

Biocept

Completing the Answer™

Published Case Report Demonstrates the Clinical Utility of Biocept's CTC Platform in the Management of Patients with Metastatic Breast Cancer

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Peer-reviewed article in journal *Clinics in Oncology* highlights ability of Biocept's Target Selector™ to detect a key biomarker to qualify breast cancer patients for targeted therapy when tissue biopsy is inconclusive

SAN DIEGO, June 18, 2018 /PRNewswire/ -- [Biocept, Inc.](#) (NASDAQ: BIOC), a leading commercial provider of liquid biopsy tests designed to provide physicians with clinically actionable information to improve the outcomes of patients diagnosed with cancer, announces the publication of a peer-reviewed case report demonstrating the clinical utility of its Target Selector™ circulating tumor cell (CTC) testing in the management of a patient with metastatic breast cancer. Biocept's CTC-based assay detected estrogen receptor (ER) expression and HER2 gene amplification, which enabled the patient to qualify for anti-HER2 therapy that extended her survival and improved her quality of life. Several prior attempts to gain this molecular information from tissue using standard image-guided biopsy were unsuccessful. In particular, for this patient with bone-only metastases, decalcification of bone tumor tissue presented challenges to immunohistochemical staining, which can be common and may lead to inconclusive or false negative ER, PR, or HER2 results.



The article, "Clinical utility of Target Selector™ circulating tumor cell (CTC) testing in tumor marker gene amplification and protein expression in metastatic breast cancer management," was published in the May 2018 issue of the medical journal *Clinics in Oncology*.

"Determining the biomarker status of patients with breast cancer is paramount for selecting appropriate targeted therapy that can significantly improve treatment outcomes," said Katherine H.R. Tkaczuk, MD, Professor of Medicine, Director, Breast Evaluation and Treatment Program, University of Maryland School of Medicine, Marlene and Stewart Greenebaum Cancer Center. "Given the technical challenges of traditional tissue biopsies, liquid biopsy can provide an alternative method to obtain this important information. In this case study, tissue biopsies obtained over several years of treatment were either negative or inconclusive. However, results from Biocept's CTC assay technology enabled the patient to qualify for targeted anti-HER2 therapy earlier in her disease process and extended her survival."

"We continue to expand the body of clinical evidence supporting the use of our Target Selector™ platform with our third published case report in 2018," said Biocept's President and CEO Michael Nall. "This case study further demonstrates how liquid biopsy testing can play a critical role in identifying biomarkers to help patients with treatment decisions that improve outcomes. We believe that demonstrating clinical utility in real-world settings is important to increase physician adoption of our Target Selector™ assays and we expect to submit additional case studies to prominent oncology journals in the future."

About Biocept's Target Selector™ Testing for Breast Cancer

Choosing the most effective treatment for women with recurrent or newly diagnosed metastatic breast cancer depends on ER, PR and HER2 receptor status. These key targets help doctors understand which therapies are most appropriate for patient treatment, and can also be used to help breast cancer patients qualify for clinical trials. Despite benefits to patient survival, molecular biomarker data is often difficult to obtain in metastatic settings due to patients' health status, a refusal to undergo another biopsy, or the tumor is metastasized to a difficult-to-sample region of the body such as bone, brain or the lungs. Additionally, tissue molecular analyses may be inconclusive due to insufficient tissue amounts from biopsies or interference of bone tissue decalcification procedures with immuno-histochemical stains. The recent development Target Selector liquid biopsy from Biocept allows physicians to obtain molecular data which helps guide individual patient treatment approaches. CTCs are cells that have shed into the bloodstream from a primary or metastatic tumor, representing an alternative source of tumor material for non-invasive disease assessment.

For more information on Biocept's Breast Cancer test offering or to order a test from Biocept please go to www.Biocept.com or click on the following link: <https://biocept.com/technology/breast-cancer-offering/>

About Biocept

Biocept, Inc. is a molecular diagnostics company with commercialized assays for biomarker analysis for lung, breast, gastric, colorectal and prostate cancers, and melanoma. The Company uses its proprietary liquid biopsy technology to provide physicians with information to help treat and monitor patients diagnosed with cancer. The Company's patented Target Selector™ liquid biopsy technology platform captures and analyzes tumor-associated molecular markers in both circulating tumor cells (CTCs) and in plasma (ctDNA). With thousands of tests performed, the platform has demonstrated the ability to identify cancer mutations and alterations to help inform physicians about a patient's disease and therapeutic options. For additional information, please visit www.biocept.com.

Forward-Looking Statements Disclaimer Statement

This release contains forward-looking statements that are based upon current expectations or beliefs, as well as a number of assumptions about future events. Although we believe that the expectations reflected in the forward-looking statements and the assumptions upon which they are based are reasonable, we can give no assurance that such expectations and assumptions will prove to have been correct. Forward-looking statements are generally identifiable by the use of words like "may," "will," "should," "could," "expect," "anticipate," "estimate," "believe," "intend," or "project" or the negative of these words or other variations on these words or comparable terminology. To the extent that statements in this release are not strictly historical, including without limitation statements as to our ability to improve the outcomes of patients diagnosed with cancer, our ability to increase physician adoption of our Target Selector assays, and whether additional case studies will be published in the future supporting the use of our liquid biopsy platform, such statements are forward-looking, and are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. The reader is cautioned not to put undue reliance on these forward-looking statements, as these statements are subject to numerous risk factors as set forth in our Securities and Exchange Commission (SEC) filings. The effects of such risks and uncertainties could cause actual results to differ materially from the forward-looking statements contained in this release. We do not plan to update any such forward-looking statements and expressly disclaim any duty to update the information contained in this press release except as required by law. Readers are advised to review our filings with the SEC, which can be accessed over the Internet at the SEC's website located at www.sec.gov.

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