

Advanced Clinical Research Center

Division of Frontier Surgery

フロンティア外科学分野

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Our division is committed to advancing surgical care for colorectal and gastric cancers and inguinal hernias through the continuous generation of high-quality clinical and translational evidence. By actively disseminating our findings in peer-reviewed journals and contributing to the evolution of international clinical guidelines, we aim to improve patient outcomes not only at the bedside but also across the global surgical community.

1. Introduction

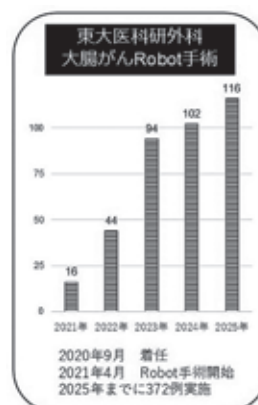
The Division of Frontier Surgery was established in September 2020 by Professor Shida and Dr. Ahiko. In April 2025, Dr. Sakuyama was promoted to Senior Assistant Professor, further strengthening the division's academic leadership, and Dr. Imaizumi joined the team in April 2025. The division was named *Frontier Surgery* to reflect our mission to pioneer innovative and unexplored areas of surgical practice and research, thereby contributing to the future advancement of surgery.

2. Treatment for Diseases of the Colon, Rectum, Anus, Stomach, and Hernias at IMSUT Hospital

All members of our division concurrently serve in the Department of Surgery at IMSUT Hospital, where we provide comprehensive surgical care for diseases of the colon, rectum, anus, and stomach, with a particular emphasis on colorectal and gastric malignancies. As certified surgeons under the Endoscopic Surgical Skill Qualification System of the Japan Society for Endoscopic Surgery (Dr. Shida), we actively per-

form advanced minimally invasive procedures, including laparoscopic and robotic surgeries. The volume of robotic surgery at IMSUT Hospital has increased steadily, reaching 116 cases in 2024. In addition, we routinely perform laparoscopic repair for inguinal hernias.

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



3. Creating Evidence for Gastrointestinal Malignancies

As gastrointestinal surgeons, our mission extends beyond operative excellence to the generation of robust scientific evidence. In parallel with increasing the use of robotic surgery, our goal is not merely to expand surgical volume, but to leverage the unique advantages of robotic platforms to develop novel sur-

gical concepts and techniques that can be shared with and adopted by the global surgical community. In 2025, we introduced *outermost-oriented surgery* for right-sided colon cancer (Shide D. *et al*; Ann Gastroenterol Surg 2025) and reported robotic lateral pelvic lymph node dissection for lower rectal cancer (Shide D.; Cancers 2026), exemplifying our commitment to innovation-driven surgical research.

4. Publications

- Shida D. Robotic Lateral Pelvic Lymph Node Dissection for Advanced Rectal Cancer: Bridging Eastern Surgical Precision and Western Multimodal Strategy. *Cancers*. 18(1): 77, 2026. doi.org/10.3390/cancers18010077.
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- Shida D. Editorial: Brain Metastases (Secondary Brain Tumor). *Cancers*. 17(21):3440, 2025. doi: 10.3390/cancers17213440.
- Imaizumi J, Shida D, Boku N, Igaki H, Miyakita Y, Kitabayashi I, Narita Y, Itami J, Takashima A, Kanemitsu Y. Development and validation of a prognostic nomogram for survival in patients with brain metastases from colorectal cancer. *Sci Rep*. 15(1):38887, 2025. doi: 10.1038/s41598-025-22760-2.
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- Imura Y, Baba K, Furukawa N, Ishibashi M, Sasuga C, Ahiko Y, Monma S, Sakuyama N, Aikou S, Shida D, Nojima M, Kuroda S, Boku N. A phase II study evaluating the preventive effect of topical hydrocortisone for capecitabine-induced hand-foot syndrome in patients with colorectal cancer receiving adjuvant chemotherapy with capecitabine plus oxaliplatin (T-CRACC study). *Int J Clin Oncol*. 30(11):2316-2324, 2025.
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