Title: Development of a fast HPLC-DAD method for simultaneous quantitation of three immunosuppressant drugs in whole blood samples using intelligent chemometrics resolving of coeluting peaks in the presence of blood interferences

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Development of a fast HPLC-DAD method for simultaneous quantitation of three immunosuppressant drugs in whole blood samples using intelligent chemometrics resolving of coeluting peaks in the presence of blood interferences

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Highlights:

- A HPLC-DAD method for analysis of immunosuppressants in blood samples is proposed.
- Multivariate curve resolution was coupled with a fast and green analytical method.
- Proper implementing the constraints was necessary for a satisfactory analysis.
- Matrix effect was handled by constructing the matrix-added calibration set.
- Quantification was accomplished efficiently using non-sophisticated instrumentation.

Abstract

The present study describes a fast high performance liquid chromatography-diode array detection analytical methodology for quantification of tacrolimus, everolimus and cyclosporine A in whole