

**Table 1. Questionnaire and examination components in SIND-1 and SINDI-2**

<b>Questionnaire</b>	<b>SINDI-1</b>	<b>SINDI-2</b>
Demographic and socioeconomic: age, sex, education, income, housing, occupation, census area	+	+
Lifestyle: smoking, alcohol consumption	+	+
Medical history: diabetes, hypertension, CVD, eye surgery		
Medications: antidiabetic, antihypertensive, statin, steroid use		
Falls history, women health	+	+
Abbreviated Mental Test (AMT) for those aged $\geq 60$ years	+	+
Assessment of sleep disorders	-	+
Vision function (VF-14) Questionnaire	+	+
Patient Health Questionnaire (PHQ-9)	-	+
CERA- Impact of Vision Impairment Profile	-	+
Knowledge, access, attitude and quality of eye care	-	+
Healthcare services and expenditure module	-	+
<b>Examination components</b>		
Height, weight, BMI, blood pressure, pulse rate	+	+
Distance & near presenting visual acuity	+	+
Subjective refraction and distance best-corrected visual acuity	+	+
Auto-refraction, keratometry and ocular biometry	+	+
Visante Optical Coherence Tomography	+	+
Slit-lamp examination: Anterior and posterior segment	+	+
Intraocular pressure using Goldmann applanation tonometry	+	+
Lens grading – LOCS III	+	+
Lens photography and Wisconsin grading for cataract	+	-
Gonioscopy and visual fields test for glaucoma suspects	+	+
Fundus photography	+	+
Retinal imaging- Cirrus-OCT, SD-OCT	-	+†
Blood for HbA1c, serum glucose, creatinine, and lipid levels	+	+
Urine for albumin-to-creatinine ratio (ACR)	+	+

LOCS III: Lens Opacities Classification System III. \* Subjective Refraction performed only on participants with presenting Visual acuity of  $>0.3$ . † Cirrus HD-OCT, Carl Zeiss Meditec, Jena,

## Supplementary Tables

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Germany and SD-OCT, Spectralis, Heidelberg Engineering, Heidelberg, Germany was used.

**Table 2. Assessment and definition of systemic risk factors in SINDI-2**

<b>Systemic Outcomes</b>	<b>Assessment</b>	<b>Definition</b>
<b>Diabetes</b>	Questionnaire, serum HbA1c and casual glucose	a self-reported physician diagnosed diabetes, use of diabetic medication or HbA1c $\geq 6.5\%$ or random plasma glucose $\geq 200$ mg/dL as per the American Diabetes Association clinical practice recommendations. <sup>1</sup>
<b>Hypertension</b>	Questionnaire and blood pressure measurement	Systolic blood pressure of at least 140 mm Hg or a diastolic blood pressure of at least 90 mm Hg, physician-diagnosed hypertension, or self-reported history of hypertension.
<b>Dyslipidemia</b>	Serum lipid profile	High levels of total cholesterol ( $\geq 5.2$ mmol/L) or low levels of HDL cholesterol ( $< 1$ mmol/L in men and $< 1.3$ mmol/L in women).
<b>Overweight and obesity</b>	Height (cms) and weight (kg). Body mass index (BMI) was calculated as weight in kg/ square of height in cms	Overweight as BMI of 25-29.9 kg/m <sup>2</sup> and obese as BMI $\geq 30$ kg/m <sup>2</sup> according to WHO-defined BMI cut points. <sup>2</sup>
<b>Chronic kidney disease</b>	Serum creatinine	Estimated glomerular filtration rate (eGFR) $< 60$ ml/min/1.73 m <sup>2</sup> using the Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) equation. <sup>3</sup>
<b>Cardiovascular disease</b>	Questionnaire	Self-reported myocardial infarction, angina or stroke

**Table 3. Assessment and definition of eye outcomes in SINDI-2**

<b>Eye outcomes</b>	<b>Assessment</b>	<b>Definition</b>
<b>DR</b>	Masked grading of digital retinal photographs obtained from two 45° retinal images corresponding to Early Treatment for Diabetic Retinopathy Study (ETDRS) standard field 1 (centered on the optic disc) and field 2 (centered on the fovea) using the modified Airlie House classification system and a modification of the ETDRS severity system for diabetic retinopathy. <sup>4</sup>	Incidence and progression of DR will be defined similar to the BMES protocol. <sup>5</sup> Incident DR will be estimated from all diabetic participants who had no retinopathy at the baseline examination and who participated in the follow-up examination(s). Incident DR will be defined as severity level >15 at the follow-up visit among those who were free of DR at baseline. Progression will be defined as an increase in the severity of retinopathy by two steps or more from the baseline level at any of the follow-up examinations. Progression to proliferative retinopathy will be estimated from all patients who were free of this complication at the baseline examination.
<b>AMD</b>	Specific AMD lesions were graded from fundus photographs using the Wisconsin AMD classification <sup>6</sup> modified for magnification as used in the Blue Mountain Eye Study (BMES). <sup>7</sup>	Incident early AMD will be defined by the appearance at follow-up of either indistinct soft or reticular drusen or the co-presence of both distinct soft drusen and retinal pigmentary abnormalities in either eye of persons in whom no early or late AMD was present at baseline. Incident late AMD will be defined as the presence of neovascular AMD or geographic atrophy (GA). Progression of early AMD lesions will be defined in those eyes with the corresponding early AMD lesion at baseline and also with absent late AMD lesions at both the baseline and 6-year examinations. Incidence of glaucoma will be defined as development of glaucomatous visual field loss combined with optic disc changes among those who were free of glaucoma at baseline. Progression of glaucoma functional changes will be determined by the Guided Progression Analysis software based on the Humphrey field analyzer (HFA) II instrument. Change in IOP will be defined as the difference between the SINDI-2 IOP and SINDI IOP.
<b>Glaucoma</b>	All participants underwent slit-lamp biomicroscopy, Goldmann applanation tonometry, and dilated optic disc assessment. Participants suspected to have glaucoma also underwent visual field examination (24-2 SITA standard, Humphrey Visual Field Analyzer II), gonioscopy, and repeat applanation tonometry. Glaucoma was defined according to International Society for Geographical and Epidemiologic Ophthalmology criteria. <sup>8</sup>	
<b>Cataract</b>	Cataract severity and progression of lens opacities were graded from slit lamp using the Lens Opacities Classification System III (LOCS III). <sup>9</sup>	Incidence of any cataract will be defined as the presence of nuclear, cortical, or posterior subcapsular cataract in those free of any cataract at baseline. Participants eligible for the analysis of progression of cataract had to have reliable cataract grading at both SINDI and SINDI-2. Progression will be deemed as any increase in

## Supplementary Tables

### **VI and blindness**

Presenting visual acuity (PVA) was monocularly measured using a logarithm of the minimum angle of resolution (logmar) number chart (Lighthouse International, New York, USA) at a distance of 4 m. Final refraction was determined by subjective refraction by trained and certified study optometrists. Best-corrected visual acuity (BCVA) after subjective refraction was monocularly assessed and recorded in logMAR scores.

the severity or involvement of a lens opacity.

Both U.S and revised WHO definitions of visual impairment and blindness<sup>10</sup> will be used. Using the WHO definition, incident best-corrected VI will be defined as  $BCVA \geq 20/60$  in both eyes at baseline which decrease to  $<20/60$  to  $20/400$  in the better-seeing eye at follow-up; incident blindness will be defined as  $BCVA \geq 20/400$  in both eyes at baseline, which decrease to  $<20/400$  in the better-seeing eye at follow-up. Incident VI and blindness will be defined according to the US Standard in the same fashion, except that the cutoff for VI will be  $< 20/40$  and for blindness  $\leq 20/200$ .

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