696 LONG-TERM SURVIVAL OF PATIENTS WITH NON-SMALL CELL LUNG CANCER (NSCLC) STRATIFIED BY A PROTEOMIC TEST: A SUB-ANALYSIS

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Background A proteomic Host Immune Classifier (HIC) was developed that identifies chronic inflammatory disease state for patients diagnosed with NSCLC. The test stratifies patients into two groups, HIC-H and HIC-C and helps evaluate patient prognosis and response to treatment.

Methods This sub-analysis aimed to assess long-term overall survival (OS) data of patients with NSCLC whose tumors are EGFR wild-type or who have unknown EGFR mutational status and were tested with the HIC at the CHRISTUS St. Frances Cabrini Cancer Center (NCT03289780).

Results A total of 155 patients received HIC testing at the CHRISTUS St. Frances Cabrini Cancer Center as part of NCT03289780 during the time period. No significant differences were found with respect to age, gender, smoking status, ECOG performance status, NSCLC stage, histology, or PD-L1 categories. Median OS across all patients was 12.7 months (95% confidence interval [CI] 9.7–17.3 months [mo]) while median OS between HIC-C and HIC-H patients was significantly different (3.7 mo [95% CI 1.7–12.8] vs 15.4 mo [95% CI 12.4–26.2], respectively). Twenty-four month median OS in the HIC-C patients was 13% while median OS in the HIC-H was 30%. Median OS was significantly different in HIC-C and HIC-H patients when assessing advanced stage (stage IIIB/IV) patients (2.5 mo [95% CI 1.6–12.8] vs 13.2 mo [95% CI 11.2–17.8, respectively]). When assessing OS by therapies, median OS was similar in HIC-C and HIC-H patients (median 12.8 vs 15.3 mo, respectively) for ICI + combination therapy in the first line.

Conclusions OS differed significantly in HIC-C vs HIC-H patients in the overall population and amongst advanced stage patients. Results of the HIC test may help determine patient prognosis and appropriate personalized regimens. Future analyses of the larger trial population across multiple sites will provide further information as to the long-term survival of patients tested with the HIC and the treatment patterns by physicians after receiving test results.

Trial Registration INSIGHT (NCT03289780) is an ongoing registry study involving over 30 academic and community oncology practices across the United States of America.

Ethics Approval INSIGHT (NCT03289780) is an ongoing registry study involving over 30 academic and community oncology practices across the United States of America. The study has been reviewed and approved by an accredited central IRB (Advarra; formerly Quorum), as well as multiple local institutional review boards and conducted in accordance with the International Conference on Harmonization guidelines for Good Clinical Practice and the Declaration of Helsinki. All patients have provided written informed consent for participation.

Consent Written informed consent was obtained from the patient for publication of this abstract and any accompanying images. A copy of the written consent is available for review by the Editor of this journal.

http://dx.doi.org/10.1136/jitc-2023-SITC2023.0696