

Paper	Cancer type	# patients	# total cells	# immune cells	Sequencing technology	Experiment details (adapted from the papers' methods)
Azizi et al. 2018	breast carcinoma (BC)	8	46,642	28,918	inDrop	Liberase TL (20min, 37°C).
Yost et al. 2019	basal cell carcinoma (BCC) and squamous cell carcinoma (SCC)	15	79,046	59,792	10x	Liberase TL and DNaseI GentleMACS C tube (37°C, 3h).
Lichun et al. 2019	intrahepatic cholangiocarcinoma (ICC) and hepatocellular carcinoma (HCC)	19	9,536	4,331	10x	GentleMACS C Tube, Tumor dissociation Kit using program h_tumor_01 (30min, 37°C).
Zhang et al. 2019	intrahepatic cholangiocarcinoma (ICC) and hepatocellular carcinoma (HCC)	16	20,393	17,242	10x and Smart-Seq2	MACS tumor dissociation kit (30min, 37°C).
Lee et al. 2020	colorectal cancer (CRC)	43	63,689	31,367	10x	1. For SMC samples GentleMACS C tubes (Enzymes H, R, and A, h_tumor_01, 02, and 03, 30min, 37°C). 2. For the KUL3 samples Collagenase P and DNase I, 10min, 37°C). 3. Singapore protocol Collagenase IV and DNases I (37°C, 1h).
Peng et al. 2019	pancreatic ductal adenocarcinoma (PDAC)	24	41,986	10,623	10x	Type VIII Collagenase, Dispase II, Trypsin Inhibitor, DNaseI (37°C, 40min).
Schelker et al. 2017	ovarian cancer (OC)	4	2,765	2,432	inDrop	
Lambrechts et al. 2018	non-small-cell lung cancer (NSCLC)	5	24,908	17,077	10x	Collagenase I/II, DNaseI, Dispase (15min, 37°C).
Lavin et al. 2017	non-small-cell lung cancer (NSCLC)	28	1,519	1,460	MARS-Seq	Collagenase type IV (45min, 37°C).
Sade-Feldman et al. 2018	melanoma	29	16,188	14,991	Smart-Seq2	Miltenyi Biotec enzyme H, R, A, (20min, 37°C).
Li et al. 2019	melanoma	22	44,403	37,398	MARS-Seq	Collagenase IV and pulmozyme (20min, 37°C).
Durante et al. 2020	uveal melanoma	11	86,407	8,513	10x	GentleMACS C tubes Collagenase IV (program "h_tumor_01", 37°C, 1h, +program "h_tumor_03").

Wu et al. 2020	colorectal cancer (CRC)	2	7,138	6,909	10x	Collagenase D and DNaseI (15+10min, 37°C)
	non-small-cell lung cancer (NSCLC)	6	39,323	35,107		
	endometrial adenocarcinoma (EA)	6	22,706	22,611		
	renal cell carcinoma (RCC)	3	19,612	18,340		

**Supplementary Table 1 | Single-cell RNA-seq data used for the Tumor Immune Cell Atlas.**