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(54) Title: PHARMACOGENOMIC MARKERS FOR PROGNOSIS OF SOLID TUMORS

(57) Abstract: The present invention provides methods, systems and equipment for prognosis or evaluation of treatment of solid tumors. Gene markers that are prognostic of solid tumors can be identified according to the present invention. Each gene marker has altered expression patterns in PBMCs of solid tumor patients following initiation of an anti-cancer treatment, and the magnitudes of these alterations are correlated with clinical outcomes of these patients. In one embodiment, a Cox proportional hazards model is used to determine the correlations between clinical outcomes of RCC patients and gene expression changes in PBMCs of these patients during the course of a CCI-779 treatment. Non-limiting examples of genes identified by the Cox model are depicted in Tables 4A3 4B, 5 A and 5B. These genes can be used as surrogate markers for prognosis of RCC. They can also be used as pharmacogenomic indicators for the efficacy of CCI-779 or other anti-cancer drugs.

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