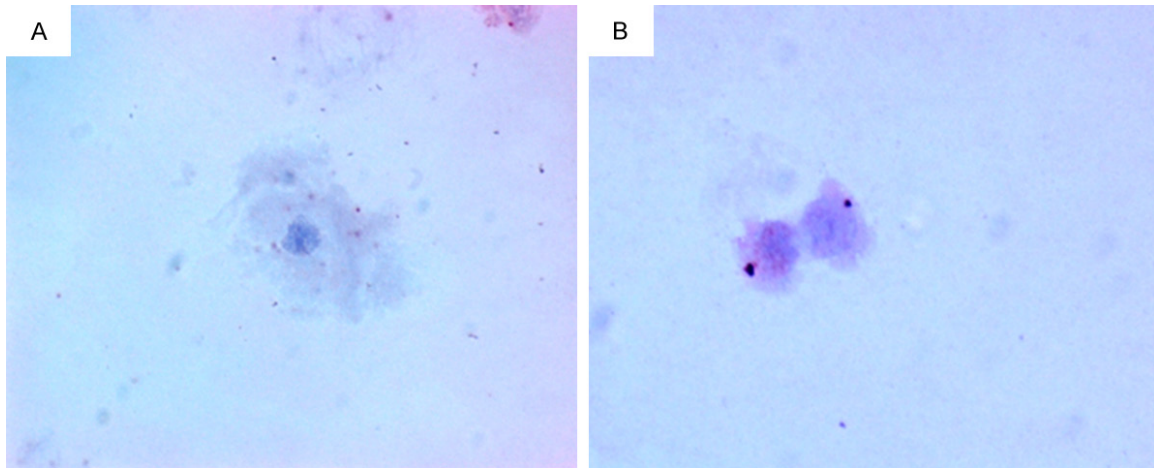
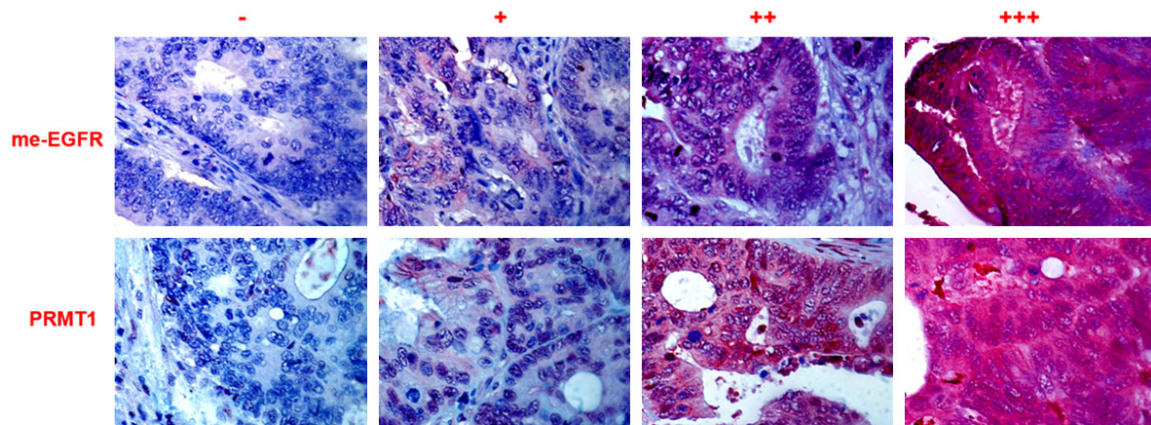


meEGFR: a predictive biomarker for mCRC



**Supplementary Figure 1.** Interpretation of immunohistochemical analysis for meEGFR-CTCs. A. meEGFR negative. B. meEGFR positive.



**Supplementary Figure 2.** Interpretation of immunohistochemical analysis for meEGFR on tumor tissues.

meEGFR: a predictive biomarker for mCRC

**Supplementary Table 1.** Association between Total CTCs count/meEGFR-CTCs and clinical-pathological and molecular factors

Variable	Total CTCs count/7.5 ml		P value	meEGFR-CTCs		P value
	< 3	≥ 3		Non-detectable	Detectable	
<b>Age</b>						
< 50 years	15	4	0.12	14	5	0.10
≥ 50 years	16	12		14	14	
<b>Sex</b>						
Female	15	7	0.76	14	8	0.60
Male	16	9		14	11	
<b>Site</b>						
Right-sided	9	4	0.77	8	5	0.87
Left-sided	22	12		20	14	
<b>Line of anti-EGFR Rx</b>						
1 <sup>st</sup> line	3	3	0.59	3	3	0.75
2 <sup>nd</sup> line	17	9		15	11	
3 <sup>rd</sup> line	11	4		10	5	
<b>Previous irinotecan</b>						
No	18	9	0.90	17	10	0.58
Yes	13	7		11	9	
<b>Previous bevacizumab</b>						
No	5	6	0.10	5	6	0.28
Yes	26	10		23	13	
<b>Liver metastasis</b>						
No	4	44	0.85	5	6	0.28
Yes	24	12		23	13	
<b>Lung metastasis</b>						
No	11	10	0.08	12	9	0.76
Yes	20	6		16	10	
<b>Differentiated</b>						
Moderate	25	15	0.23	23	17	0.49
Poorly	6	1		5	2	
<b>NRAS (n = 43)</b>						
wt	27	14	0.65	24	17	0.81
mt	1	1		1	1	
<b>BRAF (n = 45)</b>						
wt	26	13	0.43	22	17	0.64
mt	3	3		4	2	
<b>PIK3CA (n = 37)</b>						
wt	20	13	0.58	16	17	0.32
mt	3	1		3	1	
<b>MSI (n = 38)</b>						
MSS/MSI-L	24	11	0.95	20	15	0.75
MSI-H	2	1		2	1	

wt: wild type, mt: mutation.

## meEGFR: a predictive biomarker for mCRC

**Supplementary Table 2.** Association between meEGFR ratio from CTCs and meEGFR expression from tissues

		meEGFR tissues		P value
		High expression	Low/No expression	
CTCs ratio	< 0.23	3	5	0.67
	≥ 0.23	1	1	

**Supplementary Table 3.** Association between expression level of meEGFR and PRMT1

		meEGFR		P value
		Low expression	High expression	
PRMT1	Low expression	54 (61.4%)	34 (44.7%)	0.03
	High expression	34 (38.6%)	42 (55.3%)	