

Example for an Abstract in English:

**A New UHPLC Method to Determine Aloin A and B in *Aloe capensis***

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**Introduction:** The current monograph in the European Pharmacopeia [1] for *Aloe capensis* describes a photometric assay based on an adapted Bornträger reaction to determine hydroxyanthracene glycosides, calculated as aloin A. The method is time-consuming, unspecific for aloin A and B and the precision is not adequate for a modern assay. There are several HPLC methods published, see [2] as example, but their runtime is too long and the resolution for aloin A and B is not satisfactory. So far, there is no validated and robust method existing.

**Aim:** The aim of the present study was to develop a short, robust and validated UHPLC method that meets specific needs of the pharmaceutical industry.

**Method:** About 100 mg of the dried drug are placed in a 100 mL volumetric flask and extracted with 70 mL of methanol for 20 min by sonication. An Acquity UHPLC BEH Phenyl column, 50 × 2.1 mm i.d. and 1.7-µm particle size, was used. The mobile phase consisted of 17:83 (v/v) acetonitrile/water. The flow rate was 0.5 mL/min, the detection wavelength 355 nm, and the injection volume 3 µL.

**Results:** The UHPLC method allows to separate aloin A and B (see Fig. 1). Results of several samples are presented on the poster.

**Conclusio**n: The method developed is simple, robust and precise. The method is also applicable for normal HPLC systems. It is a suitable option to replace the outdated photometric assay described in the European Pharmacopeia.

**References:**

1 EDQM. European Pharmacopeia (2013), Monograph 0258.

2 Van der Heyden Y. et al. J Pharm Biomed Anal 2001; 24: 723–752.

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