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## Isolation and identification of canine plasma components suspected as uremic toxins\*

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Four peaks in the chromatograms of sera were found to be significantly correlated to serum creatinine concentrations in uremic dogs. The suspected uremic substances were isolated by two stages of preparative liquid chromatography (PLC) from plasma of uremic dogs treated with the ligation of the ureter. The primary separation of the suspected uremic peaks were performed with anion exchange resin. Analytical reversed phase HPLC showed that three of the 4 peaks consisted of single substances. Main subfractions of these peaks were successfully isolated by the secondary stage reversed phase PLC. By means of thin layer chromatography, UV and <sup>1</sup>H-NMR spectroscopy, components of the four main peaks were confirmed to be small molecules such as a pyridine derivative, uric acid, hippuric acid and kynurenic acid.

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