



TURKISH JOURNAL OF

Gastroenterology

OFFICIAL JOURNAL OF THE TURKISH SOCIETY OF GASTROENTEROLOGY

Effect of carbon dioxide versus room air insufflation on post-colonoscopy pain: A prospective, randomized, controlled study

See page 676

681 *MPO and calprotectin in NASH*

688 *Inspect total GI tract by enteroscopy*

695 *Post-EMA panitumumab monotherapy for colorectal cancer*

706 *Antioxidant effect of astaxanthin in acute pancreatitis*

713 *B&T cell epitopes for Helicobacter pylori cagPAI*



TURKISH JOURNAL OF
Gastroenterology
OFFICIAL JOURNAL OF THE TURKISH SOCIETY OF GASTROENTEROLOGY

Editor in Chief

Murat Törüner 

Department of Gastroenterology, Ankara University School of Medicine, Ankara, Turkey

Senior Associate Editors

Hale Akpınar 

Department of Gastroenterology, Dokuz Eylül University School of Medicine, İzmir, Turkey

Ramazan İdilman 

Department of Gastroenterology, Ankara University School of Medicine, Ankara, Turkey

Associate Editors

Meral Akdoğan 

Clinic of Gastroenterology, Ankara City Hospital, Ankara, Turkey

Canan Alkim 

Clinic of Gastroenterology, Şişli Etfal Training and Research Hospital, İstanbul, Turkey

Ayhan Hilmi Çekin 

University of Health Sciences; Clinic of Gastroenterology Antalya Training and Research Hospital, Antalya, Turkey

Dinç Dinçer 

Department of Gastroenterology, Akdeniz University School of Medicine, Antalya, Turkey

Ödül Eğritaş Gürkan 

Department of Pediatric Gastroenterology, Ankara University School of Medicine, Ankara, Turkey

Hale Gökcen 

Clinic of Gastroenterology, Ankara City Hospital, Ankara, Turkey

İbrahim Hatemi 

Department of Gastroenterology, İstanbul University-Cerrahpaşa, Cerrahpaşa School of Medicine, İstanbul, Turkey

Gökhan Kabaçam 

Department of Gastroenterology, Ankara Güven Hospital, Ankara, Turkey

Fatih Oğuz Önder 

Department of Gastroenterology, Acıbadem University School of Medicine, Turkey

Volkan Öter 

Clinic of Gastrointestinal Surgery, Ankara City Hospital, Ankara, Turkey

Yeşim Öztürk 


Department of Pediatric Gastroenterology, Dokuz Eylül University School of Medicine, İzmir, Turkey

Fatih Tekin 

Department of Gastroenterology, Ege University School of Medicine, İzmir, Turkey

İlker Turan 

Department of Gastroenterology, Ege University School of Medicine, İzmir, Turkey

Enver Üçbilek 

Department of Gastroenterology, Mersin University School of Medicine, Mersin, Turkey

International Associate Editor

Ahmet Gürakar 

Department of Gastroenterology and Hepatology, Johns Hopkins University School of Medicine, Baltimore, USA

Statistical Editor

Gülşah Şeydaoğlu

Department of Biostatistics, Çukurova University School of Medicine, Adana, Turkey



Publisher

İbrahim KARA

Publication Director

Ali ŞAHİN

Editorial Development

Gizem KAYAN TEKAÜT

Deputy Publication Director

Gökhan ÇİMEN

Publication Coordinators

İrem DELİÇAY

Arzu YILDİRIM

Deniz KAYA

Bahar ALBAYRAK

Emre KARA

Finance and Administration

Zeynep YAKIŞIRER ÜREN

Betül ÇİMEN

Project Coordinators

Doğan ORUÇ

Sinem KOZ

Graphics Department

Ünal ÖZER

Deniz Elif DURAN

Bezanur KARABULUT

Address: Büyükdere Cad. No:
105/9 34394 Mecidiyeköy, Şişli,
İstanbul-Turkey
Phone: +90 212 217 17 00
Fax: +90 212 217 22 92
E-mail: info@avesyayincilik.com



Aims and Scope

Turkish Journal of Gastroenterology (*Turk J Gastroenterol*) is the double-blind peer-reviewed, open access, international publication organ of the Turkish Society of Gastroenterology. The journal is published monthly and its publication language is English.

Turkish Journal of Gastroenterology aims to publish international at the highest clinical and scientific level on original issues of gastroenterology and hepatology. The journal publishes original papers, review articles, and letters to the editor on clinical and experimental gastroenterology and hepatology.

The editorial and publication processes of the journal are shaped in accordance with the guidelines of the International Committee of Medical Journal Editors (*ICMJE*), World Association of Medical Editors (*WAME*), Council of Science Editors (*CSE*), Committee on Publication Ethics (*COPE*), European Association of Science Editors (*EASE*), and National Information Standards Organization (*NISO*). The journal is in conformity with the Principles of Transparency and Best Practice in Scholarly Publishing (doaj.org/bestpractice).

The Turkish Journal of Gastroenterology is indexed in Science Citation Index Expanded, PubMed/MEDLINE, Scopus, and TUBITAK ULAKBIM TR Index.

Processing and publication are free of charge with the journal. No fees are requested from the authors at any point throughout the evaluation and publication process. All manuscripts must be submitted via the online submission system, which is available at turkjgastroenterol.org. The journal guidelines, technical information, and the required forms are available on the journal's web page.

All expenses of the journal are covered by the Turkish Society of Gastroenterology. Potential advertisers should contact the Editorial Office. Advertisement images are published only upon the Editor-in-Chief's approval.

Statements or opinions expressed in the manuscripts published in the journal reflect the views of the author(s) and not the opinions of the Turkish Society of Gastroenterology, editors, editorial board, and/or publisher; the editors, editorial board, and publisher disclaim any responsibility or liability for such materials.

All published content is available online, free of charge at turkjgastroenterol.org.

Turkish Society of Gastroenterology holds the international copyright of all the content published in the journal.

Editor in Chief: Prof. Murat Törüner
Address: Mustafa Kemal Mahallesi, 2126 Sokak, Kolbay İş Merkezi, C blok, No.: 6-9, Çankaya, Ankara, TURKEY
Phone: +90 312 284 15 11
Fax: +90 312 284 80 75
E-mail: dernek@tgd.org.tr

Publisher: AVES
Address: Büyükdere Cad., 105/9 34394 Mecidiyeköy, Şişli, İstanbul, TURKEY
Phone: +90 212 217 17 00
Fax: +90 212 217 22 92
E-mail: info@avesyayincilik.com
Web page: avesyayincilik.com





Instructions to Authors

Turkish Journal of Gastroenterology (*Turk J Gastroenterol*) is the double-blind peer-reviewed, open access, international publication organ of the Turkish Society of Gastroenterology. The journal is published monthly and its publication language is English.

Turkish Journal of Gastroenterology aims to publish international at the highest clinical and scientific level on original issues of gastroenterology and hepatology. The journal publishes original papers, review articles and letters to the editor on clinical and experimental gastroenterology and hepatology.

The editorial and publication processes of the journal are shaped in accordance with the guidelines of the International Council of Medical Journal Editors (*ICMJE*), the World Association of Medical Editors (*WAME*), the Council of Science Editors (*CSE*), the Committee on Publication Ethics (*COPE*), the European Association of Science Editors (*EASE*), and National Information Standards Organization (*NISO*). The journal conforms to the Principles of Transparency and Best Practice in Scholarly Publishing (doaj.org/bestpractice).

Originality, high scientific quality, and citation potential are the most important criteria for a manuscript to be accepted for publication. Manuscripts submitted for evaluation should not have been previously presented or already published in an electronic or printed medium. The journal should be informed of manuscripts that have been submitted to another journal for evaluation and rejected for publication. The submission of previous reviewer reports will expedite the evaluation process. Manuscripts that have been presented in a meeting should be submitted with detailed information on the organization, including the name, date, and location of the organization.

Manuscripts submitted to the Turkish Journal of Gastroenterology will go through a double-blind peer-review process. Each submission will be reviewed by at least two external, independent peer reviewers who are experts in their fields in order to ensure an unbiased evaluation process. The editorial board will invite an external and independent editor to manage the evaluation processes of manuscripts submitted by editors or by the editorial board members of the journal. The Editor in Chief is the final authority in the decision-making process for all submissions.

An approval of research protocols by the Ethics Committee in accordance with international agreements (*World Medical Association Declaration of Helsinki "Ethical Principles for Medical Research Involving Human Subjects," amended in October 2013, www.wma.net*) is required for experimental, clinical, and drug studies. If required,

ethics committee reports or an equivalent official document will be requested from the authors. For manuscripts concerning experimental research on humans, a statement should be included that shows that written informed consent of patients and volunteers was obtained following a detailed explanation of the procedures that they may undergo. For studies carried out on animals, the measures taken to prevent pain and suffering of the animals should be stated clearly. Information on patient consent, the name of the ethics committee, and the ethics committee approval number should also be stated in the Materials and Methods section of the manuscript. It is the authors' responsibility to carefully protect the patients' anonymity. For photographs that may reveal the identity of the patients, releases signed by the patient or their legal representative should be enclosed.

All submissions are screened by a similarity detection software (*iThenticate* by *CrossCheck*).

In the event of alleged or suspected research misconduct, e.g., plagiarism, citation manipulation, and data falsification/fabrication, the Editorial Board will follow and act in accordance with *COPE* guidelines.

Each individual listed as an author should fulfill the authorship criteria recommended by the International Committee of Medical Journal Editors (*ICMJE-www.icmje.org*). The *ICMJE* recommends that authorship be based on the following 4 criteria:

1. *Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND*
2. *Drafting the work or revising it critically for important intellectual content; AND*
3. *Final approval of the version to be published; AND*
4. *Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.*

In addition to being accountable for the parts of the work he/she has done, an author should be able to identify which co-authors are responsible for specific other parts of the work. In addition, authors should have confidence in the integrity of the contributions of their co-authors.

All those designated as authors should meet all four criteria for authorship, and all who meet the four criteria should be identified as



authors. Those who do not meet all four criteria should be acknowledged in the title page of the manuscript.

Turkish Journal of Gastroenterology requires corresponding authors to submit a signed and scanned version of the authorship contribution form (*available for download through turkjgastroenterol.org*) during the initial submission process in order to act appropriately on authorship rights and to prevent ghost or honorary authorship. If the editorial board suspects a case of "gift authorship," the submission will be rejected without further review. As part of the submission of the manuscript, the corresponding author should also send a short statement declaring that he/she accepts to undertake all the responsibility for authorship during the submission and review stages of the manuscript.

Turkish Journal of Gastroenterology requires and encourages the authors and the individuals involved in the evaluation process of submitted manuscripts to disclose any existing or potential conflicts of interests, including financial, consultant, and institutional, that might lead to potential bias or a conflict of interest. Any financial grants or other support received for a submitted study from individuals or institutions should be disclosed to the Editorial Board. To disclose a potential conflict of interest, the ICMJE Potential Conflict of Interest Disclosure Form should be filled in and submitted by all contributing authors. Cases of a potential conflict of interest of the editors, authors, or reviewers are resolved by the journal's Editorial Board within the scope of COPE and ICMJE guidelines.

The Editorial Board of the journal handles all appeal and complaint cases within the scope of COPE guidelines. In such cases, authors should get in direct contact with the editorial office regarding their appeals and complaints. When needed, an ombudsperson may be assigned to resolve cases that cannot be resolved internally. The Editor in Chief is the final authority in the decision-making process for all appeals and complaints.

When submitting a manuscript to Turkish Journal of Gastroenterology, authors accept to assign the copyright of their manuscript to the Turkish Society of Gastroenterology. If rejected for publication, the copyright of the manuscript will be assigned back to the authors. Turkish Journal of Gastroenterology requires each submission to be accompanied by a Copyright Transfer Form (*available for download at turkjgastroenterol.org*). When using previously published content, including figures, tables, or any other material in both print and electronic formats, authors must obtain permission from the copyright holder. Legal, financial and criminal liabilities in this regard belong to the author(s).

Statements or opinions expressed in the manuscripts published in Turkish Journal of Gastroenterology reflect the views of the author(s) and not the opinions of the editors, the editorial board, or the publisher; the editors, the editorial board, and the publisher disclaim any responsibility or liability for such materials. The final responsibility in regard to the published content rests with the authors.

Manuscript Preparation

The manuscripts should be prepared in accordance with ICMJE-Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals (*updated in December 2018 - <http://www.icmje.org/icmje-recommendations.pdf>*). Authors are required to prepare manuscripts in accordance with the CONSORT guidelines for randomized research studies, STROBE guidelines for observational original research studies, STARD guidelines for studies on diagnostic accuracy, PRISMA guidelines for systematic reviews and meta-analysis, ARRIVE guidelines for experimental animal studies, and TREND guidelines for non-randomized public behavior.

Manuscripts can only be submitted through the journal's online manuscript submission and evaluation system, available at turkjgastroenterol.org. Manuscripts submitted via any other medium will not be evaluated.

Manuscripts submitted to the journal will first go through a technical evaluation process where the editorial office staff will ensure that the manuscript has been prepared and submitted in accordance with the journal's guidelines. Submissions that do not conform to the journal's guidelines will be returned to the submitting author with technical correction requests.

Authors are required to submit the following:

- *Copyright Transfer Form,*
- *Author Contributions Form, and*
- *ICMJE Potential Conflict of Interest Disclosure Form (should be filled in by all contributing authors) during the initial submission. These forms are available for download at turkjgastroenterol.org.*

Preparation of the Manuscript

Title page: A separate title page should be submitted with all submissions and this page should include:

- *The full title of the manuscript as well as a short title (running head) of no more than 50 characters,*
- *Name(s), affiliations, highest academic degree(s), and ORCID IDs of the author(s),*



- Grant information and detailed information on the other sources of support,
- Name, address, telephone (including the mobile phone number) and fax numbers, and email address of the corresponding author,
- Acknowledgment of the individuals who contributed to the preparation of the manuscript but who do not fulfill the authorship criteria.

Abstract

An English abstract should be submitted with all submissions except for Letters to the Editor. Submitting a Turkish abstract is not compulsory for international authors. The abstract of Original Articles should be structured with subheadings (*Background/Aims, Materials and Methods, Results, and Conclusion*). Please check Table 1 below for word count specifications.

Table 1. Limitations for each manuscript type

Type of manuscript	Word limit	Abstract word limit	Reference limit	Table limit	Figure limit
Original Article	3500	250 (Structured)	30	6	7 or total of 15 images
Review Article	5000	250	50	6	10 or total of 20 images
Letter to the Editor	1000	No abstract	5	No tables	2 or total of 4 images
Diagnostic Challenge	1200	No abstract	5	No tables	7 or total of 15 images

Keywords: Each submission must be accompanied by a minimum of three to a maximum of six keywords for subject indexing at the end of the abstract. The keywords should be listed in full without abbreviations. The keywords should be selected from the National Library of Medicine, Medical Subject Headings database (<https://www.nlm.nih.gov/mesh/MBrowser.html>).

Main Points: All submissions except letters to the editor should be accompanied by 3 to 5 "main points" which should emphasize the most noteworthy results of the study and underline the principle message that is addressed to the reader. This section should be structured as itemized to give a general overview of the article. Since "Main Points" targeting the experts and specialists of the field, each item should be written as plain and straightforward as possible.

Manuscript Types

Original Articles: This is the most important type of article since it provides new information based on original research. The main text of original articles should be structured with Introduction, Materials and Methods, Results, and Discussion subheadings. Please check Table 1 for the limitations for Original Articles.

Statistical analysis to support conclusions is usually necessary. Statistical analyses must be conducted in accordance with international statistical reporting standards (Altman DG, Gore SM, Gardner MJ, Pocock SJ. Statistical guidelines for contributors to medical journals. *Br Med J* 1983; 7; 1489-93). Information on statistical analyses should be provided with a separate subheading under the Materials and Methods section and the statistical software that was used during the process must be specified.

Units should be prepared in accordance with the International System of Units (SI).

Editorial Comments

Editorial comments aim to provide a brief critical commentary by reviewers with expertise or with high reputation in the topic of the research article published in the journal. Authors are selected and invited by the journal to provide such comments. Abstract, Keywords, and Tables, Figures, Images, and other media are not included.

Review Articles

Reviews prepared by authors who have extensive knowledge on a particular field and whose scientific background has been translated into a high volume of publications with a high citation potential are welcomed. These authors may even be invited by the journal. Reviews should describe, discuss, and evaluate the current level of knowledge of a topic in clinical practice and should guide future studies. The main text should contain Introduction, Clinical and Research Consequences, and Conclusion sections. Please check Table 1 for the limitations for Review Articles.

Letters to the Editor

This type of manuscript discusses important parts, overlooked aspects, or lacking parts of a previously published article. Articles on subjects within the scope of the journal that might attract the readers' attention, particularly educative and rare cases, may also be submitted in the form of a "Letter to the Editor." Readers can also present their comments on the published manuscripts in the form of a "Letter to the Editor." Abstract, Keywords, and Tables, Figures, Images, and other media should not be included. The text should be



unstructured. The manuscript that is being commented on must be properly cited within this manuscript.

Diagnostic Challenge

Turkish Journal of Gastroenterology encourages authors to submit their striking clinical images that may challenge and inform readers and contribute to their education. This type of submissions should present the image as an “unknown” and should encourage the readers to interpret and diagnose the image. The answer will be presented on a separate page of the issue so the main text or the title should not reveal the answer. The case should be described in the first part; the answer should discuss the image findings and the diagnosis. The article should not be longer than 1200 words.

Quick look to guidelines

These manuscripts are summaries of published guidelines. Abstract, Keywords, and Tables, Figures, Images, and other media should not be included. The text should be unstructured. The guideline that is being summarized must be properly cited within the manuscript.

Tables

Tables should be included in the main document, presented after the reference list, and they should be numbered consecutively in the order they are referred to within the main text. A descriptive title must be placed above the tables. Abbreviations used in the tables should be defined below the tables by footnotes (*even if they are defined within the main text*). Tables should be created using the “insert table” command of the word processing software and they should be arranged clearly to provide easy reading. Data presented in the tables should not be a repetition of the data presented within the main text but should be supporting the main text.

Figures and Figure Legends

Figures, graphics, and photographs should be submitted as separate files (*in TIFF or JPEG format*) through the submission system. The files should not be embedded in a Word document or the main document. When there are figure subunits, the subunits should not be merged to form a single image. Each subunit should be submitted separately through the submission system. Images should not be labeled (*a, b, c, etc.*) to indicate figure subunits. Thick and thin arrows, arrowheads, stars, asterisks, and similar marks can be used on the images to support figure legends. Like the rest of the submission, the figures too should be blind. Any information within the images that may indicate an individual or institution should be blinded. The minimum resolution of each submitted figure should be 300 DPI. To prevent delays in the evaluation process, all submitted figures

should be clear in resolution and large in size (*minimum dimensions: 100×100 mm*). Figure legends should be listed at the end of the main document.

All acronyms and abbreviations used in the manuscript should be defined at first use, both in the abstract and in the main text. The abbreviation should be provided in parentheses following the definition.

When a drug, product, hardware, or software program is mentioned within the main text, product information, including the name of the product, the producer of the product, and city and the country of the company (*including the state if in USA*), should be provided in parentheses in the following format: “Discovery St PET/CT scanner (*General Electric, Milwaukee, WI, USA*)”

All references, tables, and figures should be referred to within the main text, and they should be numbered consecutively in the order they are referred to within the main text. Limitations, drawbacks, and the shortcomings of original articles should be mentioned in the Discussion section before the conclusion paragraph.

References

While citing publications, preference should be given to the latest, most up-to-date publications. If an ahead-of-print publication is cited, the DOI number should be provided. Authors are responsible for the accuracy of references. Journal titles should be abbreviated in accordance with the journal abbreviations in Index Medicus/ MEDLINE/PubMed. When there are six or fewer authors, all authors should be listed. If there are seven or more authors, the first three authors should be listed followed by “et al.” In the main text of the manuscript, references should be cited using Arabic numbers in parentheses. The reference styles for different types of publications are presented in the following examples.

Journal Article

Rankovic A, Rancic N, Jovanovic M, et al. Impact of imaging diagnostics on the budget - Are we spending too much? *Vojnosanit Pregl* 2013; 70: 709-11.

Book Section

Suh KN, Keystone JS. Malaria and babesiosis. Gorbach SL, Barlett JG, Blacklow NR, editors. *Infectious Diseases*. Philadelphia: Lippincott Williams; 2004.p.2290-308.

Books with a Single Author

Sweetman SC. Martindale the Complete Drug Reference. 34th ed. London: Pharmaceutical Press; 2005.



Editor(s) as Author

Huizing EH, de Groot JAM, editors. Functional reconstructive nasal surgery. Stuttgart-New York: Thieme; 2003.

Conference Proceedings

Bengissson S, Sothemin BG. Enforcement of data protection, privacy and security in medical informatics. In: Lun KC, Degoulet P, Piemme TE, Rienhoff O, editors. MEDINFO 92. Proceedings of the 7th World Congress on Medical Informatics; 1992 Sept 6-10; Geneva, Switzerland. Amsterdam: North-Holland; 1992. pp.1561-5.

Scientific or Technical Report

Cusick M, Chew EY, Hoogwerf B, Agrón E, Wu L, Lindley A, et al. Early Treatment Diabetic Retinopathy Study Research Group. Risk factors for renal replacement therapy in the Early Treatment Diabetic Retinopathy Study (ETDRS), Early Treatment Diabetic Retinopathy Study Kidney Int: 2004. Report No: 26.

Thesis

McCracken Jenna Mae. Mechanisms and consequences of neutrophil apoptosis inhibition by Francisella tularensis. University of Iowa, PhD (Doctor of Philosophy) thesis, 2017.

Manuscripts Accepted for Publication, Not Published Yet

Slots J. The microflora of black stain on human primary teeth. Scand J Dent Res. 1974.

Epub Ahead of Print Articles

Cai L, Yeh BM, Westphalen AC, Roberts JP, Wang ZJ. Adult living donor liver imaging. Diagn Interv Radiol. 2016 Feb 24. doi: 10.5152/dir.2016.15323. [Epub ahead of print].

Manuscripts Published in Electronic Format

Morse SS. Factors in the emergence of infectious diseases. Emerg Infect Dis (serial online) 1995 Jan-Mar (cited 1996 June 5): 1(1): (24 screens). Available from: URL: <http://www.cdc.gov/ncidod/EID/cid.htm>.

Revisions

When submitting a revised version of a paper, the author must submit a detailed "Response to the reviewers" that states point by point how each issue raised by the reviewers has been covered and where it can be found (*each reviewer's comment, followed by the author's reply and line numbers where the changes have been made*) as well as an annotated copy of the main document. Revised manuscripts must be submitted within 30 days from the date of the decision letter. If the revised version of the manuscript is not submitted within the allocated time, the revision option may be canceled. If the submitting author(s) believe that additional time is required, they should request this extension before the initial 30-day period is over.

Accepted manuscripts are copy-edited for grammar, punctuation, and format. Once the publication process of a manuscript is completed, it is published online on the journal's webpage as an ahead-of-print publication before it is included in its scheduled issue. A PDF proof of the accepted manuscript is sent to the corresponding author and their publication approval is requested within 2 days of their receipt of the proof.

Editor in Chief: Prof. Murat Törüner

Address: Mustafa Kemal Mahallesi, 2126 Sokak, Kolbay İş Merkezi, C blok, No.: 6-9, Çankaya, Ankara, TURKEY

Phone: +90 312 284 15 11

Fax: +90 312 284 80 75

E-mail: dernek@tgd.org.tr

Publisher: AVES

Address: Büyükdere Cad., 105/9 34394

Mecidiyeköy, Şişli, İstanbul, TURKEY

Phone: +90 212 217 17 00

Fax: +90 212 217 22 92

E-mail: info@avesyayincilik.com

Web page: avesyayincilik.com



Table of Contents

Original Articles

Gastrointestinal Tract

676 Effect of carbon dioxide versus room air insufflation on post-colonoscopy pain: A prospective, randomized, controlled study

Feyza Gündüz, Haluk Tarık Kani, Shannon Chang, Esra Akdeniz, Fatih Eren, Yusuf Yılmaz, Yeşim Özen Alahdab

Liver

681 Myeloperoxidase and calprotectin; Any role as non-invasive markers for the prediction of inflammation and fibrosis in non-alcoholic steatohepatitis?

Ercan Bıçakçı, Coşkun Özer Demirtaş, Çiğdem Çelikel, Goncağül Haklar, Deniz Güney Duman

Gastrointestinal Endoscopy

688 Inspecting the total gastrointestinal tract by consecutive bidirectional double-balloon enteroscopy in patients with suspected small bowel bleeding

Liang Zhao, Anning Yin, Fei Liao, Yijuan Ding, Honggang Yu

Basic & Translational

695 Efficacy and safety of panitumumab in a cohort of patients with metastatic colorectal cancer in France: PANI OUEST, a post-EMA-approval descriptive study with a geriatric oncology focus

Jean-Philippe Metges, Jean-Yves Douillard, Jean-François Ramée, Olivier Dupuis, Helene Senellart, Marc Porneuf, Philippe Deguiral, Nach Eddine Achour, Julien Edeline, Isabelle Cumin, Xavier Artignan, Roger Faroux, Claire Stampfli, Oana Cojocarasu, Alain Gourlaouen, Karine Bideau, Véronique Guérin Meyer, Aurelie Fichet, Vincent Klein, Yann Toucheffeu, Dominique Besson, Herve Desclos, Remy Barraya, Zarrin Alavi, Loic Champion, Delphine Déniel Lagadec, Fanny Marhuenda, Françoise Grudé

706 Astaxanthin alleviates oxidative damage in acute pancreatitis via direct antioxidant mechanisms

Dilek Özbeyli, Esra Bihter Gürler, Hülya Buzcu, Özlem Tuğçe Çilingir-Kaya, Muhammet Emin Çam, Meral Yüksel

713 Determination of B- and T- cell epitopes for *Helicobacter pylori* cagPAI: An in silico approach

Sevgi Kalkanlı Taş, Duygu Kırkık, Kübra Öztürk, Alpaslan Tanoğlu

Diagnostic Challenge

721 Does Serotonin in the intestines make you happy?

Atilla Bektaş, Harun Erdal, Meltem Ulusoy, İ.Tayfun Uzbay

Letter to the Editor

724 The role of probiotics in COVID-19 treatment: Gut microbiota can help physicians in the outbreak

Mustafa Şahin

726 Gastritis cystica profunda with predominant histiocytic reaction mimicking solid submucosal tumor

Sang Jae Noh, Kyoung Min Kim, Kyu Yun Jang

729 The effects of dilation with different sizes on post-endoscopic retrograde cholangiopancreatography pancreatitis after small biliary sphincterotomy

Wenbo Meng, Ping Yue, Xun Li

731 An unusual cause of ascites and pleural effusion in an elderly woman: Sarcoidosis presenting with parailiac lymph node involvement

Abdurrahman Şahin, Hakan Artaş, Gökhan Artaş