

World Journal of *Gastrointestinal Oncology*

World J Gastrointest Oncol 2022 August 15; 14(8): 1375-1603



**GUIDELINE INTERPRETATION**

- 1375** Influence of SCENIC recommendations on terminology used for histopathologic diagnosis of inflammatory bowel disease-associated dysplasia
Li Y, Wang HL

REVIEW

- 1388** KAI1/CD82 gene and autotaxin-lysophosphatidic acid axis in gastrointestinal cancers
Wang S, Chen J, Guo XZ
- 1406** Poorly cohesive cells gastric carcinoma including signet-ring cell cancer: Updated review of definition, classification and therapeutic management
Drubay V, Nuytens F, Renaud F, Adenis A, Eveno C, Piessen G
- 1429** Lymph node regression grading of locally advanced rectal cancer treated with neoadjuvant chemoradiotherapy
He L, Xiao J, Zheng P, Zhong L, Peng Q

MINIREVIEWS

- 1446** Immunotherapy in biliary tract cancers: Current evidence and future perspectives
Uson Junior PLS, Araujo RL
- 1456** Crosstalk between gut microbiota and COVID-19 impacts pancreatic cancer progression
Zhang CY, Liu S, Yang M
- 1469** Angiogenesis in gastrointestinal stromal tumors: From bench to bedside
Papadakis SP, Tsagkaris C, Papadakis M, Papazoglou AS, Moysidis DV, Zografos CG, Theocharis S
- 1478** Stereotactic radiotherapy for intrahepatic cholangiocarcinoma
Borakati A, Froghi F, Bhogal RH, Mavroeidis VK
- 1490** How the COVID-19 pandemic has affected the colorectal cancer screening in Italy: A minireview
Fancellu A, Veneroni S, Santoru A, Meloni A, Sanna V, Ginesu GC, Deiana G, Paliogiannis P, Ninniri C, Perra T, Porcu A

ORIGINAL ARTICLE**Basic Study**

- 1499** Safety and feasibility of irreversible electroporation for the pancreatic head in a porcine model
Yan L, Liang B, Feng J, Zhang HY, Chang HS, Liu B, Chen YL

Retrospective Cohort Study

- 1510** Second-line therapy for advanced hepatocellular carcinoma with regorafenib or cabozantinib: Multicenter French clinical experience in real-life after matching

Adhoute X, De Matharel M, Mineur L, Pénaranda G, Ouizeman D, Toullec C, Tran A, Castellani P, Rollet A, Oules V, Perrier H, Si Ahmed SN, Bourliere M, Anty R

Retrospective Study

- 1528** Profiling of gene fusion involving targetable genes in Chinese gastric cancer

Liu ZH, Zhu BW, Shi M, Qu YR, He XJ, Yuan HL, Ma J, Li W, Zhao DD, Liu ZC, Wang BM, Wang CY, Tao HQ, Ma TH

- 1540** Adjuvant chemoradiotherapy *vs* adjuvant chemotherapy in locally advanced Siewert type II/III adenocarcinoma of gastroesophageal junction after D2/R0 resection

Kang WZ, Shi JM, Wang BZ, Xiong JP, Shao XX, Hu HT, Jin J, Tian YT

Observational Study

- 1552** Duodenal-type follicular lymphoma more than 10 years after treatment intervention: A retrospective single-center analysis

Saito M, Mori A, Tsukamoto S, Ishio T, Yokoyama E, Izumiyama K, Morioka M, Kondo T, Sugino H

- 1562** Evaluation of the diagnostic value of serum-based proteomics for colorectal cancer

Wang HJ, Xie YB, Zhang PJ, Jiang T

- 1574** RASSF1A methylation as a biomarker for detection of colorectal cancer and hepatocellular carcinoma

Li J, Li H, Run ZC, Wang ZL, Jiang T, An Y, Li Z

CASE REPORT

- 1585** Ewing sarcoma of the ileum with wide multiorgan metastases: A case report and review of literature

Guo AW, Liu YS, Li H, Yuan Y, Li SX

LETTER TO THE EDITOR

- 1594** Exosomes: Promising biomarkers and targets for cancer

Fang Z, Ding YX, Li F

- 1597** Colitis and colorectal tumors should be further explored and differentiated

Xu DH, Zhou B, Li ZP, He LP, Wang XJ

- 1600** Acute or chronic inflammation role in gastrointestinal oncology

Chen HJ, Liang GY, Chen X, Du Z

ABOUT COVER

Editorial Board Member of *World Journal of Gastrointestinal Oncology*, Meng Zhou, PhD, Professor, School of Biomedical Engineering, Wenzhou Medical University, Wenzhou 325027, Zhejiang Province, China. zhoumeng@wmu.edu.cn

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 abstracted and indexed in PubMed, PubMed Central, Science Citation Index Expanded (SCIE, also known as SciSearch®), Journal Citation Reports/Science Edition, Scopus, Reference Citation Analysis, China National Knowledge Infrastructure, China Science and Technology Journal Database, and Superstar Journals Database. The 2022 edition of Journal Citation Reports® cites the 2021 impact factor (IF) for WJGO as 3.404; IF without journal self cites: 3.357; 5-year IF: 3.250; Journal Citation Indicator: 0.53; Ranking: 162 among 245 journals in oncology; Quartile category: Q3; Ranking: 59 among 93 journals in gastroenterology and hepatology; and Quartile category: Q3. The WJGO's CiteScore for 2021 is 3.6 and Scopus CiteScore rank 2021: Gastroenterology is 72/149; Oncology is 203/360.

RESPONSIBLE EDITORS FOR THIS ISSUE

Production Editor: Ying-Yi Yuan; **Production Department Director:** Xiang Li; **Editorial Office Director:** Jia-Ru Fan.

NAME OF JOURNAL

World Journal of Gastrointestinal Oncology

ISSN

ISSN 1948-5204 (online)

LAUNCH DATE

February 15, 2009

FREQUENCY

Monthly

EDITORS-IN-CHIEF

Monjur Ahmed, Florin Burada

EDITORIAL BOARD MEMBERS

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

PUBLICATION DATE

August 15, 2022

COPYRIGHT

© 2022 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>



Acute or chronic inflammation role in gastrointestinal oncology

Hong-Jin Chen, Gui-You Liang, Xiong Chen, Zhou Du

Specialty type: Oncology

Provenance and peer review:

Invited article; Externally peer reviewed.

Peer-review model: Single blind

Peer-review report's scientific quality classification

Grade A (Excellent): 0

Grade B (Very good): 0

Grade C (Good): C, C, C

Grade D (Fair): 0

Grade E (Poor): 0

P-Reviewer: Apiratwarakul K, Thailand; Kotlyarov S, Russia; Zhao Y, China

Received: April 4, 2022

Peer-review started: April 4, 2022

First decision: May 11, 2022

Revised: June 2, 2022

Accepted: July 16, 2022

Article in press: July 16, 2022

Published online: August 15, 2022



Hong-Jin Chen, Gui-You Liang, Translational Medicine Research Center, Guizhou Medical University, Guiyang 550025, Guizhou Province, China

Hong-Jin Chen, Guizhou Institute of Precision Medicine, Affiliated Hospital of Guizhou Medical University, Guiyang 550009, Guizhou Province, China

Xiong Chen, Department of Endocrinology, The First Affiliated Hospital of Wenzhou Medical University, Wenzhou 325000, Zhejiang Province, China

Zhou Du, Department of Hernia and Abdominal Wall Surgery, The First Affiliated Hospital of Wenzhou Medical University, Wenzhou 325000, Zhejiang Province, China

Corresponding author: Zhou Du, MD, Chief Doctor, Department of Hernia and Abdominal Wall Surgery, The First Affiliated Hospital of Wenzhou Medical University, Shangcai Village, Nanbaixiang, Wenzhou 325000, Zhejiang Province, China. duzhou2190@126.com

Abstract

The following letter to the editor highlights the review titled "Inflammatory bowel disease-related colorectal cancer: Past, present and future perspectives" in *World J Gastrointest Oncol* 2022 March 15; 14(3): 547-567. It is necessary to explore the role of inflammation in promoting tumorigenesis and development of gastrointestinal cancers.

Key Words: Inflammatory; Gastrointestinal cancers; Development; Letter to the Editor; Colorectal cancer

©The Author(s) 2022. Published by Baishideng Publishing Group Inc. All rights reserved.

Core Tip: Gastrointestinal cancers are systematic tumors with the largest number of patients in the world. Most patients are prone to migration, invasion or other malignant phenotypes. The treatment strategies mainly include surgical resection, radiotherapy and chemotherapy in clinic. However, the survival rate of cases still cannot be significantly improved. Recently, the relationship between inflammation and gastrointestinal tumors has been gradually clarified, and chronic inflammation plays an important role in the occurrence and deterioration of tumors. The main purpose of this letter is to illustrate the key role of inflammation in tumor progression and potential therapeutic directions.

Citation: Chen HJ, Liang GY, Chen X, Du Z. Acute or chronic inflammation role in gastrointestinal oncology. *World J Gastrointest Oncol* 2022; 14(8): 1600-1603

URL: <https://www.wjgnet.com/1948-5204/full/v14/i8/1600.htm>

DOI: <https://dx.doi.org/10.4251/wjgo.v14.i8.1600>

TO THE EDITOR

We read with interest the review by Majumder *et al*[1], which is titled “Inflammatory bowel disease-related colorectal cancer: Past, present and future perspectives.” The tumor pathogenesis is complex and not yet clear. Recently, inflammation induced and promoted tumor occurrence and deterioration, and the presence of high levels of inflammatory factors in many tumor patients has gradually become clear. The gastrointestinal system is one of the most prone to inflammation. Patients with chronic inflammation are more likely to develop liver cancer, pancreatic cancer, stomach cancer and colon cancer than those without inflammation. Studies have demonstrated that hepatitis B virus patients were more likely to get cancer of the liver, and prognosis and survival time is far less than the patients without hepatitis B virus[2]. Patients with pancreatitis had a 4.8-times significantly higher risk of developing cancer than those without pancreatitis[3]. *Helicobacter pylori* is one of the important risk factors for gastric cancer patients, and *Helicobacter pylori* will induce the occurrence of chronic gastritis[4]. In addition, patients with colitis have an increased mortality of colon cancer by 15%[1]. Therefore, if the potential biomarkers can be identified by early intervention of the synthesis, secretion and release of inflammatory factors, it may have great clinical significance for gastrointestinal tumors and improve the overall understanding of gastrointestinal tumors.

The interleukin (IL) family is the most common biomarker of inflammation. IL-1 β , IL-6 and IL-10 are involved in the development and progression of gastrointestinal tumors. On the other hand, external stimuli, such as excessive oxidative stress, promote the secretion and release of the IL family, while the IL family itself has a certain feedback activation effect, thus exacerbating the inflammatory response[5]. In colitis-cancer, IL-6 and other factors promote epidermal cell damage, and prolonged inflammatory damage will lead to abnormal proliferation of epidermal cells, which if not controlled will eventually lead to gene epigenetic modification mutation and ultimately induce tumorigenesis[6,7].

Tumor necrosis factor (TNF), another classic inflammatory factor, can promote the activation of neutrophils or macrophages to aggravate tissue damage by regulating monocyte chemotactic protein-1 and other mRNAs[8]. Moreover, TNF accelerates the inflammatory process and thus leads to the occurrence of tumors[9]. In addition, the role of a c-x-c motif chemokine ligand (CCL) family in gastrointestinal tumors is gradually becoming clear. CCLs infiltrated tissues by recruiting macrophages and releasing IL family members or TNF, further leading to local inflammatory infiltration of tissues, gene mutation and ultimately tumorigenesis[10].

Interestingly, some papers showed that chronic inflammatory responses promoted tumorigenesis and development, while acute inflammation is currently considered to inhibit tumor progression (Figure 1)[11]. The new clinical research paper indicated that colon cancer patients with higher IL-6 and TNF (chronic inflammatory factors) developed a cancer recurrence. However, acute inflammatory factors, IL-10 and interferon γ , were lower in expression compared with those who did not recur[7]. IL-12 is an acute inflammatory factor that could inhibit tumor progression in gastrointestinal tumors, and its high expression leads to a longer survival time[12]. Additionally, the interferon family is a potential therapeutic biomarker, which could inhibit the occurrence and progression of gastrointestinal tumors by regulating cellular immunity, controlling cell cycle or promoting cell apoptosis[13,14]. Moreover, the interferon family has been approved by the Food and Drug Administration for the treatment of tumors[15].

In conclusion, inflammation is involved in the entire gastrointestinal tumor process. The worse inflammation is mainly chronic inflammation, which can be induced by many reasons, such as unhealthy high-fat diet, excessive use of antibiotics, imbalance of intestinal flora and so on[16]. Majumder *et al*[1] systematically summarized the role of inflammatory factors in colon cancer. However, they failed to study and consider the role of acute inflammation in colon cancer. Therefore, inflammatory factors should be considered as important triggers to optimize current diagnosis and treatment strategies for early tumor diagnosis.

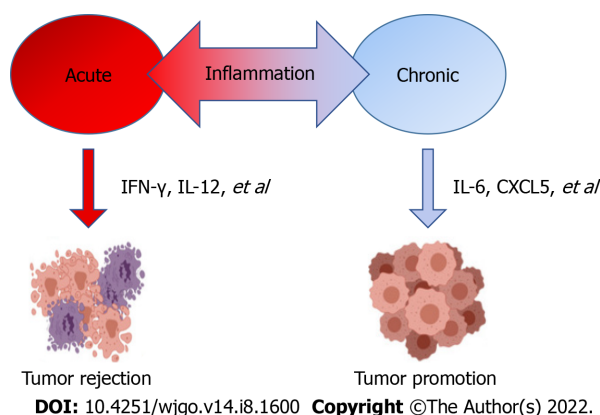


Figure 1 Relationship of inflammation and cancer.

FOOTNOTES

Author contributions: Chen HJ and Chen X designed the research; Chen HJ wrote this comment; Liang GY and Du Z reviewed and supervised this manuscript; All authors approved the final version of the article.

Supported by the Start-up Fund of Guizhou Medical University, No. J2021032; the Postdoctoral Research Fund of Affiliated Hospital of Guizhou Medical University, No. BSH-Q-2021-10; and the Guizhou Provincial Health Commission, No. gzwkj2022-082.

Conflict-of-interest statement: All authors have nothing to disclose.

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: <https://creativecommons.org/licenses/by-nc/4.0/>

Country/Territory of origin: China

ORCID number: Hong-Jin Chen 0000-0002-0513-9584; Gui-You Liang 0000-0002-4555-9102; Xiong Chen 0000-0002-1799-2654; Zhou Du 0000-0001-8726-1016.

S-Editor: Wang LL

L-Editor: Filipodia

P-Editor: Wang LL

REFERENCES

- 1 **Majumder S**, Shivaji UN, Kasturi R, Sigamani A, Ghosh S, Iacucci M. Inflammatory bowel disease-related colorectal cancer: Past, present and future perspectives. *World J Gastrointest Oncol* 2022; **14**: 547-567 [PMID: 35321275 DOI: 10.4251/wjgo.v14.i3.547]
- 2 **Zhou Q**, Zhang Q, Wang K, Huang T, Deng S, Wang Y, Cheng C. Anti-rheumatic drug-induced hepatitis B virus reactivation and preventive strategies for hepatocellular carcinoma. *Pharmacol Res* 2022; **178**: 106181 [PMID: 35301112 DOI: 10.1016/j.phrs.2022.106181]
- 3 **Petrov MS**. Post-pancreatitis diabetes mellitus and excess intra-pancreatic fat deposition as harbingers of pancreatic cancer. *World J Gastroenterol* 2021; **27**: 1936-1942 [PMID: 34007131 DOI: 10.3748/wjg.v27.i17.1936]
- 4 **El Hafa F**, Wang T, Ndifor VM, Jin G. Association between *Helicobacter pylori* antibodies determined by multiplex serology and gastric cancer risk: A meta-analysis. *Helicobacter* 2022; e12881 [DOI: 10.1111/hel.12881]
- 5 **Zhou CB**, Fang JY. The role of pyroptosis in gastrointestinal cancer and immune responses to intestinal microbial infection. *Biochim Biophys Acta Rev Cancer* 2019; **1872**: 1-10 [PMID: 31059737 DOI: 10.1016/j.bbcan.2019.05.001]
- 6 **Deng J**, Zhao L, Yuan X, Li Y, Shi J, Zhang H, Zhao Y, Han L, Wang H, Yan Y, Zhao H, Zou F. Pre-Administration of Berberine Exerts Chemopreventive Effects in AOM/DSS-Induced Colitis-Associated Carcinogenesis Mice via Modulating Inflammation and Intestinal Microbiota. *Nutrients* 2022; **14** [PMID: 35215376 DOI: 10.3390/nu14040726]
- 7 **Fleming CA**, O'Connell EP, Kavanagh RG, O'Leary DP, Twomey M, Corrigan MA, Wang JH, Maher MM, O'Connor OJ, Redmond HP. Body Composition, Inflammation, and 5-Year Outcomes in Colon Cancer. *JAMA Netw Open* 2021; **4**: e2115274 [PMID: 34459908 DOI: 10.1001/jamanetworkopen.2021.15274]
- 8 **Chen H**, Zhang Y, Zhang W, Liu H, Sun C, Zhang B, Bai B, Wu D, Xiao Z, Lum H, Zhou J, Chen R, Liang G. Inhibition

- of myeloid differentiation factor 2 by baicalein protects against acute lung injury. *Phytomedicine* 2019; **63**: 152997 [PMID: 31254764 DOI: 10.1016/j.phymed.2019.152997]
- 9 **Tu M**, Klein L, Espinet E, Georgomanolis T, Wegwitz F, Li X, Urbach L, Danieli-Mackay A, Küffer S, Bojarczuk K, Mizi A, Günesdogan U, Chapuy B, Gu Z, Neesse A, Kishore U, Ströbel P, Hessmann E, Hahn SA, Trumpp A, Papantonis A, Ellenrieder V, Singh SK. TNF- α -producing macrophages determine subtype identity and prognosis *via* AP1 enhancer reprogramming in pancreatic cancer. *Nat Cancer* 2021; **2**: 1185-1203 [PMID: 35122059 DOI: 10.1038/s43018-021-00258-w]
 - 10 **Fogelman DR**, Morris J, Xiao L, Hassan M, Vadhan S, Overman M, Javle S, Shroff R, Varadhachary G, Wolff R, Vence L, Maitra A, Cleeland C, Wang XS. A predictive model of inflammatory markers and patient-reported symptoms for cachexia in newly diagnosed pancreatic cancer patients. *Support Care Cancer* 2017; **25**: 1809-1817 [PMID: 28111717 DOI: 10.1007/s00520-016-3553-z]
 - 11 **Zhao H**, Wu L, Yan G, Chen Y, Zhou M, Wu Y, Li Y. Inflammation and tumor progression: signaling pathways and targeted intervention. *Signal Transduct Target Ther* 2021; **6**: 263 [PMID: 34248142 DOI: 10.1038/s41392-021-00658-5]
 - 12 **Hu J**, Yang Q, Zhang W, Du H, Chen Y, Zhao Q, Dao L, Xia X, Natalie Wall F, Zhang Z, Mahadeo K, Gorlick R, Kopetz S, Dotti G, Li S. Cell membrane-anchored and tumor-targeted IL-12 (attIL12)-T cell therapy for eliminating large and heterogeneous solid tumors. *J Immunother Cancer* 2022; **10** [PMID: 35027427 DOI: 10.1136/jitc-2021-003633]
 - 13 **Shi XY**, Zhang XL, Shi QY, Qiu X, Wu XB, Zheng BL, Jiang HX, Qin SY. IFN- γ affects pancreatic cancer properties by MACC1-AS1/MACC1 axis *via* AKT/mTOR signaling pathway. *Clin Transl Oncol* 2022; **24**: 1073-1085 [PMID: 35037236 DOI: 10.1007/s12094-021-02748-w]
 - 14 **Peng Y**, Hu Y, Qiu L. Vesicular IFN- γ as a cooperative attacker to enhance anti-cancer effect of 5-fluorouracil *via* thymidine phosphorylase upregulation and tumor microenvironment normalization. *Nanomedicine* 2022; **40**: 102501 [PMID: 34843983 DOI: 10.1016/j.nano.2021.102501]
 - 15 **Miller CH**, Maher SG, Young HA. Clinical Use of Interferon-gamma. *Ann N Y Acad Sci* 2009; **1182**: 69-79 [PMID: 20074276 DOI: 10.1111/j.1749-6632.2009.05069.x]
 - 16 **Alhobayb T**, Peravali R, Ashkar M. The Relationship between Acute and Chronic Pancreatitis with Pancreatic Adenocarcinoma: Review. *Diseases* 2021; **9** [PMID: 34940031 DOI: 10.3390/diseases9040093]



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>

