

Guest Lecture

@ St. John's Research Institute



St. John's National Academy
of Health Sciences

"Clinical Applications of Liquid Biopsies in Gastrointestinal Malignancies"

Venue: Ground Floor Conference Hall,
SJRI Admin Block

Date: 25th April, 2019 (Thursday)
3:00 PM to 4:00 PM



Dr. Aparna Parikh, MD

Gastrointestinal Oncologist

Tucker Gosnell Center for Gastrointestinal Cancers

Henri and Belinda Termeer Center for Targeted Therapies

Massachusetts General Hospital

Faculty, Harvard Medical School

About the Speaker :

Dr. Aparna Parikh is an oncologist at the MGH in the Tucker Gosnell Center for Gastrointestinal Cancer and the Termeer Center for Targeted Therapies and faculty at Harvard Medical School. There she leads the clinical efforts of the liquid biopsy program within Gastrointestinal Cancer Center that is a cornerstone of the GI program. The team is using liquid biopsies as a platform for understanding heterogeneous resistance mechanisms to targeted therapy and immunotherapy, tracking response to chemotherapy, targeted therapies and immunotherapy and in minimal residual disease after surgery. This work has led to several international talks as well as being the PI of a large, multi-institutional Stand Up 2 Cancer 400 patient ctDNA guided adjuvant colorectal cancer trial. In terms of developmental therapeutics, she leads the clinical research in the non hepatobiliary malignancies space. Her focus on colorectal and pancreatic cancer with the goal of finding ways to enhance the efficacy of immunotherapy and is also the immunotherapy expert in the GI group and sits on the *Severe Immunotherapy Toxicity Service* Steering Committee. She is the PI of 10 clinical trials including several investigator initiated studies.

About the Lecture:

Analysis of circulating tumor DNA (ctDNA) is emerging as a transformative technology in the field of oncology. ctDNA is shed into the bloodstream by tumor cells throughout the body and can be detected in cancer patients amidst a background of normal cell-free DNA (cfDNA) shed into the bloodstream by normal cells. Prior studies have suggested that ctDNA levels mirror overall disease burden and fluctuate with tumor response and disease progression, and that detection of ctDNA can indicate the presence of subclinical disease. Moreover, because ctDNA analysis requires only a standard, non-invasive blood draw, it can be performed serially throughout treatment, and thus offers the potential for several important clinical applications. There are several application of ctDNA including looking at resistance to target therapy, real-time monitoring of response to systemic therapy and monitoring of residual disease. Particularly, in settings where the ability to do tissue biopsies is limited, as technologies improve, the role of liquid biopsies may become increasingly relevant. Dr. Parikh hopes to engage in a discussion how these technologies may be relevant to patient care in India.