

Inflammatory Breast Cancer Focus of New Report

Rare and deadly form of breast cancer often goes unrecognized by clinicians and patients alike

ATLANTA—October 19, 2010—A rare and deadly form of breast cancer that often goes unrecognized by clinicians and patients alike is the focus of a new report from leading researchers. Inflammatory breast cancer (IBC) has made headlines as an unrecognized and misunderstood form of breast cancer. It has a younger age of onset, progresses rapidly, and has lower overall survival compared to other breast cancers. For the new report, leading researchers led by Massimo Cristofanilli, M.D., of Fox Chase Cancer Center in Philadelphia outline IBC's unique clinical presentation, pathology, epidemiology, imaging, and biology and detail the current management of the disease. The report appears online on CA First Look, and will appear in the November/December 2010 issue of [*CA: A Cancer Journal for Clinicians*](#).

"Inflammatory breast cancer is a rare and aggressive form of invasive breast cancer accounting for 2.5% of all breast cancer cases," said Dr. Cristofanilli. "A lack of awareness about IBC means this deadly cancer is often misdiagnosed as mastitis or generalized dermatitis, so treatment starts too late. We hope this report will increase clinicians' familiarity with IBC to help improve outcomes for patients."

Most often, the first symptoms of IBC are rapid breast enlargement and skin changes in the affected breast. Skin can become pink or further progress to intense red or purple color involving the entire breast. Another manifestation is the "peau d'orange" or orange peel appearance attributed to underlying skin edema. Because IBC most often lacks a palpable tumor, some physicians may rule out breast cancer as the cause.

The American Cancer Society (ACS) estimates that 192,370 new cases of breast cancer will be diagnosed this year. Given the estimation that IBC encompasses 2.5% of all incident breast cancer cases in the U.S., the authors estimate approximately 5000 possible new cases each year. However, they add that it is difficult to determine the incidence rate trends specifically for IBC because of the debatable case definitions that are used to diagnose the disease. Inflammatory breast cancer is the most aggressive and fatal form of invasive breast cancer. The median overall survival duration among women with IBC is less than four years even with multimodality treatment options.

A previous report indicates that IBC occurs more frequently in African American women than in white women, and that it is diagnosed in African American women at a much earlier age, which further emphasizes the considerable racial disparities among patients with IBC compared with those with other breast cancers.

Despite current challenges, the authors say the ability to identify new therapeutic targets that can regulate the aggressive phenotype of IBC will be crucial to establishing better therapies. "There are currently new classes of agents that display novel mechanisms of action, and early experiments suggest that these drugs may be effective in IBC," conclude the authors. "Emerging concepts in the areas of stem cell biology and cancer biology may revolutionize our understanding of the molecular basis of IBC while providing opportunities to discover new molecular targets and useful diagnostic biomarkers for IBC."

Article: "Inflammatory Breast Cancer: The Disease, the Biology, the Treatment," Fredika M. Robertson, Melissa Bondy, Wei Yang, Hideko Yamauchi, Shannon Wiggins, Samira Kamrudin, Savitri Krishnamurthy, Huong Le-Petross, Luc Bidaut, Audrey N. Player, Sanford H. Barsky, Wendy A. Woodward, Thomas Buchholz, Anthony Lucci, Naoto Ueno, and Massimo Cristofanilli. CA Cancer J Clin Published Online: October 19, 2010 (DOI: 10.3322/caac.20082); Print Issue Date: Nov/Dec 2010.
