



Preface for Brain Tumor Pathology vol.41 issue 2

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It is my great pleasure and honor to have held the 41st Annual Meeting of the Japan Society of Brain Tumor Pathology on May 26th and 27th, 2023, at the Station Conference Tokyo. It was also a significant event for our institution, the Department of Neurosurgery and Pathology, Kyorin University Faculty of Medicine.

The Japan Society of Brain Tumor Pathology has a long history among brain tumor-related societies in Japan, being established in 1984 as a research group during the International Congress of Neuropathology held in Vienna. The founding members, Professors Yoichi Ishida (Pathology, Gunma University), Naoki Kageyama (Neurosurgery, Nagoya University), Jun Yoshida (Neurosurgery, Nagoya University), and Keiji Kawamoto (Neurosurgery, Kansai Medical University), laid the groundwork for brain tumor pathology research in Japan. Since then, it has evolved into the Japan Society of Brain Tumor Pathology in 1997. The Society aims to promote interdisciplinary exchange, discussions, and advancements in research, practice, and treatment in the field of basic and clinical neuropathology, focusing on neuropathologists, neurosurgeons, brain tumor researchers, neurologists, neuro-oncologists, radiologists, and radiation oncologists.

Members of the Society get together once a year at an annual meeting to have scientific discussion on pathological diagnosis and pathogenesis in brain tumors on the basis of clinicopathological standpoints.

The theme for the 41st Annual Meeting was “Harmony, Integration, and Beyond.” We planned to discuss the evolution, current status, and future prospects of diagnostics of various brain tumor types. In addition to the traditional histopathological diagnosis based on morphology, we explored

the historical significance of molecular diagnostics, starting with the discovery of individual tumor-related genetic mutations around 1990. We also examined the role of molecular diagnostics in the systematic classification of tumor types as the growing body of knowledge with big data, facilitated by the introduction of next-generation sequencers. Furthermore, we aimed to reevaluate the strengthened integrated diagnosis introduced in the new World Health Organization (WHO) brain tumor classification in 2021. We explored whether the mainstay of brain tumor pathology diagnosis would continue to be histopathological diagnosis, be replaced by molecular diagnosis, or integrate new imaging diagnoses, including artificial intelligence (AI). We have been particularly interested in understanding the expected evolution of epigenomic analysis highlighted in the new classification.

As part of this theme, we were delighted to invite Professor David Capper from Molecular Neuropathology, Institute of Neuropathology, Charité, a world-renowned authority on brain tumor epigenomics, to deliver a special lecture. Professor Capper, the Chair of the 20th International Congress of Neuropathology to be held in Berlin in September 2023, has contributed significantly to the elucidation of brain tumor pathology and proposed a new classification based on epigenomic analysis in “Nature” in 2018. He has been an author in 10 chapters of the 2021 WHO Classification of Tumors of the Central Nervous System Tumours version 5 (CNS5). We have also invited Professor Björn Chapuy, Professor of Translational Lymphoma Biology, Campus Benjamin Franklin, Charité—University Medicine Berlin in Germany, to present on molecular genetics of primary central nervous system lymphoma (PCNSL) from a molecular pathology perspective. Professor Chapuy has been involved in basic research on lymphomas, including PCNSL, at the Dana-Farber Cancer Institute in the USA for many years, leaving a significant mark on the comprehensive understanding of PCNSL pathogenesis.

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For the Educational Lecture sessions, Professor Shunpei Ishikawa, a leading expert in the introduction of AI in pathological tissue diagnosis at the Department of Preventive Medicine, The University of Tokyo, provided insights into the current status of pathological diagnosis and AI. Furthermore, Dr. Yoshiaki Nakamura, Chief of the International Research Promotion Office and Division of Drug and Diagnostic Development Promotion, Department of Gastroenterology at the National Cancer Center Hospital East, delivered a lecture on the implementation and utility of liquid biopsy in multi-institutional collaborative trials, a topic gaining attention in cancer diagnosis.

In the sponsored sessions, we explored topics related to cancer genome panel diagnosis and bioinformatics. We were excited to hear the latest information from Professor Hiroshi Nishihara of the Genomics Unit at Keio Cancer Center, Keio University School of Medicine, and Professor Hiroyuki Aburatani of the Genome Science & Medicine Laboratory Research Center for Advanced Science, The University of Tokyo. During the luncheon seminar, attendees had the opportunity to learn about basic and clinical topics related to PCNSL, TTFIELDS, and the treatment of gliomas.

This year, we received a record number of 150 submissions for general presentations in these years, and we extend our sincere gratitude for your contributions. Symposia, oral presentations, and poster sessions were organized around themes that align with the overall goals of the meeting. We also held the traditional “Clinicopathological Case Review” sessions.

We had planned a “Big Debate” session on the afternoon of the second day to discuss the current state of brain tumor pathology diagnosis and its future direction. Experts presented their views on two challenging issues, incorporating a

show-like element, providing an opportunity for participants to engage in thoughtful discussions.

The program followed the overarching theme of the academic meeting, building on the foundation of previous diagnostic methods and looking ahead to the current status, as well as the future development and prospects. Throughout the entire program, we hoped to connect to the overall assessment of the pivotal period of transition that brain tumor pathology diagnosis is undergoing due to the major trend of molecular classification.

In addition, we aimed to educate young physicians, particularly neurosurgeons, through the Brain Tumor Pathology Education Seminar. This separate event, held in an on-demand format from June 1st to 30th, is easily accessible online, and we appreciate active participation by the attendees. The detailed information is shown in the Society’s website.

I am pleased to announce that as of May 8th, 2023, COVID-19 has been downgraded to a Category 5 infectious disease, and human interaction from the pre-COVID-19 era has been restored and made possible. As a result, our academic conference was able to be held in person, and we were able to engage in lively exchanges and academic discussions among our members on a grand scale for the first time in several years. We sincerely appreciate the participation and cooperation of everyone, and it is a great joy for our association if it has become a useful event for your daily clinical and research activities. Thank you very much.

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