|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Univariate Models** | |
|  |  |
| **Risk Factors** | **Referent** | **Hazard Ratio (95% Confidence Interval)** | **P Value** |
| Age  Gender  AD Disc Center  TD Disc Center  AD nerve  TD nerve  AD retina  TD retina  AD lens  TD lens  AD fovea  TD fovea  AD apex  TD apex  AD Sclera  TD Sclera  Optic Nerve Proximity  Fovea Proximity  Radiation Side Effects (Y/N)  Hemorrhage  Edema  Vasculopathy  Papillitis  **Tumor size**  Large  Medium  Small  Baseline 20/40 or better  Diabetes  HTN  HLD  Glaucoma  Cataract  ARMD | Continuous  Female  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  ­Continuous  Continuous  Continuous  Continuous  Absent  Absent  Absent  Absent  Absent  –  Reference  Large  Large  Worse than 20/40  Absent  Absent  Absent  Absent  Absent  Absent | 1.01 (1.00 – 1.02)  1.05 (0.69 – 1.59)  1.01 (1.01 – 1.01)  1.02 (1.01 – 1.02)  1.01 (1.00 – 1.02)  1.02 (1.01 – 1.03)  1.13 (1.10 – 1.17)  1.19 (1.15 – 1.24)  1.01 (1.01 – 1.02)  1.02 (1.01 – 1.02)  1.00 (1.00 – 1.01)  1.01 (1.00 – 1.01)  0.99 (0.98 – 0.99)  0.98 (0.97 – 0.99)  1.01 (1.00 – 1.01)  1.01 (1.00 – 1.01)  0.85 (0.78 – 0.92)  0.84 (0.77 – 0.92)  2.09 (1.11 – 3.94)  1.81 (1.07 – 3.08)  0.65 (0.42 – 1.02)  0.90 (0.52 – 1.56)  1.39 (0.79 – 2.44)  0.13 (0.05 – 0.38)  0.04 (0.01 - 0.12)  0.18 (0.12 – 0.28)  1.55 (0.87 – 2.74)  0.74 (0.49 – 1.13)  0.77 (0.50 – 1.18)  1.12 (0.35 – 3.54)  0.96 (0.63 – 1.47)  0.70 (0.22 – 2.22) | 0.154  0.826  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  0.023\*  0.028\*  0.0625  0.704  0.259  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  0.136  0.163  0.225  0.853  0.859  0.547 |
|  |  | **Univariate Models** | |
|  |  |
| **Risk Factors** | **Referent** | **Hazard Ratio (95% Confidence Interval)** | **P Value** |
| Age  Gender  AD Disc Center  TD Disc Center  AD nerve  TD nerve  AD retina  TD retina  AD lens  TD lens  AD fovea  TD fovea  AD apex  TD apex  AD Sclera  TD Sclera  Optic Nerve Proximity  Fovea Proximity  Radiation Side Effects (Y/N)  Hemorrhage  Edema  Vasculopathy  Papillitis  **Tumor size**  Large  Medium  Small  Baseline 20/40 or better  Diabetes  HTN  HLD  Glaucoma  Cataract  ARMD | Continuous  Female  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  ­Continuous  Continuous  Continuous  Continuous  Absent  Absent  Absent  Absent  Absent  Reference  Large  Large  Worse than 20/40  Absent  Absent  Absent  Absent  Absent  Absent | 1.01 (0.99 – 1.02)  0.82 (0.57 – 1.17)  1.01 (1.00 – 1.01)  1.01 (1.00 – 1.01)  1.01 (1.01 – 1.02)  1.02 (1.01 – 1.03)  1.08 (1.05 – 1.11)  1.11 (1.08 – 1.15)  1.01 (1.01 – 1.01)  1.01 (1.01 – 1.02)  1.00 (1.00 – 1.00)  1.00 (1.00 – 1.01)  1.00 (0.99 – 1.00)  0.99 (0.99 – 1.00)  1.00 (1.00 – 1.01)  1.01 (1.00 – 1.01)  0.89 (0.83 – 0.95)  0.88 (0.82 – 0.93)  2.42 (1.45 – 4.03)  1.43 (0.90 – 2.27)  0.86 (0.59 – 1.26)  1.13 (0.72 – 1.77)  1.28 (0.79 – 2.07)  0.39 (0.12 – 1.24)  0.23 (0.07 – 0.77)  0.59 (0.41 – 0.86)  1.00 (0.59 – 1.70)  0.85 (0.60 – 1.20)  0.81 (0.57 – 1.16)  0.87 (0.32 – 2.38)  0.74 (0.51 – 1.06)  1.50 (0.70 – 3.22) | 0.336  0.264  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  0.011\*  0.011\*  0.109  0.109  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  0.129  0.438  0.597  0.31  0.101  0.018\*  0.006\*\*  0.99  0.353  0.252  0.791  0.102  0.303 |
|  |  | **Univariate Models** | |
|  |  |
| **Risk Factors** | **Referent** | **Hazard Ratio (95% Confidence Interval)** | **P Value** |
| Age  Gender  AD Disc Center  TD Disc Center  AD nerve  TD nerve  AD retina  TD retina  AD lens  TD lens  AD fovea  TD fovea  AD apex  TD apex  AD Sclera  TD Sclera  Optic Nerve Proximity  Fovea Proximity  Radiation Side Effects (Y/N)  Hemorrhage  Edema  Vasculopathy  Papillitis  **Tumor size**  Large  Medium  Small  Baseline 20/40 or better  Diabetes  HTN  HLD  Glaucoma  Cataract  ARMD | Continuous  Female  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  Continuous  ­Continuous  Continuous  Continuous  Continuous  Absent  Absent  Absent  Absent  Absent  –  Reference  Large  Large  Worse than 20/40  Absent  Absent  Absent  Absent  Absent  Absent | 1.01 (0.99 – 1.02)  0.92 (0.62 – 1.36)  1.01 (1.00 – 1.01)  1.01 (1.01 – 1.01)  1.02 (1.01 – 1.02)  1.02 (1.01 – 1.03)  1.10 (1.07 – 1.13)  1.14 (1.10 – 1.18)  1.01 (1.01 – 1.02)  1.02 (1.01 – 1.02)  1.00 (1.00 – 1.00)  1.00 (1.00 – 1.01)  0.99 (0.99 – 1.00)  0.99 (0.98 – 1.00)  1.00 (1.00 – 1.01)  1.01 (1.00 – 1.01)  0.88 (0.82 – 0.94)  0.86 (0.80 – 0.93)  3.41 (1.72 – 6.77)  1.37 (0.82 – 2.27)  1.16 (0.57 – 1.30)  1.35 (0.83 – 2.18)  1.26 (0.74 – 2.14)  0.26 (0.08 – 0.85)  0.11 (0.03 - 0.38)  0.53 (0.35 – 0.80)  1.31 (0.74 – 2.31)  0.79 (0.54 – 1.17)  0.94 (0.63 – 1.39)  1.29 (0.47 – 3.52)  0.95 (0.64 – 1.41)  0.56 (0.18 – 1.75) | 0.316  0.671  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  0.006\*\*  0.006\*\*  0.006\*\*  0.006\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  <0.001\*\*\*  0.228  0.472  0.226  0.397  0.026\*  <0.001\*\*\*  0.002\*\*  0.352  0.246  0.752  0.622  0.797  0.315 |

|  |  |
| --- | --- |
| Variables  Continuous (mean ± SD)  Categorical (n, %) | N = 178 |
| Follow-up Time (days/months) | 1033.83 ±465.30  (57 ~ 2055 days)  (1.9 ~ 68.5 months) |
| Age (years) | 63.21 ± 15.55  (18.85 ~ 91.06) |
| Average Dose – Disc Center | 67.51 ± 53.79 |
| Total Dose – Disc Center | 48.61 ± 38.73 |
| Average Dose – Nerve | 33.10 ± 23.89 |
| Total Dose – Nerve | 23.83 ± 17.20 |
| Average Dose – Opposite Retina | 10.93 ± 6.24 |
| Total Dose – Opposite Retina | 7.87 ± 4.49 |
| Average Dose – Lens Center | 35.60 ± 36.71 |
| Total Dose – Lens Center | 25.63 ± 26.43 |
| Average Dose – Fovea | 110.97 ± 112.86 |
| Total Dose – Fovea | 79.88 ± 81.27 |
| Average Dose – apex | 151.58 ± 40.51 |
| Total Dose – apex | 109.13 ± 29.17 |
| Average Dose – Sclera | 321.88 ± 129.67 |
| Total Dose – Sclera | 321.88 ± 129.67 |
| Optic Nerve Proximity | 4.14 ± 3.74 |
| Fovea Proximity | 3.98 ± 3.74 |
|  |  |
| Gender |  |
| Male | 79 (44.38%) |
| Female | 99 (55.62%) |
| Tumor Laterality |  |
| Left | 86 (48.31%) |
| Right | 92 (51.69%) |
| Tumor Size |  |
| Large | 4 (2.25%) |
| Medium | 132 (74.16%) |
| Small | 42 (23.60%) |
| Baseline 20/40 or better | 120 (67.42%) |
|  |  |
| Radiation Side Effects |  |
| Present | 133 (76.00%) |
| Edema | 71 (52.21%) |
| Vasculopathy | 27 (19.85%) |
| Hemorrhage | 27 (19.85%) |
| Papillitis | 23 (16.91%) |
|  |  |
| Diabetes | 24 (13.48%) |
| Hypertension | 92 (51.69%) |
| Neovascular Glaucoma | 18 (13.24%) |
| SRF | 154 (92.77%) |
| HLD | 76 (42.70%) |
| Glaucoma | 6 (3.37%) |
| Cataract | 69 (38.76%) |
| ARMD | 10 (5.62%) |
| Deceased | 11 (6.18%) |