Rapid and Global Identification of Potentially Bioactive Crude Extracts from Chinese Medicinal Formula Chuanbeipipa Dropping Pills

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SUMMARY. A dichloromethane extract (DME) of the traditional Chinese medicine Chuanbeipipa dropping pill (CBPP) was obtained. The main bioactive components of the DME were identified and analysed by ultra-performance liquid chromatography/electrospray ionisation quadrupole time-of-flight tandem mass spectrometry. The retention time, mass spectrum, and tandem mass spectrum of the DME were compared with those of reference standards as well as literature data, and fifty-five components were resolved. Fourteen components were confirmed to have effects on cough and asthma. The current study aimed to establish a reliable and effective method for screening the potentially bioactive components of CBPP, report for the first time the basis of CBPP pharmacology, and provide useful information for further studies on the CBPP mechanism of action.

KEY WORDS: Active composition, Chuanbeipipa dropping pills, Crude extracts, Traditional chinese medicine, UPLC-Q-TOF.

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