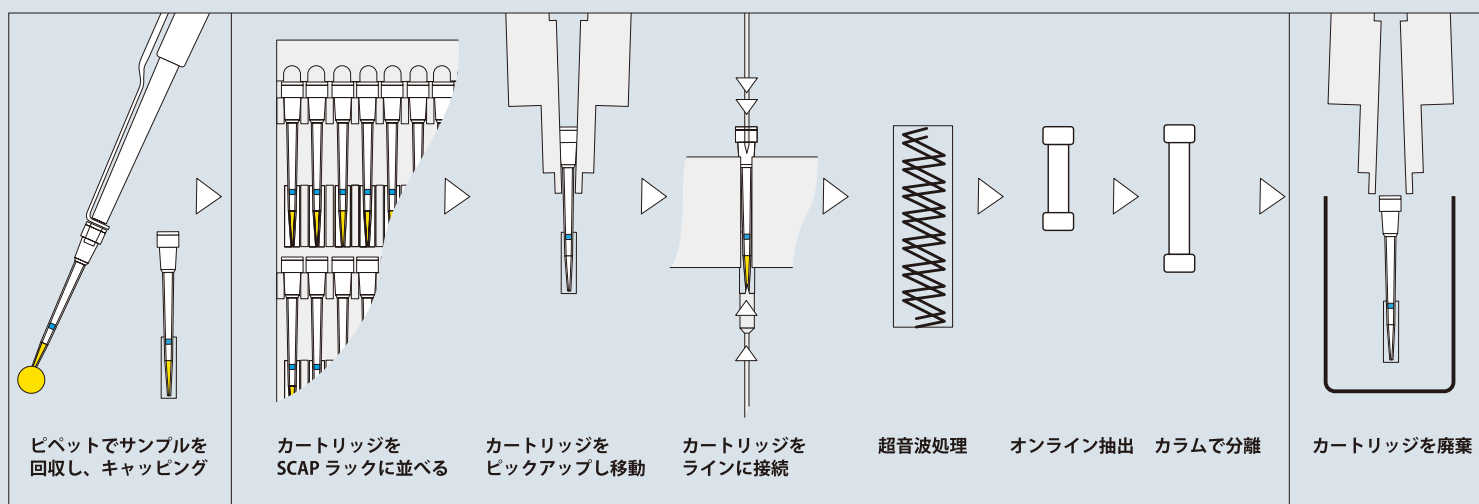
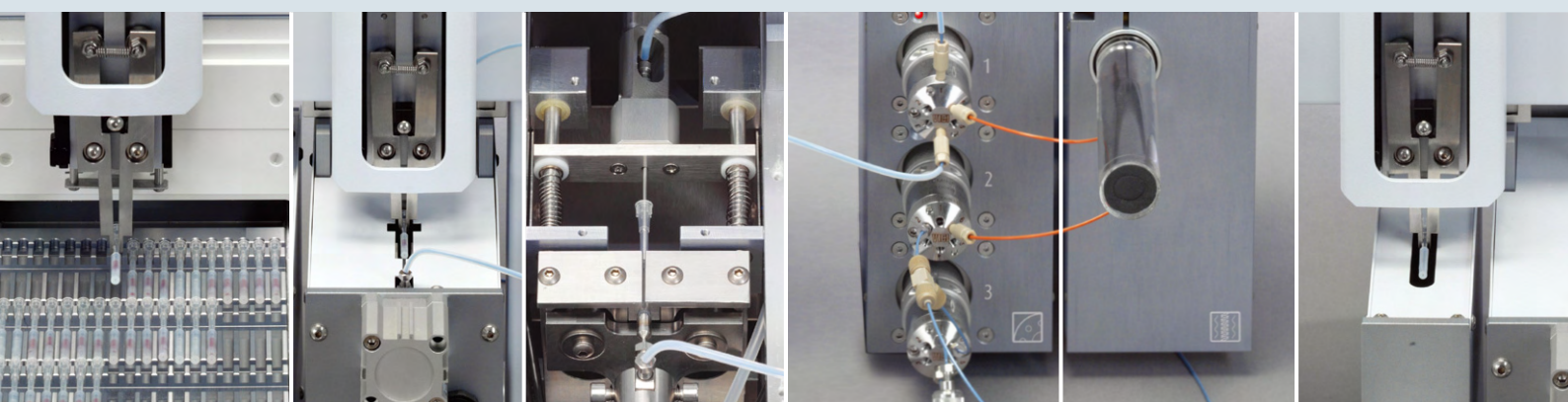


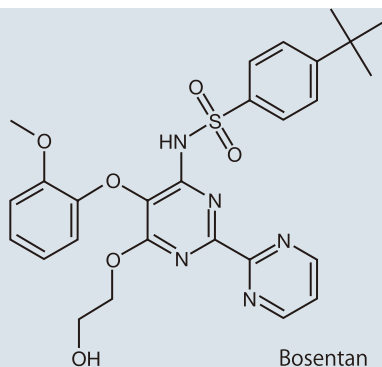
全血もそのまま LC ラインへ。



- ピペッティングしたサンプルを密閉（キャップ）してラックに並べて準備完了。
- HPLC/UPLC ラインへの組み込み、サンプル前処理も全自動。
- 血液・尿 培養液などクルードなサンプルをコンタミ・キャリーオーバーなしで連続分析可能。



Example Application



Description

A new method for the detection of Bosentan and three metabolites is presented. Bosentan and its three metabolites were spiked in whole blood and analyzed by the SCAP system. Mass spectrometric detection was performed on an MDS Sciex API 4000™ operating in positive electrospray ionization mode.

Method

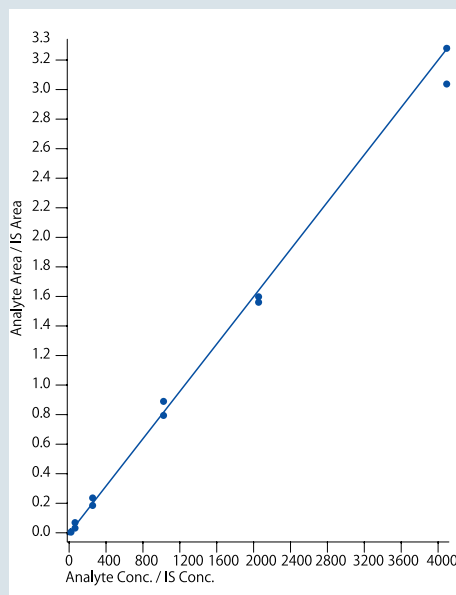
8 levels of calibration and 3 levels of quality control samples were spiked in whole blood with a linear range from 1.00 ng/mL to 4096 ng/mL for Bosentan and 2.00 to 512 ng/mL for the three metabolites.

For measurement of calibration and quality control samples, 5 µL of each level were aspirated into the sample cartridge together with 1 µL of internal standard solution (containing the ISTD's for all 4 compounds).

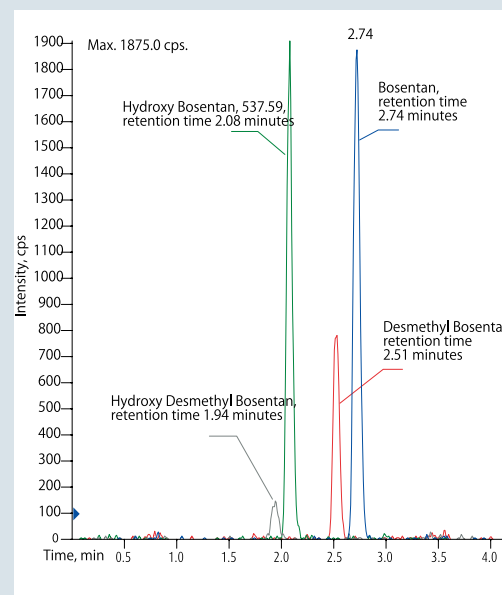
The mass spectrometer was operated in positive electrospray ionization mode with dwell times of 50 msec for each MRM transition and an HPLC flow rate of 300 µL/min on the analytical column. The whole blood samples were cleaned on a Merck RAM column, preconcentrated on a C18 trapping column and separated on a C6-Phenyl HPLC column.

Data

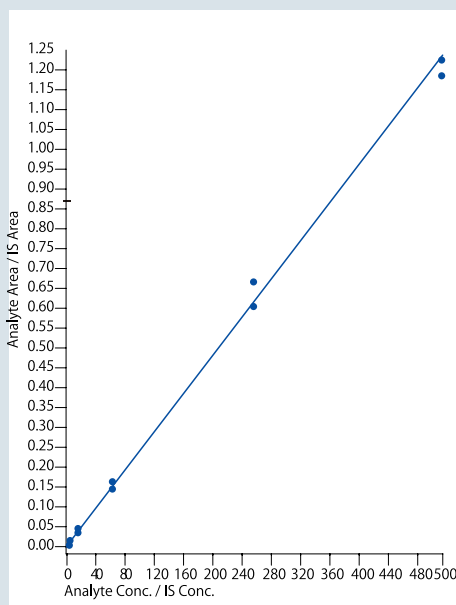
Validation runs containing 2 calibration curves and 6 replicates of the 3 levels of quality control were analyzed. Typical calibration curves for Bosentan and one of the metabolites are presented beneath. The lower limit of quantification for all 4 compounds and a picture for a typical chromatogram are shown (traces for ISTD's are not shown).



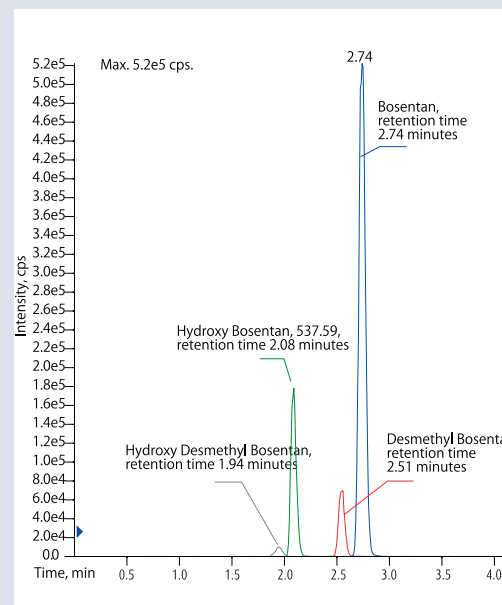
Calibration curve for Bosentan ($r = 0.9979$)



LLOQ for Bosentan and metabolites

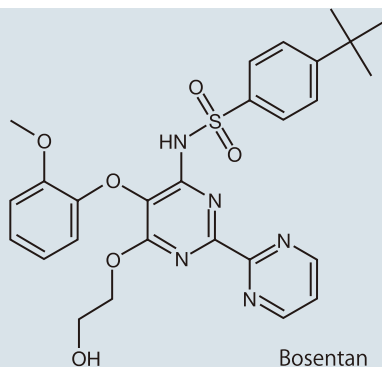


Calibration curve for one Bosentan metabolite ($r = 0.9977$)



Typical chromatogram

Example Application



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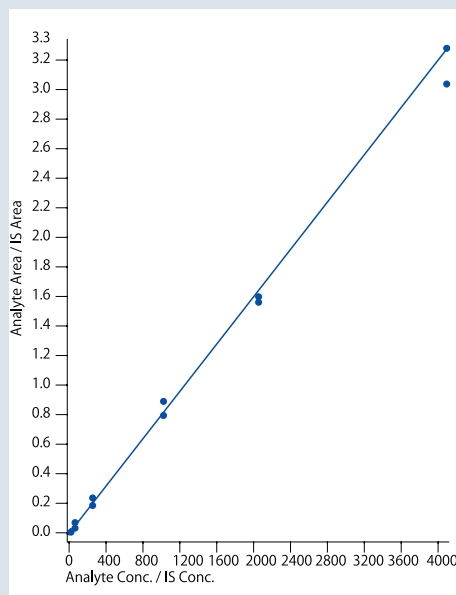
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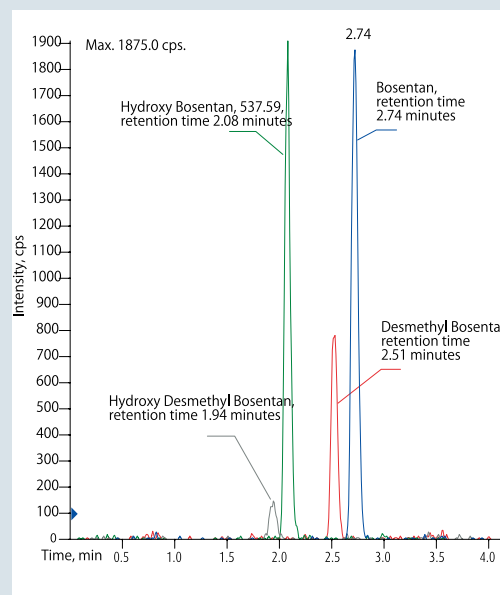
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Data

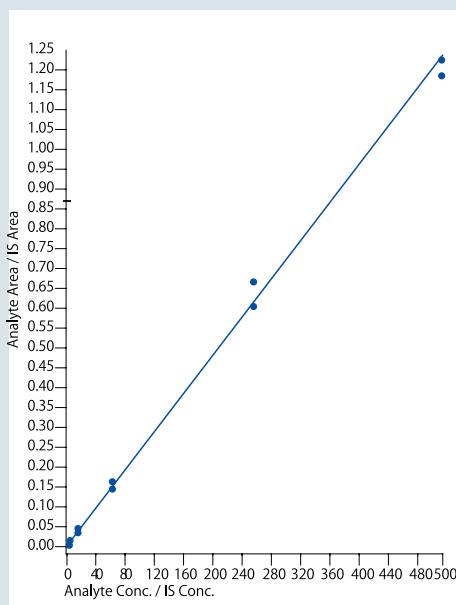
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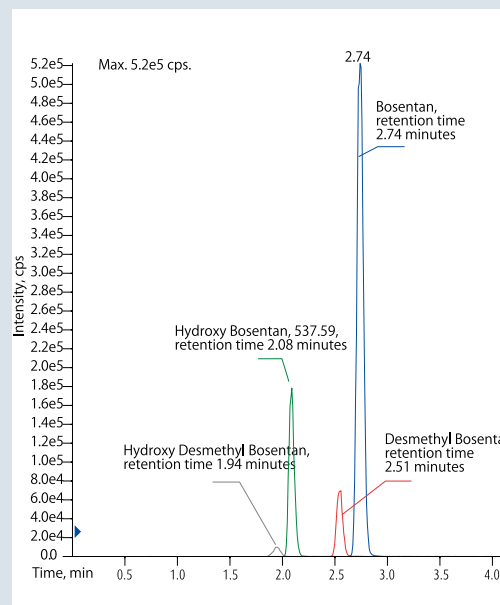
Calibration curve for Bosentan ($r = 0.9979$)



LLOQ for Bosentan and metabolites



Calibration curve for one Bosentan metabolite ($r = 0.9977$)



Typical chromatogram