Advanced breast cancer (MBC) patients are considered to be the patient group with the worst prognosis. Not only with regard to therapy decisions but also with regard to quality assurance and health-economic aspects. The presentation addresses the current situation and outlines possible strategies to improve patient care. To this end, it presents relevant aspects of the PRAEGNANT study and provides an overview of the study cohort.

**STUDY DESIGN**

The PRAEGNANT study was conducted as a prospection, diagnostic, transnational, and multicentric registry with a central documentation of patient and tumor characteristics and a central tumor biobank available for prospective molecular analyses. The study was approved by the ethical review boards of all study sites (nos. 15–022-MA, 15–012-MA, 15–010-MA, 15–024-MA, 15–008-MA, 15–006-MA, 15–013-MA, 15–014-MA).

**OBJECTIVE**

On the one hand, the study aims to determine prognostic and predictive biomarkers in a cohort of up to 3,000 MBC patients. On the other hand, the study aims to evaluate patient care and to determine factors influencing patient care.

**STUDY OBJECTIVES**

**Primary Objective**

**Discovery of biomarkers, which predict progression free survival (PFS).**

**Secondary Objectives**

- Influencing factors of death in patients with metastatic breast cancers.
- Patient influenced influencing factors on therapy adherence in patients metastatic breast cancer and/or locally advanced, estimated impact, adherence to avoidance of adverse events, serious adverse events will be reported.

**ELIGIBILITY CRITERIA**

Inclusion:

- Patients (age 50 years) with metastatic or locally advanced, metastatic breast cancer (MBC), proven by objective means (standard imaging, irrespective of status of ER, PR, receptor status, respectively).

Exclusion:

- Patients, who are able to read and writing to sign the informed consent form.

**Biographies**

**Christian Fehm**

- Assistant Professor at the University Hospital Magdeburg, Magdeburg, Germany.

**Carola Hielscher**

- Assistant Professor at the Department of Obstetrics and Gynecology at the University Hospital Magdeburg, Magdeburg, Germany.

**Max Wallwiener**

- Assistant Professor at the Department of Obstetrics and Gynecology at the University Hospital Magdeburg, Magdeburg, Germany.

**Thierry Fehm**

- Associate Professor at the University Hospital Magdeburg, Magdeburg, Germany.

**Renate Wurzel**

- Consultant at the Department of Obstetrics and Gynecology at the University Hospital Magdeburg, Magdeburg, Germany.

**Mörike Atkinson**

- Visiting Scientist at the University of California, San Francisco, CA, USA.

**Claudia Thomsen**

- Associate Professor at the University Hospital Magdeburg, Magdeburg, Germany.

**Maike Leistinger**

- Consultant at the Department of Obstetrics and Gynecology at the University Hospital Magdeburg, Magdeburg, Germany.

**Karl-Peter Schmitt**

- Consultant at the Department of Obstetrics and Gynecology at the University Hospital Magdeburg, Magdeburg, Germany.

**Uwe Ellwart**

- Consultant at the Department of Obstetrics and Gynecology at the University Hospital Magdeburg, Magdeburg, Germany.

**Markus Baur**

- Consultant at the Department of Obstetrics and Gynecology at the University Hospital Magdeburg, Magdeburg, Germany.

**Jennifer Fischback**

- Consultant at the Department of Obstetrics and Gynecology at the University Hospital Magdeburg, Magdeburg, Germany.

**STUDY COHORT DESCRIPTION**

Basic patients' characteristics are summarized in Table 1. Mean age of the patients included was 51 (±10) years and age did not differ greatly among subgroups, in which the patients were included in the study.

**PARTICIPATING SITES AND RECRUITMENT**

Since the beginning of the study in June 2014, 2,027 patients (Figure 1) have been recruited. Recruitment is a task of 3,000 patients.

**CONCLUSION**

The PRAEGNANT study network has established an innovative infrastructure to improve the healthcare for patients with advanced breast cancer. The PRAEGNANT scientific network enables ecological health care services and supported maintenance and maintenance of efficient oncological treatments via the synergistic cooperation of translational research, health care economics and innovative health care research.

**FUNDING**

Provisionally, the established infrastructure will be employed to monitor and improve health care for breast cancer patients in the next planning setting as well as for cancer patients in other indications.

**CENTRAL DEPOSITION**

The distribution of molecular subtypes is shown in Table 1. The distribution of molecular subgroups among therapy lines is shown in Figure 1. Breast subgroups were patients with a high-negative tumor (n=375; 15.8%), as assessed at the time of the initial diagnosis, while luminal A (n=915; 38.9%) and luminal B (n=1,151; 49.8%) were the most frequent tumor subgroups. Distribution of molecular subgroups did not differ greatly among subgroups, in which the patients were included in this study.

**Table 1: Description and analysis of study group.**

**Table 2: Mutation frequencies in different study groups.**

**Table 3: Therapeutic sensitivity in different study groups.**

This presentation is the intellectual property of the author/presenter. Contact them info@praegnant.org for permission to reprint and/or distribute.