Discovery Of Small Molecules Which Drive Mhc Presentation Of Oncogene Derived Neoantigens

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INVENTION NOVELTY

The invention describes a platform technology that increases MHC presentation of oncogene derived peptide neoantigens that do not normally occur in the cell. The platform has already been used to identify a method of increasing KRAS G12 D/V derived peptide presentation on MHC- I.

VALUE PROPOSITION

The invention provides a platform to screen computationally and experimentally for a cell's ability to present cancer neoantigens.

The technology provides a strategy to enhance antigen presentation and bring intracellular oncogenes to the cell surface so that they are visible by T-cell surveillance.

The technology provides a new dimension of therapeutic intervention for cancer as it expands the repertoire of epitopes targetable by small molecules and/or immunotherapy.

Targeting driver oncogenes in adventageous because it is cancer specific and is essential for cancer growth.

PATENT STATUS

Patent Pending

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OTHER INFORMATION

KEYWORDS

Oncogene-derived neoantigen, MHC presentation, small molecule

CATEGORIZED AS

- Medical
  - Therapeutics

RELATED CASES

2020-070-0

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