

Division of Molecular Epidemiology

Mitsuyoshi Urashima, Associate Professor and Director

General Summary

Despite having the same disease diagnosis, some patients may be cured but some may not. This difference cannot be understood with experimental medicine. On the other hand, clinical practice might also not provide the answer. We combined molecular biology and epidemiology to create the Division of Molecular Epidemiology, to clarify the etiology of disease and to predict factors affecting survival.

Research Activities

The Jikei clinical research course

From May 2012 through March 2013, we held 10 seminars about strategies for clinical studies for healthcare practitioners at The Jikei University. In 2012, small-group study courses targeting postgraduate students will be started from the principles of epidemiology and biostatistics by reading textbooks and by analyzing real clinical data with STATA software (StataCorp LP, College Station, TX, USA) and designing clinical studies. Our goal is for postgraduate students to develop the skills to construct hypotheses, design protocols, monitor trials, and analyze data.

Original studies

1. Randomized trial of vitamin D supplement
2. Genome and epigenome clinical studies and lead findings
3. Elective class of on global health

Publications

Suzuki M, Yoshioka M, Hashimoto M, Murakami M, Noya M, Takahashi D, Urashima M. Randomized, double-blind, placebo-controlled trial of vitamin D supplementation in Parkinson disease. *Am J Clin Nutr.* 2013; **97**: 1004-13. Epub 2013 Mar 13.

Tsutsumi Y, Sanui M, Shimojima A, Ishioka H, Urashima M. A cross-sectional study of the association between circulating 25-hydroxyvitamin D levels and predicted operative mortality of patients with cardiovascular disease. *J Nutr Sci Vitaminol (Tokyo).* 2012; **58**: 327-32.

Yokoyama K, Nakashima A, Urashima M, Suga H, Mimura T, Kimura Y, Kanazawa Y, Yokota T, Sakamoto M, Ishizawa S, Nishimura R, Kurata H, Tanno Y, Tojo K, Kageyama S, Ohkido I, Utsunomiya K, Hosoya T. Interactions between serum vitamin D levels and vitamin D receptor gene FokI polymorphisms for renal function in patients with type 2 diabetes. *PLoS*

One. 2012; **7**: e511171.

Suda T, Hama T, Kondo S, Yuza Y, Yoshikawa M, Urashima M, Kato T, Moriyama H. Copy number amplification of the PIK3CA gene is associated with poor prognosis in non-lymph node metastatic head and neck squamous cell carcinoma. *BMC Cancer.* 2012; **12**: 416.

Yokoyama K, Ohkido I, Ishida M, Hashimoto H, Urae J, Sekino H, Kimura Y, Shimada H, Urashima M, Hosoya T. Cinacalcet for hemodialyzed patients with or without a high PTH level to control serum calcium and phosphorus: ECO (evaluation of cinacalcet HCl outcome) study. *Clin Nephrol.* 2012; **78**: 87-92.

Yokoyama K, Ohkido I, Iwamoto T, Ishida M, Urashima M, Hosoya T. Decrease of serum sphingosine-1-phosphate levels in hemodialysis patients with secondary hyperparathyroidism treated with cinacalcet. *Clin Nephrol.* 2012; **78**: 85-6.