**Introduction/Background**
Persistent infection with high-risk human papillomavirus (hrHPV) is a major etiological factor of cervical cancer. Hence, the effectiveness of cytological screening can be improved by the implementation of hrHPV tests [1]. Current methods of HPV detection frequently involve expensive reagents and instrumentation or need for skilled personnel. Electrochemical methods of detection may address these challenges since they offer rapid detection times and require small, inexpensive instrumentation that is simple to operate.

**Methodology**
We compared two different bioplatforms. Both utilized loop-mediated isothermal amplification (LAMP) to amplify HPV DNA from two most oncogenic HPV types, HPV16 and HPV18, taking 30–40 mins. Then, we used capture probes to bind amplified DNA, followed by an electrochemical detection using peroxidase reaction.

**Results**
Using magnetic beads, we detected HPV DNA directly from crude lysates of cervical cancer cell lines (CaSkI, SiHa, HeLa) and from 19 clinical samples (patients with high-grade squamous intraepithelial lesions or healthy controls), without DNA extraction step [2]. Detection was possible from as little as 10 cells. We obtained excellent concordance of our assay with PCR, reaching 100% sensitivity for both genotypes, 81.82% specificity for HPV 16 and 94.12% specificity for HPV 18. Later, we omitted magnetic beads to detect HPV directly on gold electrodes, obtaining very good sensitivity and specificity when determining HPV16/HPV18 infection in 15 clinical samples when compared to the PCR [3].

**Conclusion**