



Naoya Hashimoto
Japan

Dr Naoya Hashimoto is the Vice-President of Kyoto Prefectural University of Medicine and Professor and Chairman of the Department of Neurosurgery. He graduated from the Faculty of Medicine in 1990 and completed his Ph.D. in 1996 at Kyoto Prefectural University. His professional journey includes residency at Kyoto Prefectural University Hospital, a research fellowship in Molecular Genetics, and a clinical fellowship at the University of Texas Houston Medical Center. He served as Assistant and Associate Professor at Osaka University before his current roles, assumed in 2015 and 2021 respectively. His expertise lies in surgical neuro-oncology and cancer immunotherapy.

Topic: Immunotherapy for Malignant Brain Tumors

Cancer immunotherapy has emerged and is now recognized as one of standard therapies in some cancers such as lung and skin. Major contributed facts are; 1. Cytotoxic T cells (CTLs) have anti-cancer effects, 2. Many cancer antigens recognized by CTL have been found and easily /effectively induced and cultured, then 3. Immune system specific to each cancer has become to be activated. Another important point is a discovery of checkpoint molecules and their non-specific activation of anti-cancer immune-system. In this lecture, cancer immunotherapy for malignant brain tumors will be reviewed, focusing on the characteristics of immune-system in the central nervous system. Each modality of immunotherapy against brain tumors including peptide/dendritic/autologous tumor vaccination and checkpoint inhibitors will be introduced thoroughly by looking back at the past basic researches and clinical trials. The way of assessment of clinical response specific to immunotherapy against gliomas will be discussed as well.