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(54) Title: A METHOD OF IDENTIFYING RISK OF CANCER AND THERAPEUTIC OPTIONS

(57) Abstract: There is provided a method of identifying risk of cancer in a human subject, the method comprising: determining in a biological sample of the subject, whether a copy number amplification of at least one continuous genomic region specific to human chromosome 1q21 is present, wherein the presence of a copy number amplification of the region specific to human chromosome 1q21 represents an elevated risk of cancer in the subject and the at least one continuous genomic region is selected from the group consisting of: a human TUFT1 gene or a gene from the human S100 family. It is also provided a method of treating cancer in a subject determined to have a copy number amplification of a region specific to human chromosome 1q21, the method comprising administering a therapeutic agent capable of suppressing IRAK1, IRAK4 or a S100 family member, such as Pacritinib. There are also provided a method of treating cancer, related polynucleotides, kits, therapeutic agents and use of the therapeutic agents.