

4<sup>th</sup> World Congress on

# CHROMATOGRAPHY

August 07-09, 2017 | Rome, Italy

## Identify histone acetylation in acute lymphoblastic leukemia with liquid chromatography

Zhong J F, Zhang C, Stucky A, Chen X L, Press M F and Zhang X  
University of Southern California, USA

High-performance liquid chromatography (HPLC) has been used for the study of proteins and the characterization of their post-translational modifications. Acute lymphoblastic leukemia (ALL) is generally considered as a genetic disease (disorder) with an aggressive tumor entity of highly proliferative malignant lymphoid cells. However, in recent years, significant advances have been made in the elucidation of the ALL-associated processes. Histone acetylation is involved in the permanent changes of gene expression controlling ALL developmental outcomes. Identifying histone acetylation with HPLC could potentially provide a method for ALL diagnosis and prognosis. Here, we used HPLC to profile histone acetylation from ALL bone marrow samples and correlated the result to clinical outcomes. Initial results suggested that histone acetylation could be used for ALL prognosis and treatment evaluation.

jzhong@usc.edu