

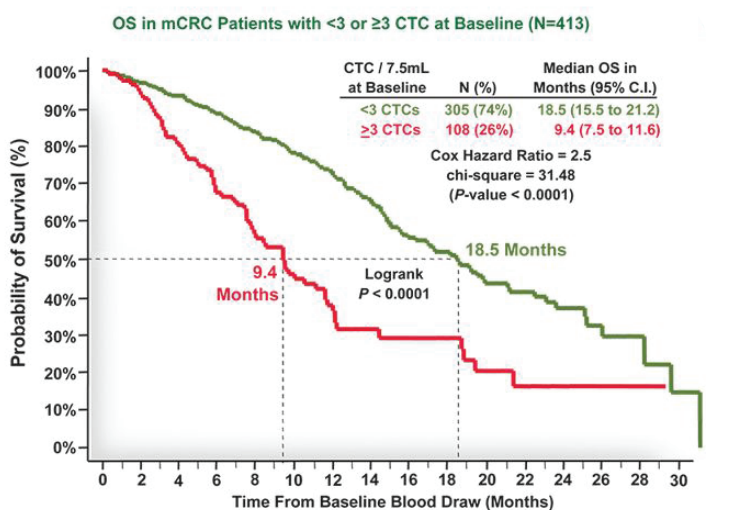
## CELLSEARCH® Circulating Tumor Cells(CTC) Test for Colorectal Cancer

The CELLSEARCH® CTC Test is a simple, actionable blood test that helps clinicians assess the prognosis of patients with metastatic breast, prostate, or colorectal cancer.

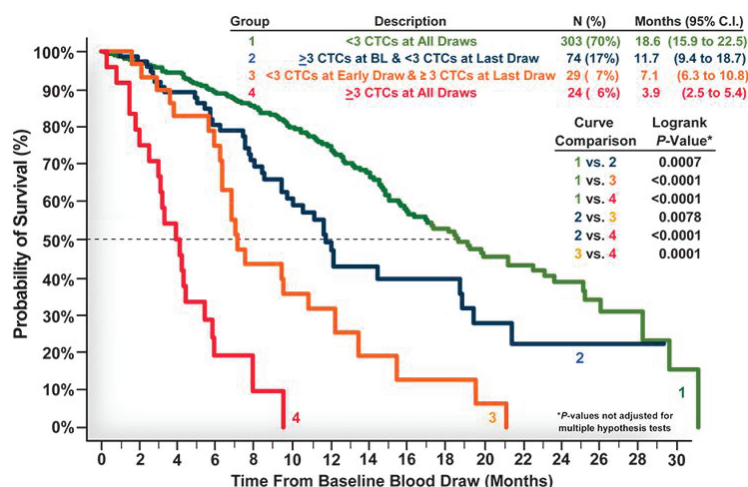
Performed exclusively by SAM Clinical Laboratory in South East Asia, it is the only FDA approved test for enumerating CTCs. This propriety technology enriches and counts the number of CTCs in whole blood to enable the analysis of CTCs in a reproducible and reliable manner.

This count is compared against a clinically validated threshold of 3 CTCs per 7.5 ml of blood to help the clinician to know the favorability of the prognosis of the patient at anytime and get an early assessment of patient prognosis.

In the pivotal study and systematic review, the measure of CTCs was shown to provide a better prognostication of the Overall Survival (OS).

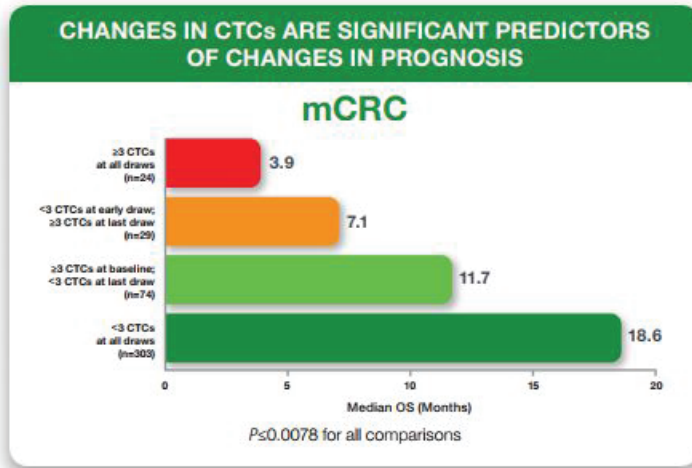


*“Unfavourable compared with favourable baseline CTCs had shorter median overall survival (OS; 9.4 vs 18.5 months; P < .0001).”*



*“A reduction of CTCs below 3 after initiation of therapy predicts the OS length after initiation of therapy.”*

## More Insights Into Disease



*"The number of CTCs before and during treatment is an independent predictor of PFS and OS in patients with metastatic colorectal cancer.*

*CTCs provide prognostic information in addition to that of imaging studies.<sup>1</sup>"*

### References

1. Cohen SJ, Punt CJA, Iannotti N, et al. J Clin Oncol. 2008;26(19):3213-3221.

## Specimen Guidelines

Specimen Format	Requirements
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Specimen Format  
(CellSave® tube)

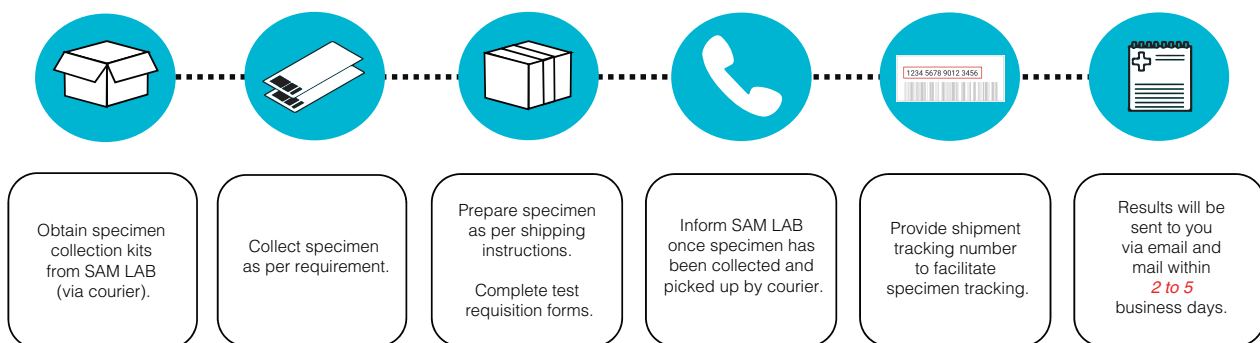


Allow 7-day washout period for Doxorubicin before specimen collection.

1 x 10.0ml peripheral whole blood drawn into CellSave® tube\*.

\*CellSave® tube stabilizes circulating tumor cells (CTCs) for up to 96 hours at room temperature, which allows shipment of specimen from remote locations for analysis. CTCs are fragile and tend to degrade within a few hours when collected in standard evacuated blood collection tubes

## Service Workflow



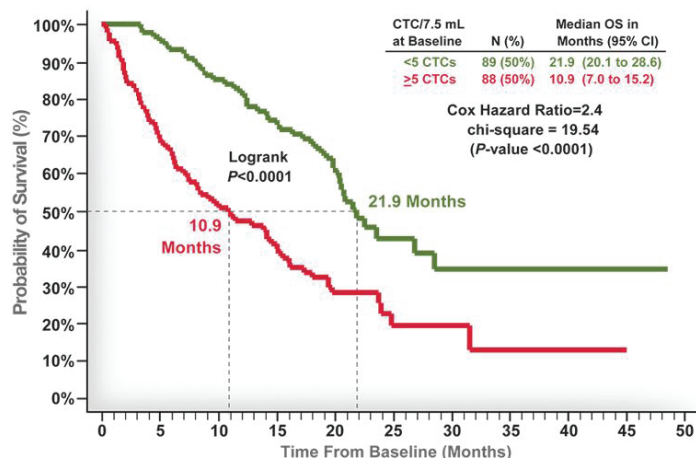
## CELLSEARCH® Circulating Tumor Cells(CTC) test for Breast Cancer

The CELLSEARCH® CTC Test is a simple, actionable blood test that helps clinicians assess the prognosis of patients with metastatic breast, prostate, or colorectal cancer.

Performed exclusively by SAM Clinical Laboratory in South East Asia, it is the only FDA approved test for enumerating CTCs. This propriety technology enriches and counts the number of CTCs in whole blood to enable the analysis of CTCs in a reproducible and reliable manner.

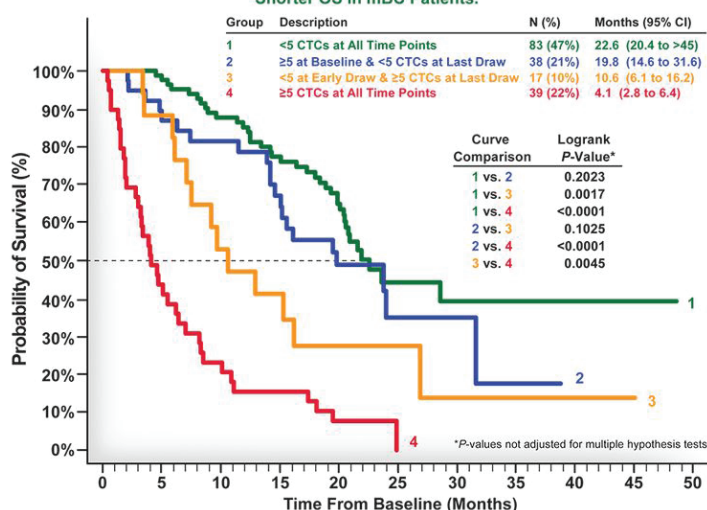
This count is compared against a clinically validated threshold of 5 CTCs per 7.5 ml of blood to help the clinician to know the favorability of the prognosis of the patient at anytime and get an early assessment of patient prognosis.

In the pivotal study and systematic review, the measure of CTCs was shown to provide a better prognostication of the Overall Survival (OS).



*“Median OS for patients with ≥5 CTCs, at all 5 time points were significantly shorter.”*

**A Reduction in CTC to Below 5 After the Initiation of Therapy Predicts Longer OS whereas an Increase in CTC Count to 5 or above Predicts Shorter OS in mBC Patients.**



*OS at baseline and up to 9 to 14 weeks after the initiation of therapy were statistically significantly different.”*

## More Accurate when CTC and Imaging are Discordant

IMAGING	CTCs	MEDIAN OS
Favorable	Favorable	23.8 months (n=84)
Favorable	Unfavorable	9.2 months (n=12)
Unfavorable	Unfavorable	6.4 months (n=22)
Unfavorable	Favorable	19.9 months (n=20)

With discordance, CELLSEARCH® CTC Test more accurately predicts prognosis


P<0.04 for all comparisons except 19.9 vs 23.8, P=0.12; 19.9 vs 9.2, P=0.67; and 6.4 vs 9.2, P=0.12

*“The most accurate assessment of prognosis in cases where CTC and imaging are discordant in patients with metastatic breast cancer. CTCs provide prognostic information in addition to that of imaging studies<sup>1</sup>.”*

### References

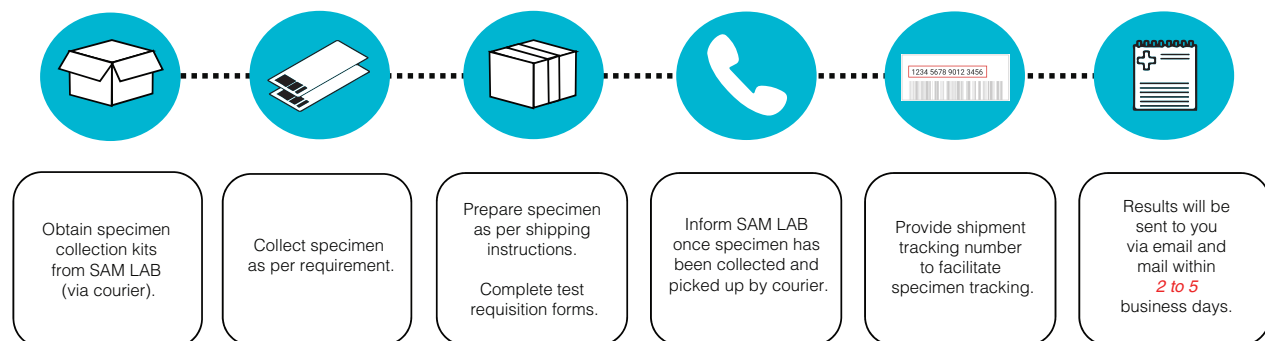
1. Hayes DF, et al. Clin Cancer Res 2006;12(14): 4218-4224.

## Specimen Guidelines

Specimen Format	Requirements
Specimen Format (CellSave® tube) 	Allow 7-day washout period for Doxorubicin before specimen collection.  1 x 10.0ml peripheral whole blood drawn into CellSave® tube*.

\*CellSave® tube stabilizes circulating tumor cells (CTCs) for up to 96 hours at room temperature, which allows shipment of specimen from remote locations for analysis. CTCs are fragile and tend to degrade within a few hours when collected in standard evacuated blood collection tubes

## Service Workflow



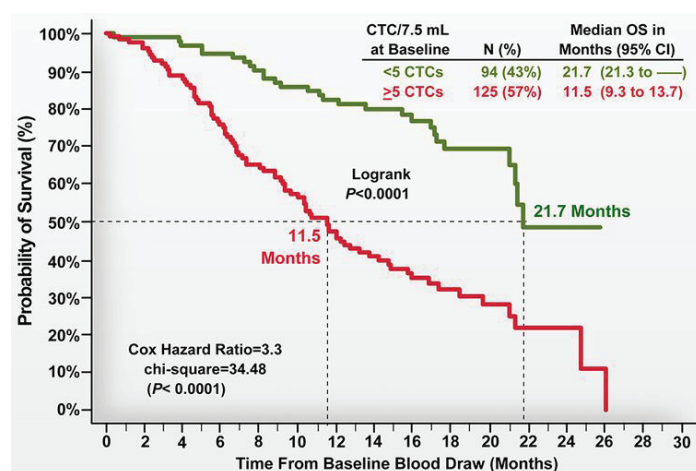
## CELLSEARCH® Circulating Tumor Cells(CTC) test for Prostate Cancer

The CELLSEARCH® CTC Test is a simple, actionable blood test that helps clinicians assess the prognosis of patients with metastatic breast, prostate, or colorectal cancer.

Performed exclusively by SAM Clinical Laboratory in South East Asia, it is the only FDA approved test for enumerating CTCs. This propriety technology enriches and counts the number of CTCs in whole blood to enable the analysis of CTCs in a reproducible and reliable manner.

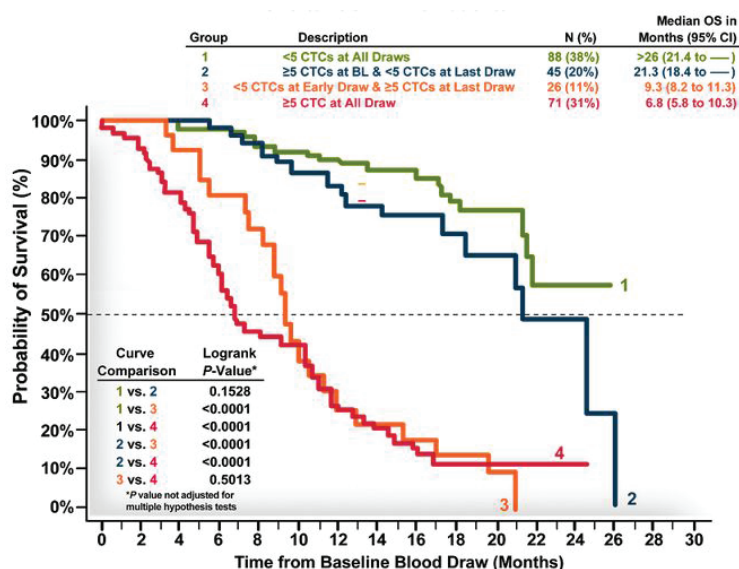
This count is compared against a clinically validated threshold of 5 CTCs per 7.5 ml of blood to help the clinician to know the favorability of the prognosis of the patient at anytime and get an early assessment of patient prognosis.

In the pivotal study and systematic review, the measure of CTCs was shown to provide a better prognostication of the Overall Survival (OS).



*“CTCs are the most accurate and independent predictor of OS in Castration Resistant Prostate Cancer.”*

*“Patients with unfavourable pretreatment CTCs had a short median OS at 2 to 20 weeks”*



## More Accurate when CTC and PSA are Discordant

PSA	CTCs	MEDIAN OS
Favorable ≥30% reduction	Favorable	17.5 months (n=50)
Favorable ≥30% reduction	Unfavorable	10.7 months (n=11)
Unfavorable <30% reduction	Unfavorable	8.6 months (n=67)
Unfavorable <30% reduction	Favorable	>20.6 months (n=69)

With discordance, CELLSEARCH® CTC Test more accurately predicts prognosis


*“CTC counts predicted OS better than PSA decrement algorithms at all time points”*

P≤0.0029 for all comparisons except 17.5 vs >20.6, P=0.0602; and 10.7 vs 8.6, P=0.4631

### References

1. de Bono JS, Scher HI, Montgomery RB, et al. Clin Cancer Res. 2008;14:6302-6309.

## Specimen Guidelines

Specimen Format	Requirements
Specimen Format (CellSave® tube) 	Allow 7-day washout period for Doxorubicin before specimen collection.  1 x 10.0ml peripheral whole blood drawn into CellSave® tube*.

\*CellSave® tube stabilizes circulating tumor cells (CTCs) for up to 96 hours at room temperature, which allows shipment of specimen from remote locations for analysis. CTCs are fragile and tend to degrade within a few hours when collected in standard evacuated blood collection tubes

## Service Workflow

