

# 2<sup>nd</sup> Gynecologic Cancer Conference

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## Primary HPV genotyping with reflex Pap cytology for cervical cancer screening

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Cervical cancer CCA is responsible worldwide for 250 000 deaths every year, most occurring in unscreened women. Most CCA's are caused by high risk HPV types (hr-HPV). Science-driven evidence demonstrates hr-HPV DNA testing to be 30%-50% more sensitive vs. Pap cytology, resulting in 1- detection of most CCA and pre-cancers at initial testing, 2- low incidence of disease at re-testing and allowing 3-increased screening intervals, safely. The absolute risk of pre-cancer/cancer in test negative subjects at baseline followed for 3 years is 50% lower in HPV- (0.3%) then Pap - (0.78 %) women. HPV testing is the ideal screening method in HPV vaccines in which a highly sensitive test is required to detect the expected rare cases of CCA/precursors. Furthermore, HPV testing allows self-testing which is critical for increasing participation of women who otherwise would not attend screening programs. Longitudinal studies have shown that precancer/CCA-risk differs by hr-HPV types, 16/18 carrying the highest risk (25% progression rate <3 years) compared to 5% for the 12 other hr-types, tested routinely. The most recent FDA-approved screening strategy (using Cobas 4800 real time PCR assay) incorporates genotyping for HPV 16 and 18, reflex Pap at 1 year for the 12 other types and re-testing HPV negatives at 3 year intervals. Current North-American guidelines approve primary HPV testing alone as acceptable screening method for women aged 25+ years for it is as safe as Pap cytology alone and as efficient for detecting CCA/ precursors as co-testing with Pap/HPV. Switching core screening technology from morphology-based Pap cytology to molecular HPV testing provides best means for secondary prevention of CCA and precursors.

### Biography

Alex Ferenczy is Professor of Pathology and Obstetrics and Gynecology at McGill University and a Gynecologic Pathologist at the Jewish General Hospital, Montreal for the past 40 years. He has been interested in HPV-related and endometrial neoplasia. He authored over 450 articles in scientific journals and textbooks and has been a member of international pathology panels in prospective, randomized controlled HPV screening and vaccine clinical trials and medical therapy for uterine fibroids.

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