**SUPPLEMENTAL TABLES**

**SUPPLEMENTAL TABLE 1: PATIENT CHARACTERISTICS AT DIAGNOSIS AND AT THE START OF NIVOLUMAB**

|  |  |  |
| --- | --- | --- |
|  |  | **Nivolumab****(n=89)** |
| AT INITIAL DIAGNOSIS |
| Gender | Male | 64/89 (71.9%) |
| M1 (synchronous metastases) | 33/89 (37.0%) |
| Fuhrman | Grade 1-3 | 47/85 (55.3%) |
| Grade 4 | 38/85 (44.7%) |
| Sarcomatoid dedifferentiation (compared to tumor volume) | 0% | 67/81 (82.7%) |
| 1-24% | 11/81 (13.6%) |
| 25% or more | 1/81 (1.2%) |
| AT START OF SYSTEMIC THERAPY |
| Karnofsky <80 | 32/89 (37.2%) |
| Neutrophils >7.800/mm³ | 7/89 (7.9%) |
| Platelets >450.000/mm³ | 6/89 (6.7%) |
| Hemoglobin low (<12 g/dl (women) or <14 g/dl (men)) | 61/89 (68.5%) |
| LDH >1.5\*ULN | 3/88 (34.1%) |
| Corrected Calcium >10.2 mg/dl  | 7/84 (8.3%) |
| Time from nephrectomy to systemic treatment <12 months | 46/89 (51.7%) |
| Cytokines before sunitinib/pazopanib | NA |
| Site of metastasis | Lung | 55/89 (61.8%) |
| Adenopathies | 45/89 (50.6%) |
| Liver metastases | 27/89 (30.3%) |
| Bone metastases | 43/89 (48.3%) |
| Brain metastases | 11/89 (12.4%) |
| IMDC | Favorable | 10/89 (11.2%) |
| Intermediate | 57/89 (64.1%) |
| Poor | 22/89 (24.7%) |
| Treatment line | First-line | 0% |
| Second-line | 59/89 (66%) |
| Third-line | 23/89 (26%) |
| Fourth-line | 5/89 (6%) |
| Fifth-line | 2/89 (2%) |

**SUPPLEMENTAL TABLE 2: RESPONSE RATES, MEDIAN PROGRESSION-FREE SURVIVAL AND MEDIAN OVERALL SURVIVAL DEPENDING ON rs307826 AFTER START OF NIVOLUMAB**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **AA** | **AG+GG** | **p** |
| **NIVOLUMAB (n=89)** |
| PD | 30/68 (44%) | 8/16 (50%) | 0.78 |
| SD | 23/68 (34%) | 7/16 (44%) | 0.56 |
| PR | 15/68 (22%) | 1/16 (6%) | 0.29 |
| mPFS | 4 months | 3 months | 0.96 |
| mOS | 19 months | 28 months | 0.76 |

**SUPPLEMENTAL FIGURES**

**SUPPLEMENTAL FIGURE 1:** **KAPLAN-MEIER ESTIMATES FOR PROGRESSION-FREE SURVIVAL AND OVERALL SURVIVAL IN PATIENTS TREATED WITH FIRST-LINE SUNITINIB: IMPACT OF rs307826 IN EACH IMDC RISK GROUP (PANEL A AND B) AND IN THE DIFFERENT MOLECULAR SUBGROUPS (PANEL C AND D).**



**SUPPLEMENTAL FIGURE 2: KAPLAN-MEIER ESTIMATES FOR PROGRESSION-FREE SURVIVAL AND OVERALL SURVIVAL IN PATIENTS TREATED WITH SECOND OR LATER LINE NIVOLUMAB.**

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