

Curriculum Vitae

April 1, 2017

Keita Hirai, Ph.D.

Research Assistant Professor,

Department of Clinical Pharmacology & Genetics,

School of Pharmaceutical Sciences, University of Shizuoka.

52-1 Yada, Suruga-ku, Shizuoka 422-8526, Japan

Phone/Fax: +81-54-264-5674

E-mail: hiraik@u-shizuoka-ken.ac.jp

URL: <http://w3pharm.u-shizuoka-ken.ac.jp/clinphar/eng/index.htm>

ORCID: [0000-0001-8027-3508](https://orcid.org/0000-0001-8027-3508)

Education:

Ph.D. Pharmaceutical Sciences, University of Shizuoka, Graduate School of Pharmaceutical Sciences (Oct. 2009 – Sept. 2012)

M.S. Pharmaceutical Sciences, University of Shizuoka, Graduate School of Pharmaceutical Sciences (Apr. 2005 – Mar. 2007)

B.S. Pharmaceutical Sciences, University of Shizuoka, Faculty of Pharmaceutical Sciences (Apr. 2001 – Mar. 2005)

Research and Professional Experience:

May 2014 – present: Research Assistant Professor, Department of Clinical Pharmacology & Genetics, School of Pharmaceutical Sciences, University of Shizuoka.

Oct. 2013 – Apr. 2014: Clinical Pharmacist, Department of Pharmacy, Shizuoka General Hospital.

Oct. 2012 – Apr. 2014: Visiting Researcher, Department of Clinical Pharmacology & Genetics, School of Pharmaceutical Sciences, University of Shizuoka.

Apr. 2007 – Sept. 2013: Clinical Pharmacist, Department of Pharmacy, Shizuoka Children's Hospital.

Society Membership:

The Pharmaceutical Society of Japan

Japanese Society of Pharmaceutical Health and Sciences

The Japanese Society of Clinical Pharmacology and Therapeutics

The Japanese Society of Therapeutic Drug Monitoring

International Association of Therapeutic Drug Monitoring and Clinical Toxicology

Research Areas:

Clinical pharmacology, pharmacogenomics, clinical pharmacokinetics

Awards:

Oct. 2013: Young Investigators Award, Japanese Pulmonary Hypertension Society

Recent Publications:

- Hirai K, Ishii H, Shimoshikiryo T, Shimomura T, Tsuji D, Inoue K, Kadoiri T, Itoh K.
Augmented renal clearance in patients with febrile neutropenia is associated with increased risk for subtherapeutic concentrations of vancomycin.
Therapeutic Drug Monitoring, 38, 706-710 (2016)
DOI: [10.1097/FTD.0000000000000346](https://doi.org/10.1097/FTD.0000000000000346)
- Tsuji D, Ikeda M, Yamamoto K, Nakamori H, Kim Y, Kawasaki Y, Otaki A, Yokoi M, Inoue K, Hirai K, Nakamichi H, Tokou U, Shiokawa M, Itoh K.
Drug-related genetic polymorphisms affecting severe chemotherapy-induced neutropenia in breast cancer patients: A hospital-based observational study.
Medicine, 95, e5151 (2016)
DOI: [10.1097/MD.00000000000005151](https://doi.org/10.1097/MD.00000000000005151)
- Hirai K, Shimomura T, Moriwaki H, Ishii H, Shimoshikiryo T, Tsuji D, Inoue K, Kadoiri T, Itoh K.
Risk factors for hypernatremia in patients with short- and long-term tolvaptan treatment.
European Journal of Clinical Pharmacology, 72, 1177-1183 (2016)
DOI: [10.1007/s00228-016-2091-4](https://doi.org/10.1007/s00228-016-2091-4)
- Inoue K, Murofushi T, Nagaoka K, Ando N, Hakamata Y, Suzuki A, Umemura A,

Yoshida Y, Hirai K, Tsuji D, Itoh K.

Influence of genetic polymorphisms and concomitant anxiolytic doses on antidepressant maintenance doses in Japanese patients with depression.

Biological and Pharmaceutical Bulletin, 39, 1508-1513 (2016)

DOI: [10.1248/bpb.b16-00298](https://doi.org/10.1248/bpb.b16-00298)

- Tsuji D, Yokoi M, Suzuki K, Daimon T, Nakao M, Ayuhara H, Kogure Y, Shibata K, Hayashi T, Hirai K, Inoue K, Hama T, Takeda K, Nishio M, Itoh K.

Influence of ABCB1 and ABCG2 polymorphisms on the antiemetic efficacy in patients with cancer receiving cisplatin-based chemotherapy: a TRIPLE pharmacogenomics study.

Pharmacogenomics Journal, in press (2016)

DOI: [10.1038/tpj.2016.38](https://doi.org/10.1038/tpj.2016.38)

- Hirai K, Ihara S, Kinae A, Ikegaya K, Suzuki M, Hirano K, Kunihiro Itoh K.

Augmented renal clearance in pediatric patients with febrile neutropenia associated with vancomycin clearance.

Therapeutic Drug Monitoring, 38, 393-397 (2016)

DOI: [10.1097/FTD.0000000000000270](https://doi.org/10.1097/FTD.0000000000000270)

- Inoue K, Yamamoto Y, Suzuki E, Takahashi T, Umemura A, Takahashi Y, Imai K, Inoue Y, Hirai K, Tsuji D, Itoh K.

Factors that influence the pharmacokinetics of lamotrigine in Japanese patients with epilepsy.

European Journal of Clinical Pharmacology, 72, 555-562 (2016)

DOI: [10.1007/s00228-016-2008-2](https://doi.org/10.1007/s00228-016-2008-2)

- Inoue K, Takahashi T, Yamamoto Y, Suzuki E, Takahashi Y, Imai K, Inoue Y, Hirai K, Tsuji D, Itoh K.

Influence of glutamine synthetase gene polymorphisms on the development of hyperammonemia during valproic acid-based therapy.

Seizure, 33, 76-80 (2015)

DOI: [10.1016/j.seizure.2015.10.015](https://doi.org/10.1016/j.seizure.2015.10.015)

- Hirai K, Yamada Y, Hayashi H, Tanaka M, Izumiya K, Suzuki M, Yoshizawa M,

Moriwaki H, Akimoto T, Tsuji D, Inoue K, Itoh K.

Plasma vitamin K concentrations depend on CYP4F2 polymorphism and influence on anticoagulation in Japanese patients with warfarin therapy.

Thrombosis Research, 135, 861-866 (2015)

DOI: [10.1016/j.thromres.2015.02.019](https://doi.org/10.1016/j.thromres.2015.02.019)

- Tazoe Y, Hayashi H, Tsuboi S, Shioura T, Matsuyama T, Yamada H, Hirai K, Tsuji D, Inoue K, Sugiyama T, Itoh K.

Reduced folate carrier 1 gene expression levels are correlated with methotrexate efficacy in Japanese patients with rheumatoid arthritis.

Drug Metabolism and Pharmacokinetics, 30, 227-230 (2015)

DOI: [10.1016/j.dmpk.2015.02.001](https://doi.org/10.1016/j.dmpk.2015.02.001)

- Yokoyama Y, Tomatsuri M, Hayashi H, Hirai K, Ono Y, Yamada Y, Todoroki K, Toyo'oka T, Yamada H, Itoh K.

Simultaneous microdetermination of bosentan, ambrisentan, sildenafil, and tadalafil in plasma using liquid chromatography/tandem mass spectrometry for pediatric patients with pulmonary arterial hypertension.

Journal of Pharmaceutical and Biomedical Analysis, 89, 227-232 (2014)

DOI: [10.1016/j.jpba.2013.11.007](https://doi.org/10.1016/j.jpba.2013.11.007)

- Hirai K, Hayashi H, Ono Y, Izumiya K, Tanaka M, Suzuki T, Sakamoto T, Itoh K.

Influence of CYP4F2 polymorphisms and plasma vitamin K levels on warfarin sensitivity in Japanese pediatric patients.

Drug Metabolism and Pharmacokinetics, 28, 132-137 (2013)

DOI: [10.2133/dmpk.DMPK-12-RG-078](https://doi.org/10.2133/dmpk.DMPK-12-RG-078)

- Uchida S, Hirai K, Hatanaka J, Hanato J, Umegaki K, Yamada S.

Antinociceptive effects of St. John's wort, *Harpagophytum procumbens* extract and Grape seed proanthocyanidins extract in mice.

Biological and Pharmaceutical Bulletin, 31, 240-245 (2008)

DOI: [10.1248/bpb.31.240](https://doi.org/10.1248/bpb.31.240)