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(54) Title: CANCER TYPE PREDICTION MODEL BUILDING SYSTEM AND BUILDING METHOD, AND CANCER TYPE PREDICTION SYSTEM

(54) 发明名称: 癌种预测模型建立系统及建立方法、癌种预测系统

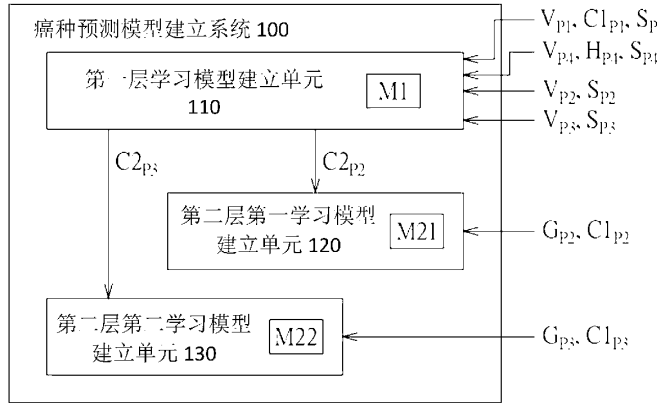


图 1

- 100 Cancer type prediction model building system
110 First-layer learning model building unit
120 Second-layer first learning model building unit
130 Second-layer second learning model building unit

(57) Abstract: Provided in the present invention are a cancer type prediction model building system and method, and a cancer type prediction system. The cancer type prediction model building system comprises a first-layer learning model building unit and a second-layer first learning model building unit. The first-layer learning model building unit is used for building a first-layer learning model by using machine learning technology and according to a first copy number variation, a first specimen cancer type and a first gender of each of a plurality of first learning specimens, and taking a second gender and a second copy number variation of each of a plurality of second learning specimens as inputs to the first-layer learning model, so that the first-layer learning model outputs a plurality of first

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output cancer types of each of the second learning specimens. The second-layer first learning model building unit is used for building a second-layer first learning model by using machine learning technology and according to the first output cancer types and a second specimen cancer type of each of the second learning specimens.

(57) 摘要: 本发明提供一种癌种预测模型建立系统及方法、癌种预测系统, 癌种预测模型建立系统包括第一层学习模型建立单元及第二层第一学习模型建立单元。第一层学习模型建立单元用以使用机器学习技术, 依据多个第一学习检体的各者的第一拷贝数变异、第一检体癌种及第一性别, 建立第一层学习模型; 及, 以多个第二学习检体的各者的第二性别及第二拷贝数变异做为第一层学习模型的输入, 使第一层学习模型输出各第二学习检体的多个第一输出癌种。第二层第一学习模型建立单元用以使用机器学习技术, 依据各第二学习检体的该些第一输出癌种及第二检体癌种, 建立第二层第一学习模型。