**Supplementary Table 3: Clinicopathologic characteristics**

|  |  |  |
| --- | --- | --- |
|  | N | % |
| **Age** - mean (range) | 64 (45-79) |  |
|  |  |  |
| **Gender (female)** | 22 | 49% |
|  |  |  |
| **Smoking** |  |  |
| Never smoker | 1 | 2% |
| Current/past smoker | 44 | 98% |
|  |  |  |
| **Smoking (pack years)** - mean (range) | 50 (0-150) |  |
|  |  |  |
| **Stage** |  |  |
| I | 18 | 40% |
| II-IIIA | 20 | 44% |
| IIIB/IV | 7 | 16% |
|  |  |  |
| **Surgery Type** |  |  |
| Primary lung tumor resection | 43 | 96% |
| Metastasectomy | 2 | 4% |
|  |  |  |
| **Ki67 proliferation marker** - mean (range) | 75 (30-100) |  |
|  |  |  |
| **Mitotic count per 10 HPF** - mean(range) | 68 (14-110) |  |
|  |  |  |
| **Syn, Chr, CD56 expression by IHC** |  |  |
| At least 1 marker positive | 45 | 100% |
| 2-3 markers positive | 36 | 80% |
|  |  |  |
| **ASCL1 expression by IHC**1 |  |  |
| Positive | 29 | 71% |
| Negative | 12 | 29% |

IHC results available for 41 cases (4 cases insufficient or technical failures).

HPF high power fields, Syn synaptophysin, Chr chromogranin