

World Journal of *Gastrointestinal Oncology*

World J Gastrointest Oncol 2024 November 15; 16(11): 4300-4531



EDITORIAL

- 4300** Molecular mechanisms underlying roles of long non-coding RNA small nucleolar RNA host gene 16 in digestive system cancers
Yang TF, Li XR, Kong MW
- 4309** Navigating the complex landscape of crawling-type gastric adenocarcinomas: Insights and implications for clinical practice
Yu HB, Jia KF, Wang XF, Li BY, Xin Q
- 4315** Present and prospect of transarterial chemoembolization combined with tyrosine kinase inhibitor and PD-1 inhibitor for unresectable hepatocellular carcinoma
Zhang R, Liu YH, Li Y, Li NN, Li Z
- 4321** Unveiling the clinicopathological enigma of crawling-type gastric adenocarcinoma
Christodoulidis G, Agko SE, Kouliou MN, Koumarelas KE
- 4326** Practical hints for the diagnosis of mixed neuroendocrine-non-neuroendocrine neoplasms of the digestive system
Mattiolo P
- 4333** Endoscopic diagnosis and management of gallbladder carcinoma in minimally invasive era: New needs, new models
Deqing LC, Zhang JW, Yang J

REVIEW

- 4338** Advances in the diagnosis and treatment of MET-variant digestive tract tumors
Zhang C, Dong HK, Gao JM, Zeng QQ, Qiu JT, Wang JJ
- 4354** Effect of colorectal cancer stem cells on the development and metastasis of colorectal cancer
Deng RZ, Zheng X, Lu ZL, Yuan M, Meng QC, Wu T, Tian Y

MINIREVIEWS

- 4369** Current clinical trials on gastric cancer surgery in China
Zhang S, Hu RH, Cui XM, Song C, Jiang XH

ORIGINAL ARTICLE**Retrospective Study**

- 4383** Pattern of colorectal surgery and long-term survival: 10-year experience from a single center
Zhu DX, Chen M, Xu DH, He GD, Xu PP, Lin Q, Ren L, Xu JM

- 4392 Drug-eluting beads chemoembolization combined with programmed cell death 1 inhibitor and lenvatinib for large hepatocellular carcinoma

Yang H, Qiu GP, Liu J, Yang TQ

- 4402 Effect of endoscopic submucosal dissection on gastrointestinal function and nutritional status in patients with early gastric cancer

Xu QD, Liu H, Zhang HW, Gao XM, Li YG, Wu ZY

- 4409 Comparison of clinical features of patients with or without severe gastrointestinal complications in aggressive gastrointestinal lymphomas

Liu XH, Chen G, Cao DD, Liu H, Ke XK, Hu YG, Tan W, Ke D, Xu XM

- 4424 Endoscopic and pathological features of neoplastic transformation of gastric hyperplastic polyps: Retrospective study of 4010 cases

Zhang DX, Niu ZY, Wang Y, Zu M, Wu YH, Shi YY, Zhang HJ, Zhang J, Ding SG

Basic Study

- 4436 *BIRC3* induces the phosphoinositide 3-kinase-Akt pathway activation to promote trastuzumab resistance in human epidermal growth factor receptor 2-positive gastric cancer

Li SL, Wang PY, Jia YP, Zhang ZX, He HY, Chen PY, Liu X, Liu B, Lu L, Fu WH

- 4456 Impact and mechanism study of dioscin on biological characteristics of colorectal cancer cells

Cai XX, Huang ZF, Tu FY, Yu J

- 4468 Effects of invigorating-spleen and anticancer prescription on extracellular signal-regulated kinase/mitogen-activated protein kinase signaling pathway in colon cancer mice model

Wang W, Wang J, Ren XX, Yue HL, Li Z

SYSTEMATIC REVIEWS

- 4477 Prognostic value of neutrophil-to-lymphocyte ratio in gastric cancer patients undergoing neoadjuvant chemotherapy: A systematic review and meta-analysis

Wei ZH, Tuo M, Ye C, Wu XF, Wang HH, Ren WZ, Liu G, Xiang T

SCIENTOMETRICS

- 4489 Bibliometric analysis of olaparib and pancreatic cancer from 2009 to 2022: A global perspective

Feng X, Chai YH, Jiang KX, Jiang WB, Chen WC, Pan Y

CASE REPORT

- 4506 Pathologic complete response to conversion therapy in hepatocellular carcinoma using patient-derived organoids: A case report

He YG, Wang Z, Li J, Xi W, Zhao CY, Huang XB, Zheng L

LETTER TO THE EDITOR

- 4514** Vascular endothelial growth factor pathway's influence on bevacizumab efficacy in metastatic colorectal cancer treatment
Qin Y, Ma FY, Zhang Z, Zhao CH, Huang B
- 4518** From biomarker discovery to combined therapies: Advancing hepatocellular carcinoma treatment strategies
Kong MW, Yu Y, Wan Y, Gao Y, Zhang CX
- 4522** Are preoperative inflammatory and nutritional markers important for the prognosis of patients with peritoneal metastasis of colorectal cancer?
Sforzin I, Borad M, Uson Junior PLS
- 4528** Elevated *ETV4* expression in cholangiocarcinoma is linked to poor prognosis and may guide targeted therapies
Okpete UE, Byeon H

ABOUT COVER

Editorial Board of *World Journal of Gastrointestinal Oncology*, Sezer Saglam, MD, Full Professor, Department of Medical Oncology, Demiroglu Istanbul Bilim University, Istanbul 34349, Türkiye. saglam@istanbul.edu.tr

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 Science and Technology Journal Database, and Superstar Journals Database. The 2024 edition of Journal Citation Reports® cites the 2023 journal impact factor (JIF) for *WJGO* as 2.5; JIF without journal self cites: 2.5; 5-year JIF: 2.8; JIF Rank: 71/143 in gastroenterology and hepatology; JIF Quartile: Q2; and 5-year JIF Quartile: Q2. The *WJGO*'s CiteScore for 2023 is 4.2 and Scopus CiteScore rank 2023: Gastroenterology is 80/167; Oncology is 196/404.

RESPONSIBLE EDITORS FOR THIS ISSUE

Production Editor: *Si Zhao*; Production Department Director: *Xiang Li*; Cover Editor: *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

November 15, 2024

COPYRIGHT

© 2024 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>



From biomarker discovery to combined therapies: Advancing hepatocellular carcinoma treatment strategies

Mo-Wei Kong, Yang Yu, Ying Wan, Yu Gao, Chun-Xiang Zhang

Specialty type: Oncology

Provenance and peer review:

Invited article; Externally peer reviewed.

Peer-review model: Single blind

Peer-review report's classification

Scientific Quality: Grade D

Novelty: Grade C

Creativity or Innovation: Grade C

Scientific Significance: Grade C

P-Reviewer: Wang X

Received: July 27, 2024

Revised: September 17, 2024

Accepted: October 9, 2024

Published online: November 15, 2024

Processing time: 90 Days and 4 Hours



Mo-Wei Kong, Yang Yu, Department of Cardiology, Southwest Medical University, Luzhou 646000, Sichuan Province, China

Ying Wan, School of Basic Medical Sciences, Southwest Medical University, Luzhou 646000, Sichuan Province, China

Yu Gao, Department of Endocrinology, The Affiliated Hospital of Chengde Medical College, Chengde 067000, Hebei Province, China

Chun-Xiang Zhang, Department of Pharmacology and Rush University Cardiovascular Research Center, Rush University Medical Center, Luzhou 646000, Sichuan Province, China

Co-first authors: Mo-Wei Kong and Yang Yu.

Corresponding author: Chun-Xiang Zhang, MD, Dean, Professor, Department of Pharmacology and Rush University Cardiovascular Research Center, Rush University Medical Center, No. 25 Taiping Street, Luzhou 646000, Sichuan Province, China. zhangchx999@163.com

Abstract

This editorial reviews advances in hepatocellular carcinoma (HCC) treatment, focusing on a triple therapy approach and biomarker discovery. Zhang *et al* discuss the synergistic potential of transarterial chemoembolization combined with tyrosine kinase inhibitors and PD-1 inhibitors. Meanwhile, Li *et al* identify protein tyrosine phosphatase non-receptor II (PTPN2) as a biomarker for poor prognosis and immune evasion in HCC. The studies highlight the importance of combined therapies and biomarkers in improving HCC treatment efficacy and patient outcomes, with PTPN2 emerging as a potential therapeutic target. This article supplements the aforementioned studies with more recent research advancements, focusing on the molecular mechanisms and clinical applications of biomarkers.

Key Words: Hepatocellular carcinoma; Triple therapy; Transarterial chemoembolization; Protein tyrosine phosphatase non-receptor II

©The Author(s) 2024. Published by Baishideng Publishing Group Inc. All rights reserved.

Core Tip: This article reviews the integration of novel combined therapies and biomarker identification in hepatocellular carcinoma (HCC) management. The studies by Zhang *et al* and Li *et al* explore the efficaciousness of a triple therapy involving transarterial chemoembolization, tyrosine kinase inhibitors, and PD-1 inhibitors, and the prognostic value of protein tyrosine phosphatase non-receptor II (PTPN2), respectively. These investigations underscore the significance of PTPN2 as a potential therapeutic target and highlight the promise of synergistic treatment strategies in enhancing HCC patient outcomes.

Citation: Kong MW, Yu Y, Wan Y, Gao Y, Zhang CX. From biomarker discovery to combined therapies: Advancing hepatocellular carcinoma treatment strategies. *World J Gastrointest Oncol* 2024; 16(11): 4518-4521

URL: <https://www.wjgnet.com/1948-5204/full/v16/i11/4518.htm>

DOI: <https://dx.doi.org/10.4251/wjgo.v16.i11.4518>

TO THE EDITOR

Hepatocellular carcinoma (HCC) is a significant contributor to cancer-related mortality worldwide. As our understanding of its molecular underpinnings grows, so too does the development of targeted and personalized treatment strategies. This editorial delves into recent breakthroughs in HCC therapy, highlighting the role of biomarkers and the emerging concept of triplet therapy.

The study by Zhang *et al*[1] explored the synergistic potential of transarterial chemoembolization (TACE) combined with tyrosine kinase inhibitors and PD-1 inhibitors. This integrated therapy not only targets tumor angiogenesis but also enhances the body's antitumor immune response through checkpoint inhibitors, offering new hope for HCC treatment. Simultaneously, Li *et al*[2] identified non-receptor type II protein tyrosine phosphatase (PTPN2) as a biomarker of poor prognosis and immune escape in HCC. The discovery of PTPN2 not only provides a new prognostic indicator for HCC but also suggests potential therapeutic targets. These studies underscore the significance of integrated therapies and biomarkers in enhancing treatment efficacy and prognosis in HCC patients.

Unveiling the molecular basis

The genomic landscape of HCC: HCC is a complex disease characterized by a diverse array of genetic and epigenetic alterations[3]. The genomic profile of HCC features a variety of mutations, copy number variations, and changes in gene expression, driving tumor initiation, progression, and metastasis. In HCC, cell cycle regulators and apoptosis-related gene families, such as CCND1 and CDK4, are key molecular players[4]. Their overexpression, as shown by Lee *et al*[5], is typically associated with poor prognosis and aggressive phenotypes in HCC. Moreover, the dysregulation of growth factors and their receptors, such as the VEGF family, crucial for angiogenesis, is a necessary condition for tumor growth and invasion[6]. The intricate interplay among these molecular components forms the foundation of HCC heterogeneity, requiring deeper understanding for the development of targeted therapies.

The role of lymph node metastasis-related genes: The propensity of HCC for lymph node metastasis is a major contributor to its poor prognosis[7]. As revealed by the genome-wide analysis by Lee *et al*[5] published in the *World Journal of Gastroenterology*, the upregulation and downregulation of genes related to HCC lymph node metastasis provide new insights into the molecular mechanisms of tumor metastasis. These genes, including *MET*, *EPHA2*, and *MMP2*, are involved in processes such as cell adhesion, migration, and extracellular matrix degradation[3,8]. The identification of these genes not only sheds light on the molecular mechanisms of tumor cell metastasis but also presents potential therapeutic targets. For instance, inhibiting matrix metalloproteinases (MMPs) like MMP2 and MMP13 may help limit the invasive capabilities of HCC cells, restricting metastasis and improving patient outcomes[9].

Integration of biomarkers and triplet therapy: The discovery of biomarkers in HCC has paved the way for personalized medicine, with therapies tailored to individual molecular characteristics. The integration of biomarkers with triplet therapy is an emerging frontier in HCC treatment. For instance, the discovery of immunotherapy biomarkers has transformed the systemic treatment of advanced HCC, exemplified by the success of the atezolizumab and bevacizumab combination[10]. Moreover, the combination of regional therapy, such as TACE, with immunotherapy is under active investigation. TACE, by increasing the release of tumor antigens, may enhance the efficacy of immunotherapy[11]. Ongoing phase 3 clinical trials, such as IMbrave150 and EMERALD-1, will provide critical evidence for this combined treatment approach[12].

Clinical translation of biomarker research

The clinical translation of biomarkers is a critical component of precision medicine, especially for HCC, a highly heterogeneous malignancy. Biomarkers in HCC not only reveal the molecular features of tumors but also predict patient responses to specific treatments, providing essential insights for clinical decision-making. In the latest IMbrave150 clinical trial, ISS and ISS10 were demonstrated to be promising predictive biomarkers that can enhance treatment outcomes for HCC patients receiving combination immunotherapy. These markers are crucial for optimizing patient stratification and personalized treatment approaches to improve the efficacy of standard care regimens[13]. The identification of

biomarkers is typically based on comprehensive analysis of the tumor genome, transcriptome, proteome, and metabolome[14]. For example, through high-throughput microarray technology, previous studies conducted gene expression analysis on tumor and non-tumor tissues from 32 HCC patients, uncovering gene expression patterns associated with lymph node metastasis[15]. These genes include cell membrane receptors, intracellular signaling, and cell adhesion-related genes, such as *MET*, *EPHA2*, *CCND1*, *MMP2*, and *MMP13*. Abnormal expression of these genes may promote tumor cell invasion and metastasis, offering new molecular targets for HCC treatment. Recent study have identified minichromosome maintenance 4, as a member of the minichromosome maintenance protein family, as a potential biomarker in pan-cancer analyses[16].

Despite the promise of biomarker discovery, their clinical application faces significant challenges. Firstly, biomarker validation requires testing in larger patient populations to ensure their generalizability and reproducibility. Additionally, biomarker detection methods need to be highly sensitive, specific, and user-friendly to meet clinical testing demands. For instance, previous studies confirmed microarray analysis results using real-time quantitative reverse transcription-polymerase chain reaction, a method that is accurate but may be complex and costly for clinical application[17]. Therefore, the development of simpler, more cost-effective detection methods is crucial for the clinical application of biomarkers.

Moreover, the clinical application of biomarkers must consider individual patient variations, such as genetic background, tumor subtype, and environmental factors[18]. These factors may influence biomarker expression and function, affecting their predictive value in clinical settings. Future research should further explore the relationship between these factors and biomarkers to improve the clinical effectiveness of biomarker applications. With the advancement of precision medicine, the study of personalized biomarkers will become a focal point. Personalized biomarkers can provide more accurate treatment predictions and guidance based on specific patient conditions, such as genetic background, tumor characteristics, and environmental factors. Individualized treatment strategies based on specific gene mutations or expression profiles may significantly enhance treatment outcomes while reducing adverse reactions.

CONCLUSION

This editorial discusses the pivotal role of biomarkers in HCC treatment and their transformative impact on precision medicine. Despite the potential of biomarkers identified in preliminary studies, their clinical application requires rigorous validation through large-scale, multicenter clinical trials to ensure their reliability and generalizability. The transition of biomarkers from research to clinical practice presents challenges, including the optimization of detection methods, consideration of individual differences, assessment of therapeutic efficacy and safety, and compliance with regulatory standards. The future of personalized treatment is promising, with biomarkers guiding precise therapeutic directions based on patient-specific conditions. Technological innovations, like artificial intelligence, big data analysis, and novel detection technologies, expedite the discovery, validation, and clinical application of biomarkers, enhancing detection accuracy and efficiency. However, it is important to emphasize that the reproducibility and variability of biomarker efficacy across different patient populations still pose challenges, necessitating further research for support.

FOOTNOTES

Author contributions: Kong MW and Yu Y wrote the manuscript; Designation of Kong MW and Yu Y as joint first authors are based on three main reasons; Kong MW and Yu Y contributed efforts of equal substance throughout the research process. Selecting these researchers as joint first authors acknowledge and respect this equal contribution, while recognizing the spirit of teamwork and collaboration of this study; Zhang CX provided crucial suggestions and guidance for the writing; Wan Y and Gao Y reviewed and revised the manuscript; all authors read and approved the final manuscript.

Supported by National Natural Science Foundation of China, No. U23A20398 and No. 82030007; and Sichuan Science and Technology Program, No. 2022YFS0578.

Conflict-of-interest statement: The authors declare that they have no competing interests.

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 of origin: China

ORCID number: Mo-Wei Kong [0000-0002-1214-164X](https://orcid.org/0000-0002-1214-164X); Chun-Xiang Zhang [0000-0001-8303-6495](https://orcid.org/0000-0001-8303-6495).

S-Editor: Liu H

L-Editor: A

P-Editor: Zhao S

REFERENCES

- 1 **Zhang R**, Liu YH, Li Y, Li NN, Li Z. Present and prospect of transarterial chemoembolization combined with tyrosine kinase inhibitor and PD-1 inhibitor for unresectable hepatocellular carcinoma. *World J Gastrointest Oncol* 2024; **16**: 4315-4320 [DOI: [10.4251/wjgo.v16.i11.4315](https://doi.org/10.4251/wjgo.v16.i11.4315)]
- 2 **Li HY**, Jing YM, Shen X, Tang MY, Shen HH, Li XW, Wang ZS, Su F. Protein tyrosine phosphatase non-receptor II: A possible biomarker of poor prognosis and mediator of immune evasion in hepatocellular carcinoma. *World J Gastrointest Oncol* 2024; **16**: 3913-3931 [PMID: [39350977](https://pubmed.ncbi.nlm.nih.gov/39350977/) DOI: [10.4251/wjgo.v16.i9.3913](https://doi.org/10.4251/wjgo.v16.i9.3913)]
- 3 **Wang C**, Yang G, Feng G, Deng C, Zhang Q, Chen S. Developing an advanced diagnostic model for hepatocellular carcinoma through multi-omics integration leveraging diverse cell-death patterns. *Front Immunol* 2024; **15**: 1410603 [PMID: [39044829](https://pubmed.ncbi.nlm.nih.gov/39044829/) DOI: [10.3389/fimmu.2024.1410603](https://doi.org/10.3389/fimmu.2024.1410603)]
- 4 **Zhao J**, Zhang T, Wu P, Qiu J, Wu K, Shi L, Zhu Q, Zhou J. circRNA-0015004 act as a ceRNA to promote RCC2 expression in hepatocellular carcinoma. *Sci Rep* 2024; **14**: 16913 [PMID: [39043840](https://pubmed.ncbi.nlm.nih.gov/39043840/) DOI: [10.1038/s41598-024-67819-8](https://doi.org/10.1038/s41598-024-67819-8)]
- 5 **Lee CF**, Ling ZQ, Zhao T, Fang SH, Chang WC, Lee SC, Lee KR. Genomic-wide analysis of lymphatic metastasis-associated genes in human hepatocellular carcinoma. *World J Gastroenterol* 2009; **15**: 356-365 [PMID: [19140237](https://pubmed.ncbi.nlm.nih.gov/19140237/) DOI: [10.3748/wjg.15.356](https://doi.org/10.3748/wjg.15.356)]
- 6 **Wang L**, He L, Yi W, Wang M, Xu F, Liu H, Nie J, Pan YH, Dang S, Zhang W. ADAMTS18-fibronectin interaction regulates the morphology of liver sinusoidal endothelial cells. *iScience* 2024; **27**: 110273 [PMID: [39040056](https://pubmed.ncbi.nlm.nih.gov/39040056/) DOI: [10.1016/j.isci.2024.110273](https://doi.org/10.1016/j.isci.2024.110273)]
- 7 **Wakabayashi T**, Nie Y, Gaudenzi F, Teshigahara Y, Wakabayashi G. Single Port Robotic Liver Resection: Metastectomy for Recurrent Fibrolamellar Hepatocellular Carcinoma. *Ann Surg Oncol* 2024 [PMID: [39003379](https://pubmed.ncbi.nlm.nih.gov/39003379/) DOI: [10.1245/s10434-024-15845-1](https://doi.org/10.1245/s10434-024-15845-1)]
- 8 **Yu Y**, Wang XH, Hu WJ, Chen DH, Hu ZL, Li SQ. Patterns, Risk Factors, and Outcomes of Recurrence After Hepatectomy for Hepatocellular Carcinoma with and without Microvascular Invasion. *J Hepatocell Carcinoma* 2024; **11**: 801-812 [PMID: [38737385](https://pubmed.ncbi.nlm.nih.gov/38737385/) DOI: [10.2147/JHC.S438850](https://doi.org/10.2147/JHC.S438850)]
- 9 **Xiang W**, Ni J, Dong L, Zhu G. ZNF300 promotes proliferation and migration of hepatocellular carcinoma by upregulating c-MYC gene expression. *Clin Res Hepatol Gastroenterol* 2024; **48**: 102415 [PMID: [39018766](https://pubmed.ncbi.nlm.nih.gov/39018766/) DOI: [10.1016/j.clinre.2024.102415](https://doi.org/10.1016/j.clinre.2024.102415)]
- 10 **Celsa C**, Cabibbo G, Fulgenzi CAM, Battaglia S, Enea M, Scheiner B, D'Alessio A, Manfredi GF, Stefanini B, Nishida N, Galle PR, Schulze K, Wege H, Ciccia R, Hsu WF, Vivaldi C, Wietharn B, Lin RP, Pirozzi A, Pressiani T, Dalbeni A, Natola LA, Auriemma A, Rigamonti C, Burlone M, Parisi A, Huang YH, Lee PC, Ang C, Marron TU, Pinter M, Cheon J, Phen S, Singal AG, Gampa A, Pillai A, Roehlen N, Thimme R, Vogel A, Soror N, Ulahannan S, Sharma R, Sacerdoti D, Pirisi M, Rimassa L, Lin CY, Saeed A, Masi G, Schönlein M, von Felden J, Kudo M, Cortellini A, Chon HJ, Cammà C, Pinato DJ. Hepatic decompensation is the major driver of mortality in patients with HCC treated with atezolizumab plus bevacizumab: The impact of successful antiviral treatment. *Hepatology* 2024 [PMID: [39028886](https://pubmed.ncbi.nlm.nih.gov/39028886/) DOI: [10.1097/HEP.0000000000001026](https://doi.org/10.1097/HEP.0000000000001026)]
- 11 **Tang S**, Gao Y, Yan X, Zhi W, Han Y. Effectiveness and safety of vascular intervention plus lenvatinib versus vascular intervention alone for hepatocellular carcinoma patients with portal vein tumor thrombus: a retrospective comparative study. *Front Oncol* 2024; **14**: 1431069 [PMID: [39035736](https://pubmed.ncbi.nlm.nih.gov/39035736/) DOI: [10.3389/fonc.2024.1431069](https://doi.org/10.3389/fonc.2024.1431069)]
- 12 **Kudo M**, Aoki T, Ueshima K, Tsuchiya K, Morita M, Chishina H, Takita M, Hagiwara S, Minami Y, Ida H, Nishida N, Ogawa C, Tomonari T, Nakamura N, Kuroda H, Takebe A, Takeyama Y, Hidaka M, Eguchi S, Chan SL, Kurosaki M, Izumi N. Achievement of Complete Response and Drug-Free Status by Atezolizumab plus Bevacizumab Combined with or without Curative Conversion in Patients with Transarterial Chemoembolization-Unsuitable, Intermediate-Stage Hepatocellular Carcinoma: A Multicenter Proof-Of-Concept Study. *Liver Cancer* 2023; **12**: 321-338 [PMID: [37901197](https://pubmed.ncbi.nlm.nih.gov/37901197/) DOI: [10.1159/000529574](https://doi.org/10.1159/000529574)]
- 13 **Yim SY**, Lee SH, Baek SW, Sohn B, Jeong YS, Kang SH, Park K, Park H, Lee SS, Kaseb AO, Park YN, Leem SH, Curran MA, Kim JH, Lee JS. Genomic Biomarkers to Predict Response to Atezolizumab Plus Bevacizumab Immunotherapy in Hepatocellular Carcinoma: Insights from the IMbrave150 Trial. *Clin Mol Hepatol* 2024 [PMID: [39038962](https://pubmed.ncbi.nlm.nih.gov/39038962/) DOI: [10.3350/cmh.2024.0333](https://doi.org/10.3350/cmh.2024.0333)]
- 14 **Khan AR**, Wei X, Xu X. Portal Vein Tumor Thrombosis and Hepatocellular Carcinoma - The Changing Tides. *J Hepatocell Carcinoma* 2021; **8**: 1089-1115 [PMID: [34522691](https://pubmed.ncbi.nlm.nih.gov/34522691/) DOI: [10.2147/JHC.S318070](https://doi.org/10.2147/JHC.S318070)]
- 15 **Lucatelli P**, Rocco B, De Beare T, Verset G, Fucilli F, Damato E, Paccapelo A, Braccischi L, Taninokuchi Tomassoni M, Bucalau AM, Catalano C, Mosconi C. Long-Term Outcomes of Balloon TACE for HCC: An European Multicentre Single-Arm Retrospective Study. *Cardiovasc Intervent Radiol* 2024; **47**: 1074-1082 [PMID: [38955814](https://pubmed.ncbi.nlm.nih.gov/38955814/) DOI: [10.1007/s00270-024-03779-w](https://doi.org/10.1007/s00270-024-03779-w)]
- 16 **Liu X**, Zhang F, Fan Y, Qiu C, Wang K. MCM4 potentiates evasion of hepatocellular carcinoma from sorafenib-induced ferroptosis through Nrf2 signaling pathway. *Int Immunopharmacol* 2024; **142**: 113107 [PMID: [39276458](https://pubmed.ncbi.nlm.nih.gov/39276458/) DOI: [10.1016/j.intimp.2024.113107](https://doi.org/10.1016/j.intimp.2024.113107)]
- 17 **Cheng Q**, Ji W, Lv Z, Wang W, Xu Z, Chen S, Zhang W, Shao Y, Liu J, Yang Y. Comprehensive analysis of PHF5A as a potential prognostic biomarker and therapeutic target across cancers and in hepatocellular carcinoma. *BMC Cancer* 2024; **24**: 868 [PMID: [39030507](https://pubmed.ncbi.nlm.nih.gov/39030507/) DOI: [10.1186/s12885-024-12620-z](https://doi.org/10.1186/s12885-024-12620-z)]
- 18 **Wu XK**, Yang LF, Chen YF, Chen ZW, Lu H, Shen XY, Chi MH, Wang L, Zhang H, Chen JF, Huang JY, Zeng YY, Yan ML, Zhang ZB. Transcatheter arterial chemoembolisation combined with lenvatinib plus camrelizumab as conversion therapy for unresectable hepatocellular carcinoma: a single-arm, multicentre, prospective study. *EClinicalMedicine* 2024; **67**: 102367 [PMID: [38169778](https://pubmed.ncbi.nlm.nih.gov/38169778/) DOI: [10.1016/j.eclinm.2023.102367](https://doi.org/10.1016/j.eclinm.2023.102367)]



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

Telephone: +1-925-3991568

E-mail: office@baishideng.com

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

<https://www.wjgnet.com>

