

## **Otto Metzger, MD**

I am a clinical investigator focused on the development of therapies for breast cancer treatment. My principal research effort is focused on investigating two subtypes of breast cancer: invasive lobular carcinoma (ILC) and HER2+ breast cancer. I also maintain an active clinical practice in the Breast Oncology Center at Dana-Farber/Brigham and Women's Cancer Center.

To accomplish my research goals, I am conducting translational-oriented clinical trials in close collaboration with laboratory-based investigators. My research in ILC seeks to identify predictive biomarkers of sensitivity to specific agents and mechanisms of resistance to endocrine therapy. I designed a multicentric preoperative clinical trial (PELOPS NCT02764541), which is one of the first prospective clinical trials dedicated to study ILC as a separate breast cancer subtype. My focus in HER2+ disease is directed at understanding the biological underpinnings of this disease and at describing the natural history of metastatic disease throughout the use of clinical trials data. I am the co-PI of the first prospective study designed to evaluate the impact of HER2 heterogeneity on response to target anti-HER2 therapies (NCT02326974). I am also the PI of an international phase III study evaluating the role of Palbociclib for patients diagnosed with metastatic HER2+ and hormone receptor positive breast cancer (PATINA NCT02947685).

I have devoted significant effort at improving the scientific and operational aspects of clinical trials. In addition to my physician and clinical investigator roles, I hold an executive officer position at the Alliance for Clinical Trials in Oncology. At Alliance, I am actively engaged in a program dedicated to understanding the natural history of metastatic breast cancer (MBC Initiative) by collecting longitudinally-studied tumor-specific markers and treatment effects from patients enrolled in clinical trials. I am currently leading the first phase III clinical trial of the MBC initiative (PATINA), which includes a comprehensive plan for molecular characterization of metastatic disease over time, collection of treatment information beyond disease progression, and mechanisms to enable data sharing. I am also a member of the Correlative Science Committee of important studies conducted by Alliance (e.g. PALLAS NCT02513394) and a member of the Alliance Breast Cancer Committee.

My clinical work, which accounts for 25% of my professional effort, is divided between clinical trials management and an active practice in the Breast Oncology Center at Dana-Farber/Brigham and Women's Cancer Center. My clinical activities are closely linked to my research endeavors and it is gratifying to talk about clinical trials with patients on a weekly basis. In addition to my roles dedicated to patient care and research, I launched an International Educational Program dedicated to improve quality of care and research through a network of Oncology Practices in Brazil. As part of this program, I teach seminars organized for Oncoclinicas staff at DFCI and for staff in Brazil as well as participate in the bi-weekly tumor boards.