

P1327

Poster Session V

Diagnostic microbiology: from lower respiratory tract infections to gynaecological infections  
**AN EVALUATION OF BRILLIANCE GBS AGAR FOR THE DETECTION OF GBS FROM VAGINAL SWABS**

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**Objectives**

The purpose of this trial was to compare the performance of Thermo Scientific™ *Brilliance*™ GBS Agar (Thermo Fisher Scientific) and chromID™ StreptoB Agar (bioMérieux) for the detection of *Streptococcus agalactiae* (group B streptococci; GBS) from vaginal swabs using LIM Broth enrichment.

**Methods**

On receipt by the University Hospital of Basel, five hundred and thirteen vaginal swabs were inoculated into Todd Hewitt Broth with colistin and nalidixic acid (LIM broth) and incubated at 35°C for 18-24hrs. Post-incubation, 10µL of broth was streaked onto *Brilliance* GBS Agar and chromID StreptoB Agar plates and incubated aerobically for 24 hrs. Presumptive positive GBS colonies (pink colonies on *Brilliance* GBS Agar and pink-red colonies on chromID StreptoB Agar) were confirmed using catalase, Pastorex Strep B (Bio-Rad), MALDI-TOF and/or CAMP tests. After 24 hrs incubation, sensitivity, negative predictive value (NPV) and percentage inhibition were calculated for both media tested.

**Results**

After 24 hrs incubation, *Brilliance* GBS Agar achieved 100.0% sensitivity, which according to McNemar's chi-square test was statistically significantly greater (P = 0.0015) than the sensitivity achieved on chromID StreptoB Agar (93.1%). NPV was also higher on *Brilliance* GBS Agar (100.0%) compared to chromID StreptoB Agar (97.6%).

Percentage inhibition of organisms other than GBS (i.e. the number of swabs showing no growth of non-target organisms) was considerably higher on *Brilliance* GBS Agar than on chromID StreptoB Agar. Due to the higher level of inhibition on *Brilliance* GBS Agar, the level of background growth on the plate was much lower, resulting in easier isolation of GBS colonies.

**Conclusion**

Following enrichment in LIM broth, *Brilliance* GBS Agar was able to detect a statistically significantly greater number of GBS from vaginal swabs than chromID StreptoB Agar. *Brilliance* GBS Agar also demonstrated a greater level of inhibition of non-target organisms, resulting in a much cleaner plate, allowing easier isolation of GBS colonies.