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(54) **Title:** NOVEL TUMOR ANTIGENS FOR MELANOMA AND USES THEREOF

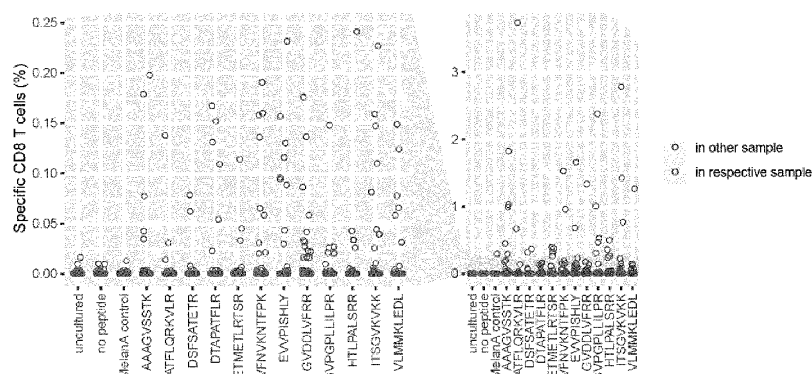


FIG. 3A

(S7) Abstract: While immune checkpoint blockade (ICB) therapy has significantly improved the outcome of metastatic melanoma, most patients do not derive long-term benefits. Previous studies suggest that treatment failure is partly due to insufficient immune recognition of tumor antigens (TAs). Cancer vaccines could potentially provide a complementary approach to boost antitumor immunity and act synergistically with ICIs. Novel tumor antigens shared by a large proportion of melanoma cells are described herein. Several of the tumor antigens described herein derives from aberrantly expressed unmutated genomic sequences, such as intronic and intergenic sequences, which are not expressed in normal tissues. Nucleic acids, compositions, cells and vaccines derived from these tumor antigens are described. The use of the tumor antigens, nucleic acids, compositions, cells and vaccines for the treatment of melanoma is also described.

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