**Supplementary Table 1. Baseline Assessment between target US population and ORIENT-11 SPP and PPP arms before and after Adjustmenta**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Before**  **Adjustment\*** | | | | | **After Adjustment** | | | | | | | | | | | |
| **IPW** | | | | | | | **EB** | | | | |
| **Covariates** | **Target US Population (N=366)** | **SPP**  **(N=266)** | **SMD** | **PPP**  **(N=131)** | **SMD** | **Target US Population (N=366)** | | **SPP**  **(N=362)** | **SMD** | **PPP**  **(N=352)** | **SMD** | **Target US Population (N=366)** | | **SPP**  **(N=366)** | **SMD** | **PPP**  **(N=366)** | **SMD** |
| **Ageb, mean, year (SD)** | 63  (7.9) | 60  (8.4) | 0.38 | 60  (8.7) | 0.41 | 63  (7.9) | | 63  (7.1) | 0.04 | 62  (7.3) | 0.08 | 63  (7.9) | | 63  (7.2) | 0.00 | 63  (7.0) | 0.00 |
| **Gender, % (n)** |  |  |  |  | |  | | | | | |  | | | | | |
| Male | 78 (286) | 77 (204) | 0.03 | 76 (99) | 0.06 | 78 (286) | 77 (280) | | 0.02 | 77 (270) | 0.04 | 78 (286) | | 78 (286) | 0.00 | 78 (286) | 0.00 |
| Female | 22 (80) | 23 (62) | 24 (32) | 22 (80) | 23 (83) | | 23 (83) | 22 (80) | | 22 (80) | 22 (80) |
| **Body mass index, % (n)** |  | | | | |  | | | | | |  | | | | | |
| <25 kg/m2 | 55 (200) | 77 (204) | 0.48 | 68 (89) | 0.28 | 55 (200) | 52 (190) | | 0.04 | 51 (180) | 0.07 | 55 (200) | | 55 (200) | 0.00 | 55 (200) | 0.00 |
| ≥25 kg/m2 | 45 (166) | 23 (62) | 32 (42) | 45 (166) | 48 (172) | | 49 (173) | 45 (166) | | 45 (166) | 45 (166) |
| **Smoking status, % (n)** |  | | | | |  | | | | | |  | | | | | |
| Never | 15 (56) | 36 (95) | 0.48 | 34 (44) | 0.44 | 15 (56) | 16 (57) | | 0.01 | 20 (71) | 0.13 | 15 (56) | | 15 (56) | 0.00 | 15 (56) | 0.00 |
| Current or former | 85 (310) | 64 (171) | 66 (87) | 85 (310) | 84 (305) | | 80 (281) | 85 (310) | | 85 (310) | 85 (310) |
| **Duration of advanced disease, mean, monthc (SD)** | 1.6  (3.3) | 1.5 (2.3) | 0.05 | 1.7 (2.7) | 0.02 | 1.6  (3.3) | 1.6  (2.1) | | 0.01 | 2.20  (3.7) | 0.17 | 1.6  (3.3) | | 1.6  (2.2) | 0.00 | 1.6  (2.7) | 0.00 |
| **ECOG PS, % (n)** |  | | | | |  | | | | | |  | | | | | |
| 0 | 44 (161) | 29 (76) | 0.32 | 26 (34) | 0.39 | 44 (161) | 57 (208) | | 0.03 | 54 (190) | 0.04 | 44 (161) | | 56 (205) | 0.00 | 56 (205) | 0.00 |
| 1 | 56 (205) | 71 (190) | 74 (97) | 56 (205) | 43 (154) | | 46 (163) | 56 (205) | | 44 (161) | 44 (161) |
| **PD-L1, TPS, % (n)** |  | | | | |  | | | | | |  | | | | | |
| <1% | 35 (127) | 32 (85) | 0.06 | 34 (44) | 0.02 | 35 (127) | 31 (114) | | 0.07 | 34 (120) | 0.01 | 35 (127) | | 35 (127) | 0.00 | 35 (127) | 0.00 |
| ≥1% | 65 (239) | 68 (181) | 66 (87) | 65 (239) | 69 (248) | | 66 (232) | 65 (239) | | 65 (239) | 65 (239) |

**Abbreviations:** BMI, body mass index; ECOG PS, Eastern Cooperative Oncology Group performance status; EB, entropy balancing; IPW, inverse probability weighting; N, number of patients in population; n, number of patients in the specified category; PPP, placebo+pemetrexed+platinum; PD-L1, programmed death-ligand 1; SD, standard deviation; SPP, sintilimab+pemetrexed+platinum; SMD, standardized mean difference between SPP and **Target US Population or between PPP and Target US Population**

\* Data from Yang et al. 2020

aAdjustment refers to IPW (primary analysis) and EB (sensitivity analysis)

b Age was recorded at first line start date

c Duration of disease was reported from advanced diagnosis to first line start date