

Table S03

FOCUS 3X (majority vote)

n slides = 510, n patients = 278

Model1 / Fold 1	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	20	10	2	3	5	50	10	15	25	67
CMS2	40	0	31	1	8	0	78	3	20	
CMS3	13	0	5	8	0	0	38	62	0	
CMS4	24	2	3	0	19	8	13	0	79	

Model2 / Fold 2	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	19	11	1	3	4	58	5	16	21	66
CMS2	47	0	43	0	4	0	91	0	9	
CMS3	14	0	3	10	1	0	21	71	7	
CMS4	27	4	11	0	12	15	41	0	44	

Model3 / Fold 3	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	19	15	0	0	4	79	0	0	21	61
CMS2	46	1	43	0	2	2	93	0	4	
CMS3	11	3	6	2	0	27	55	18	0	
CMS4	25	2	10	0	13	8	40	0	52	

Model4 / Fold 4	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	20	6	9	0	5	30	45	0	25	57
CMS2	44	0	37	3	4	0	84	7	9	
CMS3	11	1	5	5	0	9	45	45	0	
CMS4	26	0	6	2	18	0	23	8	69	

Model5 / Fold 5	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	20	10	5	2	3	50	25	10	15	55
CMS2	45	8	28	3	6	18	62	7	13	
CMS3	13	3	3	7	0	23	23	54	0	
CMS4	26	6	6	0	14	23	23	0	54	

Overall	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	98	52	17	8	21	53	17	8	21	62
CMS2	222	9	182	7	24	4	82	3	11	
CMS3	62	7	22	32	1	11	35	52	2	
CMS4	128	14	36	2	76	11	28	2	59	

FOCUS 12X (majority vote)

n slides = 510, n patients = 278

Model1 / Fold 1	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	20	10	7	1	2	50	35	5	10	52
CMS2	40	0	38	0	2	0	95	0	5	
CMS3	13	1	8	4	0	8	62	31	0	
CMS4	24	2	14	0	8	8	58	0	33	

Model2 / Fold 2	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	19	11	0	3	5	58	0	16	26	68
CMS2	47	4	40	0	3	9	85	0	6	
CMS3	14	0	3	10	1	0	21	71	7	
CMS4	27	6	5	0	16	22	19	0	59	

Model3 / Fold 3	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	19	12	2	1	4	63	11	5	21	64
CMS2	46	2	37	1	6	4	80	2	13	
CMS3	11	4	3	4	0	36	27	36	0	
CMS4	25	2	3	1	19	8	12	4	76	

Model4 / Fold 4	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	20	18	2	0	0	90	10	0	0	68
CMS2	44	1	28	13	2	2	64	30	5	
CMS3	11	3	1	7	0	27	9	64	0	
CMS4	26	4	4	4	14	15	15	15	54	

Model5 / Fold 5	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	20	12	3	0	5	60	15	0	25	56
CMS2	45	5	25	0	15	11	56	0	33	
CMS3	13	3	4	5	1	23	31	38	8	
CMS4	26	6	2	0	18	23	8	0	69	

Overall	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	98	63	14	5	16	64	14	5	16	62
CMS2	222	12	168	14	28	5	76	6	13	
CMS3	62	11	19	30	2	18	31	48	3	
CMS4	128	20	28	5	75	16	22	4	59	

TCGA 3X (majority vote)

n slides = 431, n patients = 430

Model1 / Fold 1	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	73	36	8	23	6	49	11	32	8	60
CMS2	189	4	158	19	8	2	84	10	4	
CMS3	59	6	13	33	7	10	22	56	12	
CMS4	110	4	38	10	58	4	35	9	53	

Model 2	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	73	30	9	25	9	41	12	34	12	57
CMS2	189	10	95	70	14	5	50	37	7	
CMS3	59	4	7	41	7	7	12	69	12	
CMS4	110	4	20	12	74	4	18	11	67	

Model 3	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	73	37	6	24	6	51	8	33	8	59
CMS2	189	12	113	33	31	6	60	17	16	
CMS3	59	8	12	31	8	14	20	53	14	
CMS4	110	6	14	10	80	5	13	9	73	

Model 4	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	73	38	3	28	4	52	4	38	5	59
CMS2	189	11	92	77	9	6	49	41	5	
CMS3	59	4	6	43	6	7	10	73	10	
CMS4	110	4	19	18	69	4	17	16	63	

Model 5	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	73	45	11	16	1	62	15	22	1	54
CMS2	189	18	128	36	7	10	68	19	4	
CMS3	59	11	15	30	3	19	25	51	5	
CMS4	110	24	39	7	40	22	35	6	36	

Ensemble	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	73	40	5	22	6	55	7	30	8	59
CMS2	189	9	130	36	14	5	69	19	7	
CMS3	59	5	10	37	7	8	17	63	12	
CMS4	110	7	35	13	55	6	32	12	50	

TCGA 12X (majority vote)

n slides = 431, n patients = 430

Model 1	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	73	40	13	20	0	55	18	27	0	57
CMS2	189	10	145	30	4	5	77	16	2	
CMS3	59	10	16	32	1	17	27	54	2	
CMS4	110	11	46	8	45	10	42	7	41	

Model 2	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	73	54	9	10	0	74	12	14	0	58
CMS2	189	28	146	10	5	15	77	5	3	
CMS3	59	15	23	16	5	25	39	27	8	
CMS4	110	14	33	6	57	13	30	5	52	

Model 3	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	73	45	8	16	4	62	11	22	5	56
CMS2	189	28	120	26	15	15	63	14	8	
CMS3	59	14	16	26	3	24	27	44	5	
CMS4	110	11	23	16	60	10	21	15	55	

Model 4	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	73	53	1	18	1	73	1	25	1	57
CMS2	189	31	73	75	10	16	39	40	5	
CMS3	59	15	6	35	3	25	10	59	5	
CMS4	110	12	16	17	65	11	15	15	59	

Model 5	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	73	39	7	26	1	53	10	36	1	57
CMS2	189	16	139	29	5	8	74	15	3	
CMS3	59	6	13	35	5	10	22	59	8	
CMS4	110	12	36	14	48	11	33	13	44	

Ensemble	n slides	Count				Percentage				Macro average
		imCMS1	imCMS2	imCMS3	imCMS4	imCMS1	imCMS2	imCMS3	imCMS4	
CMS1	73	49	6	17	1	67	8	23	1	60
CMS2	189	18	135	28	8	10	71	15	4	
CMS3	59	9	11	36	3	15	19	61	5	
CMS4	110	14	38	12	46	13	35	11	42	

