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ACCEPTED MANUSCRIPT

Prediction of platinum-based chemotherapy efficacy in lung cancer based on LC-MS metabolomics approach

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Highlights

- LC-MS based metabolomics approach was applied on predicting the platinum chemotherapy efficacy in lung cancer.
- 8 key metabolites were defined as potential biomarkers statistically different in patients with different chemotherapy responses.
- Prediction model was employed to find important pathways associated with platinum chemotherapy response.

Abstract

Lung cancer is the common cause of cancer-related death worldwide. Platinum-based chemotherapy is the cornerstone of treatment for lung cancer. Platinum sensitivity is a major possibility for effective cancer treatment. In this study, several potential biomarkers were identified for evaluating and predicting the response to platinum-based chemotherapy. LC-MS-based metabolomics was performed on plasma samples from 43 lung cancer patients with different chemotherapy efficacy. By combing

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