

Supplementary table 1: The correlation between MMR status and local tumour microenvironment

Tumor microenvironment	dMMR (No.)	pMMR (No.)	<i>p</i>
Stromal percentage			
Low	111	1004	<i>0.017*</i>
High	0	44	
Neutrophils-central region			
Low grade	29	456	<i>&lt;0.001*</i>
High grade	83	592	
Neutrophils- invasive margin			
Low grade	77	711	0.915
High grade	35	336	
Lymphocytes-central region			
Low grade	34	504	<i>&lt;0.001*</i>
High grade	78	544	
Lymphocytes- invasive margin			
Low grade	32	616	<i>&lt;0.001*</i>
High grade	80	432	
Crohn's-like reaction			
Yes	24	71	<i>&lt;0.001*</i>
No	87	975	

\* Chi-square test was used to compare patient characteristics, and a P value  $\leq 0.05$  was considered to be significant.

Supplementary table 2: Relationship between local microenvironment and systemic inflammatory response in all colon cancer patients

Tumor microenvironment	NLR (No.)		<i>p</i>	CRP (No.)		<i>p</i>
	≤3	>3		normal	increased	
Stromal percentage						
Low	784	367	<i>0.048*</i>	751	364	<i>0.048*</i>
High	36	8		36	8	
Neutrophils-central region						
Low grade	353	132	<i>0.001*</i>	364	121	<i>&lt;0.001*</i>
High grade	431	244		423	252	
Neutrophils- invasive margin						
Low grade	535	253	0.788	555	233	<i>0.006*</i>
High grade	249	122		231	140	
Lymphocytes-central region						
Low grade	352	186	0.148	348	190	<i>0.037*</i>
High grade	432	190		439	183	
Lymphocytes- invasive margin						
Low grade	433	215	0.570	423	225	<i>0.037*</i>
High grade	351	161		364	148	
Crohn's-like reaction						
Yes	62	33	0.647	42	53	<i>&lt;0.001*</i>
No	721	341		743	319	

\* Chi-square test was used to compare patient characteristics, and a P value ≤ 0.05 was considered to be significant.

Supplementary table 3: Relationship between local microenvironment and systemic inflammatory response in dMMR colon cancer patients

Tumor microenvironment	NLR		<i>p</i>	CRP		<i>p</i>
	≤3	>3		normal	increased	
Stromalpercentage						
Low	65	46	NA	55	56	NA
High	0	0		0	0	
Neutrophils-central region						
Low grade	21	8	0.082	17	12	0.283
High grade	44	39		38	45	
Neutrophils- invasive margin						
Low grade	47	30	0.410	42	35	0.105
High grade	18	17		13	22	
Lymphocytes-central region						
Low grade	17	17	0.300	11	23	0.024*
High grade	48	30		44	34	
Lymphocytes- invasive margin						
Low grade	15	17	0.143	10	22	0.022*
High grade	50	30		45	35	
Crohn's-like reaction						
Yes	15	9	0.646	10	14	0.495
No	49	38		44	43	

\* Chi-square test was used to compare patient characteristics, and a P value ≤ 0.05 was considered to be significant.

Supplementary table 4: Relationship between local microenvironment and systemic inflammatory response in pMMR colon cancer patients

Tumor microenvironment	NLR		<i>p</i>	CRP		<i>p</i>
	≤3	>3		normal	increased	
Stromalpercentage						
Low	683	321	0.067	696	308	0.093
High	36	8		36	8	
Neutrophils-central region						
Low grade	332	124	0.011*	347	109	<0.001*
High grade	387	205		385	207	
Neutrophils-invasive margin						
Low grade	488	223	1.000	513	198	0.017*
High grade	231	105		218	118	
Lymphocytes-central region						
Low grade	335	169	0.162	337	167	0.044*
High grade	384	160		395	149	
Lymphocytes-invasive margin						
Low grade	418	198	0.544	413	203	0.020*
High grade	301	131		319	113	
Crohn's-like reaction						
Yes	47	24	0.691	32	39	<0.001*
No	672	303		699	276	

\* Chi-square test was used to compare patient characteristics, and a P value ≤ 0.05 was considered to be significant.