components after 30 min. After 3 hours, the average conversion of CMS is about 13% at RT and 19% at 37 °C (Table 3). The stability of CMS in a matrix other than plasma was not tested. However, as there is evidence of lower stability of CMS in aqueous solutions or infusion solutions, this stability needs to be studied more closely before further measurement (7, 12).

This analytical method for determining both COL and CMS in plasma samples is applied in the ongoing phase IV clinical trial „Pharmacokinetics of Colistin in Critically Ill Patients With Extracorporeal Membrane Oxygenation (COL-ECMO2022)" (EudraCT Number 2022-000291-19; NCT05542446) (13, 14). This study is designed to assess the influence of extracorporeal membrane oxygenation on the pharmacokinetics of colistin and CMS.

Conclusion

A rapid method for measuring colistin in human plasma has been introduced and validated. The described method is sensitive and selective for the analysis of colistin in plasma and it was applied to the measurement of patient samples. The presented paper is part of the Pharmacokinetics of Colistin in Critically Ill Patients With Extracorporeal Membrane Oxygenation (COL-ECMO2022) study in which further results will be presented. The study has been approved by the Ethics Committee of St. Anne's University Hospital Brno (Number 10ML/2022-AM). EudraCT Number of the study is 2022-000291-19, registered on June 21, 2022. The study was registered at the Clinical Trials register https://clinicaltrials.gov/ct2/show/NCT05542446 on September 15, 2022.

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