

Patient NAME Ms Jane Doe	DATE OF BIRTH 1992-Jun-12	DISEASE Breast	STAGE II	Physician NAME Administrator
SPECIMEN 20ml Blood	VIAL IDs 1			

## REPORT SUMMARY

**CTCs COUNT: Isolated 3.3 cells/7.5 ml , SD +/- 0.3 cells**

### Information

## Laboratory Process

Isolation of malignant cells using flow cytometry with which the circulating tumor cells are enumerated and immunophenotyped

### Index of circulating cells number

If over limit: Advanced or progression of disease.

If less than limit: Early disease or disease is responding to a treatment plan

Breast Cancer	< 5 cells / 7.5 ml
Prostate Cancer	< 20 cells / ml
Sarcoma	< 15 cells / 6.5 ml
Colon Cancer	< 5 cells / ml
Lung Cancer	( Lc=0, r=0.99):< 10 cells / ml
All cancer types other than those listed above should be < 5 cells / ml	

## Disclaimers

\*This test will NOT DETECT cancers of the brain or other cancers that have been “encapsulated” by the body, not releasing circulating tumor or stem cells (CTC, CSC) into the blood stream or if any of these cells are dormant. We still recommend the use of biopsy, blood markers and/or various scans with this test when cancer is suspected or known to exist. No test is 100% accurate

\*The methodology has a sensitivity of 86,2% and specificity of 83,9%

## Markers

Category	Name	Results
Significant CD45 positive cells (Hematologic origin cells)	CD15	Negative
	CD30	Negative
	BCR-ABL	Negative
	CD34	Negative
	CD19	Negative
CD45 negative cells (non Hematologic origin)	CD34	Negative
	CD99	Negative
	EpCam	Positive (50% of all CTC)
	VHL mut	Positive (25% of all CTC)
	CD133	Positive (50% of all CTC)
	CD44	Negative
	Nanog	Positive (75% of all CTC)
	OKT-4	Dim
	Sox-2	Positive (75% of all CTC)
	PSMA	Negative
	c-MET	Positive (75% of all CTC)
	CD31	Negative
	CD19	Negative
	MUC-1	Negative
	CD63	Negative
	panCK	Dim
	EpCAM+ve	2.7 cells/7.5 ml

## Index of markers

CD44, CD133, Sox-2*, OKT-4*, Nanog*	Tumor stem cell marker
c-MET*	Membrane antigen that regulates the mesenchymal to epithelial transition
CD34*	Hematological stem cell and blast cell marker, epithelioid
CD45	Hematologic origin cell
BCR-ABL, CD30, CD15	Hematologic malignancy marker
CD19 (CD45 negative cells)	Hematological malignancy
CD19 (CD45 positive cells)	Lung neuroendocrine malignancy
CD31	Endothelial cell membrane antigen
CD63	Melanoma cell marker
CD99	Sarcoma marker
EpCam	Epithelial origin marker
MUC-1	Breast cancer antigen
PSMA	Prostate specific cancer stem cell membrane antigen
VHL mut	Renal carcinoma marker
panCK	Epithelial origin cell marker

\*Significant markers

Sincerely,

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