

## From bench to bedside

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A major goal of cancer research is to test cancer tissue at the molecular level and make therapeutic predictions. Personalized medicine is a rapidly advancing aspect of health care that is based on each person's unique clinical, genetic, genomic and environmental information. It depends on providing a comprehensive understanding of personalized medicine from scientific discovery at the laboratory bench to the implementation of these novel pathways of understanding human biology at the bedside. One of the most widely used molecular profiling services with the most accepted methods is Caris Target Now. The goal of Target Now is to identify clinically relevant and patient specific biomarkers from the patients' tumor and help inform more effective and targeted treatment options. A variety of tests are performed on each tumor sample including immunohistochemistry, fluorescent in situ hybridization, microarray analysis and DNA sequencing. The profiled biomarkers are then reported out with drug associations. In a pilot study, treatment recommended by Target Now molecular profiling has been shown to increase progression free survival among some patients. Caris Target Now combines comprehensive molecular pathology and tumor profiling with an exhaustive evidence-based review of the latest clinical literature on biomarkers and their correlation to potential drug response. This provides treating physicians with the information needed to personalize cancer treatment. Some of the Target Now tests performed on common tumor types and their association with therapy will be discussed in detail.

### Biography

Gargi Basu had completed her Ph.D from All India Institute of Medical Sciences in 1999 and then joined Mayo Clinic for postdoctoral studies. She is currently working at Caris Life Sciences in the Biomarker Evidence Team as a scientist. She has published over 25 papers in reputed journals and her work has appeared in Dr. Robert Weinberg's book on "The Biology of Cancer" and also on the cover of AACR journal. Her work on breast cancer has been featured on Breast Cancer Net News Release and on AACR Press Release.