

2024 年

1. Tsumugi Jono, Yuki Kasai, Takaomi Kessoku, Tomoki Ogata, Kosuke Tanaka, Tsutomu Yoshihara, Noboru Misawa, Shingo Kato, Takuma Higurashi, Kunihiro Hosono, Masato Yoneda, Kosuke Seita, Takayuki Kato, Eiji Sakai, Takeo Kurihashi, Machiko Nakatogawa, Shunsuke Oyamada, Seiji Futagami, Kok-Ann Gwee, Atsushi Nakajima: (Original Article) The Prevalence and Characteristics of Symptomatic Uncomplicated Diverticular Disease Among Asian Patients With Unexplained Abdominal Symptoms. *Journal of neurogastroenterology and motility*, 2024 Jan 30, 30(1):87-96, PMID: 38012092 doi: 10.5056/jnm22162, Epub 2023 Nov 28.
2. Sung Won Lee, Daniel Q Huang, Ricki Bettencourt, Veeral Ajmera, Monica Tincopa, Nabil Nouredin, Maral Amangurbanova, Harris Siddiqi, Egbert Madamba, Abdul M Majzoub, Tarek Nayfeh, Nobuharu Tamaki, Namiki Izumi, Atsushi Nakajima, Masato Yoneda, Ramzan Idilman, Mesut Gumussoy, Digdem Kuru Oz, Ayse Erden, Rohit Loomba: (Original Article) Low liver fat in non-alcoholic steatohepatitis-related significant fibrosis and cirrhosis is associated with hepatocellular carcinoma, decompensation and mortality. *Alimentary pharmacology & therapeutics*, 2024 Jan;59(1):80-88. PMID: 37968251 doi: 10.1111/apt.17783. Epub 2023 Nov 15.
3. Ko Suzuki, Yusuke Kurita, Kensuke Kubota, Yuji Fujita, Seitaro Tsujino, Yuji Koyama, Shintaro Tsujikawa, Shigeki Tamura, Shin Yagi, Sho Hasegawa, Takamitsu Sato, Kunihiro Hosono, Noritoshi Kobayashi, Hiromichi Iwashita, Shoji Yamanaka, Satoshi Fujii, Itaru Endo, Atsushi Nakajima: Endoscopic papillectomy could be rewarding to patients with early stage duodenal ampullary carcinoma?. *Journal of hepato-biliary-pancreatic sciences* 2024 Mar, 31(3):203-212 PMID: 38014632 doi: 10.1002/jhbp.1398. Epub 2023 Nov 28.
4. Takashi Kumada, Hidenori Toyoda, Sadanobu Ogawa, Tatsuya Gotoh, Yasuaki Suzuki, Kento Imajo, Katsutoshi Sugimoto, Tatsuya Kakegawa, Hidekatsu Kuroda, Yutaka Yasui, Nobuharu Tamaki, Masayuki Kurosaki, Namiki Izumi, Tomoyuki Akita, Junko Tanaka, Atsushi Nakajima: Advanced fibrosis leads to overestimation of steatosis with quantitative ultrasound in individuals without hepatic steatosis. *Ultrasonography (Seoul, Korea)* 2024 Mar;43(2):121-131. PMID: 38316132 PMCID: PMC100915114 doi: 10.14366/usg.23194. Epub 2023 Dec 11.
5. Yusuke Kurita, Kensuke Kubota, Yuji Fujita, Seitaro Tsujino, Yusuke Sekino, Noriki Kasuga, Akito Iwasaki, Mai Iwase, Takeshi Izuka, Koichi Kagawa, Emiko Tanida, Shin Yagi, Sho Hasegawa, Takamitsu Sato, Kunihiro Hosono, Noritoshi

- Kobayashi, Yasushi Ichikawa, Atsushi Nakajima, Itaru Endo: IgG4-related pancreatobiliary diseases could be associated with onset of pancreatobiliary cancer: A multicenter cohort study. *Journal of hepato-biliary-pancreatic sciences* 2024 Mar, **31**(3):173-182, PMID: 38124014 doi: 10.1002/jhbp.1404. Epub 2023 Dec 20.
6. Sho Hasegawa, Takamitsu Sato, Satoru Shinoda, Yusuke Kurita, Tomoki Ogata, Shinichi Nihei, Shin Yagi, Kunihiro Hosono, Itaru Endo, Noritoshi Kobayashi, Kensuke Kubota, Atsushi Nakajima: Braided-type stent versus laser-cut-type stent for patients with unresectable distal malignant biliary obstruction: a randomized controlled trial. *Gastrointestinal endoscopy* (2024 May), **99**(5):739-746. e1 PMID: 38065510 doi: 10.1016/j.gie.2023.11.057 , Epub 2023 Dec 6. Satish S Rao, Noriaki Manabe, Yusuke Karasawa, Yuko Hasebe, Kazutaka Nozawa, Atsushi Nakajima, Shin Fukudo: (Meta-Analysis) Comparative profiles of lubiprostone, linaclotide, and elobixibat for chronic constipation: a systematic literature review with meta-analysis and number needed to treat/harm. *BMC gastroenterology*, **24**(1):12. PMID: 38166671 PMCID: PMC10759335 doi: 10.1186/s12876-023-03104-8. 2024 Jan 2.
  7. Motokazu Sato, Qinghong Han, Yutaro Kubota, Anton Baranov, Daniel Ardjmand, Kohei Mizuta, Sei Morinaga, Byung Mo Kang, Noritoshi Kobayashi, Michael Bouvet, Yasushi Ichikawa, Atsushi Nakajima, Robert M Hoffman : (Research Article) Recombinant Methioninase Decreased the Effective Dose of Irinotecan by 15-fold Against Colon Cancer Cells: A Strategy for Effective Low-toxicity Treatment of Colon Cancer. *Anticancer research*, **44**(1):31-35. PMID: 38159986 doi: 10.21873/anticancerres.16785, 2024 Jan.
  8. Michihiro Iwaki, Hideki Fujii, Hideki Hayashi, Hidenori Toyoda, Satoshi Oeda, Hideyuki Hyogo, Miwa Kawanaka, Asahiro Morishita, Kensuke Munekage , Kazuhito Kawata, Tsubasa Tsutsumi, Koji Sawada, Tatsuji Maeshiro, Hiroshi Tobita, Yuichi Yoshida, Masafumi Naito, Asuka Araki, Shingo Arakaki, Takumi Kawaguchi, Hidenao Noritake, Masafumi Ono, Tsutomu Masaki, Satoshi Yasuda, Eiichi Tomita, Masato Yoneda, Akihiro Tokushige, Yoshihiro Kamada, Hirokazu Takahashi, Shinichiro Ueda, Shinichi Aishima, Yoshio Sumida, Atsushi Nakajima, Takeshi Okanoue; Japan Study Group of Nonalcoholic Fatty Liver Disease (JSG-NAFLD): (Original Article) Prognosis of biopsy-confirmed MASLD: a sub-analysis of the CLIONE study. *Clinical and molecular hepatology*, 2024 Apr; **30**(2):225-234 PMID: 38263684 doi: 10.3350/cmh.2023.0515. Epub 2024 Jan 24.
  9. Yusuke Karasawa , Kazutaka Nozawa , Atsushi Nakajima: Potential drug-induced

constipation: A retrospective study using a Japanese claims database. *JGH Open: an open access journal of gastroenterology and hepatology* 2024 Feb 15, 8(2):e13036. PMID: 38361665 PMCID: PMC10867697 doi: 10.1002/jgh3.13036. eCollection 2024 Feb.

10. Suguru Kurokawa , Takuro Kobori , Masato Yoneda , Yuji Ogawa , Yasushi Honda , Takaomi Kessoku , Kento Imajo , Satoru Saito , Atsushi Nakajima , Kikuko Hotta: Identification of differentially methylated regions associated with both liver fibrosis and hepatocellular carcinoma. *BMC Gastroenterology*, 24(1):57, PMID: 38302914 PMCID: PMC10832174 doi: 10.1186/s12876-024-03149-3, 2024 Feb 1.
11. Michihiro Iwaki, Masato Yoneda, Naohiro Wada, Otani Tomohiro, Takashi Kobayashi, Asako Nogami, Satoru Saito, Nakajima Atsushi: (Review) Emerging drugs for the treatment of hepatic fibrosis on non-alcoholic steatohepatitis. *Expert Opinion On Emerging Drugs*, 2024 Jun , 29(2):127-137 . PMID: 38469871 doi: 10.1080/14728214.2024.2328036, Epub 2024 Mar 25.
12. Sherlot J Song, Asako Nogami, Lilian Y Liang, Masato Yoneda, Howard H WLeung, Atsushi Nakajima, Jimmy C T Lai, Grace L H Wong, Sally S T Shu, Vincent W S Wong, Terry C F Yip : (Original Article) Performance of continuous controlled attenuation parameter and liver stiffness measurement by the novel SmartExam in metabolic dysfunction-associated steatotic liver disease. *Liver International* ( 2024 May ) , 44(5):1167-1175. PMID: 38353063 doi: 10.1111/liv.15862. Epub 2024 Feb 14.
13. Huapeng Lin, Hye Won Lee, Terry Cheuk-Fung Yip, Emmanuel Tsochatzis, Salvatore Petta, Elisabetta Bugianesi, Masato Yoneda, Ming-Hua Zheng, Hannes Hagström, Jérôme Boursier, José Luis Calleja, George Boon-Bee Goh, Wah-Kheong Chan, Rocio Gallego-Durán, Arun J Sanyal, Victor de Lédinghen, Philip N Newsome, Jian-Gao Fan, Laurent Castéra, Michelle Lai, Stephen A Harrison, Céline Fournier-Poizat, Grace Lai-Hung Wong, Grazia Pennisi, Angelo Armandi, Atsushi Nakajima, Wen-Yue Liu, Ying Shang, Marc de Saint-Loup, Elba Llop, Kevin Kim-Jun Teh, Carmen Lara-Romero, Amon Asgharpour, Sara Mahgoub, Mandy Sau-Wai Chan, Clemence M Canivet, Manuel Romero-Gomez, Seung Up Kim, Vincent Wai-Sun Wong; VCTE-Prognosis Study Group : (Original Investigation) Vibration-Controlled Transient Elastography Scores to Predict Liver-Related Events in Steatotic Liver Disease. *JAMA (Journal of the American Medical Journal)* 2024 Apr 16, 331(15):1287-1297. PMID: 38512249 PMCID: PMC10958386 (available on 2024-09-21) doi: 10.1001/jama.2024.1447. 2024 Apr 16.
14. Ferenc E. Mózes, Jenny A. Lee, Yasaman Vali, Emmanuel A. Selvaraj, Arjun N. A.

Jayaswal, Jérôme Boursier, Victor de Lédighen, Monica Lupşor-Platon, Yusuf Yilmaz, Wah-Kheong Chan, Sanjiv Mahadeva, Thomas Karlas, Johannes Wiegand, Shalimar, Emmanouil Tsochatzis, Antonio Liguori, Vincent Wai-Sun Wong, Dae Ho Lee, Adriaan G. Holleboom, Anne-Marieke van Dijk, Anne Linde Mak, Hannes Hagström, Camilla Akbari, Masashi Hirooka, Dong Hyeon Lee, Won Kim, Takeshi Okanoue, Toshihide Shima, Atsushi Nakajima, Masato Yoneda, Paul J. Thuluvath, Feng Li, Annalisa Berzigotti, Yuly P. Mendoza, Mazen Nouredin, Emily Truong, Céline Fournier-Poizat, Andreas Geier, Theresa Tuthill, Carla Yunis, Quentin M. Anstee, Stephen A. Harrison, Patrick M. Bossuyt, Michael Pavlides: (ORIGINAL ARTICLE) Diagnostic accuracy of non-invasive tests to screen for at-risk MASH—An individual participant data meta-analysis. *Liver international: official journal of the International Association for the Study of the Liver* 2024 Aug, 44(8):1872–1885. PMID: 38573034 doi: 10.1111/liv.15914. , Epub 2024 Apr 4.

15. Takaomi Kessoku, Takahiro Higashibata, Yasuhide Morioka, Noriyuki Naya, Yuichi Koretaka, Yasushi Ichikawa, Takayuki Hisanaga, Atsushi Nakajima : (Original Article) Naldemedine and Magnesium Oxide as First-Line Medications for Opioid-Induced Constipation: A Comparative Database Study in Japanese Patients With Cancer Pain. *Cureus*, 16(3):e55925. PMID: 38601408 PMCID: PMC11004843 doi: 10.7759/cureus.55925, eCollection 2024 Mar Published: March 10, 2024.
16. Kazuhiro Nouse, Miwa Kawanaka, Hideki Fujii, Kazuya Kariyama, Hidenori Toyoda, Michihiro Iwaki, Hideki Hayashi, Satoshi Oeda, Hideyuki Hyogo, Asahiro Morishita, Kensuke Munekage, Kazuhito Kawata, Tsubasa Tsutsumi, Koji Sawada, Tatsuji Maeshiro, Hiroshi Tobita, Yuichi Yoshida, Masafumi Naito, Asuka Araki, Shingo Arakaki, Takumi Kawaguchi, Hidenao Noritake, Masafumi Ono, Tsutomu Masaki, Satoshi Yasuda, Eiichi Tomita, Masato Yoneda, Akihiro Tokushige, Yoshihiro Kamada, Hirokazu Takahashi, Shinichiro Ueda, Shinichi Aishima, Yoshio Sumida, Atsushi Nakajima, Takashi Kumada, Takeshi Okanoue (On behalf of the Japan Study Group of Nonalcoholic Fatty Liver Disease (JSG-NAFLD)): (Original Articles) Validation Study of Age-independent Fibrosis Score (Fibrosis-3 Index) in Patients with Metabolic Dysfunction-Associated Steatotic Liver Disease. *Hepatology research : the official journal of the Japan Society of Hepatology* 2024 Oct, 54(10):912–920 PMID: 38661715 doi: 10.1111/hepr.14039. Epub 2024 Apr 25.
17. Shingo Koyama, Asako Nogami, Masato Yoneda, Shihyao Cheng, Yuya Koike, Yuka Takeuchi, Michihiro Iwaki, Takashi Kobayashi, Satoru Saito, Daisuke Utsunomiya, Atsushi Nakajima: (Article) Chronological Course and Clinical

Features after Denver Peritoneovenous Shunt Placement in Decompensated Liver Cirrhosis. *Tomography*, 10(4):471-479, PMID: 38668394 PMID: PMC11055000 doi.org/10.3390/tomography10040036, 2024 Mar 25.

18. Tsubasa Tsutsumi, Takumi Kawaguchi, Hideki Fujii, Yoshihiro Kamada, Hirokazu Takahashi, Miwa Kawanaka, Yoshio Sumida, Michihiro Iwaki, Hideki Hayashi, Hidenori Toyoda, Satoshi Oeda, Hideyuki Hyogo, Asahiro Morishita, Kensuke Munekage, Kazuhito Kawata, Koji Sawada, Tatsuji Maeshiro, Hiroshi Tobita, Yuichi Yoshida, Masafumi Naito, Asuka Araki, Shingo Arakaki, Hidenao Noritake, Masafumi Ono, Tsutomu Masaki, Satoshi Yasuda, Eiichi Tomita, Masato Yoneda, Akihiro Tokushige, Shinichiro Ueda, Shinichi Aishima, Atsushi Nakajima, Takeshi Okanoue: (ORIGINAL ARTICLE) Hepatic inflammation and fibrosis are profiles related to mid-term mortality in biopsy-proven MASLD: A multicenter study in Japan. *Alimentary pharmacology & therapeutics*, 59(12):1559-1570. PMID: 38651312 doi.org/10.1111/apt.17995, Epub 2024 Apr 23.
19. Kyo Sasaki, Yusuke Kawamura, Chikara Ogawa, Kazuhisa Yabushita, Shoji Watanabe, Hideki Hayashi, Takahiro Kochi, Tetsu Tomonari, Masashi Ninomiya, Koji Takai, Kento Imajo, Takanori Ito, Ryuichi Kita, Seiichi Mawatari, Sohji Nishina, Hidenori Toyoda: Skill Proficiency, Efficacy, and Safety of the Transradial Approach in Transarterial Treatments for Hepatocellular Carcinoma. *Cureus* 2024 Apr 8, 16(4):e57800. PMID: 38721163 PMID: PMC11078463 doi: 10.7759/cureus.57800. eCollection 2024 Apr.
20. Rohit Loomba, Mark L Hartman, Eric J Lawitz, Raj Vuppalanchi, Jérôme Boursier, Elisabetta Bugianesi, Masato Yoneda, Cynthia Behling, Oscar W Cummings, Yuanyuan Tang, Bram Brouwers, Deborah A Robins, Amir Nikooie, Mathijs C Bunck, Axel Haupt, Arun J Sanyal; SYNERGY-NASH Investigators: (Clinical Trail)(Original Article) Tirzepatide for Metabolic Dysfunction-Associated Steatohepatitis with Liver Fibrosis. *The New England journal of medicine* 2024 Jul 25, 391(4):299-310. PMID: 38856224 doi: 10.1056/NEJMoa2401943. Epub 2024 Jun 8.
21. Taeang Arai, Hirokazu Takahashi, Yuya Seko, Hidenori Toyoda, Hideki Hayashi, Kanji Yamaguchi, Michihiro Iwaki, Masato Yoneda, Toshihide Shima, Hideki Fujii, Asahiro Morishita, Kazuhito Kawata, Kengo Tomita, Miwa Kawanaka, Yuichi Yoshida, Tadashi Ikegami, Kazuo Notsumata, Satoshi Oeda, Masanori Atsukawa, Yoshihiro Kamada, Yoshio Sumida, Hideaki Fukushima, Eiji Miyoshi, Shinichi Aishima, Takeshi Okanoue, Yoshito Itoh, Atsushi Nakajima; Japan Study Group of

- Nonalcoholic Fatty Liver Disease (JSG-NAFLD): Accuracy of the Enhanced Liver Fibrosis Test in Patients With Type 2 Diabetes Mellitus and Its Clinical Implications. *Clin Gastroenterol Hepatol. Clinical gastroenterology and hepatology:the official clinical practice journal of the American Gastroenterological Association*, 2024 Apr;22(4):789-797. e8. PMID: 38048934 doi:10.1016/j.cgh.2023.11.022. Epub 2023 Dec 2.
22. Yuya Seko, Kanji Yamaguchi, Toshihide Shima, Michihiro Iwaki, Hirokazu Takahashi, Miwa Kawanaka, Saiyu Tanaka, Yasuhide Mitsumoto, Masato Yoneda, Atsushi Nakajima, Takeshi Okanoue, Yoshito Itoh: (Multicenter Study) Differential Effects of Genetic Polymorphism on Comorbid Disease in Metabolic Dysfunction-Associated Steatotic Liver Disease. *Clin Gastroenterol Hepatol. Clinical gastroenterology and hepatology:the official clinical practice journal of the American Gastroenterological Association* 2024 Jul, 22(7):1436-1443. e4. PMID: 38604296 doi: 10.1016/j.cgh.2024.02.031., Epub 2024 Apr 10.
23. Hidenori Ohkubo, Takaomi Kessoku, Kosuke Tanaka, Kota Takahashi, Tomohiro Takatsu, Tsutomu Yoshihara, Noboru Misawa, Keiichi Ashikari, Akiko Fuyuki, Shingo Kato, Takuma Higurashi, Kunihiro Hosono, Masato Yoneda, Toshihiro Misumi, Satoru Shinoda, Vincenzo Stanghellini, Atsushi Nakajima: Efficacy and safety of rifaximin in patients with chronic intestinal pseudo-obstruction: a randomized, double-blind, placebo-controlled, phase II-a exploratory trial. *Biosci Microbiota Food Health. Bioscience of microbiota, food and health* 2024;43(2):135-144. PMID: 38562545 PMCID: PMC10981945 doi: 10.12938/bmfh.2023-080. Epub 2023 Dec 27.
24. Noboru Misawa, Masaru Matsumoto, Momoko Tsuda, Shigeki Tamura, Tsutomu Yoshihara, Keiichi Ashikari, Takaomi Kessoku, Hidenori Ohkubo, Takuma Higurashi, Hiromi Sanada, Mototsugu Kato, Atsushi Nakajima: (Original Research Article) Diagnostic Ability of Ultrasonography Compared with Computed Tomography for Assessing Rectal Feces. *J Anus Rectum Colon. Journal of the Anus Rectum and Colon* 2;8(2):126-131. PMID: 38689784 PMCID: PMC11056529 doi: 10.23922/jarc.2023-058. eCollection 2024, 2024 Apr 25.
25. Shinichi Nihei, Yusuke Kurita, Sho Hasegawa, Kunihiro Hosono, Noritoshi Kobayashi, Kensuke Kubota, Atsushi Nakajima: Detective flow imaging endoscopic ultrasound for localizing pancreatic insulinomas that are undetectable with other imaging modalities. *Endoscopy*. 2024 Dec, 56(S 01):E342-E343. PMID: 38594011 PMCID: PMC11003798 doi: 10.1055/a-2291-9116. Epub 2024 Apr 9. (Case

report)

26. Nabil Nouredin, Daniel Q Huang, Ricki Bettencourt, Harris Siddiqi, Abdul M Majzoub, Tarek Nayfeh, Nobuharu Tamaki, Namiki Izumi, Atsushi Nakajima, Ramazan Idilman, Mesut Gumussoy, Digidem Kuru Oz, Ayse Erden, Tolga Gidener, Alina M Allen, Veeral Ajmera, Rohit Loomba: (Original Article) Natural history of clinical outcomes and hepatic decompensation in metabolic dysfunction-associated steatotic liver disease. *Aliment Pharmacol Ther. Alimentary pharmacology & therapeutics*, 2024 Jun; 59(12):1521-1526. PMID: 38571305 doi: 10.1111/apt.17981. Epub 2024 Apr 3.
27. Motokazu Sato, Kohei Mizuta, Qinghong Han, Sei Morinaga, Byung Mo Kang, Yutaro Kubota, Ryosuke Mori, Anton Baranov, Keita Kobayashi, Daniel Ardjmand, Noritoshi Kobayashi, Michael Bouvet, Yasushi Ichikawa, Atsushi Nakajima, Robert M Hoffman: (Research Article) Targeting Methionine Addiction Combined With Low-dose Irinotecan Arrested Colon Cancer in Contrast to High-dose Irinotecan Alone, Which Was Ineffective, in a Nude-mouse Model. *In Vivo. In vivo (Athens, Greece)* 2024 May-Jun; 38(3):1058-1063. PMID: 38688611 PMCID: PMC11059914 doi: 10.21873/invivo.13539.
28. Motokazu Sato, Qinghong Han, Ryosuke Mori, Kohei Mizuta, Byung Mo Kang, Sei Morinaga, Noritoshi Kobayashi, Yasushi Ichikawa, Atsushi Nakajima, Robert M Hoffman: (Case Reports) (Research Article) Reduction of Tumor Biomarkers from very High to Normal and Extensive Metastatic Lesions to Undetectability in a Patient With Stage IV HER2-positive Breast Cancer Treated With Low-dose Trastuzumab Deruxtecan in Combination With Oral Recombinant Methioninase and a Low-methionine Diet. *Anticancer Res. Anticancer research*, 2024 Apr; 44(4):1499-1504. PMID: 38538002 doi: 10.21873/anticancer.16946.
29. Motokazu Sato, Qinghong Han, Kohei Mizuta, Ryosuke Mori, Byung Mo Kang, Sei Morinaga, Noritoshi Kobayashi, Yasushi Ichikawa, Atsushi Nakajima, Robert M Hoffman: (Case Reports) (Research Article) Extensive Shrinkage and Long-term Stable Disease in a Teenage Female Patient With High-grade Glioma Treated With Temozolomide and Radiation in Combination With Oral Recombinant Methioninase and a Low-methionine Diet. *In Vivo. In vivo (Athens Greece)* 2024 May-Jun; 38(3):1459-1464. PMID: 38688589 PMCID: PMC11059867 doi: 10.21873/invivo.13591.
30. Clarissa Elysia Fu, Margaret Teng, Daniel Tung, Vijay Ramadoss, Christen Ong, Benjamin Koh, Wen Hui Lim, Darren Jun Hao Tan, Jia Hong Koh, Benjamin Nah , Nicholas Syn , Nobuharu Tamaki, Mohammad Shadab Siddiqui, Karn Wijarnpreecha,

George N Ioannou, Atsushi Nakajima, Mazen Nouredin, Arun J Sanyal, Cheng Han Ng, Mark Muthiah: Sex and Race-Ethnic Disparities in Metabolic Dysfunction-Associated Steatotic Liver Disease: An Analysis of 40,166 Individuals. *Digestive diseases and sciences* 2024 Sep, 69(9):3195-3205. PMID: 38940975 doi: 10.1007/s10620-024-08540-4, Epub 2024 Jun 28.

31. Gong Feng, Ferenc E Mózes, Dong Ji, Sombat Treeprasertsuk, Takeshi Okanoue, Toshihide Shima, Huiqing Liang, Emmanuel Tsochatzis, Jinjun Chen, Jorn M Schattenberg, Christian Labenz, Sanjiv Mahadeva, Wah Kheong Chan, Xiaoling Chi, Adele Delamarre, Victor de Lédinghen, Salvatore Petta, Elisabetta Bugianesi, Hannes Hagström, Jerome Boursier, Jose Luis Calleja, George Boon-Bee Goh, Rocio Gallego-Durán, Arun J Sanyal, Jian-Gao Fan, Laurent Castéra, Michelle Lai, Stephen A Harrison, Manuel Romero-Gomez, Seung Up Kim, Yongfen Zhu, Geraldine Ooi, Junping Shi, Masato Yoneda, Atsushi Nakajima, Jing Zhang, Monica Lupsor-Platon, Bihui Zhong, Jeremy F L Cobbold, Chun-Yan Ye, Peter J Eddowes, Philip Newsome, Jie Li, Jacob George, Fangping He, Myeong Jun Song, Hong Tang, Yuchen Fan, Jidong Jia, Liang Xu, Su Lin, Yiling Li, Zhonghua Lu, Yuemin Nan, Junqi Niu, Xuebing Yan, Yongjian Zhou, Chenghai Liu, Hong Deng, Qing Ye, Qing-Lei Zeng, Lei Li, Jing Wang, Song Yang, Huapeng Lin, Hye Won Lee, Terry Cheuk-Fung Yip, Céline Fournier-Poizat, Grace Lai-Hung Wong, Grazia Pennisi, Angelo Armandi, Wen-Yue Liu, Ying Shang, Marc de Saint-Loup, Elba Llop, Kevin Kim Jun Teh, Carmen Lara-Romero, Amon Asgharpour, Sara Mahgoub, Mandy Sau-Wai Chan, Clemence M Canivet, Fanpu Ji, Yongning Xin, Jin Chai, Zhiyong Dong, Giovanni Targher, Christopher D Byrne, Na He, Man Mi, Feng Ye, Vincent Wai-Sun Wong, Michael Pavlides, Ming-Hua Zheng: acFibroMASH index for the diagnosis of fibrotic MASH and prediction of liver-related events: An international multicenter study. *Clinical gastroenterology and hepatology: the official clinical practice journal of the American Gastroenterological Association*, :S1542-3565(24)00863-2. PMID: 39362618 doi: 10.1016/j.cgh.2024.07.045. (Received 21 November 2023, Revised 16 July 2024, Accepted 17 July 2024, Available online 2 October 2024) 2024 Oct 1. Online ahead of print.
32. Yusuke Kurita, Daisuke Utsunomiya, Kensuke Kubota, Shingo Koyama, Sho Hasegawa, Kunihiro Hosono, Kuniyasu Irie, Yuichi Suzuki, Shin Maeda, Noritoshi Kobayashi, Yasushi Ichikawa, Itaru Endo, Atsushi Nakajima: (Article) Diagnostic Value of Contrast-Enhanced Dual-Energy Computed Tomography in the Pancreatic Parenchymal and Delayed Phases for Pancreatic Cancer. *Tomography* 2024,



10(10):1591-1604 PMID: 39453034 PMCID: PMC11510840 DOI:  
10.3390/tomography10100117 Published: 7 October 2024 (Submission received: 23  
August 2024 / Revised: 28 September 2024 / Accepted: 3 October 2024).

33. Xiao-Dong Zhou, Seung Up Kim, Terry Cheuk-Fung Yip, Salvatore Petta, Atsushi Nakajima, Emmanuel Tsochatzis, Jérôme Boursier, Elisabetta Bugianesi, Hannes Hagström, Wah Kheong Chan, Manuel Romero-Gomez, José Luis Calleja, Victor de Lédinghen, Laurent Castéra, Arun J Sanyal, George Boon-Bee Goh, Philip N Newsome, Jiangao Fan, Michelle Lai, Céline Fournier-Poizat, Hye Won Lee, Grace Lai-Hung Wong, Angelo Armandi, Ying Shang, Grazia Pennisi, Elba Llop, Masato Yoneda, Marc de Saint-Loup, Clemence M Canivet, Carmen Lara-Romero, Rocio Gallego-Durán, Amon Asgharpour, Kevin Kim-Jun Teh, Sara Mahgoub, Mandy Sau-Wai Chan, Huapeng Lin, Wen-Yue Liu, Giovanni Targher, Christopher D Byrne, Vincent Wai-Sun Wong, Ming-Hua Zheng (VCTE-Prognosis Study Group): (Multicenter Study) Long-term liver-related outcomes and liver stiffness progression of statin usage in steatotic liver disease. *Gut*, ;73(11):1883-1892. PMID: 39089860 doi: 10.1136/gutjnl-2024-333074, 2024 Oct 7.
34. Eikichi Ihara, Noriaki Manabe, Hidenori Ohkubo, Naotaka Ogasawara, Haruei Ogino, Kazuki Kakimoto, Motoyori Kanazawa, Hidejiro Kawahara, Chika Kusano, Shiko Kuribayashi, Akinari Sawada, Tomohisa Takagi, Shota Takano, Toshihiko Tomita, Toshihiro Noake, Mariko Hojo, Ryota Hokari, Tatsuhiro Masaoka, Tomohiko Machida, Noboru Misawa, Yoshiyuki Mishima, Hiroshi Yajima, Sayuri Yamamoto, Hiroshi Yamawaki, Tatsuya Abe, Yasumi Araki, Kunio Kasugai, Takeshi Kamiya, Akira Torii, Atsushi Nakajima, Koji Nakada, Shin Fukudo, Yasuhiro Fujiwara, Hiroto Miwa, Hiromi Kataoka, Akihito Nagahara, Kazuhide Higuchi: (Practice Guideline) Evidence-Based Clinical Guidelines for Chronic Constipation 2023. *Digestion*, 1-28 PMID:39159626, doi: 10.1159/000540912, 2024 Aug 19 Online ahead of print.
35. Rebecca Wenling Zeng, Christen En Ya Ong, Elden Yen Hng Ong, Charlotte Hui Chung, Wen Hui Lim, Jieling Xiao, Pojsakorn Danpanichkul, Jia Hao Law, Nicholas Syn, Douglas Chee, Alfred Wei Chieh Kow, Sung Won Lee, Hirokazu Takahashi, Takumi Kawaguchi, Nobuharu Tamaki, Yock Young Dan, Atsushi Nakajima, Karn Wijarnpreecha, Mark D Muthiah, Mazen Nouredin, Rohit Loomba, George N Ioannou, Darren Jun Hao Tan, Cheng Han Ng, Daniel Q Huang: (Review) Global Prevalence, Clinical Characteristics, Surveillance, Treatment Allocation, and Outcomes of Alcohol-Associated Hepatocellular Carcinoma. *Clinical gastroenterology and hepatology :the official clinical practice journal of the American Gastroenterological Association* 2024 Dec, 22(12):2394-2402. e15. PMID: 38987014

doi: 10.1016/j.cgh.2024.06.026.Epub 2024 Jul 8.

36. Benjamin Koh, Jielsing Xiao, Cheng Han Ng, Michelle Law, Shyna Zhuoying Gunalan, Pojsakorn Danpanichkul, Vijay Ramadoss, Benedix Kuan Loon Sim, En Ying Tan, Chong Boon Teo, Benjamin Nah, Margaret Teng, Karn Wijarnpreecha, Yuya Seko, Mei Chin Lim, Hirokazu Takahashi, Atsushi Nakajima, Mazen Nouredin, Mark Muthiah, Daniel Q Huang, Rohit Loomba: Comparative efficacy of pharmacologic therapies for MASH in reducing liver fat content: Systematic review and network meta-analysis. *Hepatology*, PMID: 39028914 doi: 10.1097/HEP.0000000000001028. , 2024 Jul 19 Online ahead of print.
37. Eikichi Ihara, Noriaki Manabe, Hidenori Ohkubo, Naotaka Ogasawara, Haruei Ogino, Kazuki Kakimoto, Motoyori Kanazawa, Hidejiro Kawahara, Chika Kusano, Shiko Kuribayashi, Akinari Sawada, Tomohisa Takagi, Shota Takano, Toshihiko Tomita, Toshihiro Noake, Mariko Hojo, Ryota Hokari, Tatsuhiko Masaoka, Tomohiko Machida, Noboru Misawa, Yoshiyuki Mishima, Hiroshi Yajima, Sayuri Yamamoto, Hiroshi Yamawaki, Tatsuya Abe, Yasumi Araki, Kunio Kasugai, Takeshi Kamiya, Akira Torii, Atsushi Nakajima, Koji Nakada, Shin Fukudo, Yasuhiro Fujiwara, Hiroto Miwa, Hiromi Kataoka, Akihito Nagahara, Kazuhide Higuchi: 〈Practice Guideline〉 Evidence-Based Clinical Guidelines for Chronic Diarrhea 2023 . *Digestion* 2024, 105(6):480-497. PMID: 39197422 doi: 10.1159/000541121., Epub 2024 Aug 28.
38. Katsushi Tanaka, Akira Meguro, Yu Hara, Lisa Endo, Ami Izawa, Suguru Muraoka, Ayami Kaneko, Kohei Somekawa, Momo Hirata, Yukiko Otsu, Hiromi Matsumoto, Ryo Nagasawa, Sosuke Kubo, Kota Murohashi, Ayako Aoki, Hiroaki Fujii, Keisuke Watanabe, Nobuyuki Horita, Hideaki Kato, Nobuaki Kobayashi, Ichiro Takeuchi, Atsushi Nakajima, Hidetoshi Inoko, Nobuhisa Mizuki, Takeshi Kaneko: HLA-DQA1\*01:03 and DQB1\*06:01 are risk factors for severe COVID-19 pneumonia. *HLA* 2024 Jul, 104(1):e15609. PMID: 39041300 doi: 10.1111/tan.15609., First published: 23 July 2024.
39. Tsutomu Yoshihara, Takaomi Kessoku, Tomohiro Takatsu, Noboru Misawa, Keiichi Ashikari, Akiko Fuyuki, Hidenori Ohkubo, Takuma Higurashi, Michihiro Iwaki, Takeo Kurihashi, Machiko Nakatogawa, Koji Yamamoto, Izuru Terada, Yusuke Tanaka, Masataka Morita, Atsushi Nakajima: 〈Clinical Trail〉 Efficacy and safety of linaclotide in treatment-resistant chronic constipation: A multicenter, open-label study. *Neurogastroenterology and motility* 2024 Dec, 36(12):e14938. PMID: 39370607 doi: 10.1111/nmo.14938. , Epub 2024 Oct 6.
40. Jun Hamano, Takahiro Higashibata, Takaomi Kessoku, Shinya Kajiura, Mami Hirakawa, Shunsuke Oyamada, Keisuke Ariyoshi, Takeshi Yamada, Yoshiyuki

Yamamoto, Yasuyuki Takashima, Kosuke Doki, Masato Homma, Bryan J Mathis, Tsumugi Jono, Tomoki Ogata, Kosuke Tanaka, Yuki Kasai, Michihiro Iwaki, Akiko Fuyuki, Atsushi Nakajima, Ryuji Hayashi, Takayuki Ando, Naoki Izawa, Yuko Kobayashi, Yoshiki Horie, Tatsuya Morita: 〈Randomized Controlled Trail〉 Naldemedine for Opioid-Induced Constipation in Patients With Cancer: A Multicenter, Double-Blind, Randomized, Placebo-Controlled Trial. *Journal of clinical oncology :official journal of the American Society of Clinical Oncology* 2024 Dec 10, 42(35):4206-4217. PMID: 39255425 doi: 10.1200/JCO.24.00381. Epub 2024 Sep 10.

41. Takaomi Kessoku, Masaru Matsumoto, Noboru Misawa, Momoko Tsuda, Yuka Miura, Ayaka Uchida, Yuki Toriumi, Tomoyuki Onodera, Hiromi Arima, Atsuo Kawamoto, Junko Sugama, Makoto Matsushima, Mototsugu Kato, Noriaki Manabe, Nao Tamai, Hiromi Sanada, Atsushi Nakajima: Expert Consensus Document: An Algorithm for the Care and Treatment of Patients with Constipation Based on Ultrasonographic Findings in the Rectum. *Diagnostics(Basl, Switzerland)*, 14(14):1510. PMID: 39061648 PMCID: PMC11276071 doi: 10.3390/diagnostics14141510., 2024 Jul 12. ( Received 2024 May 10; Revised 2024 Jun 25; Accepted 2024 Jul 10; Collection date 2024 Jul.)
42. Atsushi Yamamoto, Takaomi Kessoku, Tomoki Ogata, Tsumugi Jono, Kota Takahashi, Kosuke Tanaka, Ko Suzuki, Yuma Takeda, Anna Ozaki, Yuki Kasai, Naoki Okubo, Michihiro Iwaki, Takashi Kobayashi, Noboru Misawa, Tsutomu Yoshihara, Akihiro Suzuki, Akiko Fuyuki, Sho Hasegawa, Kento Imajo, Noritoshi Kobayashi, Masaru Matsumoto, Nao Tamai, Hiromi Sanada, Shunsuke Oyamada, Yasushi Ichikawa, Atsushi Nakajima: A Handheld Ultrasound Device Can Predict Constipation with Rectal Fecal Retention in a Palliative Care Setting. *Diagnostics(Basl, Switzerland)*, 14(15):1626. PMID: 39125503 PMCID: PMC11311552 doi: 10.3390/diagnostics14151626., 2024 Jul 28 (Submission received: 27 May 2024 / Revised: 14 July 2024 / Accepted: 26 July 2024 / Published: 28 July 2024).
43. Takaaki Matsui, Toshiya Morozumi, Yuko Yamamoto, Takashi Kobayashi, Ryo Takuma, Masato Yoneda, Asako Nogami, Takaomi Kessoku, Muneaki Tamura, Yoshiaki Nomura, Toru Takahashi, Yohei Kamata, Shuntaro Sugihara, Kyoko Arai, Masato Minabe, Norio Aoyama, Kenji Mitsudo, Atsushi Nakajima, Motohiro Komaki: Relationship of Metabolic Dysfunction-Associated Steatohepatitis-Related Hepatocellular Carcinoma with Oral and Intestinal Microbiota: A Cross-Sectional Pilot Study. *Medicina(Kaunas, Lithuania)*, 60(7):1150. PMID: 39064580 PMCID:

PMC11279156 doi: 10.3390/medicina60071150., 2024 Jul 17 .(Received 2024 Jun 5; Revised 2024 Jul 6; Accepted 2024 Jul 15; Collection date 2024 Jul.)

44. Yuya Seko, Kanji Yamaguchi, Toshihide Shima, Michihiro Iwaki, Hirokazu Takahashi, Miwa Kawanaka, Saiyu Tanaka, Yasuhide Mitsumoto, Masato Yoneda, Atsushi Nakajima, Takeshi Okanoue, Yoshito Itoh: Clinical Utility of Genetic Variants in PNPLA3 and TM6SF2 to Predict Liver-Related Events in Metabolic Dysfunction-Associated Steatotic Liver Disease. *Liver international: official journal of the International Association for the Study of the Liver*, PMID: 39373247 doi: 10.1111/liv.16124, 2024 Oct 7 Online ahead of print.
45. Motokazu Sato, Toshihiko Sato, Chihiro Hozumi, Qinghong Han, Kohei Mizuta, Sei Morinaga, Byung Mo Kang, Noritoshi Kobayashi, Yasushi Ichikawa, Atsushi Nakajima, Robert M Hoffman: (Comparative Study) [11C]Methionine PET vs. [18F]Fluorodeoxyglucose PET Whole-body Imaging to Determine the Extent of Methionine-addiction Compared to Glucose-addiction of Primary and Metastatic Cancer of the Trunk in Patients. *Anticancer research*, 2024 Sep;44(9):3891-3898. PMID: 39197923 doi: 10.21873/anticancer.17216.
46. Yuji Ogawa, Wataru Tomeno, Yasushi Imamura, Masaru Baba, Takato Ueno, Takashi Kobayashi, Michihiro Iwaki, Asako Nogami, Takaomi Kessoku, Yasushi Honda, Kazuo Notsumata, Hirotohi Fujikawa, Megumi Kaai, Kento Imajo, Miwa Kawanaka, Hideyuki Hyogo, Mitsuru Hisatomi, Mamiko Takeuchi, Taku Hakamada, Takashi Honda, Miwa Tatsuta, Asahiro Morishita, Shigeru Mikami, Ken Furuya, Noriaki Manabe, Tomoari Kamada, Takumi Kawaguchi, Masato Yoneda, Satoru Saito, Atsushi Nakajima: Distribution of Fibrosis-4 index and vibration-controlled transient elastography-derived liver stiffness measurement for patients with metabolic dysfunction-associated steatotic liver disease in health check-up. *Hepatology Research: the official journal of the Japan Society of Hepatology*, PMID: 39364641 doi: 10.1111/hepr.14117, 2024 Oct 4. Online ahead of print.
47. Takaomi Kessoku, Toshikazu Akamatsu, Yasuhide Morioka, Takaaki Yokota, Masayuki Kobayashi, Kohei Uchida, Yuichi Koretaka, Atsushi Nakajima: (Clinical Trail) Effect of add-on naldemedine treatment in patients with cancer and opioid-induced constipation insufficiently responding to magnesium oxide: a pooled, subgroup analysis of two randomized controlled trials. *Japanese journal of clinical oncology*, 55(1):40-48. PMID: 39354673 doi: 10.1093/jjco/hyae135, 2025 Jan 8.
48. Motokazu Sato, Qinghong Han, Chihiro Hozumi, Hideo Kujiraoka, Kohei Mizuta, Sei Morinaga, Byung Mo Kang, Noritoshi Kobayashi, Yasushi Ichikawa, Atsushi

- Nakajima, Robert M Hoffman: (Case Reports) First-line Chemotherapy in Combination With Oral Recombinant Methioninase and a Low-methionine Diet for a Stage IV Inoperable Pancreatic-Cancer Patient Resulted in 40% Tumor Reduction and an 86% CA19-9 Biomarker Decrease. *Anticancer research* 2024 Sep, 44(9):3885-3889. PMID: 39197890 doi: 10.21873/anticancer.17215. (case report)
49. En Ying Tan, Pojsakorn Danpanichkul, Jie Ning Yong, Zhenning Yu, Darren Jun Hao Tan, Wen Hui Lim, Benjamin Koh, Ryan Yan Zhe Lim, Ethan Kai Jun Tham, Kartik Mitra, Asahiro Morishita, Yao-Chun Hsu, Ju Dong Yang, Hirokazu Takahashi, Ming-Hua Zheng, Atsushi Nakajima, Cheng Han Ng, Karn Wijarnpreecha, Mark D Muthiah, Amit G Singal, Daniel Q Huang : Liver Cancer in 2021: Global Burden of Disease Study. *Journal of hepatology*, S0168-8278(24)02652-7. PMID: 39481652 doi: 10.1016/j.jhep.2024.10.031., 2024 Oct 29 Online ahead of print.
  50. Yuko Ishimaru, Takaomi Kessoku, Michihiro Nonaka, Yoichiro Kitajima, Hideyuki Hyogo, Tomoaki Nakajima, Kento Imajo, Yoshihito Kubotsu, Hiroshi Isoda, Miwa Kawanaka, Masato Yoneda, Keizo Anzai, Atsushi Nakajima, Kyoji Furukawa, Atsushi Kawaguchi, Hirokazu Takahashi: Effects of ipragliflozin on skeletal muscle adiposity in patients with diabetes and metabolic dysfunction-associated steatotic liver disease. *Internal medicine(Tokyo Japan)*, PMID: 39496446 doi: 10.2169/internalmedicine.4456-24, 2024 Nov 1. Online ahead of print.
  51. Tomoki Ogata, Yusuke Kurita, Takamitsu Sato, Shin Yagi, Sho Hasegawa, Kunihiro Hosono, Noritoshi Kobayashi, Itaru Endo, Kensuke Kubota, Atsushi Nakajima : ( )Thin Delivery Stents Can Obviate the Need for Additional Fistula Dilatation of Large Diameter in Endoscopic Ultrasound-Guided Hepaticogastrostomy. *Journal of clinical medicine*, 13(21):6328., PMID: 39518467 PMID: PMC11546826 doi: 10.3390/jcm13216328. 2024 Oct 23.
  52. Michihiro Iwaki, Takashi Kobayashi, Asako Nogami, Yuji Ogawa, Kento Imajo, Eiji Sakai, Yoshinobu Nakada, Satoshi Koyama, Takeo Kurihashi, Noriko Oza, Toshikazu Kohira, Michiaki Okada, Yuki Yamaguchi, Shinji Iwane, Fujito Kageyama, Yuzo Sasada, Masahiro Matsushita, Akimitsu Tadauchi, Gou Murohisa, Masamichi Nagasawa, Shuichi Sato, Kazuhisa Maeda, Koichiro Furuta, Ryuta Shigefuku, Yuya Seko, Hiroshi Tobita, Kazuhito Kawata, Miwa Kawanaka, Takaaki Sugihara, Nobuharu Tamaki, Motoshi Iwasa, Takumi Kawaguchi, Yoshito Itoh, Atsushi Kawaguchi, Hirokazu Takahashi, Atsushi Nakajima, Masato Yoneda: (Gastroenterology and hepatology Protocol) Pemafibrate for treating MASLD complicated by hypertriglyceridaemia: a multicentre, open-label, randomised controlled trial study protocol. *BMJ Open*, 14(11):e088862. PMID: 39581726 PMID: PMC11590823

doi: 10.1136/bmjopen-2024-088862, 2024 Nov 24.

53. Hiroshi Ishiba, Hideki Fujii, Yoshihiro Kamada, Yoshio Sumida, Hirokazu Takahashi, Yuya Seko, Hidenori Toyoda, Hideki Hayashi, Kanji Yamaguchi, Michihiro Iwaki, Masato Yoneda, Taeang Arai, Toshihide Shima, Asahiro Morishita, Kazuhito Kawata, Kengo Tomita, Miwa Kawanaka, Yuichi Yoshida, Tadashi Ikegami, Kazuo Notsumata, Satoshi Oeda, Hideaki Fukushima, Eiji Miyoshi, Shinichi Aishima, Yoshito Itoh, Takeshi Okanoue, Atsushi Nakajima; Japan Study Group of Nonalcoholic Fatty Liver Disease (JSG-NAFLD): (Comparative Study) Accuracy of type IV collagen 7S versus Enhanced Liver Fibrosis score for diagnosing fibrosis in patients with metabolic dysfunction-associated steatotic liver disease. *Hepatology communications*, 9(1):e0563. doi: 10.1097/HC9.0000000000000563. eCollection 2025 Jan 1 Pubmed 2024 Dec 11.
54. Kento Imajo, Yusuke Saigusa, Takashi Kobayashi, Koki Nagai, Shinya Nishida, Nobuyoshi Kawamura, Hiroyoshi Doi, Michihiro Iwaki, Asako Nogami, Yasushi Honda, Takaomi Kessoku, Yuji Ogawa, Hiroyuki Kirikoshi, Shigehiro Kokubu, Daisuke Utsunomiya, Hirokazu Takahashi, Shinichi Aishima, Yoshio Sumida, Satoru Saito, Masato Yoneda, Andrea Dennis, Stella Kin, Anneli Andersson, Atsushi Nakajima: (Original Article) Head-to-head comparison among FAST, MAST and multiparametric MRI-based new score in diagnosing at-risk MASH. *European Radiology*, PMID: 39638942 doi: 10.1007/s00330-024-11215-3. 2024 Dec 5. Online ahead of print.
55. Ryohei Tanigawa, Atsushi Nakajima, Yuichiro Eguchi, Hirokazu Takahashi, Rohit Loomba, Hideki Suganami, Masaya Tanahashi, Ayumi Saito, Yuki Iida, Shizuya Yamashita: (原著) Effects of Pemafibrate on LDL-C and Related Lipid Markers in Patients with MASLD: A Sub-Analysis of the PEMA-FL Study. *Journal of atherosclerosis and thrombosis*, PMID: 39694503 doi: 10.5551/jat.65395, 2024 Dec 18. Online ahead of print.
56. Yusuke Kurita, Kensuke Kubota, Jotaro Harada, Yu Honda, Yuma Yamazaki, Takeshi Iizuka, Shinichi Nihei, Sho Hasegawa, Kunihiro Hosono, Noritoshi Kobayashi, Satoshi Fujii, Itaru Endo, Atsushi Nakajima: (ORIGINAL ARTICLE) Endoscopic ultrasound-guided fine-needle biopsy needle can facilitate histological diagnosis of type 1 autoimmune pancreatitis. *Journal of hepato-biliary-pancreatic sciences*, PMID: 39639754 <https://doi.org/10.1002/jhbp.12095>, First published: 06 December 2024. Online ahead of print.