**Hereditary Cancer syndromes, genetic counseling and testing: the experience in Cyprus.**

Hereditary Cancer syndromes include various rare conditions of associated cancers caused by germline mutations. The most well-known being Hereditary Breast and Ovarian Cancer syndrome, several other cancer associations meet the criteria for making a diagnosis such as Lynch syndrome, Cowden disease, Li-Fraumeni syndrome and others. Furthermore genetic disorders such as Neurofibromatosis type I (von Recklinghausen disease), Noonan syndrome and other Rasopathies, raise the risk for early onset cancers in various organs and tissues. Symptoms and signs beyond cancer, such as macrocephaly, dysmorphic features and autism, can also be indicative of a diagnosis in the group of hereditary cancer syndromes.

Genetic testing is vital for better management of patients and relatives at risk of hereditary cancer syndromes. Genetic counseling is a communication process aiming to discuss with patients all relevant information and implications of testing for them and for other family members. It is absolutely mandatory in order to assist patients to take their own personal informed decisions before testing.

In this presentation we will present data on hereditary cancer syndromes in Cyprus. We will also illustrate our experience in genetic counseling and testing patients at risk of hereditary cancer syndromes, who have been referred to the Genetics Clinic by their oncologists and other treating physicians.