Supplemental Table 2: Quality Control Metrics of Single Cell RNA Sequencing

Patient	Tissue	Estimated Number of Cells	Mean Reads per Cell	Median Genes per Cell	Number of Reads	Valid Barcodes
UV031	eye	1,903	399,252	2,191	759,777,394	88.60%
UV031	PBMC	7,156	68,629	1,550	491,109,429	90.20%
UV150	eye	4,606	105,201	1,635	484,559,710	91.50%
UV150	PBMC	5,957	83,144	1,766	495,289,818	91.20%
UV170	eye	2,828	147,433	1,514	416,941,452	92.20%
UV170	PBMC	6,871	71,363	1,613	490,339,201	91.50%
UV174	eye	1,786	158,534	1,629	283,142,294	93.20%
UV174	PBMC	5,762	67,863	1,708	391,026,903	90.80%
Patient	Tissue	Sequencing Saturation	Q30 Bases in Barcode	Q30 Bases in RNA Read	Q30 Bases in RNA Read 2	Q30 Bases in UMI
UV031	eye	95.10%	95.40%	93.30%	91.40%	94.80%
UV031	PBMC	87.80%	94.40%	87.20%	89.30%	93.90%
UV150	eye	90.20%	94.20%	87.00%	88.40%	93.70%
UV150	PBMC	88.20%	94.30%	87.10%	88.60%	93.90%
UV170	eye	93.70%	96.90%	85.30%	92.70%	96.50%
UV170	PBMC	87.70%	96.90%	88.30%	91.50%	96.60%
UV174	eye	90.90%	97.00%	88.60%	92.30%	96.70%
UV174	PBMC	84.80%	96.90%	88.40%	92.70%	96.60%
Patient	Tissue	Reads Mapped to Genome		Reads Mapped Confidently to Intergenic Regions		Reads Mapped Confidently to Exonic Regions
UV031	eye	91.10%	78.10%	7.20%	11.80%	61.60%
				7.20% 6.30%	11.80% 7.60%	
UV031	eye	91.10% 91.50% 91.20%	78.10% 82.80% 84.10%	7.20% 6.30% 5.50%	11.80% 7.60% 6.30%	61.60% 70.80% 74.40%
UV031 UV031 UV150 UV150	eye PBMC	91.10% 91.50% 91.20% 91.40%	78.10% 82.80% 84.10% 83.80%	7.20% 6.30% 5.50% 5.60%	11.80% 7.60% 6.30% 6.70%	61.60% 70.80% 74.40% 73.70%
UV031 UV031 UV150 UV150 UV170	eye PBMC eye	91.10% 91.50% 91.20% 91.40% 91.70%	78.10% 82.80% 84.10% 83.80% 86.00%	7.20% 6.30% 5.50% 5.60% 5.90%	11.80% 7.60% 6.30% 6.70% 6.00%	61.60% 70.80% 74.40% 73.70% 76.10%
UV031 UV031 UV150 UV150 UV170 UV170	eye PBMC eye PBMC	91.10% 91.50% 91.20% 91.40% 91.70% 90.70%	78.10% 82.80% 84.10% 83.80% 86.00% 83.40%	7.20% 6.30% 5.50% 5.60% 5.90% 5.60%	11.80% 7.60% 6.30% 6.70% 6.00% 6.80%	61.60% 70.80% 74.40% 73.70% 76.10% 73.40%
UV031 UV031 UV150 UV150 UV170 UV170 UV174	eye PBMC eye PBMC eye PBMC eye	91.10% 91.50% 91.20% 91.40% 91.70% 90.70% 91.40%	78.10% 82.80% 84.10% 83.80% 86.00% 83.40% 86.80%	7.20% 6.30% 5.50% 5.60% 5.90% 5.60% 4.90%	11.80% 7.60% 6.30% 6.70% 6.00% 6.80% 6.80%	61.60% 70.80% 74.40% 73.70% 76.10% 73.40% 77.80%
UV031 UV031 UV150 UV150 UV170 UV170	eye PBMC eye PBMC eye PBMC	91.10% 91.50% 91.20% 91.40% 91.70% 90.70%	78.10% 82.80% 84.10% 83.80% 86.00% 83.40%	7.20% 6.30% 5.50% 5.60% 5.90% 5.60%	11.80% 7.60% 6.30% 6.70% 6.00% 6.80%	61.60% 70.80% 74.40% 73.70% 76.10% 73.40%
UV031 UV031 UV150 UV150 UV170 UV170 UV174	eye PBMC eye PBMC eye PBMC eye PBMC	91.10% 91.50% 91.20% 91.40% 91.70% 90.70% 91.40%	78.10% 82.80% 84.10% 83.80% 86.00% 83.40% 86.80%	7.20% 6.30% 5.50% 5.60% 5.90% 5.60% 4.90%	11.80% 7.60% 6.30% 6.70% 6.00% 6.80% 6.80%	61.60% 70.80% 74.40% 73.70% 76.10% 73.40% 77.80%
UV031 UV031 UV150 UV150 UV170 UV170 UV174 UV174	eye PBMC eye PBMC eye PBMC eye PBMC	91.10% 91.50% 91.20% 91.40% 91.70% 90.70% 91.40% 90.90%	78.10% 82.80% 84.10% 83.80% 86.00% 83.40% 86.80% 83.00%	7.20% 6.30% 5.50% 5.60% 5.90% 4.90% 5.90%	11.80% 7.60% 6.30% 6.70% 6.00% 6.80% 6.80%	61.60% 70.80% 74.40% 73.70% 76.10% 73.40% 77.80% 72.20%
UV031 UV031 UV150 UV150 UV170 UV170 UV174 UV174	eye PBMC eye PBMC eye PBMC eye PBMC	91.10% 91.50% 91.20% 91.40% 91.70% 90.70% 91.40% 90.90% Reads Mapped Confidently to Transcriptome	78.10% 82.80% 84.10% 83.80% 86.00% 83.40% 86.80% 83.00% Reads Mapped Antisense to Gene	7.20% 6.30% 5.50% 5.60% 5.90% 5.60% 4.90% 5.90%	11.80% 7.60% 6.30% 6.70% 6.00% 6.80% 6.80% Total Genes Detected	61.60% 70.80% 74.40% 73.70% 76.10% 73.40% 77.80% 72.20% Median UMI Counts per Cell
UV031 UV031 UV150 UV150 UV170 UV170 UV174 UV174 UV174	eye PBMC eye PBMC eye PBMC eye PBMC Tissue eye	91.10% 91.50% 91.20% 91.40% 91.70% 90.70% 91.40% 90.90% Reads Mapped Confidently to Transcriptome 54.00%	78.10% 82.80% 84.10% 83.80% 86.00% 83.40% 86.80% 83.00% Reads Mapped Antisense to Gene 5.40%	7.20% 6.30% 5.50% 5.60% 5.90% 5.60% 4.90% 5.90% Fraction Reads in Cells 90.50%	11.80% 7.60% 6.30% 6.70% 6.00% 6.80% 6.80% Total Genes Detected 19,697	61.60% 70.80% 74.40% 73.70% 76.10% 73.40% 77.80% 72.20% Median UMI Counts per Cell 6,068
UV031 UV031 UV150 UV150 UV170 UV174 UV174 UV174 UV031 UV031	eye PBMC eye PBMC eye PBMC eye PBMC Tissue eye PBMC	91.10% 91.50% 91.20% 91.40% 91.70% 90.70% 91.40% 90.90% Reads Mapped Confidently to Transcriptome 54.00% 64.50%	78.10% 82.80% 84.10% 83.80% 86.00% 83.40% 86.80% 83.00% Reads Mapped Antisense to Gene 5.40% 3.50%	7.20% 6.30% 5.50% 5.60% 5.90% 5.60% 4.90% 5.90% Fraction Reads in Cells 90.50% 96.90%	11.80% 7.60% 6.30% 6.70% 6.00% 6.80% 6.80% Total Genes Detected 19,697 20,078	61.60% 70.80% 74.40% 73.70% 76.10% 73.40% 77.80% 72.20% Median UMI Counts per Cell 6,068 4,426
UV031 UV031 UV150 UV150 UV170 UV174 UV174 Patient UV031 UV031 UV050	eye PBMC eye PBMC eye PBMC eye PBMC Tissue eye PBMC eye	91.10% 91.50% 91.20% 91.40% 91.70% 90.70% 91.40% 90.90% Reads Mapped Confidently to Transcriptome 54.00% 64.50% 69.00%	78.10% 82.80% 84.10% 83.80% 86.00% 83.40% 86.80% 83.00% Reads Mapped Antisense to Gene 5.40% 3.50% 3.00%	7.20% 6.30% 5.50% 5.60% 5.90% 5.60% 4.90% 5.90% Fraction Reads in Cells 90.50% 96.90%	11.80% 7.60% 6.30% 6.70% 6.00% 6.80% 6.80% 6.80% Total Genes Detected 19,697 20,078 19,126	61.60% 70.80% 74.40% 73.70% 76.10% 73.40% 77.80% 72.20% Median UMI Counts per Cell 6,068 4,426 4,693
UV031 UV031 UV150 UV150 UV170 UV174 UV174 Patient UV031 UV031 UV150 UV150	eye PBMC eye PBMC eye PBMC eye PBMC eye PBMC eye PBMC eye	91.10% 91.50% 91.20% 91.40% 91.70% 90.70% 91.40% 90.90% Reads Mapped Confidently to Transcriptome 54.00% 64.50% 69.00% 68.00%	78.10% 82.80% 84.10% 83.80% 86.00% 83.40% 86.80% 83.00% Reads Mapped Antisense to Gene 5.40% 3.50% 3.00% 3.30%	7.20% 6.30% 5.50% 5.60% 5.90% 5.60% 4.90% 5.90% Fraction Reads in Cells 90.50% 96.90% 94.30% 97.20%	11.80% 7.60% 6.30% 6.70% 6.00% 6.80% 6.80% Total Genes Detected 19,697 20,078 19,126 19,955	61.60% 70.80% 74.40% 73.70% 76.10% 73.40% 77.80% 72.20% Median UMI Counts per Cell 6,068 4,426 4,693 5,514
UV031 UV031 UV150 UV150 UV170 UV174 UV174 UV031 UV031 UV031 UV150 UV150 UV170	eye PBMC eye PBMC eye PBMC eye PBMC eye PBMC eye	91.10% 91.50% 91.20% 91.40% 91.70% 90.70% 91.40% 90.90% Reads Mapped Confidently to Transcriptome 54.00% 64.50% 69.00% 68.00% 71.30%	78.10% 82.80% 84.10% 83.80% 86.00% 83.40% 86.80% 83.00% Reads Mapped Antisense to Gene 5.40% 3.50% 3.00% 3.30% 2.60%	7.20% 6.30% 5.50% 5.60% 5.90% 5.60% 4.90% 5.90% Fraction Reads in Cells 90.50% 96.90% 94.30% 97.20% 93.80%	11.80% 7.60% 6.30% 6.70% 6.00% 6.80% 6.00% 6.80% Total Genes Detected 19,697 20,078 19,126 19,955 18,177	61.60% 70.80% 74.40% 73.70% 76.10% 73.40% 77.80% 72.20% Median UMI Counts per Cell 6,068 4,426 4,693 5,514 4,181
UV031 UV031 UV150 UV150 UV170 UV174 UV174 Patient UV031 UV031 UV150 UV150 UV170	eye PBMC eye PBMC eye PBMC eye PBMC eye PBMC eye PBMC eye PBMC eye	91.10% 91.50% 91.20% 91.40% 91.70% 90.70% 91.40% 90.90% Reads Mapped Confidently to Transcriptome 54.00% 64.50% 69.00% 68.00% 71.30% 68.20%	78.10% 82.80% 84.10% 83.80% 86.00% 83.40% 86.80% 83.00% Reads Mapped Antisense to Gene 5.40% 3.50% 3.00% 3.30% 2.60% 3.10%	7.20% 6.30% 5.50% 5.60% 5.90% 5.60% 4.90% 5.90% Fraction Reads in Cells 90.50% 96.90% 94.30% 97.20% 93.80% 95.40%	11.80% 7.60% 6.30% 6.70% 6.00% 6.80% 6.80% Total Genes Detected 19,697 20,078 19,126 19,955 18,177 20,081	61.60% 70.80% 74.40% 73.70% 76.10% 73.40% 77.80% 72.20% Median UMI Counts per Cell 6,068 4,426 4,693 5,514 4,181 4,781