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(54) Title: BIOMARKERS FOR CANCER THERAPY USING MDM2 ANTAGONISTS

(57) Abstract: The invention provides DNA damage response (DDR) pathway genes and their gene products as biomarkers to predict effective treatment of cancer using an MDM2 antagonist. Identifying one or more DDR pathway biomarkers in a cancer patient allows a determination to be made whether the patient's cancer is likely to be successfully treated using an MDM2 antagonist. Accordingly, the invention relates generally to a companion diagnostic for MDM2 antagonist therapy. In particular, the DDR pathway comprises one or more genes from: the homologous recombination repair (HRR) pathway; the non-homologous end joining (NHEJ) pathway; the mismatch repair (MMR) pathway; the Fanconi Anemia (FA) pathway; and/or the base excision repair (BER) pathway.

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