NGS Analysis of Pulmonary Large Cell Carcinoma

We previously reported the results of reclassification for our 20 archived large cell carcinoma (LCC) cases with the 2015 WHO Classification of the Lung Tumours, in which 7 out of 20 cases were eventually reclassified as LCC. We further examined genomic changes of 6 out of 7 reclassified LCC cases (3 cases of LCC unclear, 3 cases of LCC-null) using next-generation sequencing technology. Overall, 4 gene mutations out of 50 targeted genes were identified in 5 out of 6 cases (83.3%); 1 case harbored *TP53* and *CTNNB1* mutations, 2 cases harbored *TP53* mutation, and the other 2 cases harbored *AKTI* and *KRAS* mutations, respectively. In conclusion, gene mutations on reclassified LCC cases are frequent but their numbers in each case are limited where *TP53* mutation is the commonest.