**Supplementary material nr. 3: Response and progression-free survival**

We here present the results of the response evaluation including the disease control rates of our first line and second line cohort. Patients who deceased before radiologic evaluation were included as having progressive disease when they were considered dying due to cancer progression by a clinician, even without radiologic confirmation.

We analyzed also PFS for both cohorts and present results of subgroups of patients who had significant differences in median PFS (MPFS).

In our first line cohort, MPFS was significant longer for patients in stage III vs stage IV and in patients without vs patients with brain metastases. No differences were found between patients in ECOG PS 0-1 vs ECOG PS 2-3, between patients with vs patients without liver and/or bone metastases, between patients in different age groups (<65, 65-75, >75 years), between patients with non-squamous vs patients with squamous histologies and between men and women.

In our second line cohort MPFS was significant longer in patients with ECOG PS 0-1 vs ECOG PS 2-3 and for patients without vs patients with liver and/or bone metastases. No significant differences were found between patients with or without brain metastases, between patients in different age groups (<65, 65-75, >75 years), between patients with PD-L1 TPS 1-49% vs ≥50%, between patients with non-squamous vs squamous histologies and between men and women.

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| --- | --- | --- |
| **Best overall response**  **First line cohort** | | |
|  |  | N |
|  | Complete response | 1 (2%) |
|  | Partial response | 27 (52%) |
|  | Stable disease | 2 (4%) |
|  | Progression | 21 (40%) |
|  | Missing | 1 (2%) |
|  |  |  |
|  |  |  |
|  | **Disease control rate** | **58%** |

|  |  |  |
| --- | --- | --- |
| **Best overall response**  **Second line cohort** | | |
|  |  | N |
|  | Complete response | 0 |
|  | Partial response | 23 (22%) |
|  | Stable disease | 20 (19%) |
|  | Progression | 61 (58%) |
|  | Missing | 1 (1%) |
|  |  |  |
|  |  |  |
|  | **Disease control rate** | **41%** |

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| --- | --- | --- | --- | --- |
| **Progression-free survival**  **First line cohort** |  | Median PFS1  (95% CI) | Log Rank | Breslow |
|  |  |  |  |  |
| All patients |  | 7.0 (0.0; 14.1) |  |  |
| Stage of disease | III | Not reached |  |  |
|  | IV | 6.0 (2.3; 9.7) | 0.003 | 0.009 |
|  |  |  |  |  |
| Brain metastases | Yes | 3.0 (1.8; 4.1) |  |  |
|  | No | 14.0 (3.5; 24.5) | 0.003 | 0.012 |
|  |  |  |  |  |
| 1Months |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Progression-free survival**  **Second line cohort** |  | Median PFS1  (95% CI) | Log  Rank | Breslow |
|  |  |  |  |  |
| All patients |  | 2.0 (1.5; 2.5) |  |  |
| Performance status | ECOG PS 0-1 | 3.0 (1.3; 4.7) |  |  |
|  | ECOG PS 2-3 | 2.0 (1.7; 2.3) | <0.001 | < 0.001 |
| Liver and/or bone metastases | Yes | 2.0 (1.6; 2.3) |  |  |
|  | No | 3.0 (1.9; 4.0) | 0.009 | 0.088 |
|  |  |  |  |  |
| 1Months |  |  |  |  |