New Drugs Improve Survival for Metastatic Breast Cancer

Atlanta 2007/07/23 -Newer drug therapies available since the 1990s, in particular aromatase inhibitors, improve the survival of women with metastatic breast cancer in the general population, according to a new study. Published in the September 1, 2007 issue of CANCER, a peer-reviewed journal of the American Cancer Society, the study is the first to demonstrate that drugs made available to the general public in the 1990s have had a significant impact on population-based metastatic breast cancer survival rates, confirming findings from earlier clinical trials. Survival improved by approximately 30 percent as systemic therapy, in particular aromatase inhibitors, became more widely used.

Currently, women with metastatic breast cancer survive an average of approximately 24 months. That marks a significant improvement from the estimated 18 month survival noted in the early 1980s. While popular opinion suggests that this improved survival rate is due to newly developed drugs, a direct link has not been clearly shown. A few studies suggest overall survival improvements are associated with the new therapies, but their conclusions are not necessarily generalizable to the general population or to specific new systemic therapies.

Dr. Stephen Chia of the University of British Columbia in Vancouver and co-investigators compared outcomes of 2150 women diagnosed with metastatic breast cancer in the Canadian province of British Columbia between 1991 and 2001. In analyzing temporal trends in outcome, the investigators' primary goal was to evaluate whether new hormonal and chemotherapeutic drugs approved for public use actually had an impact on survival outside the clinical trial setting. In addition, because not all patients in the general population received any palliative systemic therapy, they were also able to make inferences about drug efficacy versus no treatment.

Significantly, they found that new drugs did have a significant positive effect on survival for women with metastatic disease in the latter half of the 1990s. Median survival remained unchanged between the 1991-1992 and 1994-1995 groups, at only 438 days in the first and 450 days in the second time period. As new drugs, in particular the aromatase inhibitors, became available on the formulary and more commonly used for women with first metastases in the mid-1990s, survival further increased to 564 days (1997-1998 group) to 667 days (1999-2001 group).

Dr. Chia and co-authors wrote, "our population-based study of a large cohort of women with a recent diagnosis of metastatic breast cancer is the first to demonstrate a significant improvement in survival over time." While the study does not definitively attribute these improvements to a single therapy, "the greatest differences in survival were associated with the introduction of the aromatase inhibitors, docetaxel and trastuzumab in the later two cohorts," they conclude.

Article: "The Impact of New Chemotherapeutic and Hormone Agents on Survival in a Population-based Cohort of Women with Metastatic Breast Cancer," Stephen K. Chia, Caroline H. Speers, Yulia D'yachkova, Anna Kang, Suzanne Malfair-Taylor, Jeff Barnett, Andy Coldman, Karen A. Gelmon, Susan E. O'Reilly, Ivo A. Olivotto, CANCER; Published Online: July 23, 2007 (DOI: 10.1002/cncr. 22867); Print Issue Date: September 1, 2007.

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