

Supplementary Table 1 Search strategy

Search strategy	
MEDLINE (<i>via</i> PubMed)	("Irritable Bowel Syndrome"[MeSH] OR "IBS" OR "Irritable Bowel" OR "Functional Bowel Disease") AND ("Artificial Intelligence"[MeSH] OR "Machine Learning" OR "Deep Learning" OR "AI" OR "Neural Networks" OR "Natural Language Processing" OR "Data Mining" OR "Predictive Modeling") AND ("Diagnosis"[MeSH] OR "Diagnostic Accuracy" OR "Sensitivity" OR "Specificity" OR "AUC" OR "Area Under the Curve") AND ("Observational Study"[Publication Type] OR "Cohort Study" OR "Cross-Sectional Study" OR "Case-Control Study")
Embase	('irritable bowel syndrome'/exp OR 'IBS' OR 'irritable bowel') AND ('artificial intelligence'/exp OR 'machine learning' OR 'deep learning' OR 'AI' OR 'neural networks' OR 'natural language processing' OR 'data mining' OR 'predictive modeling') AND ('diagnosis'/exp OR 'diagnostic accuracy' OR 'sensitivity' OR 'specificity' OR 'area under the curve'/exp OR 'AUC') AND ('observational study'/exp OR 'cohort study'/exp OR 'cross-sectional study'/exp OR 'case control study'/exp)
Cochrane Central Register of Controlled Trials (CENTRAL)	("Irritable Bowel Syndrome" OR IBS OR "Functional Bowel Disease") AND ("Artificial Intelligence" OR "Machine Learning" OR "Deep Learning" OR "AI" OR "Neural Networks" OR "Natural Language Processing" OR "Predictive Modeling" OR "Data Mining") AND ("Diagnosis" OR "Diagnostic Accuracy" OR "Sensitivity" OR "Specificity" OR "Area Under the Curve" OR AUC) AND ("Observational Study" OR "Cohort Study" OR "Cross-Sectional Study" OR "Case-Control Study")
Scopus	(TITLE-ABS-KEY("Irritable Bowel Syndrome" OR "IBS" OR "Functional Bowel Disease")) AND (TITLE-ABS-KEY("Artificial Intelligence" OR "Machine Learning" OR "Deep Learning" OR "AI" OR "Neural Networks" OR "Natural Language Processing" OR "Predictive Modeling" OR "Data Mining")) AND (TITLE-ABS-KEY("Diagnosis" OR "Diagnostic Accuracy" OR "Sensitivity" OR "Specificity" OR

Web of Science	"Area Under the Curve" OR AUC)) AND (TITLE-ABS-KEY("Observational Study" OR "Cohort Study" OR "Cross-Sectional Study" OR "Case-Control Study")) TS=("Irritable Bowel Syndrome" OR "IBS" OR "Functional Bowel Disease") AND TS=("Artificial Intelligence" OR "Machine Learning" OR "Deep Learning" OR "AI" OR "Neural Networks" OR "Natural Language Processing" OR "Predictive Modeling" OR "Data Mining") AND TS=("Diagnosis" OR "Diagnostic Accuracy" OR "Sensitivity" OR "Specificity" OR "Area Under the Curve" OR "AUC") AND TS=("Observational Study" OR "Cohort Study" OR "Cross-Sectional Study" OR "Case-Control Study")
Google Scholar	"Irritable Bowel Syndrome" OR IBS "Artificial Intelligence" OR "Machine Learning" "Diagnosis" "Observational Study"
