**Table 1. Characteristics of the patients with dedifferentiated chondrosarcoma**

|  |  |
| --- | --- |
| **Parameter** | **Number of cases** |
| Gender |  |
| Male | 18 |
| Female | 24 |
| Tumor differentiation grade |  |
| G1 | 22 |
| G1–2 | 15 |
| G3 | 5 |
| Stage of the disease |  |
| II | 21 |
| III–IV | 21 |
| The dedifferentiated component at diagnosis |  |
| Identified | 16 |
| Not identified | 26 |

**Table 2. The association of PD-L1 expression with clinical and morphological characteristics of the patients with dedifferentiated chondrosarcoma**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Characteristics, N** | **The dedifferentiated tumor component** |  | **The chondroid tumor component** |  | **Both components present in the sample** |
| **PD-L1 +** | **PD-L1 -** | **p** | **PD-L1 +** | **PD-L1 -** | **p** | **PD-L1 +** | **PD-L1 -** | **p** |
| Age |  |  |  |  |  |  |  |  |  |
| < 65 years | 6 | 17 | 0.058 | 5 | 18 | 0.504 | 2 | 21 | 0.214 |
| > 65 years | 11 | 8 |  | 6 | 13 |  | 5 | 14 |  |
| Gender |  |  |  |  |  |  |  |  |  |
| Male | 7 | 11 | > 0.999 | 5 | 13 | > 0.999 | 3 | 15 | > 0.999 |
| Female | 10 | 14 |  | 6 | 18 |  | 4 | 20 |  |
| Histological type |  |  |  |  |  |  |  |  |  |
| Undifferentiated sarcoma | 13 | 20 | 0.639 | 8 | 25 | 0.409 | 5 | 28 | 0.603 |
| Osteosarcoma | 2 | 4 |  | 3 | 3 |  | 2 | 4 |  |
| Rhabdomyosarcoma | 1 | 1 |  | 0 | 2 |  | 0 | 2 |  |
| Angiosarcoma | 1 | 0 |  | 0 | 1 |  | 0 | 1 |  |
| Tumor differentiation grade |  |  |  |  |  |  |  |  |  |
| G1 | 9 | 13 | 0.574 | 5 | 17 | 0.729 | 5 | 17 | 0.427 |
| G1–2 | 7 | 8 |  | 4 | 11 |  | 2 | 13 |  |
| G3 | 1 | 4 |  | 2 | 3 |  | 0 | 5 |  |
| Stage |  |  |  |  |  |  |  |  |  |
| II | 7 | 14 | 0.530 | 5 | 16 | > 0.999 | 2 | 19 | 0.409 |
| III–IV | 10 | 11 |  | 6 | 15 |  | 5 | 16 |  |
| Dedifferentiated component at diagnosis |  |  |  |  |  |  |  |  |  |
| Yes | 6 | 10 | > 0.999 | 7 | 9 | 0.070 | 3 | 13 | > 0.999 |
| No | 11 | 15 |  | 4 | 22 |  | 4 | 22 |  |

N, number of cases; PD-L1 +, expression of PD-L1 present; PD-L1 -, expression of PD-L1 absent

**Table 3. The statistical analysis of the prognostic significance of PD-L1 in dedifferentiated chondrosarcoma**

|  |  |
| --- | --- |
| **High / low PD-L1 expression** | **Univariate analysis** |
| **HR** | **95% CI** | **p** |
| Dedifferentiated component | 3.150 | 0.6230–15.93 | 0.096 |
| Chondroid component | 1.503 | 0.2440–9.262 | 0.6143 |
| Both components in the sample | 3.122 | 0.3023–32.25 | 0.1365 |

CI, confidence interval; HR, hazard ratio

**Table 4. The association of the PU.1+, CD4+, CD8+ , and CD20+ immune cell counts in the patients with dedifferentiated chondrosarcoma depending on their clinical and morphological characteristics**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | **PU.1** |  | **CD4** |  | **CD8** |  | **CD20** |
| **Mean ± SD, %** | **p** | **Mean ± SD, %** | **p** | **Mean ± SD, %** | **p** | **Mean ± SD, %** | **p** |
| Age |  |  |  |  |  |  |  |  |
| < 65 years | 16.8 ± 12.2 | 0.790 | 3.7 ± 3.7 | 0.642 | 4.4 ± 2.7 | 0.451 | 6.6 ± 4.3 | 0.764 |
| > 65 years | 17.9 ± 1 3.9 |  | 4.3 ± 3.3 |  | 3.7 ± 2.1 |  | 7.0 ± 3.4 |  |
| Gender |  |  |  |  |  |  |  |  |
| Male | 21.1 ± 11.2 | 0.086 | 5.3 ± 3.2 | 0.059 | 4.1 ± 2.2 | 0.991 | 7.6 ± 4.1 | 0.274 |
| Female | 14.1 ± 13.5 |  | 3.1 ± 3.5 |  | 4.1 ± 2.7 |  | 6.1 ± 3.5 |  |
| Histological type of the dedifferentiated component |  |  |  |  |  |  |  |  |
| Undifferentiated sarcoma | 18.9 ± 13.2 | 0.411 | 4.1 ± 3.4 | 0.893 | 3.87 ± 2.2 |  | 6.8 ± 4.0 | 0.643 |
| Osteosarcoma | 11.0 ± 8.9 |  | 3.0 ± 4.4 |  | 3.75 ± 2.5 |  | 7.5 ± 2.8 |  |
| Rhabdomyosarcoma | 5\* |  | 5.0 ± 7.1 |  | 10\* |  | 7.5 ± 3.5 |  |
| Angiosarcoma | 10\* |  | 5\* |  | – |  | 2\* |  |
| Tumor differentiation grade |  |  |  |  |  |  |  |  |
| G1 | 15.0 ± 12.7 | 0.451 | 3.7 ± 3.4 | 0.740 | 3.3 ± 2.1 | 0.110 | 6.5 ± 4.2 | 0.877 |
| G1–2 | 20.7 ± 13.1 |  | 4.2 ± 3.8 |  | 5.3 ± 2.4 |  | 7.3 ± 3.7 |  |
| G3 | 18.0 ± 13.0 |  | 5.0 ± 3.5 |  | 3.3 ± 2.8 |  | 6.6 ± 2.8 |  |
| Stage |  |  |  |  |  |  |  |  |
| II | 18.4 ± 12.1 | 0.603 | 4.9 ± 3.4 | 0.138 | 3.7 ± 2.7 | 0.443 | 8.0 ± 4.2 | 0.045 |
| III–IV | 16.2 ± 13.6 |  | 3.2 ± 3.6 |  | 4.4 ± 2.1 |  | 5.3 ± 2.7 |  |
| Dedifferentiated component at diagnosis |  |  |  |  |  |  |  |  |
| Yes | 24.6 ± 9.9 | 0.003 | 5.3 ± 3.4 | 0.069 | 4.1 ± 2.2 | 0.852 | 9.0 ± 4.4 | 0.017 |
| No | 12.7 ± 12.4 |  | 3.2 ± 3.5 |  | 4.0 ± 2.6 |  | 5.7 ± 3.1 |  |

The values are given as mean % of the cells and standard deviation (mean ± SD, %)

\* Absolute numbers