



**Figure W1.** Plasma mSEPT9 and serum CEA concentrations in the patient with recurred CRC. mSEPT9 was negative and serum CEA was 2.9 ng/ml at 1 day before the first operation. At 128 days after the first operation, mSEPT9 was positive, but CEA was 4.2 ng/ml and clinical impression was abscess at anastomosis site by CT imaging. Serum CEA was 12.2 ng/ml at 215 days. Recurrence was diagnosed by the second operation at 217 days. Negative conversion of mSEPT9 was found after second operation (at 348 days; N, negative; P, positive; closed circle, mSEPT9; closed square, CEA concentration).

**Table W1.** Clinical Features of a Total of 101 CRC Patients according to Serum CEA Status.

	CEA		Total	P Value
	≥5 ng/ml	<5 ng/ml		
Age	63.86 ± 11.45	63.53 ± 11.13	63.59 ± 11.14	NS
Gender				.018
Male	6 (11.5%)	46 (88.5%)	52	
Female	15 (30.6%)	34 (69.4%)	49	
TNM stage				<.001
0/I	0 (0%)	26 (100%)	26	
II	5 (16.7%)	25 (83.3%)	30	
III	6 (21.4%)	22 (78.6%)	28	
IV	10 (58.8%)	7 (41.2%)	17	
Distant metastasis				<.001
Absent	11 (13.1%)	73 (86.9%)	84	
Present	10 (58.8%)	7 (41.2%)	17	
mSEPT9				.001
Negative	7 (10.9%)	57 (89.1%)	64	
Positive	14 (37.8%)	23 (62.2%)	37	
Preoperative CCRT				NS
Not done	18 (20.9%)	68 (79.1%)	86	
Done	3 (20.0%)	12 (80.0%)	15	
Location of tumor				NS
Right colon	5 (23.8%)	16 (76.2%)	21	
Left colon	16 (20.0%)	64 (80.0%)	80	
Mean DFS (days)	400.3 ± 39.5	547.6 ± 9.5	517.5 ± 13.0	<.001*
Total	21 (20.8%)	80 (79.2%)	101	

CCRT indicates chemoradiation; NS, not significant; DFS, disease-free survival.

\*By log-rank test of Kaplan-Meier survival curves.

**Table W2.** Clinical Features of a Total of 153 GC Patients according to Serum CEA and CA19-9 Status.

	Total	CEA		P Value	CA19-9		P Value
		≥5 ng/ml	<5 ng/ml		≥27 U/ml	<27 U/ml	
Age	60.31 ± 13.37	66.00 ± 7.59	59.73 ± 13.71	NS	64.95 ± 13.88	59.53 ± 13.18	NS
Gender							NS
Male	91	11 (12.1%)	80 (87.9%)	NS	13 (14.3%)	78 (85.7%)	
Female	62	3 (4.8%)	59 (95.2%)		9 (14.5%)	53 (85.5%)	
TNM stage				.013			.002
0/I	51	1 (2.0%)	50 (98.0%)		2 (3.9%)	49 (96.1%)	
II	44	4 (9.1%)	40 (90.9%)		5 (11.4%)	39 (88.6%)	
III	40	4 (10.0%)	36 (90.0%)		8 (20.0%)	32 (80.0%)	
IV	18	5 (27.8%)	13 (72.2%)		7 (38.9%)	11 (61.1%)	
Distant metastasis				.013			.006
Absent	135	9 (6.7%)	126 (93.3%)		15 (11.1%)	120 (88.9%)	
Present	18	8 (27.8%)	13 (72.2%)		7 (38.9%)	11 (61.1%)	
mSEPT9				NS			NS
Negative	126	9 (7.1%)	117 (92.9%)		17 (13.5%)	109 (86.5%)	
Positive	27	5 (18.5%)	22 (81.5%)		5 (18.5%)	22 (81.5%)	
Location of tumor				NS			NS
Lower third	95	9 (9.5%)	86 (90.5%)		15 (15.8%)	80 (84.2%)	
Middle third	37	4 (10.8%)	33 (89.2%)		5 (13.5%)	32 (86.5%)	
Upper third	21	1 (4.8%)	20 (95.2%)		2 (9.5%)	19 (90.5%)	
Mean DFS (days)	413.1 ± 8.5	293.2 ± 46.0	424.6 ± 7.4	<.001*	344.4 ± 31.4	423.7 ± 8.1	<.001*
Total	153	14 (9.2%)	139 (90.8%)		22 (14.4%)	131 (85.6%)	

NS indicates not significant; DFS, disease-free survival.

\*By log-rank test of Kaplan-Meier survival curves.