Research Center for Medical Sciences Division of Molecular Epidemiology

Mitsuyoshi Urashima, Professor and Director

General Summary

Despite having the same disease diagnosis, some patients might be cured but some might not. This difference cannot be understood with experimental medicine. On the other hand, the answer might not be provided by clinical practice. 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

We have held 20 seminars about strategies for clinical studies for healthcare practitioners at The Jikei University. In 2015, 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 the STATA software program (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. Elective class of Global Health
- 3. Randomized trial to prevent food allergy

Publications

Urashima M, Ohdaira H, Akutsu T, Okada S, Yoshida M, Kitajima M, Suzuki Y. Effect of Vitamin D Supplementation on Relapse-Free Survival Among Patients With Digestive Tract Cancers: The AMATERASU Randomized Clinical Trial. *JAMA*. 2019 Apr 9; **321**(14): 1361-1369. doi: 10.1001/jama.2019.2210. PMID: 30964526; PMCID: PMC6459116.

Momosaki R, Abo M, Urashima M. Vitamin D Supplementation and Post-Stroke Rehabilitation: A Randomized, Double-Blind, Placebo-Controlled Trial. Nutrients. 2019 Jun 7; 11(6): 1295. doi: 10.3390/nu1061295. PMID: 31181657; PMCID: PMC6628052.

Igarashi G, Segawa T, Akiyama N, Nishino T, Ito T, Tachimoto H, Urashima M. Efficacy of Brazilian Propolis Supplementation for Japanese Lactating Women for Atopic Sensitization and Nonspecific Symptoms in Their Offspring: A Randomized, Double-Blind, Placebo-Controlled Trial. Evid Based Complement Alternat Med. 2019 Sep 11; 2019: 8647205. doi: 10.1155/2019/8647205. PMID: 31611924; PMCID: PMC 6755297.

Imakita T, Suzuki Y, Ohdaira H, Urashima M. Colonoscopy-assisted percutaneous sigmoidopexy: a novel, simple, safe, and efficient treatment for inoperable sigmoid volvulus (with videos). Gastrointest Endosc. 2019 Sep; 90(3): 514-520. doi: 10.1016/j.gie.2019.04.246. Epub 2019 May 8. PMID: 31077700.

Yonaga H, Okada S, Akutsu T, Ohdaira H, Suzuki Y, Urashima M. Effect Modification of Vitamin D Supplementation by Histopathological Characteristics on Survival of Patients with Digestive Tract Cancer: Post

Hoc Analysis of the AMATERASU Randomized Clinical Trial. *Nutrients*. 2019 Oct 22; **11**(10): 2547. doi: 10. 3390/nu11102547. PMID: 31652554; PMCID: PMC6835362.

Urashima M, Mezawa H, Okuyama M, Urashima T, Hirano D, Gocho N, Tachimoto H. Primary Prevention of Cow's Milk Sensitization and Food Allergy by Avoiding Supplementation With Cow's Milk Formula at Birth: A Randomized Clinical Trial. *JAMA Pediatr.* 2019 Oct 21; **173**(12): 1137-45. doi: 10.1001/jamapediatrics.2019.3544. Epub ahead of print. PMID: 31633778; PMCID: PMC6806425.

Urashima M, Okuyama M, Akutsu T, Ohdaira H, Kaji M, Suzuki Y. Effect of Vitamin D Supplementation on Survival of Digestive Tract Cancer Patients with Low Bioavailable 25-Hydroxyvitamin D levels: A Post Hoc Analysis of the AMATERASU Randomized Clinical Trial. Cancers (Basel). 2020 Feb 4; 12(2): 347. doi: 10. 3390/cancers12020347. PMID: 32033150; PMCID: PMC7072519.

Akutsu T, Okada S, Hirooka S, Ikegami M, Ohdaira H, Suzuki Y, Urashima M. Effect of Vitamin D on Relapse-Free Survival in a Subgroup of Patients with p53 Protein-Positive Digestive Tract Cancer: A Post Hoc Analysis of the AMATERASU Trial. Cancer Epidemiol Biomarkers Prev. 2020 Feb; 29(2): 406-413. doi: 10.1158/1055-9965.EPI-19-0986. Epub 2019 Dec 23. PMID: 31871108.