

Supplement Table 3 : Datasets review

Data set	GEO Accession	scRNA-seq Method	Total cell number	Tissues	Information
Bojan L et al.(2020), Nat Commun	GSE112271	3' sequencing and barcoding (10x Genomics)	38553	HCC	2 donors
Ankur S et al.(2020), Cell	GSE156337	3' sequencing and barcoding (10x Genomics)	73,589	HCC&adjacent	12398 tumor cells from 14 donors (mean number of Features = 659)
Zhang et al.(2019), Cell	HRA000069	3' sequencing and barcoding (10x Genomics)/Full length (SMART-seq2)	66,187 (10x) 11,134(SMART- seq2)	HCC/adjacent/LNs/bl ood/ascites	High quality CD45+ Immune cells
Ma et al., (2019) Cancer Cell	GSE125449	3' sequencing and barcoding (10x Genomics)	5, 115	HCC	702 tumor cells from 8 tumors
Sun et al. (2020) cell	CNSA: CNP0000650	Full length (SMART-seq2)	17, 000	HCC	2737 tumor cells from 18 donors (mean number of Features = 7540)