## 1 Report of PCAWG objects

	Cancer_type	Fea- ture_type	Num- ber.of.s	Num- anlongsdæsf.f	Sum.of.features.for.group.1	Sum.of.features.for.group.2	sum_all_ct
1	Biliary-AdenoCA	nu- cleotidesub- stitution1	15.00	6.00	31708, 10657, 95289, 23511, 85704, 11819	7148, 3094, 16771, 5196, 13878, 3056	1854.00
2	Biliary-AdenoCA	nu- cleotidesub- stitution3	15.00	96.00	1877, 1438, 227, 1624, 720, 496, 111, 921, 6704, 3153, 11597, 3308, 3069, 286 23265.3990159484,	552, 369, 77, 411, 259, 164, 41, 240, 1336, 550, 1672, 651, 501, 428, 271, 73 3278.11921199857,	1854.00
3	Biliary-AdenoCA	signatures	15.00	67.00	6335.28556545343, 129.905521239188, 946.246316321856, 6246	1682.22358160167, 73.4372680276237, 183.531608209343, 681.7	1854.00
4	Bladder-TCC	nu- cleotidesub- stitution1	9.00	6.00	11247, 23297, 36661, 4894, 10328, 2397	4316, 8187, 15153, 1945, 3241, 1200	1854.00
5	Bladder-TCC	nu- cleotidesub- stitution3	9.00	96.00	864, 564, 138, 492, 364, 221, 59, 395, 1115, 570, 1678, 785, 463, 264, 301, 5	332, 238, 47, 213, 162, 71, 27, 164, 471, 225, 651, 282, 170, 110, 118, 263,	1854.00
6	Bladder-TCC	$\operatorname{signatures}$	9.00	67.00	3850.16917289413, 19223.2271315855, -1.91668633071992e-12, 1589.77619536001,	1392.31651751711, 8469.72805991824, 114.147357111078, 420.570288846855, 1008	1854.00
7	Bone-Benign	nu- cleotidesub- stitution1	5.00	6.00	485, 166, 954, 422, 375, 201	356, 109, 607, 260, 297, 150	1854.00
8	Bone-Benign	nu- cleotidesub- stitution3	5.00	96.00	65, 57, 11, 58, 18, 8, 6, 16, 99, 31, 123, 61, 32, 31, 34, 46, 53, 18, 32, 58	62, 40, 6, 33, 10, 4, 4, 5, 58, 26, 86, 41, 33, 16, 20, 23, 53, 9, 23, 36, 10	1854.00
9	Bone-Benign	$_{ m signatures}$	5.00	67.00	272.633178022064, 6.8949703243094, 4.25411415211175e-13, -5.7362876998306e-13	185.900784176247, 18.3022252942639, 20.3498574229508, 10.5184717476863, 38.64	1854.00
10	Bone-Epith	nu- cleotidesub- stitution1	6.00	6.00	2055, 1675, 4598, 1603, 2404, 899	752, 432, 1403, 608, 1010, 555	1854.00
11	Bone-Epith	nu- cleotidesub- stitution3	6.00	96.00	218, 176, 22, 182, 94, 58, 18, 96, 270, 130, 489, 158, 173, 98, 97, 168, 289,	82, 66, 10, 57, 36, 27, 5, 38, 91, 50, 126, 77, 75, 47, 45, 67, 92, 35, 41, 1	1854.00
12	Bone-Epith	$_{ m signatures}$	6.00	67.00	1115.38625439732, 1256.17947460705, 338.427340519909, 4.47761830220823e-13, 5	254.257374881263, 172.048594645656, 237.956131105912, 2.14435506428417, 29.52	1854.00
13	Bone-Osteosarc	nu- cleotidesub- stitution1	27.00	6.00	16765, 11412, 24999, 12860, 16676, 8919	6890, 4496, 10281, 4750, 6866, 3728	1854.00
14	Bone-Osteosarc	nu- cleotidesub- stitution3	27.00	96.00	1686, 1259, 225, 1467, 858, 481, 164, 894, 2018, 1048, 1810, 1357, 801, 518, 3087.16399731988,	673, 433, 78, 546, 353, 189, 97, 331, 746, 368, 576, 574, 306, 217, 213, 406, 827.166228306351,	1854.00
15	Bone-Osteosarc	signatures	27.00	67.00	2747.55749753469, 4560.40299034362, 28.6361005032861, 728.8	1412.52387935667, 597.641686142282, 63.8685867690686, 93.61	1854.00
16	Breast-AdenoCA	nu- cleotidesub- stitution1	136.00	6.00	102333, 109936, 197258, 62235, 79343, 40654	56188, 77621, 126098, 33510, 43220, 25667	1854.00
17	Breast-AdenoCA	nu- cleotidesub- stitution3	136.00	96.00	9831, 7910, 1287, 7413, 5454, 3377, 1368, 5709, 9906, 5161, 15766, 7683, 4141	5028, 3863, 594, 3756, 3149, 1902, 812, 3180, 5323, 2514, 6708, 4021, 2353, 1	1854.00
18	Breast-AdenoCA	signatures	136.00	67.00	33782.5073769357, 60519.3153150691, 43994.423064049, 1057.49110358632, 24947	13063.7562425675, 59489.4923173392, 19659.484697551, 1061.102147616, 3989.171	1854.00
19	Breast-DCIS	nu- cleotidesub- stitution1	2.00	6.00	546, 225, 1193, 351, 558, 213	233, 96, 431, 121, 188, 88	1854.00
20	Breast-DCIS	nu- cleotidesub- stitution3	2.00	96.00	48, 53, 8, 40, 17, 16, 7, 14, 60, 44, 142, 50, 26, 33, 33, 45, 80, 37, 39, 80	36, 21, 6, 18, 9, 7, 2, 6, 25, 13, 51, 21, 6, 10, 11, 10, 20, 9, 12, 19, 2, 0	1854.00
21	Breast-DCIS	$_{ m signatures}$	2.00	67.00	315.928195789719, 97.2931650999246, 202.647807661729, -3.04916636196287e-13, 	110.640043875143, 18.2712544543606, 76.2233628074865, 35.6127566134672, 87.19	1854.00
22	Breast-LobularCA	nu- cleotidesub- stitution1	8.00	6.00	5483, 16385, 27590, 1577, 2558, 899	2009, 7298, 8956, 605, 848, 374	1854.00
23	Breast-LobularCA	nu- cleotidesub- stitution3	8.00	96.00	288, 205, 43, 185, 157, 85, 37, 165, 471, 210, 841, 245, 129, 141, 128, 172,	115, 82, 18, 56, 77, 44, 20, 77, 162, 73, 246, 95, 48, 53, 52, 52, 97, 41, 66	1854.00
24	Breast-LobularCA	signatures	8.00	67.00	1967.44457663833, 21139.0955080961, 4.34132834781002, 14.5210517100428, 2177	567.884677256106, 6786.17183874461, 42.0353641258717, 13.5266998020772, 184.3	1854.00
25	Cervix-AdenoCA	nu- cleotidesub- stitution1	2.00	6.00	1004, 676, 3594, 372, 688, 200	268, 113, 825, 143, 208, 88	1854.00

26	Cervix-AdenoCA	nu- cleotidesub- stitution3	2.00	96.00	102, 55, 12, 55, 16, 21, 12, 17, 108, 59, 502, 96, 29, 23, 17, 64, 72, 33, 44	19, 15, 4, 15, 8, 4, 4, 6, 33, 14, 130, 21, 6, 10, 9, 17, 24, 11, 9, 11, 5, 1	1854.00
27	Cervix-AdenoCA	signatures	2.00	67.00	1183.27611742386, 1015.81065139978, -1.28021207936864e-12, 3.08837207692665e	300.957653425067, 86.53603935672, -1.89404968212677e-13, -9.54024491611131e-1	1854.00
28	Cervix-SCC	nu- cleotidesub- stitution1	16.00	6.00	9432, 16150, 33724, 4204, 6292, 2374	3942, 9697, 15700, 1838, 2612, 1041	1854.00
29	Cervix-SCC	nu- cleotidesub- stitution3	16.00	96.00	791, 454, 111, 520, 327, 190, 118, 340, 1014, 564, 2700, 739, 312, 258, 267, 6003.54063689202,	259, 170, 36, 206, 202, 91, 43, 171, 400, 213, 857, 281, 140, 108, 117, 257, 1924, 32211718459,	1854.00
30	Cervix-SCC	signatures	16.00	67.00	15679.5768912425, 120.462065300687, 25.5812161351638, 2470	9137.67604748009, 81.5275955273514, 54.0575534644598, 479.4	1854.00
31	CNS-GBM	nu- cleotidesub- stitution1	34.00	6.00	24392, 12080, 79747, 20246, 28954, 8645 2878, 2463, 328, 2645,	11416, 5690, 193921, 8988, 14027, 3817 1210, 1037, 127, 1124,	1854.00
32	CNS-GBM	nu- cleotidesub- stitution3	34.00	96.00	1369, 693, 179, 1405, 3909, 1791, 22569, 2682, 1507, 9 53722.395685486,	612, 375, 90, 599, 6154, 20738, 7011, 16245, 681, 397, 14233.9627236758,	1854.00
33	CNS-GBM	signatures	34.00	67.00	982.274782199956, 8032.54943302977, -2.59674061573124e-11, 1	5137.78331043576, 3210.2869595515, 99.484600875727, 289.604	1854.00
34	CNS-Medullo	nu- cleotidesub- stitution1	106.00	6.00	17235, 7311, 40746, 9389, 15202, 4779 1729, 1378, 217, 1191,	9973, 5020, 20581, 5755, 9501, 3105 1062, 727, 125, 664,	1854.00
35	CNS-Medullo	nu- cleotidesub- stitution3	106.00	96.00	1028, 577, 209, 802, 2179, 1188, 8132, 1614, 677, 477, 19473.4736075548,	743, 387, 133, 548, 1269, 657, 3529, 893, 450, 294, 312, 8167.9353243652,	1854.00
36	CNS-Medullo	signatures	106.00	67.00	604.483949094173, 1174.13623059921, 264.081637984501, 845.4	351.807681861559, 248.026445823009, 298.193494944641, 776.80	1854.00
37	CNS-Oligo	nu- cleotidesub- stitution1	15.00	6.00	3097, 1842, 11182, 2674, 6622, 1490	1539, 823, 5875, 1215, 3065, 694	1854.00
38	CNS-Oligo	nu- cleotidesub- stitution3	15.00	96.00	415, 347, 51, 350, 224, 132, 17, 226, 575, 299, 2161, 430, 268, 159, 167, 260 5126.88905736351,	197, 157, 23, 165, 94, 66, 11, 86, 325, 158, 1079, 212, 129, 86, 75, 120, 357 2560.34978285385,	1854.00
39	CNS-Oligo	signatures	15.00	67.00	103.634612189594, 13.2265522430431, -3.02190816308251e-12, 	103.382209507906, 143.422630394916, 6.5587090968034e-13, 26	1854.00
40	CNS-PiloAstro	nu- cleotidesub- stitution1	42.00	6.00	693, 312, 2514, 503, 1005, 257	1000, 414, 2941, 753, 1281, 372	1854.00
41	CNS-PiloAstro	nu- cleotidesub- stitution3	42.00	96.00	75, 72, 12, 61, 36, 15, 17, 38, 162, 59, 523, 86, 44, 29, 30, 53, 126, 42, 77	130, 97, 17, 109, 47, 23, 13, 33, 161, 91, 416, 104, 69, 38, 64, 69, 174, 67,	1854.00
42	CNS-PiloAstro	signatures	42.00	67.00	1258.98674348096, 55.6489881974731, 19.4888084531813, 11.1663101349811, 44.09	931.474566961833, 71.7328520114922, 69.5203805748062, 66.0956734122494, 106.7	1854.00
43	${\bf ColoRect\text{-}AdenoCA}$	nu- cleotidesub- stitution1	37.00	6.00	1065268, 26616, 656012, 71060, 320700, 595450	1137079, 19165, 561617, 67491, 399462, 780714	1854.00
44	ColoRect-AdenoCA	nu- cleotidesub- stitution3	37.00	96.00	12072, 10664, 1091, 27438, 3059, 1638, 280, 3024, 10598, 11158, 46824, 17602, 65329.7620929798,	6698, 7115, 733, 34697, 2233, 1236, 210, 2260, 8038, 10211, 24502, 16972, 367 13702.1023818585,	1854.00
45	ColoRect-AdenoCA	signatures	37.00	67.00	7900.78680597273, 2.1501559835312e-10, -3.54528434780563e-1	8131.52084664726, 1.55350268244454e-10, 71.26650177996, 215	1854.00
46	Eso-AdenoCA	nu- cleotidesub- stitution1	65.00	6.00	127271, 51688, 202501, 100316, 221397, 349514 12213, 6829, 1072,	77347, 38979, 131812, 56101, 106263, 153940 7428, 4222, 678, 4628,	1854.00
47	Eso-AdenoCA	nu- cleotidesub- stitution3	65.00	96.00	7239, 3777, 2321, 666, 4229, 10636, 5701, 26110, 8157, 471 54680.9888833264,	7420, 4222, 070, 4026, 2558, 1506, 565, 2792, 7136, 3661, 14430, 5451, 2889, 29457.2957528153,	1854.00
48	Eso-AdenoCA	signatures	65.00	67.00	21050.9584386567, 523.758528548971, 2.66176731934127e-11, 1	20674.7117826262, 343.427202505903, 438.520377777157, 11258	1854.00
49	Head-SCC	nu- cleotidesub- stitution1	32.00	6.00	54802, 83020, 140484, 27094, 35653, 14709	16784, 28222, 49282, 8665, 11900, 5878	1854.00
50	Head-SCC	nu- cleotidesub- stitution3	32.00	96.00	4530, 2608, 624, 2758, 2022, 1115, 423, 2323, 4300, 2555, 6562, 3355, 2522, 1 12852.6025869812,	1350, 740, 156, 856, 731, 368, 154, 766, 1516, 816, 2432, 1092, 672, 465, 488 4914.08924169728,	1854.00
51	Head-SCC	signatures	32.00	67.00	70367.6842496578, 1162.92795400683, 9415.69828177657, 5394	25658.0598087451, 1909.5969787338, 277.065628628594, 863.52	1854.00
52	Kidney-ChRCC	nu- cleotidesub- stitution1	38.00	6.00	6581, 3953, 14153, 3943, 5683, 3241	5919, 2983, 13429, 3550, 4943, 3255	1854.00
53	Kidney-ChRCC	nu- cleotidesub- stitution3	38.00	96.00	941, 568, 108, 544, 307, 183, 59, 351, 810, 432, 2343, 561, 387, 255, 324, 34 5436.00747142877,	872, 474, 91, 451, 265, 143, 63, 242, 646, 387, 2503, 527, 317, 204, 283, 338 5801.31310937803,	1854.00
54	Kidney-ChRCC	signatures	38.00	67.00	868.310797854879, 2257.51006804321, 405.375430232798, 1447	562.828739474715, 1274.17896218364, 342.238552568846, 239.0	1854.00

55	Kidney-RCC.clearcell	nu- cleotidesub-	86.00	6.00	79755, 43304, 106472, 93346, 69569, 39892	29211, 14817, 40284, 29463, 21734, 11075	1854.00
56	Kidney-RCC.clearcell	nu- cleotidesub- stitution3	86.00	96.00	9873, 4933, 1070, 5318, 3956, 2630, 722, 4441, 7904, 4520, 8295, 6406,	3989, 1822, 397, 1877, 1589, 911, 262, 1330, 2782, 1594, 3738, 2163,	1854.00
		stitutions			7872, 18037.301938108, 1859.36714201358,	2657, 92 7652.78267084567, 1212.98036888003,	
57	Kidney-RCC.clearcell	signatures	86.00	67.00	3322.64219011167, 8736.01316433894, 1610.0	3366.19193324173, 3340.12514261013, 657.2	1854.00
58	Kidney-RCC.papillary	nu- cleotidesub- stitution1	30.00	6.00	21259, 15798, 32767, 20276, 25892, 17065	5429, 3703, 9593, 3912, 5751, 3014	1854.00
59	Kidney-RCC.papillary	nu- cleotidesub- stitution3	30.00	96.00	2256, 1236, 271, 1451, 1168, 961, 226, 1709, 2528, 1436, 2078, 2098, 1497, 76 4450.63124050123,	540, 375, 83, 372, 298, 185, 64, 333, 664, 379, 903, 490, 345, 191, 246, 420, 1946.11317569171.	1854.00
60	Kidney-RCC.papillary	signatures	30.00	67.00	1337.95044141494, 1068.26319467467, 88.4020408682784, 1587	1946.11317.09171, 1157.42022224246, 1721.58680884854, 295.9611456123, 652.017	1854.00
61	Liver-HCC	nu- cleotidesub- stitution1	207.00	6.00	378482, 133729, 448007, 278339, 667430, 122636	116079, 44796, 133375, 97596, 165501, 39011	1854.00
62	Liver-HCC	nu- cleotidesub- stitution3	207.00	96.00	37099, 24969, 5957, 23315, 10684, 6613, 1783, 12345, 34022, 17850, 22428, 229 34177.371610163,	10462, 7819, 1454, 6986, 3639, 2351, 576, 3958, 9841, 5363, 6308, 6741, 8521, 8729,27361090133,	1854.00
63	Liver-HCC	signatures	207.00	67.00	18599.0562281778, 62433.0776275653, 118296.61969812, 41964.3	6816.00758221106, 31888.0223328352, 27777.0103900263, 8361	1854.00
64	Lung-AdenoCA	nu- cleotidesub- stitution1	17.00	6.00	84217, 27462, 50984, 25766, 23707, 11368	23204, 15133, 33878, 9522, 12162, 12953	1854.00
65	Lung-AdenoCA	nu- cleotidesub- stitution3	17.00	96.00	7623, 4791, 1693, 4989, 1923, 917, 324, 1498, 3211, 1485, 2606, 1884, 1955, 9	2051, 1366, 381, 1311, 620, 323, 118, 577, 1362, 665, 1437, 844, 641, 416, 63	1854.00
66	Lung-AdenoCA	signatures	17.00	67.00	4312.76857351021, 12521.5487518205, 2413.42502332668, 79924.9564211879, 2827	2589.91088098383, 17309.0676984335, 641.041891128399, 14960.2794380372, 571.7	1854.00
67	Lung-SCC	nu- cleotidesub- stitution1	34.00	6.00	341617, 141834, 207863, 124123, 146834, 37810	67052, 44446, 62665, 27885, 32664, 12340	1854.00
68	Lung-SCC	nu- cleotidesub- stitution3	34.00	96.00	31727, 18373, 7165, 19728, 10174, 4630, 2163, 7524, 14965, 7038, 6918, 9240,	6160, 3990, 1170, 3878, 2333, 1193, 666, 2000, 3576, 1723, 2440, 2432, 2148,	1854.00
69	Lung-SCC	signatures	34.00	67.00	5284.47432801545, 46408.5174776554, 2258.80965858908, 307368.801840694,	3590.42247514167, 21008.3669518586, 5515.57210401424, 44482.5695998976,	1854.00
70	Lymph-BNHL	nu- cleotidesub-	51.00	6.00	3355 45838, 21361, 92833, 43857, 76409, 80569	1180 10010, 4779, 20653, 10960, 19033, 19129	1854.00
71	Lymph-BNHL	stitution1 nu- cleotidesub- stitution3	51.00	96.00	4090, 3325, 412, 3205, 2360, 1233, 299, 2445, 7049, 3549, 9542, 4917, 4143, 2	913, 735, 97, 657, 471, 292, 74, 553, 1553, 863, 1639, 1010, 1033, 546, 559,	1854.00
72	Lymph-BNHL	signatures	51.00	67.00	18968.4128354178, 3098.80254257847, 1397.1840786762, 28.2888485268797, 22488	2785.47138408916, 862.122022449951, 610.345507879906, 49.9955044491976, 1793	1854.00
73	Lymph-CLL	nu- cleotidesub- stitution1	53.00	6.00	13002, 5129, 26586, 11620, 18434, 9829	7525, 3062, 15659, 7591, 9861, 3133	1854.00
74	Lymph-CLL	nu- cleotidesub- stitution3	53.00	96.00	1425, 1067, 198, 1051, 596, 370, 83, 479, 1796, 1103, 3699, 1265, 1098, 879,	1072, 663, 137, 588, 372, 244, 46, 277, 1103, 617, 1906, 733, 753, 605, 728,	1854.00
75	Lymph-CLL	signatures	53.00	67.00	8102.31966354739, 313.243843604807, 1182.21871202236, 82.7231197032934, 6337	3933.20507477098, 227.929116280559, 1205.05344424519, 72.5071139182542, 3504	1854.00
76	Myeloid-AML	nu- cleotidesub- stitution1	8.00	6.00	1155, 476, 3776, 711, 1215, 335	1019, 225, 1789, 453, 643, 187	1854.00
77	Myeloid-AML	nu- cleotidesub- stitution3	8.00	96.00	112, 83, 9, 70, 73, 12, 8, 36, 236, 149, 488, 185, 48, 55, 42, 64, 146, 39, 1	92, 49, 8, 47, 34, 19, 9, 27, 73, 46, 291, 59, 25, 17, 20, 44, 61, 32, 35, 51	1854.00
78	Myeloid-AML	signatures	8.00	67.00	1129.92868512001, 0.603188983673472, 7.13867893825946e-14, 0.336934260591716,	662.487131925736, 22.0891660067274, 4.61015669083346e-13, 5.20988757147899,	1854.00
79	Myeloid-MPN	nu- cleotidesub- stitution1	19.00	6.00	1287, 772, 6189, 1004, 2022, 665	1603, 805, 5436, 1386, 2189, 969	1854.00
80	Myeloid-MPN	nu- cleotidesub- stitution3	19.00	96.00	201, 100, 10, 90, 116, 57, 16, 75, 450, 260, 933, 349, 106, 103, 88, 92, 260, 2103.14910923093,	242, 136, 18, 104, 140, 55, 22, 93, 375, 193, 906, 296, 149, 125, 93, 152, 24 2013.05853307215,	1854.00
81	Myeloid-MPN	signatures	19.00	67.00	24.2170896216592, 121.199546585739, 17.0471777353132, 848.4	45.7030081327688, 72.3441766702624, 13.3393319033685, 393.8	1854.00
82	Ovary-AdenoCA	nu- cleotidesub- stitution1	97.00	6.00	124081, 92075, 163415, 88479, 111234, 49316	45375, 38371, 56995, 33963, 41794, 19838	1854.00
83	Ovary-AdenoCA	nu- cleotidesub- stitution3	97.00	96.00	14043, 11390, 1631, 10718, 7887, 4246, 1832, 7817, 12059, 6450, 15797, 10581,	4822, 4137, 577, 3804, 3074, 1739, 958, 2947, 4213, 2173, 4579, 3941, 2027, 1	1854.00

					21740 7656922002	9200 24200969655	
84	Ovary-AdenoCA	signatures	97.00	67.00	31749.7656822093, 9336.00003639141, 77246.0741436906, 2269.770205119, 44988.0	8299,34309868655, 5859,61884300338, 21140.5279266568, 1157.67415422567, 9498	1854.00
85	Panc-AdenoCA	nu- cleotidesub- stitution1	193.00	6.00	136960, 72755, 339695, 94677, 136853, 63302	78308, 43746, 155856, 52446, 82252, 46313	1854.00
86	Panc-AdenoCA	nu- cleotidesub- stitution3	193.00	96.00	13506, 11403, 1449, 9670, 5041, 3165, 836, 5252, 16041, 8327, 57744, 11566, 7 139626.405073023,	7380, 5309, 791, 5202, 3133, 1867, 667, 3139, 7973, 3920, 20678, 5835, 3701, 46978.956887415,	1854.00
87	Panc-AdenoCA	signatures	193.00	67.00	28924.6063549603, 26290.3828812139, 1111.19622954746, 51889	21905.9459294641, 12084.2279285786, 1253.59627675103, 12516	1854.00
88	Panc-Endocrine	nu- cleotidesub- stitution1	70.00	6.00	30379, 10745, 37445, 13098, 20270, 6537 2376, 1660, 249, 1656,	35736, 10295, 35019, 11689, 16568, 5258 2331, 1450, 245, 1639,	1854.00
89	Panc-Endocrine	nu- cleotidesub- stitution3	70.00	96.00	852, 603, 137, 832, 2478, 1441, 3739, 1692, 1190, 850, 7105.14149752684,	793, 545, 141, 726, 2172, 1200, 2589, 1477, 1311, 800, 3851.76110730804,	1854.00
90	Panc-Endocrine	signatures	70.00	67.00	2248.46423703667, 3992.59241250701, 896.58933753144, 9944.0	5017.71853350075, 2030.94163532671, 659.383311250143, 4340	1854.00
91	Prost-AdenoCA	nu- cleotidesub- stitution1	208.00	6.00	101699, 45409, 183941, 61779, 86341, 39992	59214, 26308, 114603, 39176, 54577, 23929	1854.00
92	Prost-AdenoCA	nu- cleotidesub- stitution3	208.00	96.00	11498, 8082, 1454, 7664, 4019, 2730, 710, 4184, 10737, 5626, 29234, 7704, 522 67832.9632532681,	6464, 4377, 806, 4287, 2450, 1590, 410, 2456, 6111, 3015, 18943, 4314, 3505, 43352.8994944312,	1854.00
93	Prost-AdenoCA	signatures	208.00	67.00	6226.82267059393, 14026.4919222897, 5650.25406655612, 21112	4232.88916544656, 6342.84414893218, 3444.44779293949, 3096	1854.00
94	Skin-Melanoma.acral	nu- cleotidesub- stitution1	15.00	6.00	17962, 9591, 37479, 8717, 14971, 10754	7634, 4216, 16385, 3962, 5691, 4439	1854.00
95	Skin-Melanoma.acral	nu- cleotidesub- stitution3	15.00	96.00	1338, 895, 123, 853, 968, 633, 149, 789, 1477, 1042, 2052, 1303, 743, 510, 50 3922.66121726925,	621, 412, 50, 369, 408, 251, 55, 347, 582, 472, 714, 544, 314, 192, 221, 420, 1378.5086481684,	1854.00
96	Skin-Melanoma.acral	signatures	15.00	67.00	3639.46966247448, 2057.78103485071, 11.8998250806296, 1141	1803.97180734069, 1719.44865158198, 8.92385143193391, 260.26	1854.00
97	Skin- Melanoma.cutaneous	nu- cleotidesub- stitution1	30.00	6.00	46622, 24891, 1918858, 104954, 110358, 50566	14049, 7144, 308414, 19546, 23963, 10553	1854.00
98	Skin- Melanoma.cutaneous	nu- cleotidesub- stitution3	30.00	96.00	3513, 1978, 326, 2081, 1916, 1269, 511, 2271, 4426, 39731, 3843, 19775, 10053 3967.75260516287,	995, 561, 85, 596, 672, 397, 102, 648, 2373, 6906, 1718, 3705, 1800, 668, 679 2632,96755292303,	1854.00
99	Skin- Melanoma.cutaneous	signatures	30.00	67.00	32770.9264766432, 978.901998002976, 2.73466525044391e-10,	7794.4939761108, 105.139852515569, 129.416336221737, 8.5987	1854.00
100	Skin-Melanoma.mucosal	nu- cleotidesub- stitution1			-	-	1854.00
101	Skin-Melanoma.mucosal	nu- cleotidesub- stitution3			-	-	1854.00
102	Skin-Melanoma.mucosal	signatures nu-			- 8328, 5434, 14014,	- 7367, 4667, 11042,	1854.00
103	SoftTissue-Leiomyo	cleotidesub- stitution1 nu-	15.00	6.00	6122, 8927, 3204 961, 733, 115, 747, 463,	5345, 6508, 2686 778, 561, 80, 622, 374,	1854.00
104	SoftTissue-Leiomyo	cleotidesub- stitution3	15.00	96.00	256, 71, 430, 1087, 550, 1623, 711, 447, 322, 431, 5 3427.75513487984,	190, 90, 363, 909, 484, 799, 607, 320, 245, 330, 436, 1419.53028422913,	1854.00
105	SoftTissue-Leiomyo	signatures	15.00	67.00	740.093491575406, 1127.06155263873, 200.506613508019, 2635	804.757972135136, 2369.16495072182, 162.915592598199, 101.8	1854.00
106	SoftTissue-Liposarc	nu- cleotidesub- stitution1	15.00	6.00	8930, 6717, 18460, 6389, 7481, 2714	5378, 3672, 8494, 3938, 4457, 2017	1854.00
107	SoftTissue-Liposarc	nu- cleotidesub- stitution3	15.00	96.00	1007, 737, 129, 844, 475, 224, 61, 479, 1332, 601, 1693, 882, 436, 421, 476, 3656.86610120355,	552, 412, 50, 528, 299, 146, 53, 298, 653, 253, 733, 441, 264, 197, 239, 376, 1490.25680759162,	1854.00
108	${\bf SoftTissue\text{-}Liposarc}$	signatures	15.00	67.00	2940.86879630254, 1149.85411795493, 78.7672370977543, 846.1	1243.17473005284, 948.959063715692, 117.366980922475, 114.8	1854.00
109	Stomach-AdenoCA	nu- cleotidesub- stitution1	30.00	6.00	58970, 19915, 129452, 43560, 105854, 92047	57988, 13049, 114585, 52086, 125807, 47444	1854.00
110	Stomach-AdenoCA	nu- cleotidesub- stitution3	30.00	96.00	4731, 2844, 429, 3145, 1588, 944, 240, 1952, 8330, 3741, 16967, 4414, 2712, 2 29215.3038749325,	3210, 2004, 274, 2607, 1133, 735, 182, 1282, 6845, 4782, 9151, 4105, 5114, 75 8903.8056990995,	1854.00
111	Stomach-AdenoCA	signatures	30.00	67.00	6085.7153494415, 2166.09117035136, 203.058899418628, 8757.7	5881.3627442936, 1330.05426301255, 82.1605425781853, 4202.43	1854.00
112	Thy-AdenoCA	nu- cleotidesub- stitution1	41.00	6.00	5481, 3845, 12990, 3805, 6342, 1504	3832, 3740, 11056, 2752, 3942, 972	1854.00
113	Thy-AdenoCA	nu- cleotidesub- stitution3	41.00	96.00	700, 453, 122, 494, 274, 128, 42, 236, 904, 504, 1360, 486, 384, 293, 367, 34	472, 307, 87, 278, 175, 95, 28, 144, 620, 366, 964, 319, 265, 229, 224, 351,	1854.00

114	Thy-AdenoCA	signatures	41.00	67.00	2643.54163392574, 1503.80072138999, 1123.04011820176, 44.2774574579362, 2184	1967.76839082616, 2942.41706410095, 412.395429172704, 135.633690614096, 904.9	1854.00
115	Uterus-AdenoCA	nu- cleotidesub- stitution1	40.00	6.00	151075, 33385, 130137, 32585, 81489, 56138	31885, 29825, 63238, 20694, 49062, 14090	1854.00
116	Uterus-AdenoCA	nu- cleotidesub- stitution3	40.00	96.00	4169, 3384, 584, 5393, 1863, 944, 715, 1989, 6431, 3467, 12816, 4776, 3111, 1	2250, 1743, 360, 1919, 1367, 670, 633, 1340, 4550, 1757, 4964, 2674, 1814, 89	1854.00
117	Uterus-AdenoCA	signatures	40.00	67.00	25183.3887480489, 15350.2514231786, 4205.15656022579, 871.350835605971, 12518	9357.66172791117, 15820.0083219454, 1861.86544952254, 389.384479335226, 4490	1854.00

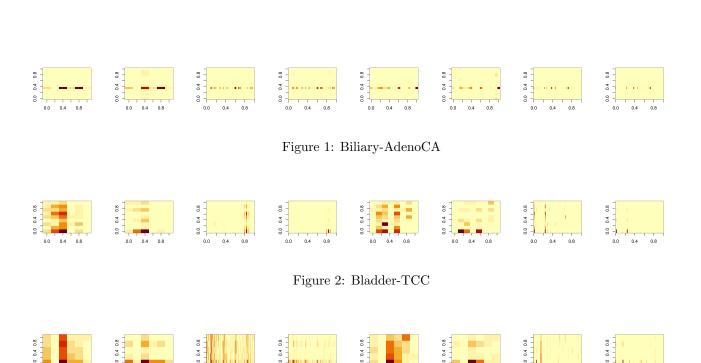
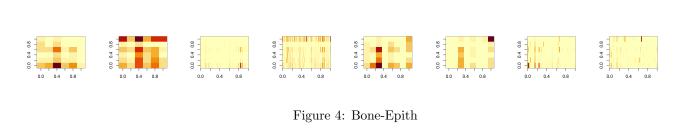
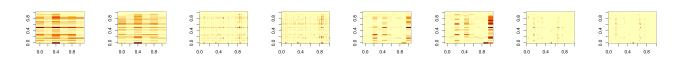


Figure 3: Bone-Benign





 $Figure \ 5: \ Bone-Osteosarc$ 



Figure 6: Breast-AdenoCA

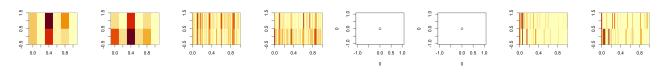
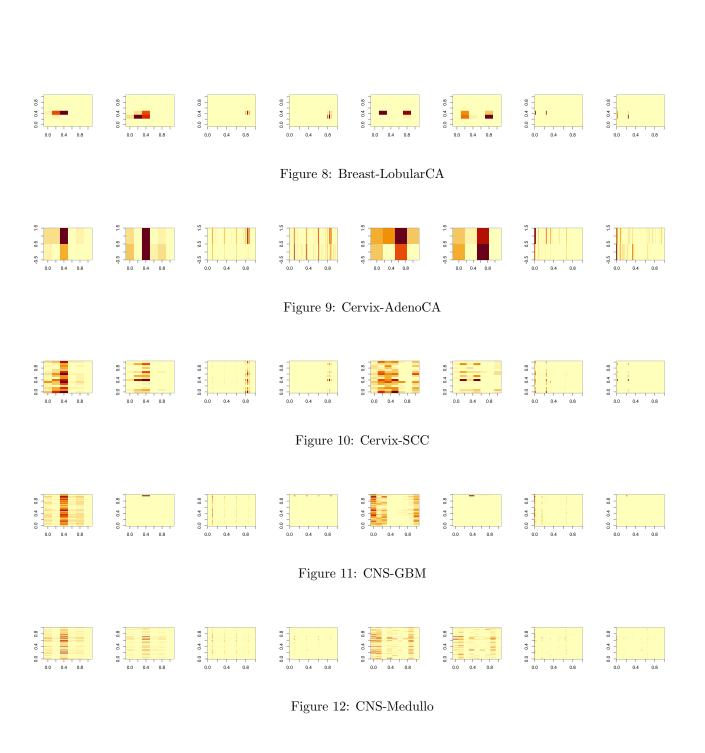


Figure 7: Breast-DCIS



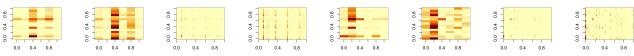


Figure 13: CNS-Oligo

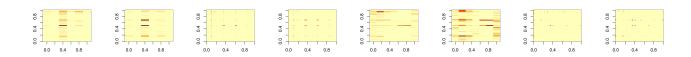


Figure 14: CNS-PiloAstro

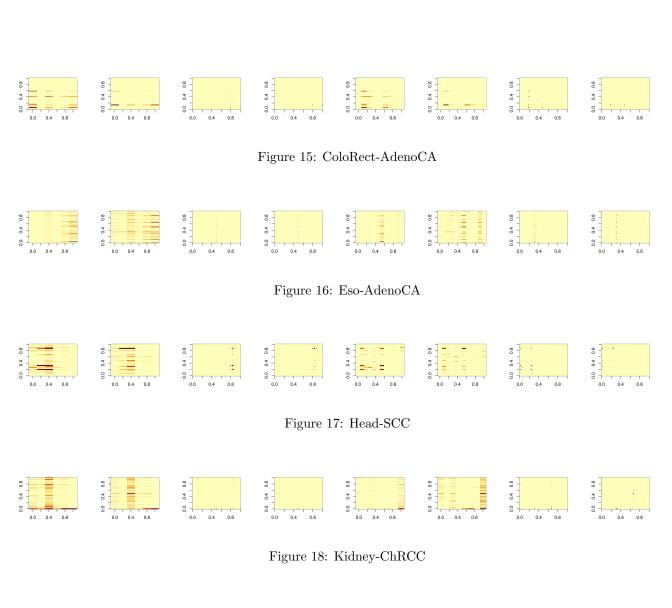




Figure 19: Kidney-RCC.clearcell

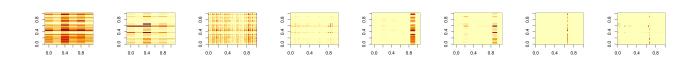


Figure 20: Kidney-RCC.papillary



Figure 21: Liver-HCC

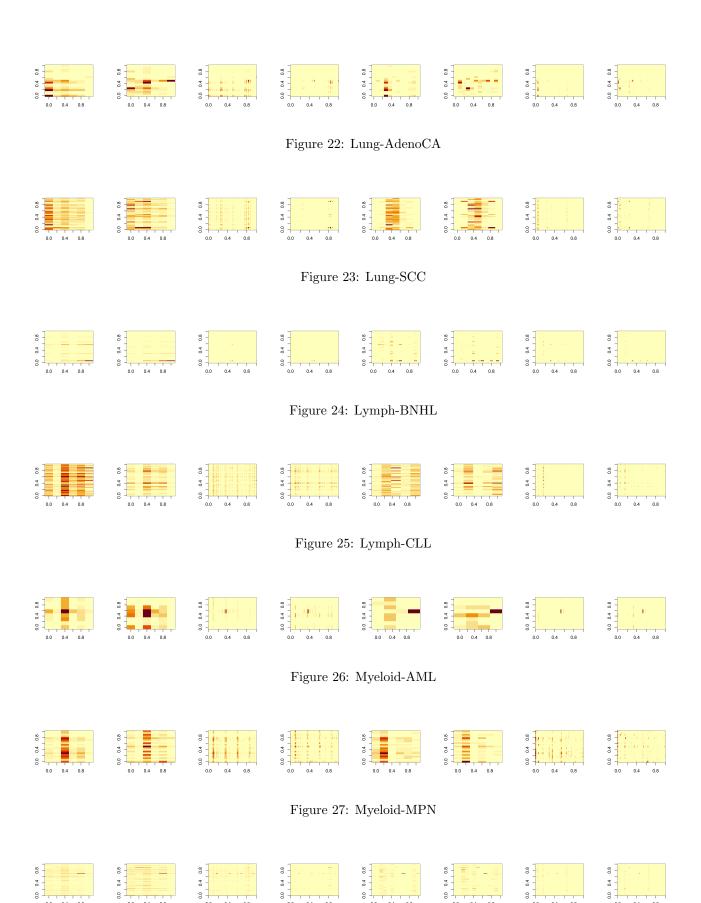


Figure 28: Ovary-AdenoCA



Figure 29: Panc-AdenoCA

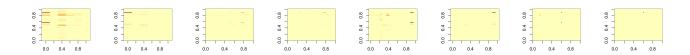


Figure 30: Panc-Endocrine

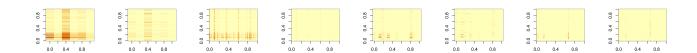


Figure 31: Prost-AdenoCA



Figure 32: Skin-Melanoma.acral



Figure 33: Skin-Melanoma.cutaneous

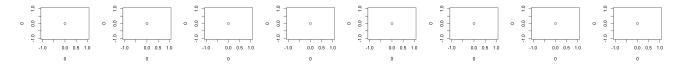


Figure 34: Skin-Melanoma.mucosal

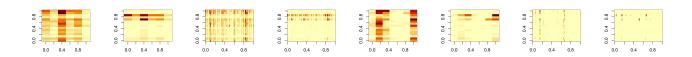


Figure 35: SoftTissue-Leiomyo

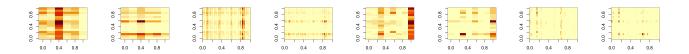


Figure 36: SoftTissue-Liposarc

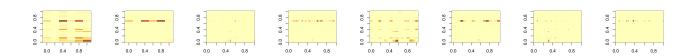


Figure 37: Stomach-AdenoCA

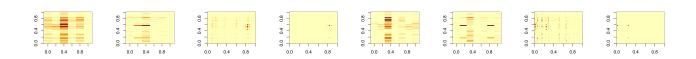


Figure 38: Thy-AdenoCA

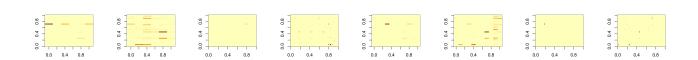


Figure 39: Uterus-AdenoCA