

World Journal of *Gastrointestinal Oncology*

World J Gastrointest Oncol 2021 September 15; 13(9): 980-1212



REVIEW

- 980** Involvement of integrin-activating peptides derived from tenascin-C in colon cancer progression
Fujita M, Suzuki H, Fukai F
- 995** MicroRNA expression in inflammatory bowel disease-associated colorectal cancer
Grillo TG, Quaglio AEV, Beraldo RF, Lima TB, Baima JP, Di Stasi LC, Sasaki LY
- 1017** Association between intestinal neoplasms and celiac disease: A review
Wang M, Yu M, Kong WJ, Cui M, Gao F
- 1029** Real-time fluorescence image-guided gastrointestinal oncologic surgery: Towards a new era
Martínez-López E, Martínez-Pérez A, Navarro-Martínez S, Sebastián-Tomás JC, de'Angelis N, García-Granero E
- 1043** Neoadjuvant chemotherapy for colorectal liver metastases: A contemporary review of the literature
Guo M, Jin N, Pawlik T, Cloyd JM

MINIREVIEWS

- 1062** Review of incomplete macroscopic resections (R2) in rectal cancer: Treatment, prognosis and future perspectives
Pérez Lara FJ, Hebrero Jimenez ML, Moya Donoso FJ, Hernández Gonzalez JM, Pitarch Martinez M, Prieto-Puga Arjona T
- 1073** Potential utility of liquid biopsies in the management of patients with biliary tract cancers: A review
Shotton R, Lamarca A, Valle J, McNamara MG
- 1086** Conservative management of malignant gastric outlet obstruction syndrome-evidence based evaluation of endoscopic ultrasound-guided gastroentero-anastomosis
Cominardi A, Tamanini G, Brighi N, Fusaroli P, Lisotti A
- 1099** Overgrowth of *Lactobacillus* in gastric cancer
Li ZP, Liu JX, Lu LL, Wang LL, Xu L, Guo ZH, Dong QJ
- 1109** Evidence based tools to improve efficiency of currently administered oncotherapies for tumors of the hepatopancreatobiliary system
Herold Z, Szasz AM, Dank M
- 1121** Screening strategy for gastrointestinal and hepatopancreatobiliary cancers in cystic fibrosis
Hoskins B, Wasuwanich P, Scheimann AO, Karnsakul W
- 1132** Immune aspects of hepatocellular carcinoma: From immune markers for early detection to immunotherapy
Mattos ÁZ, Debes JD, Boonstra A, Vogel A, Mattos AA

- 1144 Characterization of metabolic landscape in hepatocellular carcinoma

Wu J, Xue R, Jiang RT, Meng QH

- 1157 Effect of oncometabolic surgery on gastric cancer: The remission of hypertension, type 2 diabetes mellitus, and beyond

Cheng YX, Peng D, Tao W, Zhang W

ORIGINAL ARTICLE

Basic Study

- 1164 Scoparone inhibits pancreatic cancer through PI3K/Akt signaling pathway

Li N, Yang F, Liu DY, Guo JT, Ge N, Sun SY

Retrospective Study

- 1184 Prognostic value of modified Lauren classification in gastric cancer

Ning FL, Zhang NN, Wang J, Jin YF, Quan HG, Pei JP, Zhao Y, Zeng XT, Abe M, Zhang CD

META-ANALYSIS

- 1196 Neoadjuvant chemotherapy without radiation as a potential alternative treatment for locally advanced rectal cancer: A meta-analysis

Wu P, Xu HM, Zhu Z

LETTER TO THE EDITOR

- 1210 Use of liquid biopsies in gastrointestinal cancers

Khachfe HH

ABOUT COVER

Editorial Board Member of *World Journal of Gastrointestinal Oncology*, Rossana Berardi, MD, PhD, Director, Full Professor, Medical Oncology, Università Politecnica delle Marche, Ancona 60126, Italy. r.berardi@staff.univpm.it

AIMS AND SCOPE

The primary aim of *World Journal of Gastrointestinal Oncology* (WJGO, *World J Gastrointest Oncol*) is to provide scholars and readers from various fields of gastrointestinal oncology with a platform to publish high-quality basic and clinical research articles and communicate their research findings online.

WJGO mainly publishes articles reporting research results and findings obtained in the field of gastrointestinal oncology and covering a wide range of topics including liver cell adenoma, gastric neoplasms, appendiceal neoplasms, biliary tract neoplasms, hepatocellular carcinoma, pancreatic carcinoma, cecal neoplasms, colonic neoplasms, colorectal neoplasms, duodenal neoplasms, esophageal neoplasms, gallbladder neoplasms, etc.

INDEXING/ABSTRACTING

The WJGO is now indexed in Science Citation Index Expanded (also known as SciSearch®), PubMed, PubMed Central, and Scopus. The 2021 edition of Journal Citation Reports® cites the 2020 impact factor (IF) for WJGO as 3.393; IF without journal self cites: 3.333; 5-year IF: 3.519; Journal Citation Indicator: 0.5; Ranking: 163 among 242 journals in oncology; Quartile category: Q3; Ranking: 60 among 92 journals in gastroenterology and hepatology; and Quartile category: Q3. The WJGO's CiteScore for 2020 is 3.3 and Scopus CiteScore rank 2020: Gastroenterology is 70/136.

RESPONSIBLE EDITORS FOR THIS ISSUE

Production Editor: *Ying-Yi Yuan*, Production Department Director: *Xiang Li*, Editorial Office Director: *Ya-Juan Ma*.

NAME OF JOURNAL

World Journal of Gastrointestinal Oncology

ISSN

ISSN 1948-5204 (online)

LAUNCH DATE

February 15, 2009

FREQUENCY

Monthly

EDITORS-IN-CHIEF

Rosa M Jimenez Rodriguez, Pashtoon Kasi, Monjur Ahmed, Florin Burada

EDITORIAL BOARD MEMBERS

<https://www.wjgnet.com/1948-5204/editorialboard.htm>

PUBLICATION DATE

September 15, 2021

COPYRIGHT

© 2021 Baishideng Publishing Group Inc

INSTRUCTIONS TO AUTHORS

<https://www.wjgnet.com/bpg/gerinfo/204>

GUIDELINES FOR ETHICS DOCUMENTS

<https://www.wjgnet.com/bpg/GerInfo/287>

GUIDELINES FOR NON-NATIVE SPEAKERS OF ENGLISH

<https://www.wjgnet.com/bpg/gerinfo/240>

PUBLICATION ETHICS

<https://www.wjgnet.com/bpg/GerInfo/288>

PUBLICATION MISCONDUCT

<https://www.wjgnet.com/bpg/gerinfo/208>

ARTICLE PROCESSING CHARGE

<https://www.wjgnet.com/bpg/gerinfo/242>

STEPS FOR SUBMITTING MANUSCRIPTS

<https://www.wjgnet.com/bpg/GerInfo/239>

ONLINE SUBMISSION

<https://www.f6publishing.com>



Use of liquid biopsies in gastrointestinal cancers

Hussein H Khachfe

ORCID number: Hussein H Khachfe
0000-0001-7537-9033.

Author contributions: Khachfe HH performed the research, wrote, and revised the letter.

Conflict-of-interest statement: The author does not report any conflict of interest. The author did not receive any funding.

Open-Access: This article is an open-access article that was selected by an in-house editor and fully peer-reviewed by external reviewers. It is distributed in accordance with the Creative Commons Attribution NonCommercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>

Manuscript source: Invited manuscript

Specialty type: Oncology

Country/Territory of origin: United States

Peer-review report's scientific quality classification

Grade A (Excellent): 0

Grade B (Very good): B, B

Hussein H Khachfe, Department of Gastrointestinal Surgical Oncology, University of Pittsburgh, Pittsburgh, PA 15232, United States

Corresponding author: Hussein H Khachfe, MD, Doctor, Research Fellow, Department of Gastrointestinal Surgical Oncology, University of Pittsburgh, 3550 Terrace St, Pittsburgh, PA 15232, United States. hkh15@mail.aub.edu

Abstract

The use of liquid biopsies is a relatively new tool in diagnosis and management of gastrointestinal cancers and is actively being investigated. Liquid biopsies have become extremely popular in cholangiocarcinoma and pancreatic cancer research. With more prospective trials using this tool for early diagnosis, liquid biopsies may become an important part of cancer management.

Key Words: Liquid biopsy; Gastrointestinal cancer; Cholangiocarcinoma; Pancreatic cancer

©The Author(s) 2021. Published by Baishideng Publishing Group Inc. All rights reserved.

Core Tip: Liquid biopsies are a novel method to help physicians in the early diagnosis and management of various cancer subtypes. Due to the ease of performance, cost-effectiveness, and quick results associated with liquid biopsies, this technique will be integrated more into the treatment of aggressive cancer types such as cholangiocarcinoma and pancreatic cancers. More prospective clinical trials are needed to validate results on this tool.

Citation: Khachfe HH. Use of liquid biopsies in gastrointestinal cancers. *World J Gastrointest Oncol* 2021; 13(9): 1210-1212

URL: <https://www.wjgnet.com/1948-5204/full/v13/i9/1210.htm>

DOI: <https://dx.doi.org/10.4251/wjgo.v13.i9.1210>

TO THE EDITOR

We read with interest a review by Rompianesi *et al*[1], who analyzed the current evidence present on liquid biopsy use in the diagnosis and management of patients affected with cholangiocarcinoma[1].

Grade C (Good): 0
 Grade D (Fair): 0
 Grade E (Poor): 0

Received: May 8, 2021

Peer-review started: May 8, 2021

First decision: June 16, 2021

Revised: June 16, 2021

Accepted: August 9, 2021

Article in press: August 9, 2021

Published online: September 15, 2021

P-Reviewer: Garg PK, Park WS

S-Editor: Fan JR

L-Editor: A

P-Editor: Ma YJ

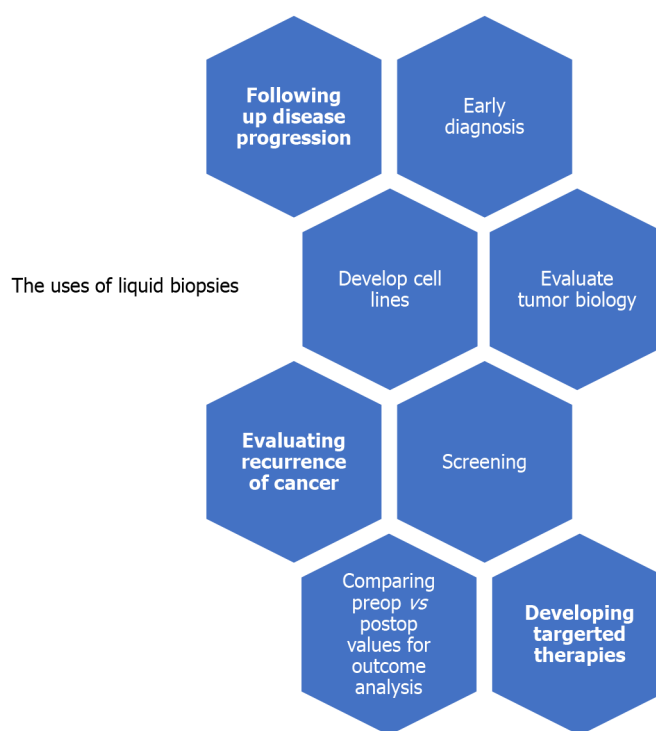


Figure 1 The various uses of liquid biopsies in cancer management.

We agree with the authors' insight that cholangiocarcinoma remains a dismal prognosis for patients, primarily due to the difficulty in diagnosis, minimal surgical resection options available, and high recurrence rates. The use of liquid biopsies in its various forms as a new biomarker is a novel technique in the diagnosis and management of cholangiocarcinoma and other gastrointestinal tumors due to its low risk, ease of performance, cost-effectiveness, and quick results. This is especially true when compared to other mainstay options of screening, diagnosis and follow up such as surgical or computed tomography-guided biopsy and various forms of imaging (Computed tomography, magnetic resonance imaging, *etc.*).

Because of the increased interest in liquid biopsy use in cancer management as a biomarker, there are currently over 1000 clinical trials (over 700 on circulating tumor cells and over 300 on circulating tumor derived DNA) listed in ClinicalTrials.gov concerning the topic[2]. We expect that even more will follow on detecting microRNA, proteins, cytokines, metabolites, and extracellular vesicles in most gastrointestinal cancers, including cholangiocarcinoma.

Liquid biopsies have reported sensitivities ranging from 38% to 100% in different cancers such as breast, prostate, colorectal and pancreatic[3]. Due to the need for fast and accurate diagnosis in aggressive cancer types (cholangiocarcinoma and pancreatic cancer for example), liquid biopsies offer clinicians a novel way to treat such diseases. Pancreatic cancer and cholangiocarcinoma rates have increased drastically over the past few decades, but 5-year survival rates remain at 5%-20% and 8%-25% respectively even with curative intent surgical resection and chemo/radiotherapy[4,5]. As such, innovative methods such as liquid biopsies are needed to increase survival odds by allowing earlier diagnosis and tracking new biomarkers preoperatively and postoperatively for surgical prognostication.

Liquid biopsies offer clinicians with insights on tumor biology, which might help in developing targeted therapies according to specific cancer pathologies. The uses of liquid biopsies are summarized in Figure 1. We believe this will be a key factor in future cholangiocarcinoma and other gastrointestinal treatment plans, especially in patients where surgical resection is not a viable option. These biopsies will be able to evaluate treatment response and provide "real-time" evidence of resistance to some chemo/targeted therapies.

We believe that liquid biopsies will become a crucial tool in the early diagnosis and management of gastrointestinal cancers, as is the case with cholangiocarcinoma. More large prospective clinical trials are needed to validate the results already present on the technique. More funding is needed to develop further this technique in order to increase the sensitivity and accuracy of liquid biopsy results.

REFERENCES

- 1 **Rompianesi G**, Di Martino M, Gordon-Weeks A, Montalti R, Troisi R. Liquid biopsy in cholangiocarcinoma: Current status and future perspectives. *World J Gastrointest Oncol* 2021; **13**: 332-350 [PMID: [34040697](#) DOI: [10.4251/wjgo.v13.i5.332](#)]
- 2 **ClinicalTrials.gov**. ClinicalTrials.gov is a database of privately and publicly funded clinical studies conducted around the world. [cited 10 May 2021]. Available from: <https://clinicaltrials.gov/>
- 3 **Lewis AR**, Valle JW, McNamara MG. Pancreatic cancer: Are "liquid biopsies" ready for prime-time? *World J Gastroenterol* 2016; **22**: 7175-7185 [PMID: [27621566](#) DOI: [10.3748/wjg.v22.i32.7175](#)]
- 4 **Siegel RL**, Miller KD, Fuchs HE, Jemal A. Cancer Statistics, 2021. *CA Cancer J Clin* 2021; **71**: 7-33 [PMID: [33433946](#) DOI: [10.3322/caac.21654](#)]
- 5 **Puckett Y**. Pancreatic Cancer. StatPearls [Internet]. StatPearls (ed): StatPearls Publishing, Treasure Island (FL), 2020



Published by **Baishideng Publishing Group Inc**
7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA

Telephone: +1-925-3991568

E-mail: bpgoffice@wjgnet.com

Help Desk: <https://www.f6publishing.com/helpdesk>

<https://www.wjgnet.com>

