Protein-based biomarker analysis has become one of the most popular researched areas, especially in cancer research. In recent years, researchers have focused on identifying suitable biomarkers to increase the chance of cure for different types of cancer by detecting and screening. It is well known that cancer is a multifactorial disease that occurs from change of genetic and protein post-transcriptional steps. These changes result in alterations of the levels of proteins and their functions and distributions in cells and tissues. Tumor biomarkers can be molecules, metabolites, or proteins that are produced by the body in response to a tumor. The proteins are used to measure and evaluate the detection and screening of different types of cancer. Their levels are altered quantitatively and/or qualitatively in pre-cancerous or cancerous conditions. Even though, many of prognostic cancer biomarkers have been discovered, few of them can be used as a diagnostic biomarker clinically for early detection: PSA is used for early detection of prostate cancer, CEA is used for colorectal cancer, CA-125 is used for ovarian cancer, and AFP is used for liver tumors. Consequently, proteomic approaches for the discovery of protein tumor biomarkers will likely provide the clinical tumor biomarkers that will be used for early detection of cancer, thus reducing suffering and killing cancer in the following years.

Biography
Farideh Ghazi has completed her PhD at University of Essex and is the Head of department of Genetics and Molecular Biology at Iran University of Medical Sciences. She has published more than 25 papers in reputed journals.

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