

## ASNR 2026, Austin, USA, May 2026

During ASNR 2026 in Austin (May 17–20, 2026), the AOSNHNR Focus Session titled “Neuroimaging AI in the Asian–Oceanian Context — From Vision to Clinical Implementation: Innovations, Challenges, and Lessons from a Rapidly Evolving Region,” planned by Drs. Wan-Yuo Guo, Mariam Aboian, Ajay Malhotra, and Xiaohong Joe Zhou, was held in Lonestar B on the morning of Wednesday, May 20, 2026 (9:55–10:55 AM). Drs. Wan-Yuo Guo and Cem Calli served as moderators. Three invited lectures were presented: “Bridging Continents with Code: Asia-Pacific AI Model (NeuroSuite CT ICH) vs. US AI Model (RapidAI ICH) for Intracranial Hemorrhage Detection on Emergency CT” (Dr. Fatt Yang Chew, Taiwan), “Regulatory, infrastructural, and workforce factors influencing AI implementation across diverse healthcare systems” (Dr. Arunnit Boonrod, Thailand), and “Opportunities and controversies in the clinical application of AI in neuroimaging” (Dr. Rintaro Ito, Japan). All three lectures were complementary and stimulated an unusually substantive Q&A discussion among an international audience drawn from Asia–Oceania, North America, and Europe.

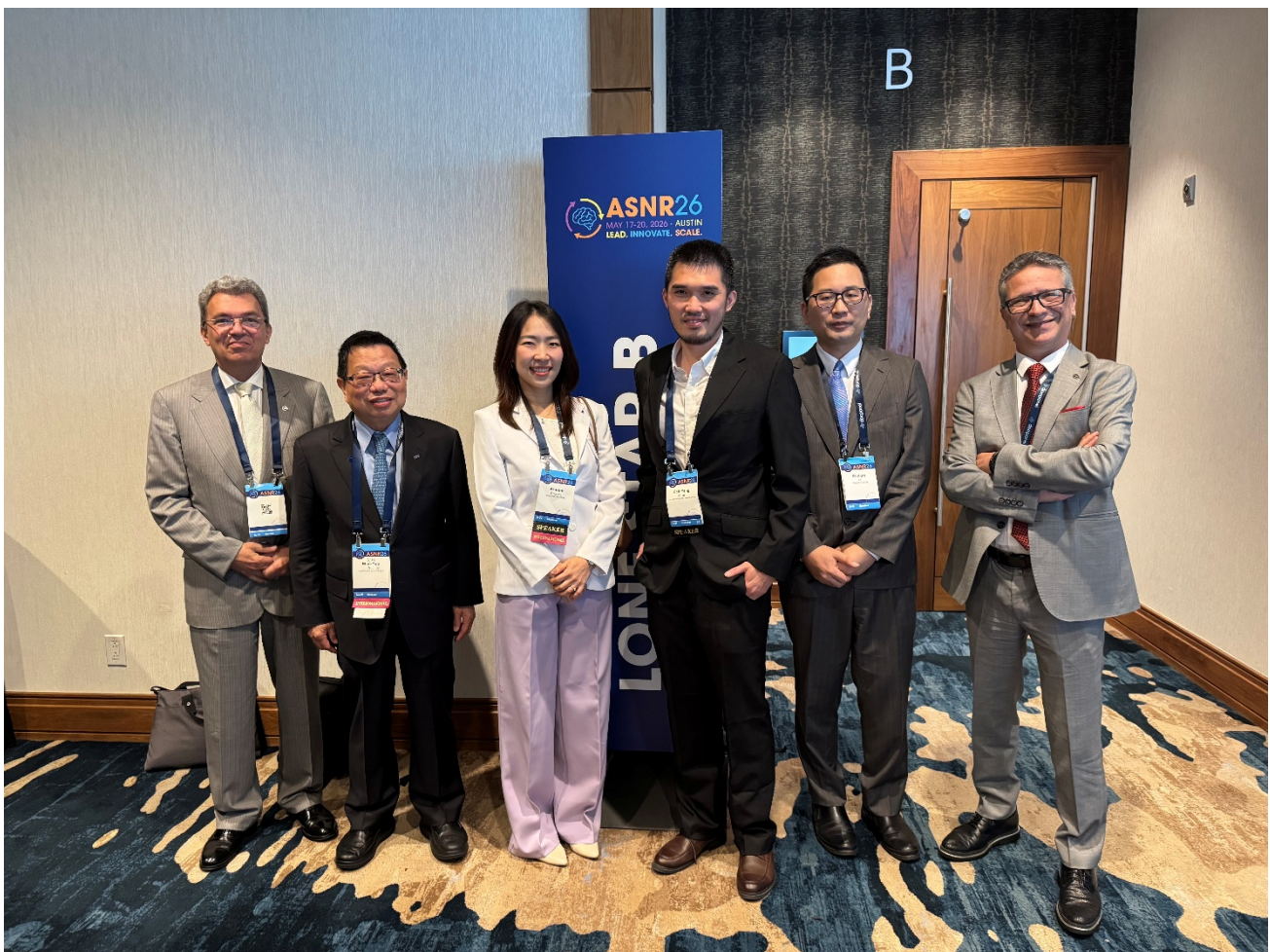


Fig. 1: Moderators and speakers .

### **Dr. Rintaro Ito:**

“Opportunities and Controversies in the Clinical Application of AI in Neuroimaging.”

It was a great honor to be invited to speak at the AOSNHNR Focus Session at ASNR 2026 in Austin. I sincerely thank Drs. Guo, Aboian, Malhotra, and Zhou for the kind invitation, and Profs. Naganawa and Taoka and my colleagues at Nagoya University for their continued support. In my fifteen-minute lecture I tried to present both sides of clinical AI in neuroimaging through real-world data from Japan. On the opportunity side, Japan’s 55

MRI scanners per million population (the highest density in the OECD), universal health insurance, the national J-MID image database (534 million images from 11 sites as of April 2024), and PMDA's active brain-AI device approvals since 2019 make the country a uniquely fertile setting for clinical AI. On the controversy side, our 442-case real-world evaluation of a PMDA-approved deep-learning aneurysm-detection software (Ito et al., *Magn Reson Med Sci* 2025) showed a sensitivity of 77.7%, a positive predictive value of only 12.3%, and approximately seven false alarms for every true aneurysm; half of aneurysms larger than 5 mm — the size threshold that drives treatment decisions — were missed. Independent replications from Tokyo IUHW, Toranomon, Hiroshima, Chiba, and the University of Tokyo confirmed that this false-alarm pattern is not a single-institution artefact but a national one. I also briefly touched on the rapidly closing image-interpretation gap for vision-language models on the Japanese Nuclear Medicine and Radiology Board examinations, and on how open-weight models (DeepSeek-R1, Llama) have closed the gap to proprietary models from roughly 70 points in 2023 to about 3 points in May 2026. My take-home message was that an approved AI is not necessarily a clinically optimal AI, and that Japan's emerging failure modes — population bias, scanner heterogeneity, and post-market drift — are universal lessons for the global community.

### **Discussion highlights.**

The session concluded with a particularly rich Q&A in which several themes recurred. First, on whether AI actually speeds up reading: audience members agreed that triage-oriented AI (e.g., intracranial-hemorrhage detection) clearly accelerates downstream stroke pathways, but that AI does not yet meaningfully shorten neuroradiologists' reading times for general work. Second, Dr. Guo cautioned against use outside the validated indication — for example, applying large-vessel-occlusion or aneurysm-detection AI to posterior-circulation cases, where sensitivity collapses and false-positive rates climb. Third, on user education, Dr. Ito noted that subspecialty neuroradiologists tend to use AI carefully, but general radiologists and trainees less familiar with each product's indications and failure modes need structured education on each tool's strengths and weaknesses; at Nagoya University Hospital, structured training is now run for every new AI user.

A vigorous exchange followed on residents working unsupervised overnight. An audience member described how their residents' AI-supported reads have, on rare occasions, escalated a true-negative CT to a higher-acuity workflow because the AI flagged a small finding the residents were unwilling to overrule at 3 AM. Dr. Boonrod argued that residents must nevertheless be exposed to these tools early and learn their limitations, including dealing with angry clinician calls on false positives — this is part of training. Prof. Yousem (London) described the UK approach: AI is used for stroke triage with a strict policy that the on-call neuroradiology consultant (not the stroke neurologist at home) makes the final call, with response times measured in minutes and a non-blame culture for honest mistakes; if a tool produces more problems than it solves, that must be reflected on directly. Finally, Drs. Boonrod and Calli noted that radiology residency applications have declined in both Thailand and Turkey, with anecdotal evidence that anxiety about AI displacing radiologists is one driver. The consensus response was that the role of the radiologist is shifting from pure anatomical interpretation toward judgment, accountability, and governance of AI in deployment — and that the next generation must be encouraged to “learn how to learn,” combining one deep area of expertise with cross-domain agility.