

1 **Supplementary materials**

Medical Examination and Questionnaire

Question

I would like to ask you about any illnesses you have had.
Please select the applicable disease(s) or history of surgery from the list below.
For each selected item, please indicate the current status and the age of onset of each.

01. Hypertension

02. Diabetes mellitus

03. Dyslipidemia

04. Angina pectoris/myocardial infarction

05. Other cardiac diseases ()

06. Chronic renal failure

07. Other kidney disease ()

08. Hyperuricemia/gout

09. Pulmonary tuberculosis

10. Asthma

11. Chronic obstructive pulmonary disease (COPD)

12. Glaucoma

13. Cataracts

14. Gastric ulcer

15. Gastritis

16. Duodenal ulcer

17. Colorectal Polyp

18. Cancer (Location: [])

19. Liver Disease ()

20. Cholelithiasis

21. Kidney and ureteral stones

22. Rheumatoid arthritis

23. Otitis media

24. Anemia

25. Thyroid disease ()

26. Stroke (cerebral hemorrhage/stroke)

27. Transient ischemic attack

28. Dementia

29. Other diseases ()

30. Surgery ()

Answer

Choice Number	Description of the situation				Age of onset
	① Treatment	② Observation	③ Cured	④ Drop out	
01	●				45
↑ 【Example】 Hypertension at age 45 and currently under treatment					

①Treatment

②Observation

③Cured

④Drop out

→Regular visits to the hospital for medication, injections, dialysis, eye drops, and other treatments.

→Visits the hospital regularly for checkups and examinations, but does not take any medications or other treatments.

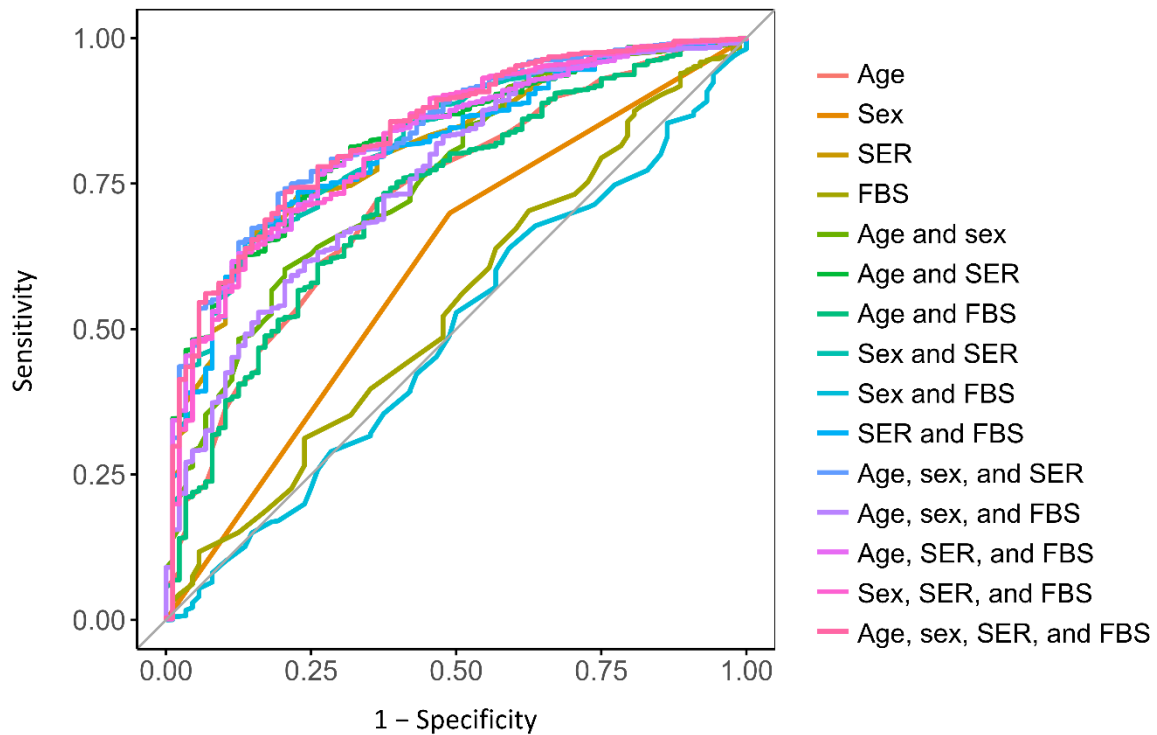
→Diagnosed with a disease in the past, but cured by treatment/surgery and treatment has been completed.

→Diagnosed with a disease but have not seen a doctor or have stopped treatment or visits to the hospital due to self-determination.

2
3 **Figure S1. Details of the questionnaire administered**

4 The part of the questionnaire that was used for this study is quoted. The original
5 questionnaire was written in Japanese, the native language, and translated into
6 English. We verified the content of this questionnaire in advance.

7
8



9
10

11 **Figure S2. ROC curves of 15 different combinations of parameters for**
12 **predicting ACD < 2.70 mm.**

13 ROC curves of the different combinations of parameters for predicting ACD <2.70
14 mm are plotted. The AUCs of 'age and SER' and 'age, SER, sex, and FBS' were
15 0.821 (95% CI = 0.782, 0.861) and 0.836 (95% CI = 0.797, 0.876), respectively, with
16 no significant difference ($P = 0.113$); those of 'sex and SER' and 'age, SER, sex, and
17 FBS' were 0.817 (95% CI = 0.775, 0.859) and 0.836, respectively, which were
18 significantly different ($P = 0.041$). ROC, receiver operating characteristic; SER,
19 spherical equivalent refractive error; ACD, anterior chamber depth; FBS, fasting
20 blood sugar, AUC, area under the curve; CI, confidence interval.

21

Supplementary Table S1. Multivariable linear regression analysis between ACD and explanatory variables using FBS as a categorical variable

	Standardized partial regression coefficient (β)	Partial regression coefficient (B)	95 % CI [0.025, 0.975]	P value	VIF
Age (years)	-0.19	-8.1×10^{-3}	-9.3×10^{-2} , -7.0×10^{-2}	< 0.001*	1.3
Sex (Male: 0, Female: 1)	-3.2×10^{-2}	-9.0×10^{-2}	-0.13, -5.5×10^{-2}	< 0.001*	2.4
IOP (mmHg)	3.4×10^{-2}	4.5×10^{-3}	6.4×10^{-4} , 8.4×10^{-3}	0.022*	1.1
SER (D)	-0.26	-3.6×10^{-2}	-4.0×10^{-2} , -3.2×10^{-2}	< 0.001*	1.1
Height	4.9×10^{-2}	2.3×10^{-3}	4.6×10^{-4} , 4.2×10^{-3}	0.015*	2.2
BMI	3.2×10^{-2}	2.6×10^{-3}	1.4×10^{-3} , 3.7×10^{-2}	0.131	1.4
HDL (mg/dL)	-3.2×10^{-2}	-6.4×10^{-4}	-1.5×10^{-3} , 1.9×10^{-4}	0.128	1.5
FBS (< 110 mg/dL: 0, $\geq$ 110 mg/dL: 1)	-1.6×10^{-2}	-4.0×10^{-2}	-7.0×10^{-2} , -9.7×10^{-3}	0.010*	1.2

CI, confidence interval; VIF, variance inflation factor; IOP, intraocular pressure; SER, spherical equivalent refractive error; D, diopter; BMI, body mass index; HDL, high density lipoprotein cholesterol; FBS, fasting blood sugar.

* P value < 0.05

23

24

Supplementary Table S2. Logistic regression analysis between ACD and explanatory variables using FBS as a categorical variable

	Odds ratio	95 % CI [0.025, 0.975]	P value	VIF
Age (years)	0.945	0.923, 0.968	< 0.001*	1.16
Sex (Male:0, Female:1)	0.372	0.238, 0.581	< 0.001*	1.03
SER (D)	0.659	0.581, 0.747	< 0.001*	1.14

The odds ratio was calculated using a binary logistic regression model, in which a deeper anterior chamber depth (ACD $\geq$ 2.70 mm) was defined as 1 and a shallower chamber depth (ACD < 2.70 mm) was defined as 0.

CI, confidence interval; VIF, Variance Inflation Factor; SER, spherical equivalent refractive error; D, diopter; ACD, anterior chamber depth

* P value < 0.05

25

26