

UPLC vs. UHPLC for urine AFM1 sub ppb

Peni Kistijani Samsuria Mutalib^{1,2}

¹Medical Physics Department,²Medical Technology Cluster, Faculty of Medicine, Universitas Indonesia

penikisses@gmail.com

Introduction

Background: Cost and know how is the mystery of strengths of successful public services.

Problem: The move on from research to public services infrastructure needs 30 years of experience.

Objective: Threats to build many detection analyses without thinking of supporting preparation center are known widely become the weakness of this management

Method: Review and Experience

Result: UPLC has a lower pressure principle and UHPLC has a high pressure principle. UPLC has largely write in Europe and US journals, but UHPLC

has large segment in Asia. EBSCOhost search engine: UPLC[^]urine[^]AFM1: 3 literatures

Discussion: The marketing of both has their own segment

Conclusions: Operational cooperation of ultra performance LC will help the competition marketing in building public health infrastructure.

Keywords: urine AFM1, sub ppb, ppt, UHPLC. UPLC, quantification

1. Jager A V, Tonin FG, Souto PCMC, Privatti RT, Oliveira CAF. Determination of urinary biomarkers for assessment of short-term human exposure to aflatoxins in São Paulo, Brazil. *Toxins (Basel)* 2014;6(7):1996–2007.
2. Solfrizzo M, Gambacorta L, Visconti A. Assessment of multi-mycotoxin exposure in southern Italy by urinary multi-biomarker determination. *Toxins (Basel)* 2014;6(2):523–38.
3. Shephard GS, Burger H-M, Gambacorta L, Gong YY, Krska R, Rheeder JP, et al. Multiple mycotoxin exposure determined by urinary biomarkers in rural subsistence farmers in the former Transkei, South Africa. *Food Chem Toxicol An Int J Publ Br Ind Biol Res Assoc* 2013;62:217–25.