BCOR alterations and the activation of *CXCL12* oncogenic pathway in classical Hodgkin lymphoma

POPULAR ABSTRACT

In our previous analyses we have found an interesting relationship between inactivating mutations of the *BCOR* gene and activation of the *CXCL12* gene. *CXCL12* encodes a protein potentially contributing to the development of classical Hodgkin lymphoma. Therefore, we think that we identified a new molecular mechanism that results in the expression of the oncogenic CXCL12 protein in this lymphoma.

The aim of our project is the validation of this hypothesis by generating neoplastic cell lines harboring alterations of the *BCOR* gene. We will use advanced genome editing techniques and analyze the activity of the *CXCL12* gene in the normal and edited cell lines. Moreover, we will use a set of functional analyses such as viability or migration assays to better understand the role of *BCOR* alterations and *CXCL12* activation in the biology of classical Hodgkin lymphoma.

In result of this project we expect to fully understand the mechanism of *CXCL12* activation and its consequences in classical Hodgkin lymphoma. This newly gained knowledge might contribute to the development of better therapeutic approaches in the future.