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Implementation of UHPLC-single quad MS platform: The next level transforming pharmaceutical quality control laboratories

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In pharmaceutical analysis, the use of mass spectrometry (MS) coupled to liquid chromatography in quality control has become very significant. This is observed in i. a. the European Pharmacopoeia, where this technique is already incorporated in different general texts as well as specific monographs. Here, often (GMP) single quad MS platforms can be used, characterized by acceptable low costs, easy-to-use smooth lab-integration, increased efficiency and providing additional detection possibilities over a traditional UV/VIS detector. Single quad mass spectrometers also work well as analytical tools for the detection of low-abundant genotoxic impurities and their basic confirmation. Moreover, also in drug development, this detector can be useful: low UV-detectable impurities, obtained during synthesis, formulation or after degradation, can be analyzed, even in complex matrices. In developmental quality control of complex mixtures (e.g. plant extracts), the UPLC-single quad MS platform was found to be of great use in transdermal research as well.

Biography

Evelien Wynendaele has completed her PhD in Pharmaceutical Sciences in 2014 at Ghent University. She is currently working as a Post-doctoral fellow in the DruQuaR Laboratory at the same university, under the supervision of Prof. Bart De Spiegeleer. She has published more than 35 papers in reputed journals.

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