



What is the rate of breast cancer diagnosed at metastatic (advanced stage) in your country?

Optimal treatment and care of patients with breast cancer requires that we know the answer to this simple question. It is also a measure of the impact of screening programs as well as the level of awareness and health education of a country population.

We anticipate that presentation of stage IV primary breast cancer with distant metastases at diagnosis, often referred to as de-novo metastatic breast cancer (dnMBC), has a different biology, a different response to treatment and different outcomes versus that of breast cancer that becomes metastatic after distant recurrence of primary localized breast cancer, referred to as relapsed metastatic breast cancer (rMBC), implying therefore that these patients groups will have different management and support needs.

Despite the wealth of data on breast cancer overall, there are few prospective registries for advanced disease. A recent study by Marschner et al (1) demonstrated that observational research from population-based registries are able to provide real world data on treatment and outcomes to compliment that of clinical trials. The German data specifically point to the need for heightened awareness of the breast cancer community to current guidelines in this dynamic indication.

Musa et al (2) were able to estimate (2017) that there are 154,794 women living with MBC in the US. Their analysis reveals that 3 out of 4 women are rMBCa and 1 out of 4 dnMBC. Unfortunately these numbers are only estimates since in the US as well as in the vast majority of countries, cancer registries register only diagnosis and death (incidence and mortality) but not relapses. For this reason, the number of patients living with advanced breast cancer is currently unknown. This study also reported survival for dnMBC increased over the years, especially in younger women, where they estimate a two-fold increase in 5-year survival (from 18% to 36%) for dnMBC, at age 15–49, between 1992–1994 and 2005–2012. This study shows that, with adequate access to the best available treatment, survival can be improved for this still incurable disease.

These data are supported by a study by Kaplan et al (3) of a Swedish dataset of 8,189 optimally treated BC patients, followed since 1990, which showed that of the 1158 MBC patients. 247 (21%) were dnMBC and 911 (79%) rMBC.

While the Swedish data (and two other studies) are from high income settings, with optimally treated patients, the key messages and data are important for program planners globally:

- New treatments for breast cancer have increased 5-year disease specific survival in optimally treated de novo MBC from 28% in 1990-1998 to 55% in 2005-2010.

- New treatments for breast cancer and earlier detection with mammography have prevented more than half of metastatic recurrences in Stage I-III breast cancer

The data from high income settings also shows that in those who do recur rMBC 5-year disease-specific survival has actually decreased during this 20 year period, from 23% to 13%, i.e. breast cancers that do recur are now more resistant and difficult to treat. Therefore there is **a call to the research community** to study de novo and recurrent MBC as different diseases, including stratifying clinical trials, looking at long-term survivors and complete responders separately, and importantly, **a call to the surveillance community** to ensure cancer registries document relapse data – both calls to action in the ABC Global Alliance Charter.

The ABC Global Alliance is a multi-stakeholder platform for all those interested in collaborating in common projects relating to advanced breast cancer (ABC) around the world. Its vision and mission is to improve and extend the lives of women and men living with ABC in all countries worldwide and to fight for a cure, as well as to raise awareness of ABC and lobby worldwide for the improvement of the lives of ABC patients. Its Global Charter highlights 10 achievable goals for the next 10 years.

- (1) Marchner et al. Palliative systemic therapy and overall survival of 1,395 patients with advanced breast cancer e Results from the prospective German TMK cohort study, *The Breast* 34 (2017) 122e130
- (2) Musa et al. Estimation of the number of women living with metastatic breast cancer in the United States, *Cancer Epidemiol Biomarkers Prev*; 26(6); 809–15, 2017
- (3) Kaplan et al. Differential presentation and survival of de novo and recurrent metastatic breast cancer over time: 1990–2010 *Breast Cancer Research and Treatment* DOI 10.1007/s10549-017-4529-5

