	No	13	46	95	52	108	52	
	UNK	8	29	47	26	55	26	
RAS			0					
	WT	13	46	113	62	126	60	0.15
	mut	15	54	68	38	83	40	
BRAF								
	WT	21	75	146	81	167	80	0.46
	mut	7	25	35	19	42	20	

Abbreviations: MSS status (microsatellite stability status); MSS (microsatellite stable); MSI (microsatellite instable); UNK (unknown); WT (wild type); mut (mutant).

[0231] The clinicopathological risk factors were based on the patient's tumor pathological stage (T status) and their lymph node pathological state (N status). T status was assessed at stages 1-4. A T1 status indicates the tumor is only in the inner layer of the bowel. A T2 means the tumor has grown into the muscle layer of the bowel wall. A T3 means the tumor has grown into the outer lining of the bowel wall but has not grown through it. T4 means that the tumor has grown into the outler lining of the bowel wall and has spread to other tissue and/or organs. Patients with a clinicopathological risk factor of pT4pT4 are considered at high risk for recurrence while patients with a clinicopathological risk factor of pT1pT1 are considered at low risk of recurrence. N status was assessed at stage 1 and 2. As shown, N1 status is split into 3 stages – N1a, N1b and N1c. N1a means there are cancer cells in 1 nearby lymph node, N1b means there are cancer cells in 2 or 3 nearby lymph nodes, and N1c means the nearby lymph nodes don't contain cancer, but there are cancer cells in the tissue near the tumor. N2 is split into 2 stages – N2a and N2b. N2a means there are cancer cells in 4 to 6 nearby lymph nodes and N2b means there are cancer cells in more than 7 nearby lymph nodes. Patients with a clinicopathological risk of pN2pN2 are considered high risk for recurrence while patients with a clinicopathological risk factor of 3N1 are considered low risk for recurrence.

[0232] As also shown in FIG. 8B, of the 209 patients 47 patients blood samples were used to assess the location of recurrence and to determine if there was a difference in time to recurrence based on post-surgery ctDNA status. Further, blood samples from 170 patients were evaluated for prognostic ctDNA status post-ACT as well as ctDNA clearance by ACT.

[0233] FIG. 9 shows a dot graph (FIG. 9A) and a box and whiskers (FIG. 9B) for post-surgery ctDNA status and cfDNA concentration. ctDNA-positive patients experiencing a recurrence