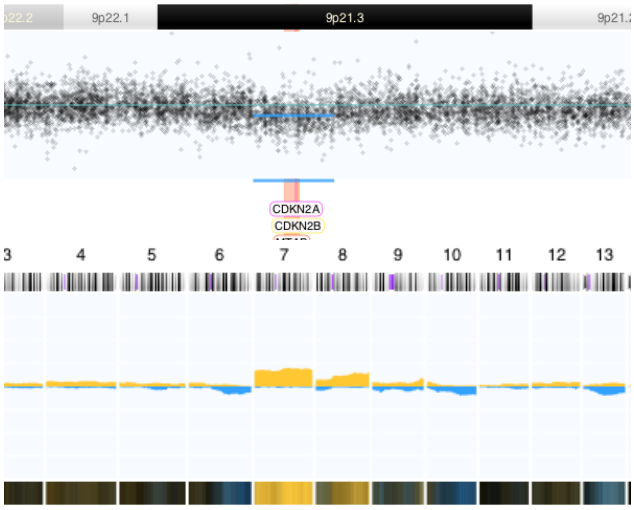
PROGRAMUL DE COOPERARE ELVEȚIANO-ROMÂN
SWISS-ROMANIAN COOPERATION PROGRAMME

From chronic inflammatory dermatoses to cutaneous lymphoma: Molecular cytogenetic and gene expression profiling

Starting Date 01.01.2013

Duration 36 Months

Discipline Dermatopathology
Cancer Genomics



Genomic copy number aberrations in 391 cutaneous lymphomas

Main Goals Cutaneous lymphomas (CL) represent a hetero-geneous group of rare and frequently fatal skin diseases. As additional challenge, when judging only by histomorphology CL can resemble inflammatory dermatoses (IDs), which has a high relevance for the clinical treatment and prognosis of the individual patient. Through the molecular and computational analysis of samples from rare CL and borderline ID samples, this project is aimed at identifying biomarkers for correct diagnostic identification and clinical stratification in these diseases, and to define molecular targets for tailored therapeutic approaches in the area of personalized medicine.

Activities Main ongoing activities of the project are in the areas of biobank creation, genomic analysis of patient samples and bioinformatics method development. Already, about 100 samples from the biobank have been submitted to molecular-cytogenetic studies (e.g.genomic array analyses) and are being analysed for genomic events. Through the project's website at *cnhl.progenetix.org*, researchers have access to several hundred published genomic profiles of CL; this also serves as the portal for accessing internal project data.

Expected results

- Romanian national biobank for patient derived tissue samples
- novel computational methods for cancer genome data analysis
- comprehensive meta-analysis of available genomic profiling data for CL and possibly ID
- description of targets of genetic changes in CL and related disorders
- molecular classifiers based on integration of own experimental and curated data
- diagnostic guidelines for stratification of CL subtypes and differentiation from ID, with implications for personalised treatment decision making

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