Analysis of blood immune biomarkers and fecal microbiome in subjects with and without malignant solid tumors: report from a feasibility study

Haoran Gao², Devansh Acharya¹,², Eliot N. Haddad³, Sarah S. Comstock³, Rick Jorgensen², Muhammad Hamdan¹, Hussein Al-Ahmad¹, Brittani Thomas¹, Ushasree Chamarthy¹, Venu Gangur², Gordan Srkalovic¹*

¹Herbert-Herman Cancer Center, E W Sparrow Hospital, Lansing, MI 48912, United States
²Food Allergy & Immunology Laboratory, Department of Food Science and Human Nutrition, Michigan State University, East Lansing, MI 48824, United States
³Microbiome Laboratory, Department Food Science and Human Nutrition, Michigan State University, East Lansing, MI 48824, United States

*Corresponding Author: Gordan Srkalovic, Herbert-Herman Cancer Center, E W Sparrow Hospital, Lansing, MI 48912, United States. E-mail: Gordan.Srkalovic@Sparrow.org. https://orcid.org/0000-0003-3519-04090
Figure S1. Analysis of immune biomarkers in subjects without malignant tumors (healthy) vs. existing cancer patients on immunotherapy. A. Plot of PC1 and PC2 values of healthy (H) and existing patients treated with immunotherapy (E). B.
Heatmap of 99 biomarkers in healthy (H) and existing patients treated with immunotherapy (E). C. Volcano Plot comparing fold change and p-values of 99 biomarkers healthy (H) and existing patients treated with immunotherapy (E). Each point represents a biomarker. D. Boxplot of NAP-2 in healthy (H) and existing patients treated with immunotherapy (E).