000	109,163	2,360	402,268,141	96.80%	68.20%	95.90%	88.00%	93.50%	95.80%	86.30%	83.20%	5.10%	24.10%	54.00%	51.00%	1.10%	55.90%	23,425	6,873	
18-342-6	Native Nephrectomy	69	M	50	20,000	50,277	595	437,310,416	96.80%	81.80%	95.80%	88.50%	92.10%	95.70%	83.80%	79.40%	5.40%	21.60%	52.40%	49.10%	1.60%	40.70%	22,042	1,170	
Mux-Seq Samples																									
Pool 1																									
2582	Transplant Nephrectomy	28	F	80	5,000																				
2584	Transplant Nephrectomy	31	M	79	5,000																				
2585	Native Nephrectomy	57	M	73	5,000																				
2586	Native Nephrectomy	59	F	65	5,000																				
						118,671	1,208	403,600,677	96.70%	76.90%	95.60%	87.90%	93.40%	95.50%	84.40%	79.80%	4.80%	24.60%	50.30%	47.30%	1.40%	33.20%	22,280	2,732	
Pool 2 (replicate of Pool 1)																									
2582	Transplant Nephrectomy	28	F	80	5,000																				
2584	Transplant Nephrectomy	31	M	79	5,000																				
2585	Native Nephrectomy	57	M	73	5,000																				
2586	Native Nephrectomy	59	F	65	5,000																				
						97,055	1,235	407,048,749	96.70%	73.40%	95.80%	88.50%	90.60%	95.70%	85.30%	80.80%	4.80%	23.80%	52.30%	49.30%	1.30%	34.90%	22,938	2,964	
Pool 3																									
18-142-6	Native Nephrectomy	68	F	45	5,000																				
18-162-6	Native Nephrectomy	64	F	45	5,000																				
18-312-6	Native Nephrectomy	71	M	50	5,000																				
18-342-6	Native Nephrectomy	69	M	50	5,000																				
						7,104	90	390,919,835	94.30%	92.70%	95.90%	91.80%	94.60%	95.80%	90.10%	84.30%	8.40%	18.00%	57.80%	54.00%	1.70%	75.00%	20,851	155	