

Supplementary Table 1 Search strategies of databases

Databases	Search strategies	Search outcomes
Pubmed	("Artificial Intelligence"[MeSH Terms] OR "Machine Learning"[MeSH Terms] OR "Deep Learning"[MeSH Terms] OR "artificial intelligence" OR "machine learning" OR "deep learning") AND (("Diagnosis, Computer-Assisted"[MeSH Terms] OR "computer-aided" OR "computer-assisted" OR "CAD" OR "CADE" OR "CADx") OR ("Endoscopy"[MeSH Terms] OR "Endoscopy, Gastrointestinal"[MeSH Terms] OR "endoscopy" OR "gastroscopy" OR "esophagogastroduodenoscopy" OR "EGD")) AND (((("Precancerous Conditions"[MeSH Terms] OR "precancerous condition*" OR "precancerous lesion*") AND (("Stomach Neoplasms"[MeSH Terms] OR "stomach neoplasm*" OR "gastric neoplasm*" OR "stomach cancer" OR "gastric cancer") OR ("Esophageal Neoplasms"[MeSH Terms] OR "esophageal neoplasm*" OR "esophageal neoplasm*" OR "esophageal cancer" OR "esophageal cancer")))) OR (("Gastritis, Atrophic"[MeSH Terms] OR "atrophic gastritis" OR "gastric atrophy" OR "chronic atrophic gastritis" OR "CAG") OR (Intestinal Metaplasia[MeSH Terms] OR "intestinal metaplasia") OR (("gastric" OR "stomach") AND ("dysplasia" OR "epithelial dysplasia" OR "intraepithelial neoplasia" OR "IEN" OR "LGIN" OR "HGIN" OR "low-grade dysplasia" OR "LDG" OR "high-grade dysplasia" OR "HDG")))) OR (("Barrett Esophagus"[MeSH Terms] OR "Barrett* esophagus" OR "Barrett* Dysplasia" OR "esophageal columnar metaplasia") OR ("esophag*" AND ("epithelial dysplasia" OR "intraepithelial neoplasia" OR "IEN" OR "LGIN" OR "HGIN" OR "squamous intraepithelial neoplasia" OR "SIN" OR "squamous intraepithelial lesions" OR "squamous cell intraepithelial neoplasia" OR (adenomatous intraepithelial neoplasia) OR "AIN" OR (adenomatous intraepithelial lesions) OR (adenomatous cell intraepithelial neoplasia))))))	245
Web of science	TS=("artificial intelligence" OR "machine learning" OR "deep learning") AND TS=("computer-aided" OR "computer-assisted" OR "CAD" OR "CADE" OR "CADx" OR "endoscopy" OR "gastroscopy" OR "esophagogastroduodenoscopy" OR "EGD") AND TS=((("precancerous condition*" OR "precancerous lesion*") AND ("stomach neoplasm*" OR "gastric neoplasm*" OR "stomach cancer" OR "gastric cancer" OR "esophageal neoplasm*" OR "esophageal cancer") OR ("atrophic gastritis" OR "gastric atrophy" OR "chronic atrophic gastritis" OR "CAG") OR ("intestinal metaplasia") OR (("gastric" OR "stomach") AND ("dysplasia" OR "epithelial dysplasia" OR "intraepithelial neoplasia" OR "IEN" OR "LGIN" OR "HGIN" OR "low-grade dysplasia" OR "LDG" OR "high-grade dysplasia" OR "HDG")) OR ("Barrett* esophagus" OR "Barrett* Dysplasia" OR "esophageal columnar metaplasia") OR ("esophag*" AND ("epithelial dysplasia" OR "intraepithelial neoplasia" OR "IEN" OR "LGIN" OR "HGIN" OR "squamous intraepithelial neoplasia" OR "SIN" OR "squamous intraepithelial lesions" OR "squamous cell intraepithelial neoplasia" OR "adenomatous intraepithelial neoplasia" OR "AIN" OR "adenomatous intraepithelial lesions" OR "adenomatous cell	209

intraepithelial neoplasia"))))

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[mh "Artificial Intelligence"] OR [mh "Machine Learning"] OR [mh "Deep Learning"] OR "artificial intelligence":ti,ab,kw OR "machine learning":ti,ab,kw OR "deep learning":ti,ab,kw) AND ([mh "Diagnosis, Computer-Assisted"] OR "computer-aided":ti,ab,kw OR "computer-assisted":ti,ab,kw OR CAD:ti,ab,kw OR CADe:ti,ab,kw OR CADx:ti,ab,kw OR [mh "Endoscopy"] OR [mh "Endoscopy, Gastrointestinal"] OR "endoscopy":ti,ab,kw OR "gastroscopy":ti,ab,kw OR "esophagogastroduodenoscopy":ti,ab,kw OR EGD:ti,ab,kw) AND (([mh "Precancerous Conditions"] OR (precancerous NEXT condition*):ti,ab,kw OR (precancerous NEXT lesion*):ti,ab,kw) AND ([mh "Stomach Neoplasms"] OR (stomach NEXT neoplasm*):ti,ab,kw OR (gastric NEXT neoplasm*):ti,ab,kw OR (stomach NEXT cancer):ti,ab,kw OR (gastric NEXT cancer):ti,ab,kw OR [mh "Esophageal Neoplasms"] OR (esophageal NEXT neoplasm*):ti,ab,kw OR (esophageal NEXT cancer):ti,ab,kw) OR ([mh "Gastritis, Atrophic"] OR (atrophic NEXT gastritis):ti,ab,kw OR (gastric NEXT atrophy):ti,ab,kw OR (chronic NEXT atrophic NEXT gastritis):ti,ab,kw OR CAG:ti,ab,kw) OR ([mh "Intestinal Metaplasia"] OR (intestinal NEXT metaplasia):ti,ab,kw) OR ((gastric:ti,ab,kw OR stomach:ti,ab,kw) AND (dysplasia:ti,ab,kw OR (epithelial NEXT dysplasia):ti,ab,kw OR (intraepithelial NEXT neoplasia):ti,ab,kw OR IEN:ti,ab,kw OR LGIN:ti,ab,kw OR HGIN:ti,ab,kw OR (low-grade NEXT dysplasia):ti,ab,kw OR LDG:ti,ab,kw OR (high-grade NEXT dysplasia):ti,ab,kw OR HDG:ti,ab,kw)) OR ([mh "Barrett Esophagus"] OR (Barrett* NEXT esophagus):ti,ab,kw OR (Barrett* NEXT dysplasia):ti,ab,kw OR (esophageal NEXT columnar NEXT metaplasia):ti,ab,kw) OR (esophag*:ti,ab,kw AND ((epithelial NEXT dysplasia):ti,ab,kw OR (intraepithelial NEXT neoplasia):ti,ab,kw OR IEN:ti,ab,kw OR LGIN:ti,ab,kw OR HGIN:ti,ab,kw OR (squamous NEXT intraepithelial NEXT neoplasia):ti,ab,kw OR SIN:ti,ab,kw OR (squamous NEXT intraepithelial NEXT lesions):ti,ab,kw OR (squamous NEXT cell NEXT intraepithelial NEXT neoplasia):ti,ab,kw OR (adenomatous NEXT intraepithelial NEXT neoplasia):ti,ab,kw OR AIN:ti,ab,kw OR (adenomatous NEXT intraepithelial NEXT lesions):ti,ab,kw OR (adenomatous NEXT cell NEXT intraepithelial NEXT neoplasia):ti,ab,kw)))

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('artificial intelligence'/exp OR 'artificial intelligence' OR 'machine learning'/exp OR 'machine learning' OR 'deep learning'/exp OR 'deep learning' OR 'artificial intelligence':ti,ab OR 'machine learning':ti,ab OR 'deep learning':ti,ab) AND ('computer assisted diagnosis'/exp OR 'computer assisted diagnosis' OR 'computer-aided':ti,ab OR 'computer-assisted':ti,ab OR 'cad':ti,ab OR 'cade':ti,ab OR 'cadx':ti,ab OR 'endoscopy'/exp OR 'endoscopy' OR 'gastrointestinal endoscopy'/exp OR 'gastrointestinal endoscopy' OR 'endoscopy':ti,ab OR 'gastroscopy':ti,ab OR 'esophagogastroduodenoscopy':ti,ab OR 'egd':ti,ab) AND (('precancerous condition' OR 'precancerous condition*':ti,ab

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OR 'precancerous lesion*':ti,ab) AND ('stomach tumor'/exp OR 'stomach tumor' OR 'esophagus tumor'/exp OR 'esophagus tumor' OR 'stomach neoplasm*':ti,ab OR 'gastric neoplasm*':ti,ab OR 'stomach cancer':ti,ab OR 'gastric cancer':ti,ab OR 'esophageal neoplasm*':ti,ab OR 'esophageal cancer':ti,ab) OR (('atrophic gastritis'/exp OR 'atrophic gastritis' OR 'intestinal metaplasia'/exp OR 'intestinal metaplasia' OR 'atrophic gastritis':ti,ab OR 'gastric atrophy':ti,ab OR 'chronic atrophic gastritis':ti,ab OR 'cag':ti,ab OR 'intestinal metaplasia':ti,ab OR 'gastric':ti,ab OR 'stomach':ti,ab) AND ('dysplasia':ti,ab OR 'epithelial dysplasia':ti,ab OR 'intraepithelial neoplasia':ti,ab OR 'ien':ti,ab OR 'lgin':ti,ab OR 'hgin':ti,ab OR 'low-grade dysplasia':ti,ab OR 'ldg':ti,ab OR 'high-grade dysplasia':ti,ab OR 'hdg':ti,ab)) OR 'barrett esophagus'/exp OR 'barrett esophagus' OR 'barrett* esophagus':ti,ab OR 'barrett* dysplasia':ti,ab OR 'esophageal columnar metaplasia':ti,ab OR ('esophag*':ti,ab AND ('epithelial dysplasia':ti,ab OR 'intraepithelial neoplasia':ti,ab OR 'ien':ti,ab OR 'lgin':ti,ab OR 'hgin':ti,ab OR 'squamous intraepithelial neoplasia':ti,ab OR 'sin':ti,ab OR 'squamous intraepithelial lesions':ti,ab OR 'squamous cell intraepithelial neoplasia':ti,ab OR 'adenomatous intraepithelial neoplasia':ti,ab OR 'ain':ti,ab OR 'adenomatous intraepithelial lesions':ti,ab OR 'adenomatous cell intraepithelial neoplasia':ti,ab)))) NOT 'conference abstract'/it
