Title (en)
METHOD FOR PREDICTING RESPONSIVENESS TO IMMUNOTHERAPY

Title (de)
VERFAHREN ZUR VORHERSAGE DER ANSPRECHBARKEIT AUF EINE IMMUNTHERAPIE

Title (fr)
MÉTHODE DE PRÉDICTION DE LA SENSIBILITÉ À UNE IMMUNOTHÉRAPIE

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Abstract (en)
[origin: WO2019012105A1] This invention relates to the field of cancer diagnostics and therapeutics. In particular, the invention relates to a method for predicting responsiveness to immunotherapy in a subject having a neoplastic disease, the method comprising: (A) determining the methylation level of a gene or a fragment thereof selected from the group consisting of internexin neuronal intermediate filament protein alpha (ΓNA), protein tyrosine phosphatase, receptor type C-associated protein (PTPRCAP), semaphorin 3B (SEMA3B), kelch-like family member 6 (KLHL6), and Ras association domain family member 1 (RASSF1) in a sample from the subject, wherein: hypomethylation of the gene or fragment thereof in the sample indicates that the subject will be responsive to immunotherapy; or hypermethylation of the gene or fragment thereof in the sample indicates that the subject will be unresponsive to immunotherapy; or (B) (i) determining a methylation profile of two or more genes or fragments thereof selected from the group consisting of IN A, PTPRCAP, SEMA3B, KLHL6, and RASSF1 in the sample from the subject; (ii) comparing the methylation profile as determined in (i) with a reference methylation profile, said reference methylation profile representing a known responsiveness to immunotherapy; (iii) finding a deviation or no deviation of the methylation profile as determined in (i) from said reference methylation profile; and (iv) attributing said finding of deviation or no deviation to a particular prediction of responsiveness of the subject to immunotherapy.

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