Supplemental Table S1. Inclusion and Exclusion Criteria

Inclusion criteria

(i) Patients with written consent to participate in the study, either provided by themselves or their parent (if they were younger than 18 years)
(ii) Those aged 6 years or older
(iii) Those that satisfied at least one of the following four conditions:
(a) body temperature of 37.0°C or higher
(b) systematic influenza-like symptoms, such as joint pain, muscle pain, headache, tiredness, and appetite loss
(c) respiratory symptoms, such as cough, sore throat, and nasal discharge or congestion
(d) an episode of close contact with patients with influenza or influenza-like symptoms within 3 days, or any other scenario in which the consulting physician suspected influenza infection

Exclusion criteria

(i) Those with fluctuating teeth
(ii) Those with severe oral lesions
(iii) Those with severe nausea
(iv) Those with difficulty opening the mouth sufficiently for the use of the camera (e.g., small mouth, temporomandibular joint pain, incompatibility of dentures, disturbed consciousness, or respiratory failure)
(v) Those who had participated in another clinical trial within 7 days prior, those who were scheduled to participate in another clinical trial (excluding post-marketing surveillance), or those with difficulty for the follow-up for mental, family, social, geographical, or other reasons
(vi) Pediatric patients who clearly did not agree to participate in the study
(vii) Those judged to be inappropriate for participation in the study by the responsible physician at each site

Yoshihara H, *et al. BMJ Health Care Inform* 2024; 31:e100824. doi: 10.1136/bmjhci-2023-100824

Supplemental Table S2. Comparison of various model configuration

	Number of input images	Backbone	Image size	AUROC of training dataset
Main analysis	3	EfficientNet-b5	384	**0.826**
Experiment #1	3	EfficientNet-b5	256	0.792
Experiment #2	3	EfficientNet-b5	512	0.812
Experiment #3	3	ConvNeXt-S	384	0.807
Experiment #4	4	EfficientNet-b0	384	0.814

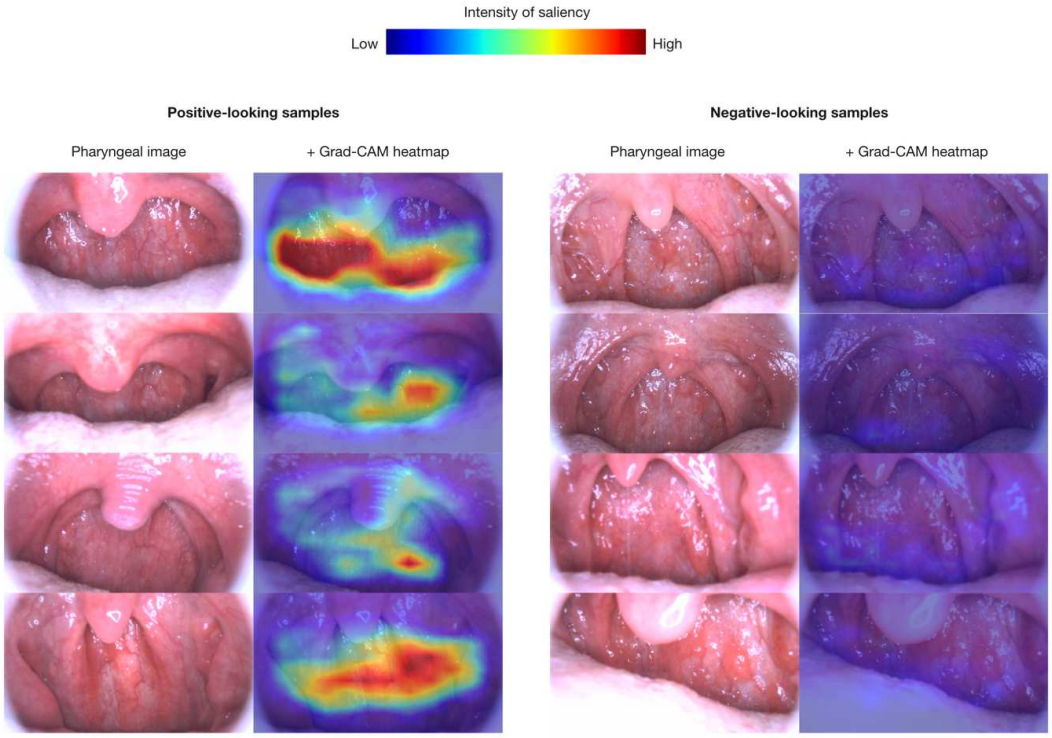
Supplemental Table S3. TRIPOD Checklist: Prediction Model Development and Validation

Section/Topic	ı		Checklist Item	Page
Title and abstract				
Title	1	);V	Identify the study as developing and/or validating a multivariable prediction model, the target population, and the outcome to be predicted.	1
Abstract	2	);V	Provide a summary of objectives, study design, setting, participants, sample size, predictors, outcome, statistical analysis, results, and conclusions.	3
Introduction				
Background and objectives	3a	);V	Explain the medical context (including whether diagnostic or prognostic) and rationale for developing or validating the multivariable prediction model, including references to existing models.	5
	3b	);V	Specify the objectives, including whether the study describes the development or validation of the model or both.	6
Methods				
Source of data	4a	);V	Describe the study design or source of data (e.g., randomized trial, cohort, or registry data), separately for the development and validation data sets, if applicable.	6
	4b	);V	Specify the key study dates, including start of accrual; end of accrual; and, if applicable, end of follow-up.	6
Participants	5a	);V	Specify key elements of the study setting (e.g., primary care, secondary care, general population) including number and location of centres.	6
	5b	);V	Describe eligibility criteria for participants.	6
	5c	);V	Give details of treatments received, if relevant.	-
Outcome	6a	);V	Clearly define the outcome that is predicted by the prediction model, including how and when assessed.	7
	6b	);V	Report any actions to blind assessment of the outcome to be predicted.	-
Predictors	7a	);V	Clearly define all predictors used in developing or validating the multivariable prediction model, including how and when they were measured.	8
	7b	);V	Report any actions to blind assessment of predictors for the outcome and other predictors.	-
Sample size	8	);V	Explain how the study size was arrived at.	-
Missing data	9	);V	Describe how missing data were handled (e.g., complete-case analysis, single imputation, multiple imputation) with details of any imputation method.	10
Statistical analysis methods	0a	D	Describe how predictors were handled in the analyses.	7,8
	0b	D	Specify type of model, all model-building procedures (including any predictor selection), and method for internal validation.	7,8
	0c	V	For validation, describe how the predictions were calculated.	9
	0d	);V	Specify all measures used to assess model performance and, if relevant, to compare multiple models.	9,10
	0e	V	Describe any model updating (e.g., recalibration) arising from the validation, if done.	-
Risk groups	11	);V	Provide details on how risk groups were created, if done.	-
Development vs. validation	12	V	For validation, identify any differences from the development data in setting, eligibility criteria, outcome, and predictors.	7
Results				
Participants	3a	);V	Describe the flow of participants through the study, including the number of participants with and without the outcome and, if applicable, a summary of the follow-up time. A diagram may be helpful.	10
	3b	);V	Describe the characteristics of the participants (basic demographics, clinical features, available predictors), including the number of participants with missing data for predictors and outcome.	11
	3c	V	For validation, show a comparison with the development data of the distribution of important variables (demographics, predictors and outcome).	11
Model development	4a	D	Specify the number of participants and outcome events in each analysis.	10
	4b	D	If done, report the unadjusted association between each candidate predictor and outcome.	-

Model specification	5a	D	Present the full prediction model to allow predictions for individuals (i.e., all regression coefficients, and model intercept or baseline survival at a given time point).	-
	5b	D	Explain how to the use the prediction model.	-
Model performance	16	D;V	Report performance measures (with CIs) for the prediction model.	11,12
Model-updating	17	V	If done, report the results from any model updating (i.e., model specification, model performance).	-
Discussion				
Limitations	18	D;V	Discuss any limitations of the study (such as nonrepresentative sample, few events per predictor, missing data).	14,15
Interpretation	9a	V	For validation, discuss the results with reference to performance in the development data, and any other validation data.	13,14
	9b	D;V	Give an overall interpretation of the results, considering objectives, limitations, results from similar studies, and other relevant evidence.	13,14
Implications	20	D;V	Discuss the potential clinical use of the model and implications for future research.	15
Other information				
Supplementary information	21	D;V	Provide information about the availability of supplementary resources, such as study protocol, Web calculator, and data sets.	7
Funding	22	D;V	Give the source of funding and the role of the funders for the present study.	16

*Items relevant only to the development of a prediction model are denoted by D, items relating solely to a validation of a prediction model are denoted by V, and items relating to both are denoted D;V. We recommend using the TRIPOD Checklist in conjunction with the TRIPOD Explanation and Elaboration document.

Supplemental Figure S1. Gradient-weighted class activation mapping (Grad-CAM) heatmaps



Note that, since the heatmap visualizes the contribution to the positive class, there was little attention in the negative-looking samples.