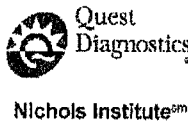


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 CLIENT SERVICES - (800) 553-5445
 Director: Jon Nakamoto, M.D., Ph. D.

PATIENT NAME 16812, CellSearch(R) Circul				PATIENT ID NO. NOT GIVEN		DATE NOT GIVEN		TIME NOT GIVEN	
ACCESSION NO. 47648295	AGE NG	SEX NG	SAMPLE ID NO. NOT GIVEN	OTHER ID NO. NG		COLLECTED	09/28/2017	05:25	
REMARKS				REFERRING PHYSICIAN NG		REPORTED	09/28/2017	05:26	
						STATUS	DUPLICATE		

TEST: **CellSearch(R), Prostate** RESULT (* = OUT OF RANGE): **6.5** UNITS: **CTC/7.5 mL Whole Blood** REFERENCE RANGE:

Interpretation/Comment:

A circulating tumor cell (CTC) count of 5 or more per 7.5 ml of blood at any time during the course of the disease has been reported to be associated with a poor prognosis and is predictive of shorter progression free survival (PFS) and overall survival (OS) in patients with androgen-independent, hormone-resistant prostate cancer. The table lists median PFS and OS based CTC counts.

Number of CTC	PFS (months)	OS (months)
At all time <5	6.5	>26
Baseline <5; At final draw >=5	4.2	9.3
Baseline >=5; At final draw <5	7.3	21.3
At all time points >=5	2.5	6.8

CellSearch(TM) results should be used in conjunction with all clinical information derived from diagnostic tests (i.e., imaging, laboratory tests), physical examination and complete medical history in accordance with appropriate patient management procedures. This prognostic study does not demonstrate that any current line of therapy is any more or less effective than any other or no therapy.

Method:
The test was performed using Veridex Circulating Tumor Cell Kit.

Reference:

- Veridex product insert, document LBL50058, Rev. 6, 2009-05.
- Circulating Tumor Cells Predict Survival Benefit From Treatment in Metastatic Castration-resistant Prostate Cancer. Clin Cancer Res. 2008 Oct 1;14(19):6302-9.
- Circulating Tumor Cell Number and Prognosis in Progressive Castration-Resistant Prostate Cancer. Clin Cancer Res. 2007 Dec 1;13(23):7053-8.