

**Table S2a: Retinal thickness measurements derived from histology sections.** Estimated means and 95% confidence intervals (95% CI) based on the linear models for all histology section-derived retinal layer/zone thickness measurements at positions 1, 2 ,3, 4, and 6mm ventral to the central and nasal ONH rim. Means that have either no superscript or no identical superscript are significantly different from each other ( $P<0.05$ ). Means with identical superscript are not significantly different from each other ( $P>0.05$ ). All measurements in  $\mu\text{m}$ .

| Retinal layer/zone thickness on histology: mean (95% CI) |         |                                     |                                     |                                     |                                     |                        |
|--|---------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|------------------------|
| Distance from ONH  |         | 1mm                                 | 2mm                                 | 3mm                                 | 4mm                                 | 6mm                    |
| IR   | nasal   | 106.94<br>(104.74;109.13)           | 103.33<br>(101.13;105.53)           | 99.08<br>(96.90;101.25)             | 93.97<br>(91.81;96.12)              | 82.91<br>(80.74;85.08) |
|  | central | 107.91<br>(105.75;110.07)           | 103.32<br>(101.17;105.48)           | 98.35<br>(96.19;100.51)             | 95.20<br>(93.04;97.37)              | 86.59<br>(84.43;88.75) |
| INL  | nasal   | 20.86 <sup>a</sup><br>(20.33;21.39) | 20.74 <sup>a</sup><br>(20.20;21.27) | 18.75 <sup>b</sup><br>(18.23;19.27) | 18.24 <sup>b</sup><br>(17.73;18.76) | 15.82<br>(15.30;16.34) |
|  | central | 17.50<br>(17.04;17.96)              | 22.12<br>(21.66;22.57)              | 19.31<br>(18.85;19.77)              | 18.21<br>(17.75;18.67)              | 16.25<br>(15.79;16.70) |
| ONL  | nasal   | 27.31 <sup>c</sup><br>(26.39;28.22) | 27.68 <sup>c</sup><br>(26.76;28.60) | 26.50<br>(25.62;27.44)              | 24.79<br>(23.88;25.69)              | 20.71<br>(19.80;21.62) |
|  | central | 27.66<br>(26.92;28.40)              | 26.09 <sup>d</sup><br>(25.35;26.83) | 26.23 <sup>d</sup><br>(25.49;26.97) | 25.17<br>(24.43;25.91)              | 21.11<br>(20.36;21.85) |
| OR   | nasal   | 31.11 <sup>e</sup><br>(30.36;31.85) | 31.67 <sup>e</sup><br>(30.91;32.42) | 31.59 <sup>e</sup><br>(30.85;32.33) | 28.82<br>(28.09;29.56)              | 25.92<br>(25.18;26.66) |
|  | central | 29.33<br>(28.82;29.84)              | 32.11<br>(31.61;32.61)              | 34.44<br>(33.93;34.95)              | 30.74<br>(30.24;31.24)              | 26.61<br>(26.11;27.11) |
| PROS   | nasal   | 19.14<br>(18.68;19.60)              | 17.65<br>(17.19;18.11)              | 16.27<br>(15.81;16.72)              | 13.96<br>(13.51;14.41)              | 11.90<br>(11.44;12.34) |
|  | central | 14.59<br>(14.24;14.94)              | 18.12<br>(17.78;18.46)              | 20.22<br>(19.87;20.57)              | 16.32<br>(15.97;16.66)              | 12.47<br>(12.13;12.81) |