# Genetic Profile and Functional Proteomics of Anal Squamous Cell Carcinoma: Proposal for a Molecular Classification

## **Authors**

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#### In Brief

Anal squamous cell carcinoma is a rare tumor and the treatment standards have not suffered any improvement since 1970s. For this reason, a molecular characterization of the disease is still necessary. In this work, two molecular groups with a different protein and genetic profile were described. Additionally, some of these differences suggested biological processes that may be therapeutic targets.

### **Graphical Abstract**

MS-based proteomics

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MS-based proteomics

Systems Biology analyses

# **Highlights**

- Two molecular groups in anal squamous carcinoma according proteomic profile.
- Differences in possible targeted processes such as metabolism or immune response.
- Different percentage of tumor lymphocyte infiltration.
- Difference in the frequency of *ATM* variants, related to PPAR inhibitors.