

**TITLE OF INVENTION: [SYSTEM FOR PREDICTING COGNITIVE
IMPAIRMENT BASED ON SYNCHRONOUS ACQUISITION OF EEG AND EGEG
SIGNALS]**

ABSTRACT

The present invention relates to the field of disease prediction, and in particular to a system for predicting cognitive impairment based on synchronous acquisition of electroencephalogram (EEG) and electrogastroenterogram (EGEG) signals, comprising: a data acquisition module configured to acquire data comprising EEG data and EGEG data; a first analysis module configured to obtain an average electrode inconsistency index of a first channel and a second channel based on a first model according to time series data; and a prediction module configured to compare the average electrode inconsistency index of a subject with a preset evaluation threshold so as to predict patients with cognitive impairment. The system provided by the present invention can more accurately and efficiently distinguish the patients with cognitive impairment from healthy population, and can be applied as an auxiliary diagnosis tool to primary screening of mild cognitive impairment in relatively large population (such as communities and physical examination centers).

[FIG. 4]