

Table 1. Overview of the 19 articles included in the literature review

Author(s) (year)	Title	Aim	Article type	Method	Findings	Conclusions
Dahiya et al (2022)	Artificial intelligence in endoscopic ultrasound for pancreatic cancer: where are we now and what does the future entail?	To evaluate the role of artificial intelligence (AI) in improving the accuracy of endoscopic ultrasound for diagnosing pancreatic cancer	Review article	Review of studies employing AI in endoscopic ultrasound for pancreatic cancer diagnosis	AI has potential to enhance detection accuracy but requires further validation	AI could improve pancreatic cancer detection with further advancements and real-world application
Daoud et al (2019)	MicroRNAs* in pancreatic cancer: biomarkers, prognostic, and therapeutic modulators	To review the role of microRNAs as biomarkers and therapeutic agents in pancreatic cancer	Review article	Review of microRNA studies	MicroRNAs are promising as diagnostic and prognostic markers for pancreatic cancer	MicroRNAs could serve as both biomarkers and therapeutic targets in pancreatic cancer
Draus et al (2023)	Model-based screening for pancreatic cancer in Sweden	To develop and test model-based screening of the Swedish population for pancreatic cancer	Modelling study	Simulation of screening scenarios	Early screening could reduce pancreatic cancer mortality in high-risk populations	Model-based screening may help identify high-risk patients and improve outcomes
Franklin et al (2018)	Plasma micro-RNA alterations appear late in pancreatic cancer	To explore the timing of plasma microRNA alterations in pancreatic cancer	Mixed-method study	Retrospective case-control cohort, early detection case-control cohort, measurement of carbohydrate antigen 19-9 levels	Plasma microRNA alterations are late-stage markers for pancreatic cancer	Plasma microRNAs may not be effective for early detection but are valuable for late-stage diagnosis
Ghafari-Fard et al (2021)	LncRNAs: novel biomarkers for pancreatic cancer	To explore the potential of long non-coding RNAs (lncRNAs) as biomarkers for pancreatic cancer	Review article	Review of studies on lncRNAs	lncRNAs have been implicated in the development and progression of pancreatic cancer	lncRNAs show promise as diagnostic and prognostic biomarkers for pancreatic cancer
Gheorghe et al (2022)	Risk factors for pancreatic cancer: emerging role of viral hepatitis	To investigate the role of viral hepatitis in pancreatic cancer risk	Review article	Review of epidemiological studies	Viral hepatitis, particularly hepatitis B and C, may increase the risk of developing pancreatic cancer	Emerging evidence suggests a link between viral hepatitis and pancreatic cancer risk
Ibnawadh et al (2023)	Pancreatic cancer presenting with acute pancreatitis complicated by Wernicke's encephalopathy and a colonic fistula: a case report	To report a rare case of pancreatic cancer presentation	Case report	Description of a rare patient case	Rare complications associated with pancreatic cancer can obscure diagnosis	Early recognition of atypical presentations is crucial for timely intervention
Kenner et al (2021)	Artificial intelligence and early detection of pancreatic cancer: 2020 summative review	To review the role of AI in the early detection of pancreatic cancer	Review article	Review of AI diagnostic technologies	AI shows potential to enhance early detection in high-risk populations	AI can have a significant role in improving early diagnosis of pancreatic cancer
Kirkegård et al (2020)	Acute pancreatitis as an early marker of pancreatic cancer and cancer stage, treatment, and prognosis	To investigate the role of acute pancreatitis as an early marker of pancreatic cancer	Cohort study	Cohort study of patients diagnosed with pancreatic cancer between 2004 and 2017	Acute pancreatitis can be an early indicator of pancreatic cancer	Patients with unexplained acute pancreatitis should be monitored for pancreatic cancer
Markabawi et al (2018)	When it is not just DKA; diabetic ketoacidosis as a first presentation of pancreatic adenocarcinoma	To discuss diabetic ketoacidosis (DKA) as an initial presentation of pancreatic adenocarcinoma	Case report	Analysis of a patient case presenting with DKA and consequently diagnosed with pancreatic ductal adenocarcinoma (PDAC)	DKA can be a rare initial presentation of pancreatic adenocarcinoma	Screening for pancreatic cancer in patients with unexplained DKA may support early diagnosis
Menakuru et al (2022)	Diabetic ketoacidosis as the initial presenting symptom of pancreatic adenocarcinoma: a discussion about screening	To explore the link between DKA and undiagnosed pancreatic cancer	Case report	Case study of a patient presenting with DKA and consequently diagnosed with pancreatic cancer	Diabetic ketoacidosis may be an initial indicator of undiagnosed pancreatic cancer	Screening for pancreatic cancer in patients with unexplained diabetic ketoacidosis could lead to earlier diagnosis
Osei et al (2022)	Review of clinical and emerging biomarkers for early diagnosis and treatment management of pancreatic cancer: towards personalised medicine	To review clinical and emerging biomarkers for early diagnosis of pancreatic cancer	Review article	Review of biomarker studies	Several emerging biomarkers show promise for early detection	Biomarkers can have a key role in early diagnosis of pancreatic cancer
Principe and Rana (2020)	Updated risk factors to inform early pancreatic cancer screening and identify high risk patients	To update and discuss the risk factors for pancreatic cancer and implications for screening high-risk patients	Review article	Review of epidemiological studies	Smoking, family history and certain genetic mutations are key risk factors for pancreatic cancer	Identifying high-risk individuals is critical for the success of early screening programmes
Rahman and Washington (2019)	The seemingly innocuous presentation of metastatic pancreatic tail cancer: a case report	To discuss a case of metastatic pancreatic tail cancer presenting with non-specific symptoms	Case report	Description of a case with an atypical presentation	Pancreatic tail cancer can present with vague, non-specific symptoms, delaying diagnosis	Early consideration of pancreatic cancer in non-specific cases may improve early diagnosis
Sagami et al (2022)	Diagnostic strategy of early stage pancreatic cancer via clinical predictor assessment: clinical indicators, risk factors and imaging findings	To propose a diagnostic strategy for early-stage pancreatic cancer based on clinical indicators, risk factors and imaging	Mixed-method study	Retrospective comparison of factors of 35 patients with early-stage PDAC and 801 patients without PDAC, followed by the design of a new diagnostic strategy	Early-stage pancreatic cancer often presents with non-specific symptoms; imaging has a key role in early detection	Combining clinical indicators, risk factors and imaging findings is essential for the early diagnosis of pancreatic cancer
Takikawa et al (2020)	New-onset or exacerbation of diabetes mellitus is a clue to the early diagnosis of pancreatic cancer	To explore the relationship between new-onset diabetes and pancreatic cancer	Observational study	Retrospective review of 489 patients with PDAC	New-onset diabetes may be an early indicator of pancreatic cancer	Monitoring patients with new-onset diabetes for pancreatic cancer could improve early diagnosis rates
Tiffon (2020)	Defining parallels between the salivary glands and pancreas to better understand pancreatic carcinogenesis	To identify parallels between the pancreas and salivary glands to better understand pancreatic carcinogenesis	Review article	Review article focusing on the similarities and differences between the pancreas and salivary glands and how these can inform the understanding of PDAC genesis and early diagnosis	A link between chemical exposure and the development of diabetes, obesity, and consequently PDAC genesis is proposed; saliva contains putative specific biomarkers that show promise as non-invasive diagnostic tools for PDAC	The salivary glands and environmental factors have an important role in pancreatic homeostatic mechanisms and normal regulation through salivary gland dysfunction
Wei et al (2019)	The microbiota and microbiome in pancreatic cancer: more influential than expected	To examine the role of the microbiome in the development and progression of pancreatic cancer	Review article	Analysis of microbiota studies	The microbiota may influence pancreatic cancer risk and progression through immune modulation and metabolic pathways	The microbiome's role in pancreatic cancer warrants further investigation
Yang et al (2021)	Early screening and diagnosis strategies of pancreatic cancer: a comprehensive review	To provide a comprehensive review of early screening and diagnostic strategies for pancreatic cancer	Review article	Review of early screening and diagnostic strategies	Various strategies exist for early detection, but none are universally adopted	A multifaceted approach combining different screening methods may improve early detection rates

\*RNA = ribonucleic acid