## Supplementary material

Supplementary Table 1: Association analysis for myopic 5-year change in spherical equivalent (more than -0.5D) in phakic eyes. Data from the German population-based

## Gutenberg Health Study (2007-2017).

Multivariable logistic regression analysis with generalized estimating equations was conducted.

| ( $n=15,836$ eyes) | OR | 95\%-CI | $P$ |
| :---: | :---: | :---: | :---: |
| Sex [female] | 1.49 | 1.28; 1.73 | <0.001 |
| Age [per year] |  |  |  |
| Linear term | 0.52 | 0.49; 0.55 | <0.001 |
| Quadratic term | 1.01 | 1.01; 1.01 | <0.001 |
| Cardiovascular parameters |  |  |  |
| HbA1c [\%] | 1.07 | 0.95; 1.20 | 0.27 |
| HDL-cholesterol [mg/dl] | 1.00 | 0.99; 1.00 | 0.75 |
| LDL-cholesterol [mg/dl] | 1.00 | 1.00; 1.00 | 0.81 |
| Triglycerides [ $\mathrm{mg} / \mathrm{dl}$ ] | 1.00 | 1.00; 1.00 | 0.33 |
| BMI [ $\mathrm{kg} / \mathrm{m}^{2}$ ] | 1.00 | 0.98; 1.01 | 0.86 |
| Physical activity | 1.00 | 1.00; 1.00 | 0.28 |
| Smoking history |  |  |  |
| Non-smoker |  | Reference |  |
| Smoker | 0.96 | 0.80; 1.16 | 0.70 |
| Occasional smoker | 0.91 | 0.58; 1.44 | 0.70 |
| Former smoker | 1.10 | 0.95; 1.26 | 0.19 |
| Ocular parameters |  |  |  |
| Spherical equivalent [D] | 0.89 | 0.87; 0.91 | <0.001 |
| IOP [ mmHg ] | 1.01 | 0.99; 1.03 | 0.54 |
| Lens opacity | 1.09 | 0.91; 1.30 | 0.36 |
| Education |  |  |  |
| Secondary gerneral school („Hauptschule") |  | Reference |  |
| Intermediate school („Realschule") | 0.96 | 0.81; 1.14 | 0.64 |
| High school (,Abitur") | 0.96 | 0.81; 1.12 | 0.58 |
| Others | 0.52 | 0.17; 1.57 | 0.25 |
| None | 0.91 | 0.28; 2.94 | 0.88 |
| Occupation |  |  |  |
| Housemaker, retried or none |  | Reference |  |
| Agriculture, forestry, animal husbandry and horticulture | 1.11 | 0.69; 1.78 | 0.67 |
| Production and manufacturing | 0.89 | 0.67; 1.18 | 0.42 |
| Construction and architecture | 1.06 | 0.70; 1.60 | 0.78 |
| Natural and computer science | 1.09 | 0.79; 1.51 | 0.61 |
| Transport, logistics, security and military | 1.20 | 0.87; 1.64 | 0.26 |
| Commercial services and tourism | 1.02 | 0.76; 1.36 | 0.90 |
| Business organization, accounting, law and administration | 0.96 | 0.78; 1.18 | 0.70 |
| Health and education | 0.82 | 0.65; 1.05 | 0.12 |
| Humanities, media and culture | 0.81 | 0.55; 1.20 | 0.29 |

