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 المراجعة في فاريد بخري من فقية مريطة مريطة في م من قلق في مريطة في مريطة في فاريد بخرية من من قلقة إن مريطة في م المريطة في مريطة في مريطة في فاريد بخرية في مريطة في مريط المريطة في مريطة في م المريطة في مريطة في المريطة في مريطة في م المريطة في مريطة في م



CTC are stained blue, filter holes of 8 microns appear black.

Panel A: breast cancer, B: prostate cancer, C: colorectal cancer, D: renal/ bladder cancer

Figure 2: Histo-pathological/ cyto-morphological detection of CTC using the ISET method.

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		CTC count ¹					
Type of cancer	Number of patients	Stage 1	Stage 2-3	Stage 4			
		<3 CTC/mI	3-20 CTC/ml	>20 CTC/mI			
		N (% of type)	N (% of type)	N (% of type)			
All	277						
Breast	81	52 (64)	20 (25)	9 (11)			
Prostate	69	54 (78)	11(14)	4 (5)			
Colorectal, gastric	37	26 (70)	7 (19)	4 (11)			
Kidney, bladder	19	11	6	2			
Blood type cancers: Lymphoma, NHL, HL, MCL, MM	17	10	2	5			
Ovarian, endometrial, uterine, cervical	15	10	4	1			
Lung	6	2	1	3			
Melanoma	9	9	-				
Pancreatic	3	2	-	1			
Thyroid	5	5	-	-			
Other, e.g. tongue, brain, SCC	16	9	6	1			

¹ CTC baseline count, CTC repeat tests of same patient not included in this table.

Abbreviations: HL, Hodgkin's lymphoma; MCL, mantle cell lymphoma; MM, multiple myeloma; NHL, Non-Hodgkin's lymphoma; SCC, squamous cell carcinoma **Table 1:** CTC count by type of cancer (Group 1: Cancer patients).

Patient ID, age	Cancer type	Test ID	CTC test time points (A-D)	CTC count/ ml	N months between CTC tests	

M22a, 76 yrs	ISET;	Feb-16;	0.7 atypical infammatory cells;		normal	May-16	3	Prostatitis	PSMA=PET CT: mild prostatitis; ISET-CTC identifed infammatory condition, no CTC detected; Maintrac-CTC does not distinguish between CTC and atypical infammatory cells
M22b	Maintrac	Apr-16	2	PSA=79; AR=88.6	normal				
M23, 49 yrs	ISET;	May-16	65.4;		normal	April-16	1	Prostate	PSMA-PET: moderate uptake
	Maintrac	May-16	13	AR=62; PSA=0					
M24, 66 yrs	ISET;	May-16	10.7;		high normal	Jun-16	1	Prostate	PSMA-PET: low to moderate uptake
	Maintrac		11	PSA=79; AR=73;					

ISET, ISET technology (Rarecells, France, www.rarecells.com)

Maintrac technology (Germany, www.maintrac.com): Receptor expression and EpCAM marker based CTC testing. In our experience, the CTC count by Maintrac correlates to the ISET CTC counts have been divided by 100.

F, female; M, male, AR, androgen receptor; Ki67, the Ki-67 protein is a cellular marker for cell proliferation; PSA, prostate specific antigen; PSMA, prostate specific membrane antigen; PET scan, positron emission tomography scan; n/a, not applicable

Table 3: Early detection CTC screening and follow-up scans of asymptomatic patients without detected tumour at time of CTC testing (group 2).

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Figure 3: CTC monitoring of a) cancer patients (group1) and b) asymptomatic patients without detectable tumour (group3) before and after integrative nutritional immune-stimulating therapy.

Cancer patients (group 1) did not undergo surgery, chemo- or radiotherapy.

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