

## Advanced Clinical Research Center

# Division of Anesthesia and Surgical Homeostasis 侵襲防御医学分野

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*Established in April 2024, this division enhances the Department of Anesthesiology at IMSUT Hospital, focusing on delivering superior perioperative patient care. While clinical duties remain the current priority, future plans include initiating clinical research and contributing to translational research in collaboration with other hospital departments and divisions to improve patient outcomes and advance medical care.*

### Introduction

This division was newly established in April 2024 to enhance the activities of the Department of Anesthesiology at IMSUT Hospital and to elevate the hospital's ability to deliver superior perioperative patient care. The field of anesthesiology covers a wide range of physiological responses to surgical stimuli and the strategies to protect the body against them. Examples include the management of sedation, respiration, circulation, pain, coagulation, metabolism, and more. Our mission is to establish a robust foundation for delivering optimal anesthetic and intensive care when necessary, not only to general surgical patients but

also to those undergoing innovative therapeutic interventions at IMSUT Hospital.

### Future Prospects

At present, most of our efforts are focused on clinical duties. In the near future, we plan to initiate clinical research to further enhance our activities and pursue better patient outcomes in collaboration with other surgical departments within the hospital. Additionally, we are preparing to contribute to translational research at IMSUT in partnership with other divisions to advance innovative medical practices.

### Publications

Kashiwa K, Kurosawa H, Fujishiro K, Kubo H, Inokuchi R, Bougaki M, Kawamura G, Sato M, Konoeda C, Nakajima J, Doi K. Increased white blood cell count is associated with an increased demand for unfractionated heparin during veno-arterial extracorporeal oxygenation in lung transplantation. J Extra Corpor Technol. 56:108-113, 2024.

Meng Q, Seto F, Totsu T, Miyashita T, Wu S, Bougaki M, Ushio M, Hiruma T, Trapnell BC, Uchida K. Lung immune incompetency after mild peritoneal sepsis and its partial restoration by type 1 interferon: a mouse model study. Intensive Care Med Exp. 12:119, 2024.