**Interocular Symmetry in Retinal Nerve Fiber Layer Thickness in Children: The Hong Kong Children Eye Study**

*Xiu Juan Zhang[1,7], *Yu Meng Wang[1,8], Zhenzhen Jue[1], Hei-Nga Chan[1], Yi Han Lau[1], Wei Zhang[7], Ka Wai Kam[1,2], Patrick Ip[3], Alvin L. Young[1,2], Clement C. Tham[1,2,4,5], Chi Pui Pang[1,5], Li Jia Chen[1,2,5], Jason C. Yam[1,2,4,5,6]

1. Department of Ophthalmology and Visual Sciences, The Chinese University of Hong Kong, Hong Kong SAR, China

2. Department of Ophthalmology and Visual Sciences, Prince of Wales Hospital, Hong Kong SAR, China

3. Department of Paediatrics and Adolescent Medicine, LKS Faculty of Medicine, The University of Hong Kong, Hong Kong SAR, China

4. Hong Kong Eye Hospital, Kowloon, Hong Kong SAR, China

5. Hong Kong Hub of Paediatric Excellence, The Chinese University of Hong Kong, Hong Kong SAR, China

6. Department of Ophthalmology, Hong Kong Children's Hospital, Hong Kong SAR, China

7. Tianjin Eye Hospital, Tianjin, China

8. Department of Neurobiology, Interdisciplinary Center for Neurosciences (IZN), Heidelberg University, Heidelberg, Germany

*co-first authors and contributed equally

**Correspondence to**: Jason C. Yam

Department of Ophthalmology and Visual Sciences, The Chinese University of Hong Kong, Hong Kong

Email: yamcheuksing@cuhk.edu.hk

Tel: +852 3943 5892 / Fax: +852 2715 9490

Address for reprints: 4/F Department of Ophthalmology and Visual Sciences, Hong Kong Eye Hospital, 147K Argyle Street, Kowloon, Hong Kong

**Supplementary Table. Univariable analysis between log-transformed Interocular absolute difference of RNFL thickness with systemic and ocular determinants**

| | Global | TS | T | TI | NI | N | NS |
|---|---|---|---|---|---|---|---|
| | β (P values) | β (P values) | β (P values) | β (P values) | β (P values) | β (P values) | β (P values) |
| Age, years | -0.041 (0.598) | 0.003 (0.680) | -0.002 (0.733) | <0.001 (0.966) | -0.011 (0.080) | -0.006 (0.316) | 0.005 (0.365) |
| Sex | 0.217 (0.155) | -0.016 (0.180) | -0.002 (0.826) | -0.001 (0.964) | 0.004 (0.758) | -0.013 (0.267) | -0.008 (0.516) |
| Body mass index, kg/m2 | -0.021 (0.429) | 0.004 (0.037) | <0.001 (0.894) | -0.03 (0.109) | -0.002 (0.328) | -0.001 (0.780) | -0.001 (0.531) |
| Waist circumference, cm | <0.001 (0.591) | 0.002 (0.064) | <0.001 (0.835) | -0.001 (0.520) | -0.001 (0.123) | <0.001 (0.945) | -0.001 (0.231) |
| Head circumference, cm | 0.003 (0.141) | 0.006 (0.041) | 0.006 (0.038) | 0.002 (0.527) | -0.002 (0.558) | 0.001 (0.780) | 0.005 (0.108) |
| Systolic blood pressure, mm Hg | -0.010 (0.137) | 0.001 (0.085) | <0.001 (0.401) | 0.001 (0.186) | <0.001 (0.362) | <0.001 (0.916) | <0.001 (0.568) |
| Diastolic blood pressure, mm Hg | 0.001 (0.877) | <0.001 (0.804) | 0.001 (0.264) | <0.001 (0.832) | <0.001 (0.760) | <0.001 (0.577) | -0.001 (0.249) |
| Visual acuity difference*, logMAR unit | 0.587 (0.075) | 0.370 (0.396) | -0.218 (0.576) | 1.009 (0.019) | 1.096 (0.010) | -0.101 (0.805) | 0.089 (0.832) |
| Axial length difference*, mm | 0.515 (<0.001) | 0.106 (0.355) | 0.292 (0.004) | 0.327 (0.106) | 0.608 (<0.001) | 0.086 (0.422) | 0.226 (0.039) |
| SE difference*,D | 0.203 (<0.001) | 0.028 (0.622) | 0.207 (<0.001) | 0.112 (0.046) | 0.171 (0.002) | 0.075 (0.158) | 0.185 (0.001) |
| Astigmatism difference*, D | 0.094 (0.031) | 0.038 (0.582) | -0.064 (0.292) | 0.024 (0.725) | 0.135 (0.044) | 0.074 (0.251) | 0.020 (0.762) |
| CCT difference*, μm | 0.031 (0.001) | 0.049 (0.003) | 0.010 (0.517) | -0.002 (0.921) | 0.013 (0.773) | 0.027 (0.092) | 0.023 (0.153) |
| Central macular thickness difference*, μm | <0.005 (0.989) | 0.008 (0.581) | 0.016 (0.242) | <0.001 (0.992) | 0.006 (0.674) | 0.013 (0.354) | -0.027 (0.064) |
| Intraocular Pressure *, mmHg | 0.009 (0.713) | -0.001 (0.976) | 0.009 (0.736) | 0.047 (0.124) | -0.009 (0.763) | 0.002 (0.935) | -0.017 (0.561) |

RNFL, retinal nerve fibre layer; TS: temporal superior; T: temporal; TI: temporal inferior; NI: nasal inferior; N: nasal; NS: nasal superior; SE: spherical equivalent

*Refers to log-transformed absolute difference between the right and left eye