Supplementary Materials: Artificial Intelligence in Upper Gastrointestinal Endoscopy: Application of a Convolutional Neural Network for Diagnosis of Esophageal Cancer in Endoscopic Images

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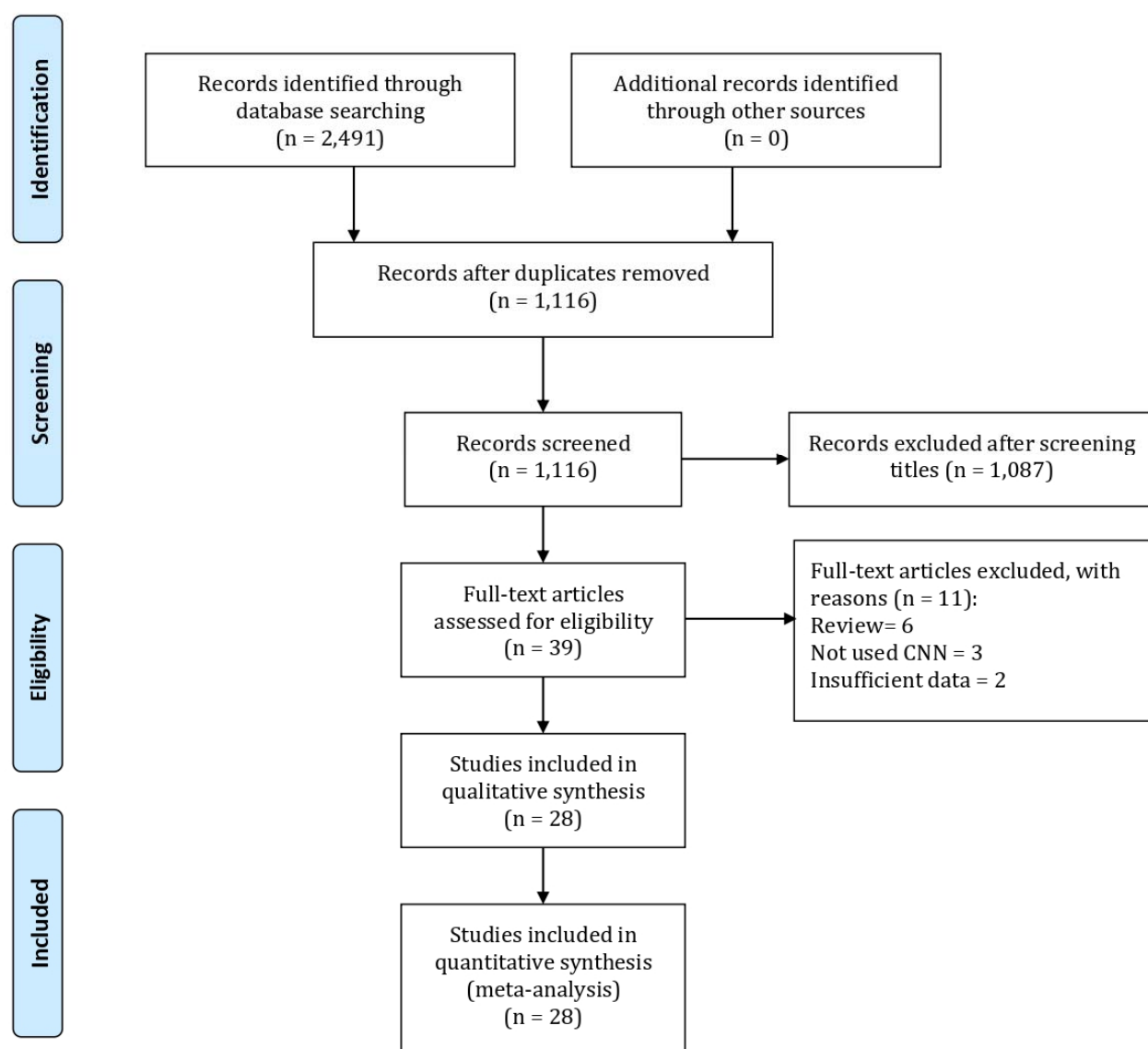
Figure S1. PRISMA flowchart for identifying and selecting study.

Supplementary Table S1. Evaluation metrics.

Evaluation metrics	Explanation	Formula
Sensitivity	It is the probability that a test will indicate 'esophageal cancer' among those with the disease	Sensitivity = True positive/ (True positive + False negative) × 100
Specificity	It is the fraction of those without the esophageal cancer who will have a negative test result	Specificity = True negative / (True negative + False positive) × 100
Positive likelihood ratio	ratio between the probability of a positive test result given the presence of the disease and the probability of a positive test result given the absence of the disease, i.e.	PLR = True positive rate / False positive rate = Sensitivity / (1-Specificity)
Negative likelihood ratio	ratio between the probability of a negative test result given the presence of the disease and the probability of a negative test result given the absence of the disease, i.e.	NLR = False negative rate / True negative rate = (1-Sensitivity) / Specificity
Positive predictive value	probability that the esophageal cancer is present when the test is positive	PPV = (Sensitivity × Prevalence) / [Sensitivity × Prevalence + (1-Specificity) × (1- Prevalence)
Negative predictive value	probability that the esophageal cancer is not present when the test is negative	NPV = [Sensitivity × (1 - Prevalence) / [(1- Sensitivity) × Prevalence + Specificity × (1- Prevalence)
Accuracy	overall probability that a patient is correctly classified	Accuracy = Sensitivity × Prevalence + Specificity × (1 − Prevalence)