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**P-20; EVALUATION OF TAMPON AS A SUITABLE SELF SAMPLING DEVICE FOR DETECTION OF HPV mRNA FROM CERVICAL CELLS – A PRELIMINARY REPORT**

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**Background:** In low resource settings screening by cervical cytology is often not implemented. This failure of cytological screening in the less developed world is partly due to the logistical problems inherently part of any “speculum collected specimen” program. It is hoped that HPV detection on self-collected specimens which does not demand the use of speculums, will become a valuable primary screening test in both developed and developing countries.

Self-collection of samples for human papillomavirus (HPV) testing is also a feasible alternative method for women who decline to participate in population based cervical cancer screening programs.

**Objectives:** This study is performed to prove the principle of tampon collection to detect high risk HPV mRNA, using the PreTect HPV-Proofer, in patients with cervical cancer.

**Materials and Methods:** 45 patients at the Academic Hospital in Pretoria, South Africa, with newly diagnosed cervical cancer have been sampled so far. Samples have been collected with tampons inserted for one hour and with cervix brushes. After the sampling (and preparation of PAP smears) both brushes and tampons were placed in vials with PreTect TM for cell preservation and shipped to NorChip AS, Norway for analysis

The samples have been analysed with the PreTect HPV-Proofer assay detecting E6/E7 mRNA from the 5 high risk HPV types 16, 18, 31, 33 and 45.

**Results:** Of the 45 sets of samples 43 had concordant results. In one case the internal control for sample quality was negative and also no HPV was detected in the brush sample, while the tampon was HPV positive and in one case HPV-16 was detected in the tampon sample, but not in the brush sample.

**Conclusions:** This study demonstrates that tampon collection and mRNA based testing is feasible for women who for various reasons are not included in any conventional screening program. Molecular

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testing is probably superior to cytological testing of self-collected samples.