

**0-394 A new formulation of SMP-105 (BCG-CWS) for effective stimulation of DCs in cancer immunotherapy**

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**樹状細胞療法に有用な新規アジュバントの開発**

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A number of cancer therapies using immunomodalities such as peptide vaccines and dendritic cells (DCs) has been widely investigated for a long time. To date, nevertheless, there are few clinically-useful adjuvants to elicit and improve the adaptive immune responses in cancer patients. We have now developed a new formulation of a single particle aqueous suspension of SMP-105, which is highly purified BCG-CWS. Here, the adjuvant efficacy was evaluated using human CD14<sup>+</sup> cells or murine bone marrow-derived DCs after differentiation with GM-CSF and IL-4 *in vitro* and *in vivo*.

SMP-105 most effectively increased T-cell stimulatory molecules on human DCs as compared to other adjuvants such as OK-432. Although the SMP-105 efficacy was similar to other adjuvants' on murine DC maturation *in vitro*, tumor growth was most strongly inhibited when SMP-105(+)DCs were i.t. injected after tumor cryoablation as compared with the case using DCs stimulated with other adjuvants. The tumors were completely cured following increase of TILs and systemic immune responses in the mice receiving the SMP-105 therapy.

These data suggest that SMP-105 would be useful for immunotherapy of cancer patients.

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