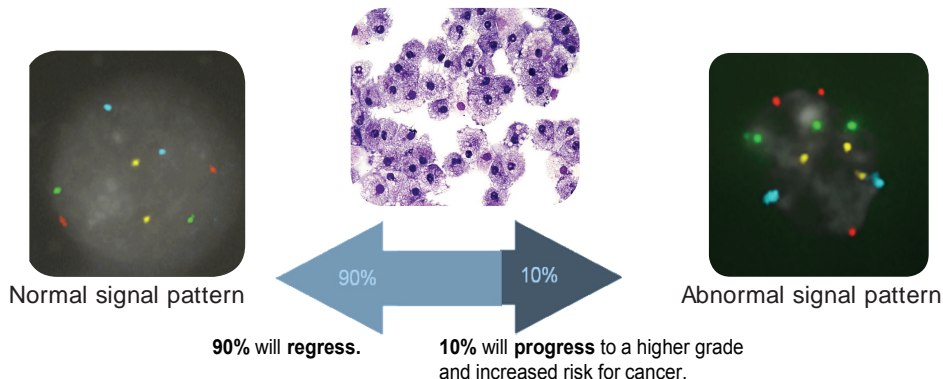


The FISH-based HPV-Associated Cancer Test (FHACT™) is the only four color FISH Probe that can be used for cervical cancer screening as additional triage before referral for colposcopy.

Low Grade HPV+ Cervical Lesion

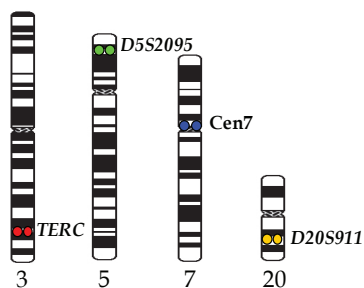


FHACT™ aids in the identification of low grade cervical lesions that will progress to a higher grade versus those that will regress.

Fluorescence *in situ* hybridization (FISH) is a molecular cytogenetics technique that permits visualization and mapping of specific genes or loci on metaphase chromosomes or interphase nuclei. FHACT™ is a Probe designed to determine copy number changes of the 3q26 (*TERC*, 5p15 (*D5S2095*), 20q13 (*D20S911*), and Cen7 regions by FISH.

In normal diploid interphase and metaphase cells, FHACT™ generates two red, two green, two blue and two gold signals corresponding to the normal chromosomes 3, 5, 7 and 20 respectively.

In cells with gain or amplification of 3q26, 5p15, 20q13 and/or chromosome 7, the number of red, green, gold and/or blue signals will be greater than 2 each.



Filter Requirements for Fluorescence Microscopy

Fluorophore	Excitation _{max}	Emission _{max}
DAPI	360 nm	460 nm
Aqua	431 nm	480 nm
Green	496 nm	551 nm
Gold	525 nm	551 nm
Red	580 nm	603 nm

About HPV-Associated Cancers

Several screening programs for cervical cancer have been successfully implemented in the clinical community, and are comprised of tests based on the appearance of abnormal cells in cytological specimens, and more recently, based on HPV type. There remains, however, a great need for additional biomarkers that will increase the sensitivity with which precancerous and cancerous lesions are detected. Furthermore, there is a lack of testing available for the identification of atypical or moderately abnormal squamous cell lesions that will progress to higher grades.

FHACT™ can be used on leftover thin prep specimen (no re-sampling) and conventional Pap smears.

FHACT™ is protected by the following patents:
Methods for Detecting Human Papilloma Virus-Associated Cancers. US, 13/474,111 (Sept. 6, 2012) and PCT/US2011/050681 (March 15, 2012)

FHACT™ is a trademark of Cancer Genetics, Inc.

*For Research Use Only
Not for use in diagnostic procedures*



Introduction to FHACT™

Several screening programs for cervical cancer have been successfully implemented in the clinical community, and are comprised of tests based on the appearance of abnormal cells in cytological specimens, and more recently, based on HPV type. There remains, however, a great need for additional biomarkers that will increase the sensitivity with which precancerous and cancerous lesions are detected. Furthermore, there is a lack of testing available for the identification of atypical or moderately abnormal squamous cell lesions that will progress to higher grades.

The FISH-based HPV-Associated Cancer Test (FHACT™) is a new, proprietary four-color FISH test designed and validated by Cancer Genetics, Inc. FHACT™ detects copy number changes of chromosomal regions 3q, 5p, 20q, and chromosome 7 in a single hybridization. These regions have been reported to be gained and/or amplified in precancerous and cancerous cervical cells.

FHACT™ FISH Probe currently available as RUO (CGI Italia), and the FHACT™ test will be available at CGI in the summer of 2013.

For more information, please contact us at contact@cancergeneticsitalia.com.