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(54) Title: METHOD OF PREDICTING FOR BENEFIT FROM IMMUNE CHECKPOINT INHIBITION THERAPY

(57) Abstract: The present invention relates to a method of identifying a cancer patient as benefiting or not benefiting from immune checkpoint inhibition therapy comprising measuring an expression level of one or more preselected markers in a cancerous biological sample obtained from the patient, identifying a differentially expressed alternative promoter based on the expression level of the one or more preselected markers, calculating an alternative promoter usage score (APB score) and identifying the patient as benefiting or not benefiting from immune checkpoint inhibition therapy using the APB score. In particular, patients with high APB score has lower expression of CD8A, granzyme A and perforin 1 and have worse progression-free survival than patients with low APB score. Patients with lower APB score have higher objective response rate as compared to patients with APB score.



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