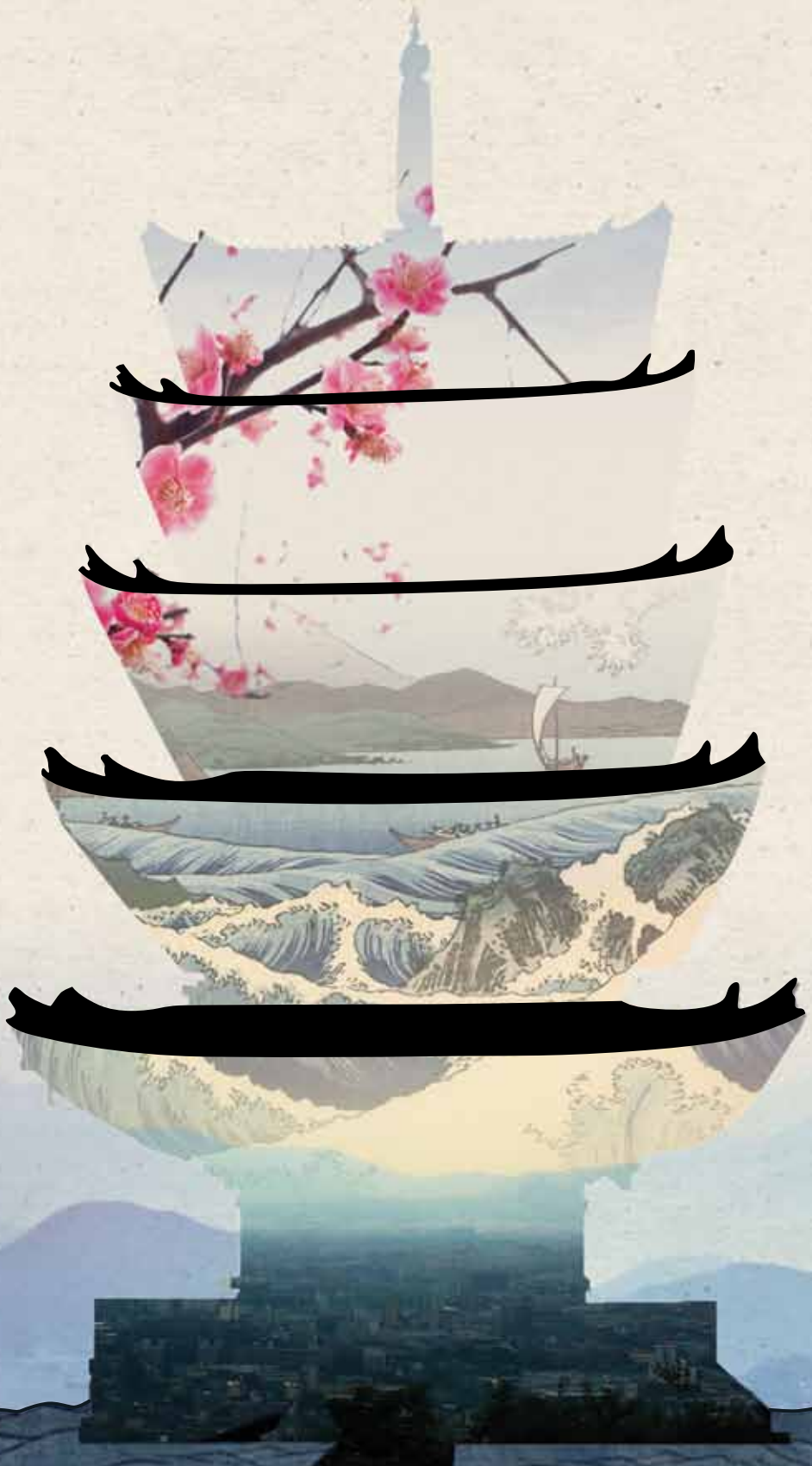
A symposium held in conjunction with the 14th International Myeloma Workshop

Can Multiple Myeloma Become a Chronic Disease in the Short-Term Future?



Friday
5 April 2013

10.15 – 12.15

Main Hall
Kyoto International
Conference Center
Kyoto, Japan

This meeting is
a prIME Oncology activity.

prIME oncology

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is provided by Takeda and Millennium:
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Main Hall
Kyoto International Conference Center
Kyoto, Japan

Faculty

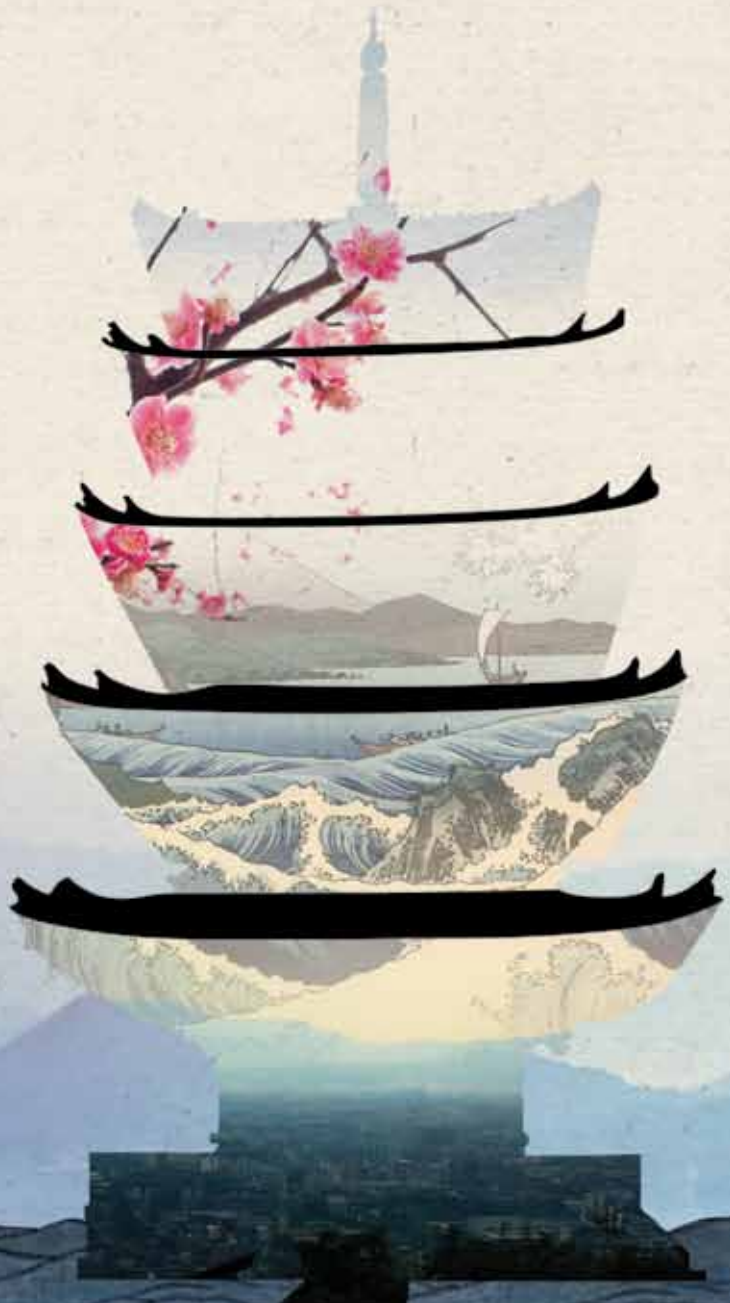
Kenneth Anderson, MD (Co-Chair)
Dana-Farber Cancer Institute
Boston, Massachusetts, United States

Kazuyuki Shimizu, MD (Co-Chair)
Nagoya City Midori General Hospital
Aichi, Japan

Wee Joo Chng, MB, PhD
National University
Cancer Institute of Singapore
Singapore, Singapore

Shaji Kumar, MD
Mayo Clinic
Rochester, Minnesota, United States

Jesús San Miguel, MD, PhD
University Hospital Salamanca
Salamanca, Spain



Organizer

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Agenda

10.15 **Welcome to Japan and symposium overview**
Kazuyuki Shimizu, MD

10.20 **Functional oncogenomics: A tool for identification and validation of targeted therapies in multiple myeloma**
Wee Joo Chng, MB, PhD

10.35 **Audience questions/comments and faculty discussion**

10.40 **Optimizing proteasome inhibition in myeloma**
Shaji Kumar, MD

11.00 **Audience questions/comments and faculty discussion**

11.05 **Targeting the ubiquitin cascade in multiple myeloma**
Kenneth Anderson, MD

11.25 **Audience questions/comments and faculty discussion**

11.30 **Combination targeted strategies: Choosing rational designs**
Jesús San Miguel, MD, PhD

11.50 **Faculty panel discussion: Can multiple myeloma become a chronic disease in the short-term future, and if so, what are the most promising strategies to achieve this goal?**
Moderators: Kenneth Anderson, MD
Kazuyuki Shimizu, MD

12.10 **Symposium "pearls"**
Kenneth Anderson, MD

12.15 **Conclusion**

Target Audience

This educational activity is specifically designed for hematologists, oncologists, and other healthcare professionals interested and/or involved in the treatment of patients with multiple myeloma.

Learning Objectives

After successful completion of this educational activity, participants should be able to:

- Evaluate recent progress in the management of multiple myeloma and discuss options for identifying future therapeutic targets.
- Analyze the impact of proteasome inhibitors on the prognosis of patients with multiple myeloma
- Explain the rationale behind the development of second generation proteasome inhibitors, including the role of these emerging agents in overcoming therapeutic resistance
- Compare available therapies and therapeutic combinations for multiple myeloma on the basis of recent clinical trial data

Co-Chair

Kenneth Anderson, MD

Dana-Farber Cancer Institute
Boston, Massachusetts, United States

Kenneth Anderson, MD, is the Kraft Family Professor of Medicine at Harvard Medical School as well as director of the Lebow Institute for Myeloma Therapeutics and Jerome Lipper Multiple Myeloma Center at Dana-Farber Cancer Institute in Boston, Massachusetts, United States. He is a Doris Duke Distinguished Clinical Research Scientist and American Cancer Society Clinical Research Professor. After graduating from Johns Hopkins Medical School in Baltimore, Maryland, United States, he trained in internal medicine at John's Hopkins Hospital, and then completed hematology, medical oncology, and tumor immunology training at the Dana-Farber Cancer Institute. Over the last three decades, he has focused his laboratory and clinical research studies on multiple myeloma. He has developed laboratory and animal models of the tumor in it is microenvironment that have allowed for both identification of novel targets and validation of novel targeted therapies, and has then rapidly translated these studies to clinical trials culminating in FDA approval of novel targeted therapies. His paradigm for identifying and validating targets in the tumor cell and its milieu has transformed myeloma therapy and markedly improved patient outcome.

Dr Anderson is the recipient of many scientific and humanitarian awards including the International Myeloma Workshop Waldenström's Award in 2003, the International Myeloma Foundation Robert A. Kyle Lifetime Achievement Award in 2005, the American Association for Cancer Research Joseph H. Burchenal Award in 2007, and the American Society of Hematology William Dameshek Prize in 2008. He was elected into the Johns Hopkins Society of Scholars in 2009, the Institute of Medicine of the National Academy of Sciences in 2010, and the Royal College of Physicians and of Pathologists (UK) in 2010. In 2011 he received the American Society of Clinical Oncology David A. Karnofsky Award and the Hope Funds for Cancer Research Award of Excellence in Clinical Research, and in 2012 received the Ron Burton Humanitarian Award, the Harvard Medical School Warren Alpert Foundation Prize, and the American Cancer Society Medal of Honor.

Co-Chair

Kazuyuki Shimizu, MD

Nagoya City Midori General Hospital
Aichi, Japan

Kazuyuki Shimizu, MD, received his MD degree from the Nagoya University School of Medicine (Japan) in 1972, and completed a fellowship in clinical immunology at the Memorial Sloan-Kettering Cancer Center in New York, New York, United States. He was a member of the First Department of Internal Medicine at the Nagoya University Hospital from 1977 to 1987 and an associate professor at the Fujita Health University School of Medicine in Japan from 1987 to 1992, a section chief of hematology in the Department of Internal Medicine and then an assistant hospital director at Nagoya City Higashi General Hospital from 1992 to 2006, and the director of the Nagoya City Midori General Hospital from 2006 until 2011, when he assumed his current positions as honorary director of the Nagoya City Midori General Hospital in Japan; professor in the Department of Multimodal Therapy for Multiple Myeloma, Aichi Gakuin University School of Dentistry in Japan; and a visiting professor at the Fujita Health University School of Medicine.

Dr Shimizu developed a laboratory method to enumerate immunoglobulin-secreting cells of different immunoglobulin class and type in peripheral blood and has published several peer-reviewed papers on the topic in *Blood* in 1980 and 1982. This method was a breakthrough technique because the quantitation of monoclonal immunoglobulin-secreting cells in the peripheral blood is a strong indicator of the prognosis of multiple myeloma, and is now being done using flow cytometry.

Dr Shimizu has helped to publish a patient handbook in collaboration with the Japanese myeloma patient association, IMF Japan. He has been the president of the Japanese Society of Myeloma (JMS) since 2008, an organization that has over 300 member physicians specializing in myeloma. He has helped to publish myeloma management guidelines in collaboration with the members of JMS for the past 8 years (the first edition was published in 2004, second in 2008, and the most recent in 2012). In addition, he is the president of the 14th International Myeloma Workshop (Kyoto, 2013), is a scientific advisor for the European Myeloma Network (EMN), is on the Board of Directors for the International Myeloma Society (IMS), and is an active member in the American Society of Hematology (ASH) and the American Society of Clinical Oncology (ASCO). His clinical interest is in treating relapsed but responding myeloma patients with biweekly or monthly bortezomib, treating the myeloma as a chronic disease.

Wee Joo Chng, MB, PhD

National University
Cancer Institute of Singapore
Singapore, Singapore

Wee Joo Chng, MB, PhD, is the head of the Division of Hematology and associate director of Research at the National University Cancer Institute of Singapore. He is an associate professor in the Department of Medicine of the Yong Loo Lin School of Medicine, National University of Singapore (NUS). He is also the deputy director at the Cancer Science Institute, Singapore (CSI), NUS. He is a member of the International Myeloma Working Group and a founding member of the Asian Myeloma Network. Associate Professor Chng received his undergraduate medical degree from the University of Leeds in the United Kingdom. He then completed his training in internal medicine in the United Kingdom and fellowship training in hematology at the National University Hospital in Singapore. In 2004, he obtained the A*STAR International Fellowship and went to the Mayo Clinic in the United States on a research fellowship working on myeloma genomics. He completed his PhD (NUS) in 2011. Associate Professor Chng has won multiple awards both locally and internationally, including the the Multiple Myeloma Research Foundation Fellowship in 2006, the Celgene Future Leaders in Hematology award at the American Society of Hematology Annual Meeting in 2007, the National Medical Research Council (NMRC) Clinician Scientist Award in 2008 and again in 2012, and the National University of Singapore Young Researcher Award in 2011. To date, he has published more than 90 research papers in journals such as *Cancer Cell, Nature Medicine, Nature Cell Biology, Blood*, and *Leukemia*. His current research involves the use of high-resolution global genomic technique to understand biology, identify drug targets, understand drug resistance and improve disease prognosis in hematologic malignancies, with the ultimate aim of improving patient's outcome and personalizing treatment.

Faculty

Shaji Kumar, MD

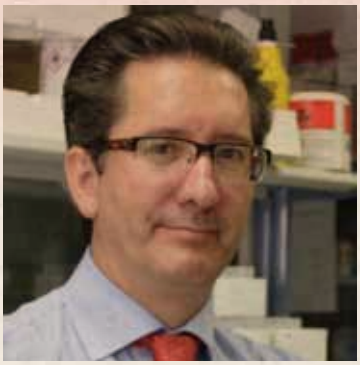
Mayo Clinic
Rochester, Minnesota, United States

Shaji Kumar, MD, received his medical degree from All India Institute of Medical Sciences in New Delhi, India. His postdoctoral training included a residency in internal medicine and a fellowship in hematology/oncology at the Mayo Graduate School of Medicine in Rochester, Minnesota, United States.

Dr Kumar is certified by the American Board of Internal Medicine (ABIM) in internal medicine and medical oncology and is an ABIM diplomate in hematology. He holds membership in several professional organizations, including the American Society of Hematology, the American Society of Clinical Oncology, the American Association for Cancer Research, the American Society of Blood and Marrow Transplantation, the Association of Physicians of India, and the European Hematology Association.

Dr Kumar has published numerous articles, abstracts, editorials, and letters in the peer-reviewed literature, including *Blood, Journal of Clinical Oncology, Leukemia, American Journal of Hematology, British Journal of Haematology,* and *Bone Marrow Transplantation.* He is also a member of the editorial board for several journals, including *American Journal of Hematology, European Journal of Clinical and Medical Oncology,* and *Leukemia.*

Dr Kumar's research focuses on the development of novel drugs for the treatment of myeloma, and he has presented nationally and internationally. He is the principal investigator of several phase I and phase II clinical trials exploring new drugs and combinations for newly diagnosed and relapsed myeloma. His laboratory is focused on understanding the role of the bone marrow microenvironment in the development and progression of myeloma.



Jesús San Miguel, MD, PhD

University Hospital Salamanca
Salamanca, Spain

Jesús San Miguel, MD, PhD, is professor of medicine (hematology), head of the Hematology Department at the University Hospital of Salamanca, and director of the Biomedical Research Institute of Salamanca, Spain. He is an internationally recognized leader in the field of hematology, specifically in the area of multiple myeloma (MM).

He has made seminal contributions to myeloma cell biology (immunophenotyping, risk of progression from monoclonal gammopathy of undetermined significance [MGUS] or smouldering MM into active MM, minimal residual disease, number of plasma cells [PC] in S-phase, prognostic value of fluorescence *in situ* hybridization [FISH] and comparative genomic hybridization [CGH] investigations), as well in the area of therapeutics (pivotal studies for new antimyeloma drugs at the preclinical and clinical levels: proteasome inhibitors, immunomodulary drugs [IMIDs], histone deacetylases [HDACs]). Above this, he has a major committed service to medical community and to patients through numerous guidelines and consensuses on diagnostic, classification, and treatment of myeloma (in fact, he was responsible for the creation of the International Staging System for MM). He has published over 500 original papers in international journals with a median impact factor of 6.54 in the last five years.

Professor San Miguel is a member of the Advisory Board of the International Myeloma Foundation and the Multiple Myeloma Research Foundation. He has served the European Association as board councillor and chairman of the Scientific Committee for the IXth Congress (2004) and president of the 15th European Hematology Association (EHA) Congress. He has received numerous prizes including the Waldenstöm Award and the Spanish Prizes on both Oncology and Translational Research.

Disclosures

Disclosure of Conflicts of Interest

prIME Oncology assess the relevant financial relationships of its instructors, planners, managers, and other individuals who are in a position to control content of activities. Any potential conflicts of interest are identified are thoroughly vetted by prIME Oncology for fairness, balance, and scientific objectivity of data, as well as patient care recommendations. prIME Oncology is committed to providing its learners with high-quality activities and related materials that promote improvements or quality in healthcare and not a specific proprietary business interest of a commercial entity.

The faculty reported the following financial relationships or relationships to products or devices they or their spouses/life partners have with commercial interest related to the content of this activity:

Dr Anderson has disclosed that he has received fees for advisory boards from Celgene, Gilead, Millenium, Onyx, and Sanofi Aventis. He has also disclosed that he has ownership interest (stocks, stock options, or other ownership interests excluding diversified mutual funds) in Acetylon and OncoPep. He has agreed to disclose any unlabeled/unapproved uses of drugs or products referenced in his presentation.

Dr Chng has disclosed that he has received consulting fees from Celgene, Janssen, Millennium, MSD, and Novartis. He has also performed contracted research for Celgene and Roche. He has agreed to disclose any unlabeled/unapproved uses of drugs or products referenced in his presentation.

Dr Kumar has disclosed that he has performed contracted research with funding going to his institution for Celgene, Genzyme, Millennium, and Novartis. He has agreed to disclose any unlabeled/unapproved uses of drugs or products referenced in his presentation.

Dr San Miguel has disclosed that he has received consulting fees from Celgene, Janssen, Millennium, Novartis, and Onyx. He has agreed to disclose any unlabeled/unapproved uses of drugs or products referenced in his presentation.

Dr Shimizu has disclosed that he has received consulting fees from Millennium. He has agreed to disclose any unlabeled/unapproved uses of drugs or products referenced in his presentation.

The employees of prIME Oncology have disclosed:

Janice Galleshaw, MD (medical director) – no relevant financial relationships

Janelle Bowersox, RN, MSN, OCN (clinical) – no relevant financial relationships

Trudy Stoddert, ELS (editorial) – no relevant financial relationships

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Disclaimer

Participants have an implied responsibility to use the newly acquired information to enhance patient outcomes and their own professional development. The information presented in this activity is not meant to serve as a guideline for patient management. Any procedures, medications, or other courses of diagnosis or treatment discussed or suggested in this activity should not be used by clinicians without evaluation of their patients' conditions and possible contraindications or dangers in use, review of any applicable manufacturer's product information, and comparison with recommendations of other authorities.

Ideas, Facts, or Concepts to Remember

Questions

I Can Use This in My Practice

Ideas, Facts, or Concepts to Remember

Questions

I Can Use This in My Practice

Certificate of Attendance

prIME Oncology certifies that

attended the satellite symposium

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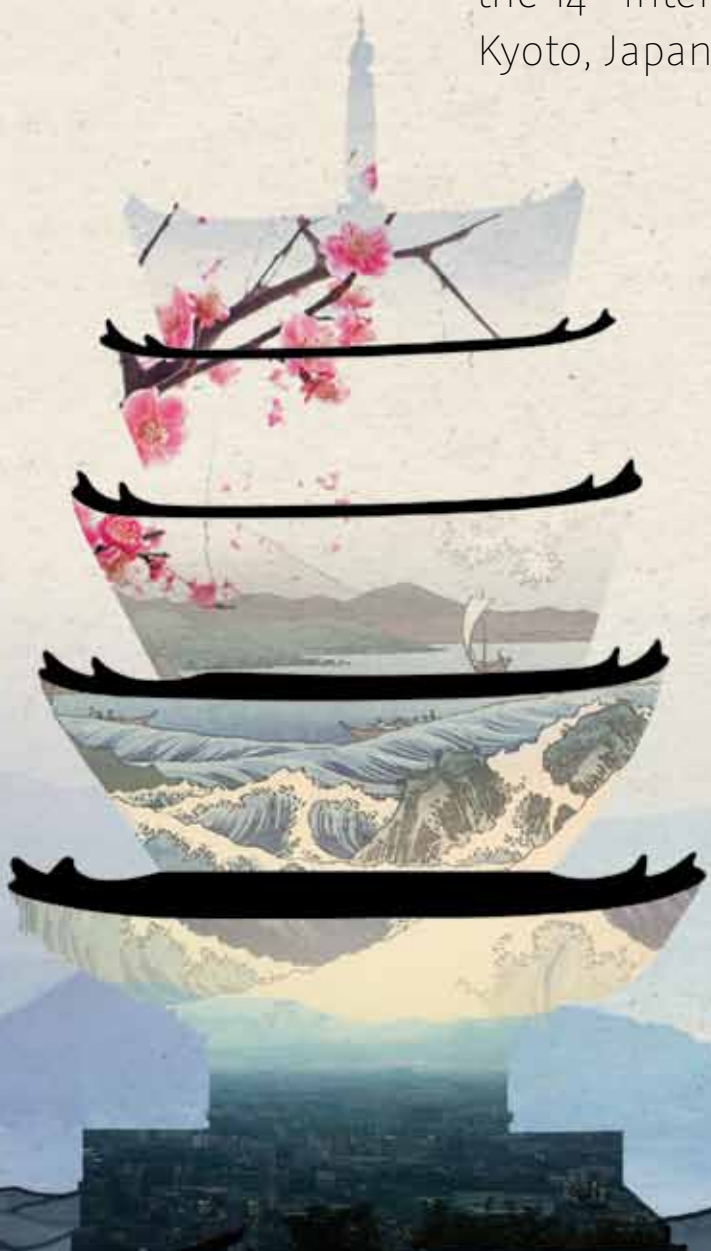

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A Webcast with downloadable slides
will be available in May 2013 at
www.prIMEoncology.org/kyotoMM2_Webcast

About prIME Oncology

prIME Oncology is a global professional Independent Medical Education organization specializing in educational activities for physicians who treat patients with cancer.

With the ultimate goal of improving patient outcomes, prIME Oncology provides evidence-based, state-of-the-art educational activities that assist oncology clinicians in making up-to-date and appropriate treatment decisions.

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