A Summary of the Fight Colorectal Cancer Early Age Onset Working Meeting: Exploring Potential Risk Factors, Contextual Causation of Etiology of Sporadic Early Age Onset Colorectal Cancer.

**Background**

Early age onset colorectal cancer (EAO CRC) is defined as colon and rectal cancers occurring in individuals under the age of 50 years old. According to Siegel et al. “compared with adults born circa 1950, those born circa 1990 have double the risk of colon cancer (IRR = 2.40, 95% CI = 1.11 to 5.19) and quadruple the risk of rectal cancer (IRR = 4.32, 95% CI = 2.19 to 8.51).” As research pointed to an increasing trend of early onset cases, it was clear that Fight CRC had a responsibility to take action.

Based on recommendations from the 2017 strategy session convened by the National Colorectal Cancer Roundtable investigating EAO CRC, which focused on next steps in early age onset initiatives, Fight CRC convened over 45 multi-disciplinary experts and four patient advocates in Denver, CO to align research priorities in exploring the causation and etiology of sporadic EAO CRC on February 1st, 2019. Experts who attended included epidemiologists, biostatisticians, oncologists, and researchers from the United States, Spain, the UK, and the Netherlands.

The four objectives of the meeting included:

- Determine the prioritized risk factors to be studied in EAO CRC
- Determine the means to study these priorities with existing studies and/or data repositories
- Determine the means to study priorities with new studies
- Understand the perspectives of policy makers and funders on the conclusions
**Early Age Onset Meeting Summary**

**Risk Factors**

Five major themes arose out of the prioritized risk factors to study across the groups in various combinations which included:

- Diet in childhood
- Obesity in childhood
- The microbiome
- Antibiotic use in childhood
- Gene-environment interactions

The major outcomes to be studied included the presence of adenomas and the incidence of developing colorectal cancer.

**Next Steps**

In order to continue the momentum of the Fight CRC EAO CRC working group, attendees indicated the need to publish findings from the meeting in a peer-reviewed journal, to continue the conversation by formalizing quarterly and yearly work group meetings, to seek funding for novel case control studies, collaborate with the National Cancer Institute (NCI) to inform policy and funding in this area, and work with the NCI and American Cancer Society (ACS) to identify future areas of research.

Fight CRC is positioned to bring together committed partners at all levels, integrating the patient voice, and addressing future research needs as prevention and detection of colorectal cancer in young adults is vital. Currently, a manuscript outlining the findings and major research priority areas have been accepted for publication into Gastro, thanks to the collaborative efforts of Fight CRC and the EAO working group members.