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学位論文の題名	Four immunohistochemical assays to measure the PD-L1 expression in malignant pleural mesothelioma (悪性胸膜中皮腫における4種の染色抗体を用いたPD-L1発現の検討) Oncotarget. 9(29):20769-20780, Apr 17 2018
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Abstract

Background: Immune checkpoint inhibitors (ICIs) targeting the PD-1/PD-L1 pathway are expected to be a novel therapy for combating future increases in numbers of malignant pleural mesothelioma (MPM) patients. However, the PD-L1 expression, which is a predictor of the response to ICIs, is unclear in MPM.

Methods: We studied the PD-L1 expression using four immunohistochemical assays (SP142, SP263, 28-8 and 22C3) in 32 MPM patients. The PD-L1 expression in tumor cells and immune cells was evaluated to clarify the rate of PD-L1 expression and the concordance among the four assays in MPM.

Results: The positivity rate of PD-L1 expression was 53.1% for SP142, 28.1% for SP263, 53.1% for 28-8, and 56.3% for 22C3. Nine cases were positive and 10 were negative for all assays. Discordance among the four assays was found in 13 cases. The concordance rates between SP142 and 22C3 and between 28-8 and 22C3 were the highest (84.4%). The concordance rates between SP263 and the other three assays were low (71.9% to 75.0%).

Conclusions: The PD-L1 expression in MPM was almost equivalent for three of the assays. Given the cut-off values set in our study, these findings suggested that these assays, except for SP263, can be used for accurate PD-L1 immunostaining in MPM.