CE&B ROUNDS
Presents

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MicroRNAs as long-term biomarkers of breast cancer risk and prognosis

MicroRNAs (miRNAs), as modulators of gene expression, have been implicated in the regulation of key metabolic, inflammatory and cancer pathways, hence they might be considered both predictors and players of neoplastic development. The presentation focuses on results derived from the first prospective cohort study conducted on microRNAs and cancer risk with a follow-up of 20 years. The study results have been extensively validated in publicly available breast cancer datasets, evaluated their functional aspects in in-vitro models and tested in their prognostic potential in a different large prospective cohort of breast cancer patients.

Over the past twenty years, much of Dr. Muti’s research has focused on epidemiological methods, particularly on the use of biomarkers in population-based studies and cancer and molecular epidemiology. She has investigated methodological questions related to the application of biomarkers in epidemiology of chronic diseases, conducted transitional studies and explored sources of variation in biomarkers.

Dr. Muti’s research has directly contributed to identifying metabolism as a key factor in the development and possible prevention of cancer. In the last years Dr. Muti has devoted most of her scientific attention to cancer prevention, and in particular on cancer chemoprevention.