

HemaGraph: Breaking Barriers in Hematologic Single Cell Classification with Graph Attention

Supplementary Material

Following Table 1 shows the graph statistics for every patient in our dataset, where the number of edges come from the kNN graph (we used $k = 7$) with added self-loops:

Patient	#Cells	#Edges	T Cells (%)	B Cells (%)	Monocytes (%)	Mast Cells (%)	Hematopoietic (%)
0	94664	757312	66439 (70.18%)	11773 (12.44%)	12768 (13.49%)	66 (0.07%)	3618 (3.82%)
1	21915	175320	7839 (35.77%)	2982 (13.61%)	6073 (27.71%)	100 (0.46%)	4921 (22.45%)
2	85217	681736	49738 (58.37%)	13307 (15.62%)	8938 (10.49%)	86 (0.10%)	13148 (15.43%)
3	76704	613632	44914 (58.55%)	7521 (9.81%)	16964 (22.12%)	138 (0.18%)	7167 (9.34%)
4	107637	861096	52221 (48.52%)	9787 (9.09%)	27350 (25.41%)	160 (0.15%)	18119 (16.83%)
5	76125	609000	26920 (35.36%)	4768 (6.26%)	30124 (39.57%)	158 (0.21%)	14155 (18.59%)
6	81182	649456	61417 (75.65%)	7484 (9.22%)	4753 (5.85%)	18 (0.02%)	7510 (9.25%)
7	48143	385144	30190 (62.71%)	10799 (22.43%)	3064 (6.36%)	68 (0.14%)	4022 (8.35%)
8	27137	217096	13667 (50.36%)	136 (0.50%)	4431 (16.33%)	30 (0.11%)	8873 (32.70%)
9	120654	965232	68396 (56.69%)	47653 (39.50%)	3788 (3.14%)	136 (0.11%)	681 (0.56%)
10	83704	669632	28560 (34.12%)	5313 (6.35%)	33976 (40.59%)	31 (0.04%)	15824 (18.90%)
11	27091	216726	19633 (72.47%)	1582 (5.84%)	5116 (18.88%)	3 (0.01%)	757 (2.79%)
12	37797	302376	22788 (60.29%)	3768 (9.97%)	8522 (22.55%)	232 (0.61%)	2487 (6.58%)
13	24626	197008	16627 (67.52%)	4307 (17.49%)	2156 (8.75%)	42 (0.17%)	1494 (6.07%)
14	114043	912344	86021 (75.43%)	12369 (10.85%)	11357 (9.96%)	51 (0.04%)	4245 (3.72%)
15	63750	510000	43842 (68.77%)	12719 (19.95%)	4764 (7.47%)	11 (0.02%)	2414 (3.79%)
16	109781	878248	37995 (34.61%)	39854 (36.30%)	20879 (19.02%)	278 (0.25%)	10775 (9.81%)
17	88001	704008	61466 (69.85%)	6487 (7.37%)	12614 (14.33%)	26 (0.03%)	7408 (8.42%)
18	20212	161696	12920 (63.92%)	3656 (18.09%)	2620 (12.96%)	27 (0.13%)	989 (4.89%)
19	49863	398904	38406 (77.02%)	3111 (6.24%)	4340 (8.70%)	40 (0.08%)	3966 (7.95%)
20	86991	695928	55871 (64.23%)	14300 (16.44%)	8307 (9.55%)	4 (0.00%)	8509 (9.78%)
21	74477	595816	46971 (63.07%)	15616 (20.97%)	5681 (7.63%)	38 (0.05%)	6171 (8.29%)
22	49774	398192	31063 (62.41%)	8375 (16.83%)	4699 (9.44%)	815 (1.64%)	4822 (9.69%)
23	133820	1070560	111218 (83.11%)	5749 (4.30%)	10868 (8.12%)	51 (0.04%)	5934 (4.43%)
24	53192	425536	37326 (70.17%)	576 (1.08%)	11163 (20.99%)	30 (0.06%)	4097 (7.70%)
25	66972	535776	42925 (64.09%)	974 (1.45%)	16500 (24.64%)	399 (0.60%)	6174 (9.22%)
26	22253	178024	8100 (36.40%)	11386 (51.17%)	2027 (9.11%)	4 (0.02%)	736 (3.31%)
27	42758	342064	24857 (58.13%)	51 (0.12%)	10836 (25.34%)	117 (0.27%)	6897 (16.13%)
28	64569	516552	50091 (77.58%)	3452 (5.35%)	5826 (9.02%)	271 (0.42%)	4929 (7.63%)
29	121287	970296	91772 (75.67%)	867 (0.71%)	5809 (4.79%)	149 (0.12%)	22690 (18.71%)

Table 1: Graph statistics for every patient of the dataset. For the sake of simplicity, every percentage value has been rounded to two decimal digits.