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Study on Chemical components of *Patrinia villosa* (Thunb.) Dufr. Anti-Liver Tumor Effective Part by UPLC-Q-TOF-MS

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***SUMMARY. Patrinia villosa* (Thunb.) Dufr. (PVD), a well-known Traditional Chinese Medicine (TCM) has been widely used over thousands of years. In modern medicine, it has been adopted in the traditional prescription for cancer treatment in clinic. In the experiments, we prove that PVD total flavonoids extract has the excellent inhibitory effect on SMMC-7721 liver tumor cells. At the same time, the UPLC-Q-TOF-MS technology is used to analyze the chemical components of PVD total flavonoids extract; a total of 19 components are identified, flavonoids and phenolic acids being the main components. Among them, kaempferol-3-O-glucuronide, hyperoside, and apigenin-7-O-glucoside are first discovered in PVD. The experiments provide references for the researches and developments of anti-tumor drug candidates, and provide the basis for revealing the bioactive components of PVD.**

RESUMEN. Patrinia villosa (Thunb.) Dufr. (PVD), una conocida medicina tradicional china (MTC) ha sido ampliamente utilizada durante miles de años. En la medicina moderna, se ha adoptado en la prescripción tradicional en la clínica para el tratamiento del cáncer. En los experimentos demostramos que el extracto de flavonoides totales de PVD tiene un excelente efecto inhibidor sobre las células tumorales hepáticas SMMC-7721. Al mismo tiempo, la tecnología UPLC-Q-TOF-MS se utiliza para analizar los componentes químicos del extracto de flavonoides totales de PVD, identificándose un total de 19 componentes, siendo los principales flavonoides y ácidos fenólicos. Entre ellos, kaempferol-3-O-glucurónido, hiperósido y apigenina-7-O-glucósido se informan por primera vez en PVD. Los experimentos proporcionan referencias para las investigaciones y desarrollos de candidatos a fármacos antitumorales, y proporcionan la base para revelar los componentes bioactivos de PVD.

KEY WORDS: anti-liver cancer, component identification, fragmentation pattern, *Patrinia villosa* (Thunb.) Dufr., structural analysis.

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