

**Supplemental Table 1:  
Correlation of Grade of Anaplasia and Degree of Optic Nerve Invasion in 266 Patients with Retinoblastoma**

<b><i>Frequency Row Percent</i></b>	<b>Absent Invasion</b>	<b>Pre-laminar Invasion</b>	<b>Laminar Invasion</b>	<b>Post-Laminar Invasion</b>	<b>Surgical Margin Invasion</b>	<b>TOTAL</b>
<b>Mild Anaplasia</b>	23 79.31	1 3.45	1 3.45	4 13.79	0 0.00	29
<b>Moderate Anaplasia</b>	83 48.54	50 29.24	21 12.28	13 7.60	4 2.34	171
<b>Severe Anaplasia</b>	12 18.18	15 22.73	12 18.18	19 28.79	8 12.12	66
<b>TOTAL</b>	118	66	34	36	12	266

**Fisher's Exact Test: P = 1.078E-09**

**Supplemental Table 2.**  
**Correlation of Grade of Anaplasia and Degree of Choroidal Invasion in 266 Patients with Retinoblastoma**

<b><i>Frequency Row Percent</i></b>	<b>Absent Invasion</b>	<b>Non-massive Invasion</b>	<b>Massive Invasion</b>	<b>TOTAL</b>
<b>Mild Anaplasia</b>	28 96.55	0 0.00	1 3.45	29
<b>Moderate Anaplasia</b>	145 84.80	11 6.43	15 8.77	171
<b>Severe Anaplasia</b>	28 42.42	14 21.21	24 36.36	6
<b>TOTAL</b>	201	25	40	266

**Fisher's Exact Test P = 1.788E-10**

**Supplemental Table 3.**  
**Correlation of Grade of Anaplasia and Anterior Chamber Invasion in 266 Patients with Retinoblastoma**

<b><i>Frequency Row Percent</i></b>	<b>Absent Invasion</b>	<b>Present Invasion</b>	<b>TOTAL</b>
<b>Mild Anaplasia</b>	26 89.66	3 10.34	32
<b>Moderate Anaplasia</b>	164 95.91	7 4.09	164
<b>Severe Anaplasia</b>	58 87.88	8 12.12	70
<b>TOTAL</b>	248	18	266

**Fisher's Exact Test P=0.0383**

**Supplemental Table 4.****One-Way Analysis of Variance (ANOVA) and Multiple Comparison Test (MCT) Results for Nuclear Morphometric Analysis in 47 Cases of Retinoblastoma**

<b>Feature (p value from ANOVA)</b>	<b>Significantly Different Groups (95% Confidence Interval from MCT)</b>
Area (p = 3.328163e-06)	Retinocytoma and Severe: (-543.696595, -130.284425) Mild and Moderate: (455.792538, -68.434728) Mild and Severe: (-596.197045, -215.537569)
Perimeter (p = 1.223930e-08)	Retinocytoma and Moderate: (-37.731521, -3.273227) Retinocytoma and Severe: (-52.555303, -18.604192) Mild and Moderate: (-43.287318, -11.475897) Mild and Severe: (-58.089644, -26.828318)
Eccentricity (p = 4.585668e-13)	Retinocytoma and Moderate: (-0.101353, -0.020836) Retinocytoma and Severe: (-0.173505, -0.094173) Mild and Moderate: (-0.100753, -0.026421) Mild and Severe: (-0.172855, -0.099807) Moderate and Severe: (-0.108503, -0.036985)
Circularity (p = 1.240615e-15)	Retinocytoma and Moderate: (0.019950, 0.081561) Retinocytoma and Severe: (0.089774, 0.150478) Mild and Moderate: (0.027932, 0.084811) Mild and Severe: (0.097795, 0.153690) Moderate and Severe: (0.042008, 0.096734)
Extent (p = 2.423461e-13)	Retinocytoma and Moderate: (0.002233, 0.032494) Retinocytoma and Severe: (0.039707, 0.069522) Mild and Severe: (0.035087, 0.062540) Moderate and Severe: (0.023811, 0.050690)
IntensityMean (p = 4.089759e-04)	Retinocytoma and Mild: (5.055324, 40.937481) Retinocytoma and Severe: (12.147360, 46.913736)