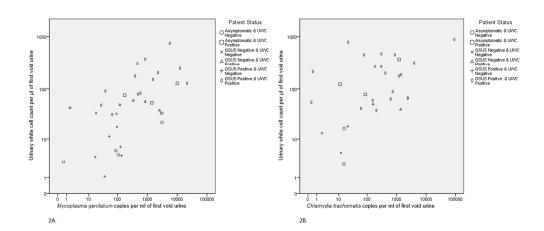
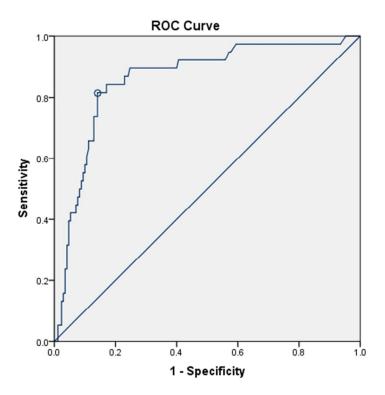


Figure 1. Boxplots comparing the distributions of first void urinary white cell counts per μL in patients with and without urethritis stratified by urethral smear grade (1A) and *C. trachomatis* or *M. genitalium* infection status (1B). Training set patients only. The median urinary white cell count increases as the urethral smear grade increases (1A, P=<0.001). UWCC counts are increased in infected patients with respect to non-infected (1B, p=<0.001), regardless of clinical grouping. Negative GSUS: `-`(0 PMN/HPF), `-/+' (1-5 PMN/HPF). Positive GSUS: `+' (5-10 PMN/HPF), `++' (10-20PMN/HPF) and `+++' (>20PMN/HPF). 1541x657mm (96 x 96 DPI)



Supplementary Figure 2. First void UWCC count in relation to M. genitalium (2A) or C. trachomatis (2B) urinary load. Kendall tau b rank correlation observed and associations between UWCC count and M. genitalium urinary load (2A, n=34, τ =0.426, p=<0.001) or C. trachomatis urinary load (2B, n=30, τ =0.333, p=0.10) 331x158mm (96 x 96 DPI)



Supplemental Figure 3. Diagnostic receiver operator characteristic curve for the prediction of urethral infection from urinary white cell count. The y axis is the sensitivity and the x axis is 1-specificty. The green line is the reference line and the blue line is the test under analysis. The area under the curve is 0.855 (p=<0.001). Circle present upon ROC curve represents the threshold identified by Youden index analysis. $165 \times 132 \text{mm}$ (96 x 96 DPI)