Abstract #1416; PD6-03

• 5,203 tested for PD-L1 status (354 PD-L1+, 6.8%, CI 6.2-7.5%).

A total of 9,627 BC cases were queried from Caris Life Sciences TML (tumor mutation load) was calculated as a total number of

• MSI was calculated by comparing repeat-insertions or deletions to the hg19 reference genome.

• PD-L1+ breast cancers.

- Pembrolizumab, a monoclonal antibody against programmed death 1 (PD-1) receptor and one of several ICB agents in

- Recent data indicate a promising response to immune checkpoint inhibitors (ICB). Pembrolizumab, a monoclonal antibody against programmed death 1 (PD-1) receptor and one of several ICB agents in: PD-L1-positivity, MSI-H, and PD-L1+ breast cancers. Among 1,952 cases of breast cancer tested, a high PD-L1 was found in 120 cases (6.1%), MSI status was present in 12 cases (0.6%), and TML-H in 72 cases (3.7%).

- The majority of PD-L1-positive, MSI-H, and PD-L1+ breast cancers. The Co-occurrence of PD-L1, MSI-H, and PD-L1+ breast cancers shows results of the 1,952 cohort. Table 2A – Total number and percent of PD-L1-positive, MSI-H, and TML-H breast cancer cases. Among 1,952 cases of breast cancer tested, a high PD-L1 was found in 120 cases (6.1%), MSI status was present in 12 cases (0.6%), and TML-H in 72 cases (3.7%).

Conclusion: • PD-L1-positivity, MSI-H, or TML-H was present in 189 cases (9.7%). At least one of the three aforementioned biomarker results was present in 7.3% of ER/PR+ cases, 10% of HER2+, and 13% of TNBC. The majority of this was PD-L1+ and TML-H (6.1% and 3.7%), while low MSI-H distribution (0.6%).

- We observed statistically significant differences in PD-L1 and TML distributions based on molecular subtype, specimen site, distant metastatic site, and age. This was not observed with MSI.

- No differences in distribution were observed based on AR status in TNBC cases.

- PD-L1 distribution was higher in TNBC cases, while TML was higher in ER/PR+ cases.

- TML-H in lobular breast cancer (13.7%) was noted, warranting further research.

- Future research is needed to show the clinical utility of these biomarkers in response to ICB and should be considered in designing prospective clinical trials.

References:


