

Hematology

1. Staffs and Students

Professor	Osamu MIURA	
Junior Associate Professor	Ayako ARAI	
Assistant Professor	Tetsuya FUKUDA, Manabu OHKI,	Tetsuya KUROSU, Masahide YAMAMOTO
Hospital Staff	Yutaka MURATA, Koji SASAKI	Hanae KUMEKAWA
Hospital Staff/Graduate Student	Takayuki SUZUKI,	Ken WATANABE
Graduate Student	Minako JINTA, Gaku OSHIKAWA,	Toshikage NAGAO, Nan WU

2. Purpose of Education

The major objective of the course is to understand the pathophysiology of blood cells, blood cell-forming organs, and hemostasis to provide a basis for rational diagnosis and treatment of their disorders. We offer the lectures of basic knowledge of hematological diseases for the 4th grade medical students, and we provide the opportunity to study process of diagnosis and management of hematological disorder for the 5th and 6th grade medical students as clinical clerkship, CC1 and CC3.

In our clinical residency the junior resident can have the opportunity to obtain knowledge and skills for dissolving hematological, oncological and infectious problem.

The senior residents are making profound efforts in their clinical experience to be hematological experts.

3. Research Subjects

- 1) Cell signaling for the hematopoiesis and hematological oncogenesis
- 2) Molecular mechanism of lymphomagenesis
- 3) Regulation of hematopoietic cell death after chemotherapeutic reagents
- 4) Mechanism of resistance against tyrosine kinase inhibitors
- 5) Mechanism of EB virus associated disease

4. Clinical Services

We provide the highest quality of patient care for a wide spectrum of blood diseases and cancer.

5. Publications

1. Kurosu T, Ohki M, Wu N, Kagechika H, Miura O. Sorafenib induces apoptosis specifically in cells expressing BCR/ABL by inhibiting its kinase activity to activate the intrinsic mitochondrial pathway. *Cancer Res.* 2009 May 1;69(9):3927-36.
2. Yamamoto M, Kakihana K, Ohashi K, Yamaguchi T, Tadokoro K, Akiyama H, Sakamaki H. Serial monitoring of T315I BCR-ABL mutation by Invader assay combined with RT-PCR. *Int J Hematol.* 2009 May;89(4):482-8
3. Wakabayashi S, Arai A, Oshikawa G, Araki A, Watanabe M, Uchida N, Taniguchi S, Miura O. Extranodal NK/T cell lymphoma, nasal type, of the small intestine diagnosed by double-balloon endoscopy. *Int J Hematol.* 2009;90:605-610
4. Sugita S, Takase H, Sugamoto Y, Arai A, Miura O, Mochizuki M. Diagnosis of intraocular lymphoma by polymerase chain reaction analysis and cytokine profiling of the vitreous fluid. *Jpn J Ophthalmol.* 2009;53:209-214
5. Nonaka M, Uota S, Saitoh Y, Takahashi M, Sugimoto H, Amet T, Arai A, Miura O, Yamamoto N, Yamaoka S. Role for protein geranylgeranylation in adult T-cell leukemia cell survival. *Exp Cell Res.* 2009;315:141-150
6. Hirokawa M, Sawada K, Fujishima N, Kawano F, Kimura A, Watanabe T, Arai A, Matsui T, Nakao S, Urabe A, Omine M, Ozawa K. Acquired pure red cell aplasia associated with malignant lymphomas: a nationwide cohort study in Japan for the PRCA Collaborative Study Group. *Am J Hematol.* 2009;84:144-148