

**Supplementary Table 1** - Correlation between anaplasia and multinucleation.

	<b><u>Multinucleation - Positive</u></b>	<b><u>Multinucleation - Negative</u></b>
<b><u>Anaplasia – Positive</u></b>	50	14
<b><u>Anaplasia - Negative</u></b>	21	64*

\* p<0.001, calculated using Fisher's exact test.

**Supplementary Table 2** – Location and relative distribution of anaplasia and multinucleation within the tumors.

	<b>Location: Primary Tumor<sup>^</sup></b>	<b>Location: Nodal Metastases</b>	<b>Distribution: Focal</b>	<b>Distribution: Multifocal or Diffuse</b>	<b>p16 Positive*</b>
Anaplasia	54/63 (85.7%)	35/44 (79.5%)	15/63 (23.8%)	48/63 (76.2%)	51/64 (79.7%)
Multinucleation	61/70 (87.1%)	38/50 (76.0%)	29/71 (40.8%)	42/71 (59.2%)	56/71 (78.9%)

<sup>^</sup>Numerators for each result indicate the total number of cases showing the respective feature in the cited anatomic location or distribution, and denominators for each result indicate total number of cases which showed the respective features in any of the anatomic locations or distribution.

\*Defined as >50% of tumor cells staining = positive and no staining or staining of <50% of tumor cells = negative.