**Supplementary Table S2.** Clinical activity by PD-L1 status

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | **Arm A**  **2L D+T** | | | **Arm B**  **2L D** | | | **Arm C**  **2L T** | | **Arm D**  **3L D+T** | | | **Arm E**  **2L/3L D+T IFN-γ+** | | |
| **PD-L1**  **High**  **(*n* = 14)** | **PD-L1 Low/Neg**  **(*n* = 10)** | **PD-L1**  **High**  **(*n* = 9)** | | **PD-L1 Low/Neg**  **(*n* = 11)** | **PD-L1**  **High**  **(*n* = 5)** | | **PD-L1 Low/Neg**  **(*n* = 4)** | | **PD-L1**  **High**  **(*n* = 5)** | **PD-L1 Low/Neg**  **(*n* = 15)** | | **PD-L1**  **High**  **(*n* = 9)** | **PD-L1 Low/Neg**  **(*n* = 3)** |
| ORR, *n* (%)  [95% CI]  CR  PR  SD  PD  NE | 2 (14.3)  [1.8–42.8]  0  2 (14.3)  0  8 (57.1)  4 (28.6) | 0  [0–30.8]  0  0  5 (50.0)  5 (50.0)  0 | 0  [0–33.6]  0  0  0  5 (55.6)  4 (44.4) | | 0  [0–28.5]  0  0  2 (18.2)  7 (63.6)  2 (18.2) | 0  [0–45.9]  0  0  1 (16.7)  4 (66.7)  1 (16.7) | | 1 (25.0)  [0.6–80.6] 0  1 (25.0)  1 (25.0)  0  2 (50.0) | | 0  [0–52.2]  0  0  0  3 (60.0)  2 (40.0) | 0  [0–21.8]  0  0  6 (40.0)  7 (46.7)  2 (13.3) | | 3 (33.3)  [7.5–70.1]  1 (11.1)  2 (22.2)  0  4 (44.4)  2 (22.2) | 0  [0.0–70.8]  0  0  0  3 (100)  0 |
| Median PFS, months (95% CI) | 1.7  (1.6–5.4) | 2.8  (1.2–3.6) | 1.7  (0.8–1.8) | | 1.6  (0.9–3.4) | 1.7  (0.8–5.3) | | 5.4  (0.8–7.7) | | 1.5  (1.0–1.8) | 2.1  (1.6–3.6) | | 1.8  (1.0–4.9) | 1.8  (1.8–1.9) |
| PFS-6, % (95% CI) | 12.7  (0.9–40.3) | 0  (NA–NA) | 0  (0-0) | | 0  (NA–NA) | 0  (0-0) | | 50.0  (5.8–84.5) | | 0  (0–0) | 16.7  (2.9–40.2) | | 0  (NA–NA) | 0  (0–0) |
| Median OS, months (95% CI) | 10.6  (5.4–15.4) | 8.9  (2.0–12.6) | 2.9  (0.8–7.0) | | 3.6  (1.2–4.4) | 10.8  (3.1–NA) | | 5.6  (0.8–10.5) | | 4.8  (1.0–21.0) | 10.6  (2.3–12.8) | | 7.0  (1.4–NA) | NA  (2.4–NA) |
| OS-12, % (95% CI) | 42.9  (17.7–66.0) | 30.0  (7.1–57.8) | 0  (0–0) | | 9.1  (0.5–33.3) | 50  (5.8–84.5) | | 0  (0–0) | | 26.7  (1.0–68.6) | 29.6  (9.3–53.6) | | 0  (NA–NA) | 0  (NA–NA) |
| OS-24, % (95% CI) | 21.4  (5.2–44.8) | 20.0  (3.1–47.5) | 0  (0–0) | | 0  (0–0) | 25  (0.9–66.5) | | 0  (0–0) | | 0  (0–0) | 7.4  (0.5–28.3) | | 0  (NA–NA) | 0  (NA–NA) |

2L = received treatment in the second-line setting; 3L = received treatment in the third-line setting; CI = confidence interval; D = durvalumab; NA = not applicable; Neg = negative; ORR = objective response rate; OS = overall survival; PD-L1 = programmed cell death ligand 1; PFS = progression-free survival; T = tremelimumab.

**Supplementary Table S2.** Clinical activity by PD-L1 status

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | **Arm A**  **2L D+T** | | | **Arm B**  **2L D** | | | **Arm C**  **2L T** | | **Arm D**  **3L D+T** | | | **Arm E**  **2L/3L D+T IFN-γ+** | | |
| **PD-L1**  **High**  **(*n* = 14)** | **PD-L1 Low/Neg**  **(*n* = 10)** | **PD-L1**  **High**  **(*n* = 9)** | | **PD-L1 Low/Neg**  **(*n* = 11)** | **PD-L1**  **High**  **(*n* = 5)** | | **PD-L1 Low/Neg**  **(*n* = 4)** | | **PD-L1**  **High**  **(*n* = 5)** | **PD-L1 Low/Neg**  **(*n* = 15)** | | **PD-L1**  **High**  **(*n* = 9)** | **PD-L1 Low/Neg**  **(*n* = 3)** |
| ORR, *n* (%)  [95% CI]  CR  PR  SD  PD  NE | 2 (14.3)  [1.8–42.8]  0  2 (14.3)  0  8 (57.1)  4 (28.6) | 0  [0–30.8]  0  0  5 (50.0)  5 (50.0)  0 | 0  [0–33.6]  0  0  0  5 (55.6)  4 (44.4) | | 0  [0–28.5]  0  0  2 (18.2)  7 (63.6)  2 (18.2) | 0  [0–45.9]  0  0  1 (16.7)  4 (66.7)  1 (16.7) | | 1 (25.0)  [0.6–80.6] 0  1 (25.0)  1 (25.0)  0  2 (50.0) | | 0  [0–52.2]  0  0  0  3 (60.0)  2 (40.0) | 0  [0–21.8]  0  0  6 (40.0)  7 (46.7)  2 (13.3) | | 3 (33.3)  [7.5–70.1]  1 (11.1)  2 (22.2)  0  4 (44.4)  2 (22.2) | 0  [0.0–70.8]  0  0  0  3 (100)  0 |
| Median PFS, months (95% CI) | 1.7  (1.6–5.4) | 2.8  (1.2–3.6) | 1.7  (0.8–1.8) | | 1.6  (0.9–3.4) | 1.7  (0.8–5.3) | | 5.4  (0.8–7.7) | | 1.5  (1.0–1.8) | 2.1  (1.6–3.6) | | 1.8  (1.0–4.9) | 1.8  (1.8–1.9) |
| PFS-6, % (95% CI) | 12.7  (0.9–40.3) | 0  (NA–NA) | 0  (0-0) | | 0  (NA–NA) | 0  (0-0) | | 50.0  (5.8–84.5) | | 0  (0–0) | 16.7  (2.9–40.2) | | 0  (NA–NA) | 0  (0–0) |
| Median OS, months (95% CI) | 10.6  (5.4–15.4) | 8.9  (2.0–12.6) | 2.9  (0.8–7.0) | | 3.6  (1.2–4.4) | 10.8  (3.1–NA) | | 5.6  (0.8–10.5) | | 4.8  (1.0–21.0) | 10.6  (2.3–12.8) | | 7.0  (1.4–NA) | NA  (2.4–NA) |
| OS-12, % (95% CI) | 42.9  (17.7–66.0) | 30.0  (7.1–57.8) | 0  (0–0) | | 9.1  (0.5–33.3) | 50  (5.8–84.5) | | 0  (0–0) | | 26.7  (1.0–68.6) | 29.6  (9.3–53.6) | | 0  (NA–NA) | 0  (NA–NA) |
| OS-24, % (95% CI) | 21.4  (5.2–44.8) | 20.0  (3.1–47.5) | 0  (0–0) | | 0  (0–0) | 25  (0.9–66.5) | | 0  (0–0) | | 0  (0–0) | 7.4  (0.5–28.3) | | 0  (NA–NA) | 0  (NA–NA) |

2L = received treatment in the second-line setting; 3L = received treatment in the third-line setting; CI = confidence interval; D = durvalumab; NA = not applicable; Neg = negative; ORR = objective response rate; OS = overall survival; PD-L1 = programmed cell death ligand 1; PFS = progression-free survival; T = tremelimumab.