severe respiratory adverse events（SRAEs）in lung cancer patients after surgical resection.
Methods : A total of 822 patients with lung cancer, who underwent preoperative high-resolution computed tomography（HRCT）, FDG-positron emission tomography/CT, and pulmonary resection between July 2012 and July 2018 were assessed. SUVmax of the main tumor（Tumor-SUVmax）and that of the non-cancerous lung area（NCA-SUVmax）were measured using a three-dimensional workstation. Multivariable analyses for AE and SRAEs were performed using the logistic regression model.
Results : Among all patients, 120（14.6%）patients had IPF findings on HRCT whereas SRAEs were observed in 35（4.2%）patients, including those with AE（n = 5, 1.8%）. NCA-SUVmax was independently associated with both AE and SRAEs on multivariable analysis, both in all patients and in the 120 patients with IPF. Risk stratification analysis showed that 19.0% and 30.2% of patients who were positive for IPF on HRCT and with an NCA-SUVmax > 1.69（the optimal cut-off value relevant to AE）experienced AE and SRAEs, respectively.
Conclusions : NCA-SUVmax was independently associated with the incidence of postoperative AE and SRAEs in patients with lung cancer.

P2-18.
The immune checkpoint inhibitor expression and tumor microenvironment in salivary duct carcinomas

（社会人大学院博士課程 3 年人体病理学分野）
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Salivary duct carcinoma（SDC）is a rare, high-grade cancer. The standard treatment for SDC is surgical excision with post-operative chemoradiotherapy, and thus the development of salvage therapy is warranted. Recently, immune checkpoint inhibitors have shown efficiency in various cancers. Understanding PD-1/PD-L1 expression, tumor infiltrating lymphocytes（TILs）, and mismatch repair（MMR）deficiency may provide insight for the prediction of therapeutic response and clinical outcome. In SDC, however, the tumor-immune microenvironment has not been fully explored. We performed immunostaining for PD-1, PD-L1, MMR, and CD8 in 136 cases of SDC. The mean number of PD-1-positive immune cells within the cancer nests was 2.53/HPF in all cases. Regarding the PD-L1 expression, 11% and 14% of the cases demonstrated the combined positive score（CPS）≥ 1 and the tumor positive score（TPS）≥ 5%, respectively. A positive correlation was observed between PD-1 positivity and PD-L1 TPS/CPS as well as intratumoral CD8+ TILs. PD-L1 CPS/TPS also positively correlated with intratumoral CD8+ TILs. On the other hand, MMR deficiency, assessed by immunoreactivity for MLH1, MLH2, PMS2, and MSH6, was detected in 10% of the cases. SDCs with higher PD-L1 CPS and intratumoral CD8+ TILs more frequently showed lymph nodal metastases. In survival analysis, patients with high intratumoral CD8-positive TILs exhibited reduced overall and progression-free survival. In addition, high PD-L1 TPS/CPS were associated with poor overall survival. PD-L1 and intratumoral CD8+ TILs might be a clinically relevant biomarker.

P2-19.
A potential mechanism for decreased FDG uptake in EGFR mutated lung adenocarcinomas alteration of GLUT1 distribution

（大学院博士課程 2 年呼吸器・甲状腺外科学分野）
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Epidermal growth factor receptor（EGFR）mutation status in lung cancer patients is reported to show decreased standardized uptake value（SUVmax）from F-18 fluorodeoxyglucose（FDG）positron emission tomography /computed tomography（PET/CT）. Glucose transporters（GLUTs）facilitate the transport of glucose by which FDG is transported into cytoplasm, and