NT/14337

Laboratoř Metalomiky a Nanotechnologií

Vás zve na seminář:

Prevalence of Papillomaviruses, Polyomaviruses, and Herpesviruses in Triple-Negative and Inflammatory Breast Tumors

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Abstrakt

Background: The possible role of viruses in breast cancer etiology remains an

unresolved question. We hypothesized that if some

viruses are involved, it may be

in a subgroup of breast cancers only. Epidemiological arguments drove our interest

in breast cancer subgroups that are more frequent in Africa, namely inflammatory

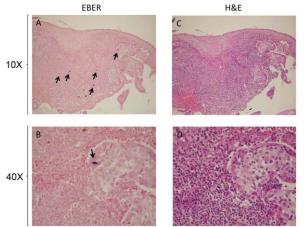
breast cancer (IBC) and triple-negative breast cancer. We tested whether viral

prevalence was significantly higher in these subgroups.

Materials and Methods: One hundred fifty-five paraffin-embedded malignant

breast tumors were randomly selected at the pathology laboratory of the University

Hospital of Annaba (Algeria) to include one third of IBC and two thirds of non-IBC.



They were tested for the presence of DNA from 61 viral agents (46 human papillomaviruses, 10 polyomaviruses, and 5 herpesviruses) using type-specific multiplex genotyping assays, which combine multiplex PCR and bead-based Luminex technology. Results: Viral DNA was found in 22 (17.9%) of 123 tumors. The most prevalent viruses were EBV1 and HPV16. IBC tumors carried significantly more viruses (any type) than non-IBC tumors (30% vs. 13%, p,0.04). Similarly, triple-negative tumors displayed higher virus-positivity than non-triple-negative tumors (44% vs. 14%, p,0.009).

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