

Advanced Clinical Research Center

Division of Frontier Surgery

フロンティア外科学分野

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The mission of our division is to create solid evidence of surgical treatment for colorectal cancer as well as gastric cancer by continuously publishing the papers of clinical research and basic research. If our research can help rewrite various clinical guidelines around the world, we as surgeons can not only cure the patients in front of us but also contribute to the development of surgical treatment for gastrointestinal cancer.

1. Introduction

This division was newly established in September 2020 by professor Shida and Dr. Ahiko. On November 16th, professor Dr. Aiko joined this new division. On October 1st, 2022, Dr. Kojima also joined this division. We named our new division as 'Frontier Surgery', because we want to greedily open up undeveloped areas of surgery and contribute to the development of surgery.

2. Treatment for diseases of colon, rectum, anus and stomach in IMSUT hospital

All of us are also members of Department of Surgery, IMSUT hospital. We treat diseases of colon, rectum, anus, and stomach, especially colorectal cancer and gastric cancer. We also perform laparoscopic surgery for inguinal hernias.

See NO16-10 (Department of Surgery, IMSUT Hospital).

3. Making Evidence for gastrointestinal malignancy

While performing surgery as gastrointestinal sur-

geons, we are planning to conduct translational research as academic surgeons in the near future.

4. Publications

Refractory Intestinal Behçet-Like Disease Associated with Trisomy 8 Myelodysplastic Syndrome Resolved by Parenteral Nutrition.

Takahashi R, Matsubara Y, Takahashi S, Yokoyama K, Ahyoung LL, Koga M, Sakamoto H, Boku N, Shida D, Yotsuyanagi H.

Case Rep Gastroenterol. 2023 Oct 11;17(1):287-293.

Prognostic factors associated with the transition in treatment methods for brain metastases from colorectal cancer.

Imaizumi J, Shida D, Boku N, Igaki H, Itami J, Miyakita Y, Narita Y, Takashima A, Kanemitsu Y.

Int J Clin Oncol. 2023 Aug;28(8):1043-1053.

Genomic landscape and its prognostic significance in stage III colorectal cancer: JCOG1506A1, an ancil-

lary of JCOG0910.

Shida D, Kuchiba A, Shibata T, Hamaguchi T, Yamasaki S, Ito M, Kobatake T, Tonooka T, Masaki T, Shiozawa M, Takii Y, Uetake H, Okamura S, Ojima H, Kazama S, Takeyama H, Kanato K, Shimada Y, Murakami Y, Kanemitsu Y.

Cancer Sci. 2023 Aug;114(8):3352-3363.

Bromodomain protein BRD8 regulates cell cycle progression in colorectal cancer cells through a TIP60-independent regulation of the pre-RC complex.

Yamaguchi K, Nakagawa S, Saku A, Isobe Y, Yamaguchi R, Sheridan P, Takane K, Ikenoue T, Zhu C, Miura M, Okawara Y, Nagatoishi S, Kozuka-Hata H, Oyama M, Aikou S, Ahiko Y, Shida D, Tsumoto K, Miyano S, Imoto S, Furukawa Y.

iScience. 2023 Apr 1;26(4):106563.

Comparison of clinicopathological and genomic profiles in anal squamous cell carcinoma between Japanese and Caucasian cohorts.

Ito T, Takayanagi D, Sekine S, Hashimoto T, Shimada Y, Matsuda M, Yamada M, Hamamoto R, Kato T, Shida D, Kanemitsu Y, Boku N, Kohno T, Takashima A, Shiraishi K.

Sci Rep. 2023 Mar 3;13(1):3587. doi: 10.1038/s41598-023-30624-w.

Effect of Biologics on the Risk of Advanced-Stage Inflammatory Bowel Disease-Associated Intestinal Cancer: A Nationwide Study.

Seishima R, Okabayashi K, Ikeuchi H, Uchino M, Futami K, Noguchi T, Ohge H, Iseki Y, Watanabe K, Itabashi M, Okamoto K, Toiyama Y, Ogino T, Nakamura M, Yamada K, Wakai T, Sato Y, Kimura H, Takahashi K, Hida K, Kinugasa Y, Ishida F, Okuda J, Daito K, Koyama F, Ueno H, Yamamoto T, Yamamoto S, Hanai T, Maemoto A, Arakaki J, Komori K, Akagi Y, Shida D, Yamaguchi S, Matsuda K, Maeda K, Noake T, Nezu R, Sasaki S, Hasegawa J, Sunami E, Kanemitsu Y, Katsumata K, Uehara K, Kiyomatsu T, Suto T, Kazama S, Yamada T, Goi T, Ishihara S, Ajioka Y, Sugihara K.

Am J Gastroenterol. 2023 Jul 1;118(7):1248-1255.

Prognostic differences between oligometastatic and polymetastatic disease after resection in patients with colorectal cancer and hepatic or lung metastases: Retrospective analysis of a large cohort at a single institution.

Horie T, Kanemitsu Y, Takamizawa Y, Moritani K, Tsukamoto S, Shida D.

Surgery. 2023 Feb;173(2):328-334.

Identification of odontogenic ameloblast associated as a novel target gene of the Wnt/ β -catenin signaling pathway.

Yamaguchi K, Horie C, Takane K, Ikenoue T, Nakagawa S, Isobe Y, Ota Y, Ushiku T, Tanaka M, Fujishiro J, Hoshino N, Arisue A, Nishizuka S, Aikou S, Shida D, Furukawa Y.

Cancer Sci. 2023 Mar;114(3):948-960.

Risk of non-colorectal cancer-related death in elderly patients with the disease: A comparison of five preoperative risk assessment indices.

Yasui K, Shida D, Ahiko Y, Takamizawa Y, Moritani K, Tsukamoto S, Kanemitsu Y.

Cancer Med. 2023 Feb;12(3):2290-2302.

Prognostic Role for Primary Tumor Location in Patients With Colorectal Liver Metastases: A Comparison of Right-Sided Colon, Left-Sided Colon, and Rectum.

Takamizawa Y, Shida D, Horie T, Tsukamoto S, Esaki M, Shimada K, Kondo T, Kanemitsu Y.

Dis Colon Rectum. 2023 Feb 1;66(2):233-242.

Prognostic Factors of Bone Metastases From Colorectal Cancer in the Era of Targeted Therapy.

Kobayashi Y, Shida D, Boku N, Yasui K, Nakamura Y, Kudose Y, Imaizumi J, Kanemitsu Y.

Dis Colon Rectum. 2023 Mar 1;66(3):401-409.

Lymphatic flow mapping using near-infrared fluorescence imaging with indocyanine green helps to predict lymph node metastasis intraoperatively in patients with esophageal or esophagogastric junction cancer not treated with neoadjuvant chemotherapy.

Shiomi S, Yagi K, Iwata R, Yajima S, Okumura Y, Aikou S, Yamashita H, Nomura S, Seto Y.

Surg Endosc. 2023 Nov;37(11):8214-8226.

Utility of the revised FIGO2023 staging with molecular classification in endometrial cancer.

Kobayashi-Kato M, Fujii E, Asami Y, Ahiko Y, Hiranuma K, Terao Y, Matsumoto K, Ishikawa M,

Kohno T, Kato T, Shiraishi K, Yoshida H.

Gynecol Oncol. 2023 Nov;178:36-43.

Artificial intelligence for the recognition of key anatomical structures in laparoscopic colorectal surgery.

Kitaguchi D, Harai Y, Kosugi N, Hayashi K, Kojima S, Ishikawa Y, Yamada A, Hasegawa H, Takeshita N, Ito M.

Br J Surg. 2023 Sep 6;110(10):1355-1358.

Automatic Surgical Skill Assessment System Based on Concordance of Standardized Surgical Field Development Using Artificial Intelligence.

Igaki T, Kitaguchi D, Matsuzaki H, Nakajima K, Kojima S, Hasegawa H, Takeshita N, Kinugasa Y, Ito M.

JAMA Surg. 2023 Aug 1;158(8):e231131. doi: 10.1001/jamasurg.2023.1131. Epub 2023 Aug 9.

Deep-learning-based semantic segmentation of autonomic nerves from laparoscopic images of colorectal surgery: an experimental pilot study.

Kojima S, Kitaguchi D, Igaki T, Nakajima K, Ishikawa Y, Harai Y, Yamada A, Lee Y, Hayashi K, Kosugi N, Hasegawa H, Ito M.

Int J Surg. 2023 Apr 1;109(4):813-820.

Universal meta-competencies of operative performances: a literature review and qualitative synthesis.

Igaki T, Takenaka S, Watanabe Y, Kojima S, Nakajima K, Takabe Y, Kitaguchi D, Takeshita N, Inomata M, Kuroyanagi H, Kinugasa Y, Ito M.

Surg Endosc. 2023 Feb;37(2):835-845.

Assessment of Elastic Laminal Invasion Contributes to an Objective pT3 Subclassification in Colon Cancer.

Kojima M, Yokota M, Yanagisawa N, Kitamura S, Amemiya K, Kawano S, Tsukada Y, Sakuyama N, Nagayasu K, Hashimoto T, Nakashima K, Jiang K, Kanemitsu Y, Fujita F, Akiba J, Notohara K, Itakura J, Sekine S, Sakashita S, Sakamoto N, Ishikawa S, Nakanishi Y, Yao T, Liang WY, Lauwers GY, Ito M, Sakamoto K, Ishii G, Ochiai A.

Am J Surg Pathol. 2023 Oct 1;47(10):1122-1133.