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### **Accuracy of three different point-of-care test in general practice (GP) in Denmark – preliminary results**

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**Background & Aim:** Symptoms of urinary tract infection (UTI) are common in general practice. Point-of-care testing (POCT) can aid the doctors in finding the patients with significant bacteriuria, who could benefit from antibiotics. More knowledge about precise diagnosis of infectious disease is essential to reduce the use of inappropriate antibiotics. In Denmark, dip-stick, microscopy and urine culture are used however, few studies have been made. The aim of this study is to determine the accuracy of urine dipstick, microscopy and culture in general practice.

**Method:** 125 adult, non-pregnant women with symptoms of UTI, are asked to deliver a mid-stream urine sample. Immediately after, the same primary investigator analyze the urine by; 1) Urine dipstick using a Combur5 stick analyzed at Urisys1100, 2) Microscopy using a Olympus CX31 microscopy with 400x magnification, 3) Urine culture with 10 µl urine spread out using a three-step technic on a ID Flexicult<sup>TM</sup> and incubated 24 hours. A parallel sample from the same urine is sent to the microbiological department as reference. Both the outcome assessor of the index tests and the reference is blinded to the result of the other. Accuracy will be calculated and results presented in 2x2 tables.

**Results:** The study is conducted in 1 practice in Copenhagen and is ongoing. Presently, 35 patients are included and we expect to present results from 60 patients.

**Conclusions:** This study will determine the accuracy of urine dipstick, microscopy and culture in general practice. POCT microscopy and culture is uncommon outside of Scandinavia and studies are lacking. Adding to the knowledge about precise diagnostics for UTI can hopefully aid in reducing inappropriate antibiotics prescriptions.