

## IMSUT Hospital

# Department of Palliative Medicine and Advanced Clinical Oncology 先端緩和医療科

Project Senior Assistant Professor Yasuki Hijikata, M.D., Ph.D.  
Assistant Professor Tetsuya Ito, M.D., Ph.D.

特任講師 博士(医学) 土方 康基  
助教 博士(医学) 伊藤 哲也

*We explore and provide personalized cancer treatment based on genome analysis, in addition to established standard therapy. Our goal is set also to improve patients' quality of life by controlling symptoms related to the disease and treatment. We will perform a multidisciplinary approach to medical care based on the two specialized perspectives of cancer treatment and palliative medicine.*

### 1. Clinical sequencing in patients with refractory advanced cancers.

Yasuki Hijikata<sup>1</sup>, Tetsuya Ito<sup>1</sup>, Keishi Mori<sup>1</sup>, Noriko Fujiwara<sup>1</sup>, Kiyoshi Yamaguchi<sup>2</sup>, Tsuneo Ikenoue<sup>2</sup>, Seiya Imoto<sup>3</sup>, Yasuo Matsubara<sup>4</sup>, Kazuaki Yokoyama<sup>5</sup>, Hiroshi Yotsuyanagi<sup>4</sup>, Yoichi Furukawa<sup>2</sup>

<sup>1</sup> Dept. of Palliative Medicine / Advanced Clinical Oncology, IMSUT Hosp.

<sup>2</sup> Div. of Clinical Genome Research, IMSUT

<sup>3</sup> Div. of Health Medical Intelligence Human Genome Center, IMSUT

<sup>4</sup> Dept. of General Medicine, IMSUT Hosp.

<sup>5</sup> Dept. of Hematology/Oncology, IMSUT Hosp.

Metastatic cancer is a major cause of death and is associated with poor treatment efficacy. A better understanding of the advanced cancers is required to help adapt personalized treatments. Next-generation sequencing (NGS)-based genomic testing for cancer is becoming more widespread as a clinical tool for accurate diagnosis and proper treatment in clinical oncology. However, using various NGS techniques to guide cancer therapy has created challenges in ana-

lyzing large volumes of genomic data and reporting results to patients and caregivers. To resolve this, we organized a clinical sequencing team called the molecular tumor board (MTB). Clinical sequencing is associated with several potential challenges in analysis, interpretation, and drug development for refractory cancers. Briefly, after obtaining informed consent, whole-exome sequencing and/or RNA sequencing were performed on tumor, for comparisons with normal tissue, followed by analysis our hospital curators. MTB chose actionable drugs based on artificial intelligence and our database. The chosen drugs are administered to patients with advanced cancers refractory to standard treatment in our clinical study. We are currently evaluating the results of clinical study.

### 2. Palliative medicine to improve QOL of patients with life-threatening illness and their families.

Tetsuya Ito<sup>1</sup>, Keishi Mori<sup>1</sup>, Noriko Fujiwara<sup>1</sup>, Aya Watanabe<sup>1</sup>, Tomoe Honda<sup>1</sup>, Yasuki Hijikata<sup>1</sup>

<sup>1</sup> Dept. of Palliative Medicine / Advanced Clinical Oncology, IMSUT Hosp.

Patients with life-threatening illness including

cancer and their families are facing challenges, that interfere with their quality of life.

Regardless of the stage of the disease, we aim to address problems of patients and families, whether physical, psychological, social or spiritual, and even-

tually improve their quality of life under multidisciplinary collaboration.

At the same time, we will conduct research activities to build evidence on palliative medicine and disseminate new findings.

## Publications

**Watanabe A, Shimada N, Ishiki H, Fujiwara N, Nojima M, Tojo A.** Differences in Fentanyl Requirements in Terminally Ill Cancer Patients. *J Pain Palliat Care Pharmacother.* 2023 Mar;37(1):26-33.

**T Kadono, H Ishiki, N Yokomichi, T Ito, I Maeda, Y Hatano, T Miura, J Hamano, T Yamaguchi, A Ishikawa, Y Suzuki, S Arakawa, K Amano, E Satomi, M Mori.** Malignancy-related ascites in palliative care units: prognostic factor analysis. *BMJ Support Palli-*

*at Care.* 2023 Apr 20:spcare-2023-004286.

**Kohara I, Fujiwara N, Tamaki S, Nakahama H, Nosaki A, Hosoya M, Yabuki M, Yamamoto M, Kojima C, Fujiwara K.** Development of a Japanese Scale that Evaluates the Level of Nursing Support Provided to Patients for Decision-Making in Cancer Clinical Trials. *J Cancer Educ.* 2023 Oct;38(5):1548-1556.