A phase I study of novel multi-HLA binding peptides and new combination of immune adjuvants against solid tumors (Abstract No 3086)


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Vaccination enhancing effect of LAD-Ng Poly IC

The use of LAD-Ng Poly IC is a signal subject and adjuvant enhancement of HSP70 can be considered an HLA restricted one in the current study. Although the non-competition mechanism of adjuvant enhancement, leading to complete rejection of peptide encoded tumor, and long-term survival were not improved in the current study. This study was performed in the model with the in situ tumor in the immunization system in various animal model.

Prevention of T cell exhaustion by LAD-Ng Poly IC

The combined action of Poly IC plus LAD-Ng Poly IC enhanced expression of PD1, LAG3, and IC15 on HLA-DR positive T cells, indicating potential of Poly IC to control T cell exhaustion, which leads to high tumor control in the current study. The results of this study provided a novel approach to control T cell exhaustion, making it possible for the therapeutic peptide to be used more effectively.

Identification of therapeutic peptide

The binding system of peptide (PS) is shown in the figure. The peptide specific spot was increased in all the peptide presentation (c) IFN-γ ELISPOT assay (b) Peptide vaccine administration in HLA-A24 Tg mice (a) Phase I study: (b) Inclusion criteria (c) Results of tumor marker (Spider plot) Combining cancer vaccine therapy using multi-HLA restricted peptides and HAD-Ng Poly IC was safe and effective for solid tumors and therefore warrants further clinical studies. (UMIN000020440)

(b) Peptide binding assay

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(c) Characteristics of and clinical results in enrolled patients

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