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(54) **Title**: ONCOLYTIC ADENOVIRAL VECTORS AND METHODS AND USES RELATED THERETO

(57) **Abstract**: The present invention relates to the fields of life sciences and medicine. Specifically, the invention relates to cancer therapies. More specifically, the present invention relates to oncolytic adenoviral vectors and cells and pharmaceutical compositions comprising said vectors. The present invention also relates to said vectors for treating cancer in a subject and a method of treating cancer in a subject. Furthermore, the present invention relates to methods of producing CD40L in a cell and increasing tumor specific immune response and apoptosis in a subject, as well as to uses of the oncolytic adenoviral vector of the invention for producing CD40L in a cell and increasing tumor specific immune response and apoptosis, while decreasing tumor-associated immunosuppression, in a subject.