

Prognostic and predictive Biomarker for Melanoma

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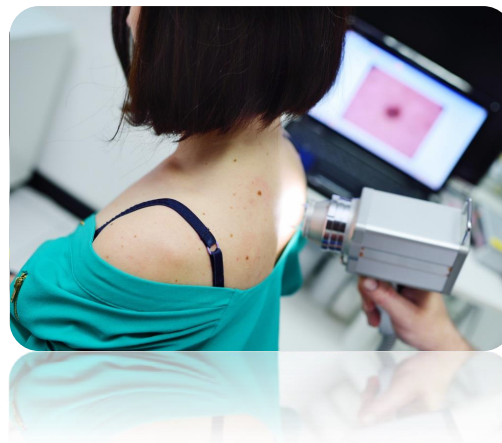
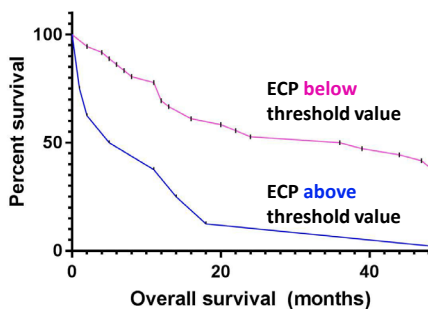
CHALLENGE

Malignant melanoma is a highly dangerous form of skin cancer. Metastases can develop early, and the disease is often fatal. Globally, there are about 350'000 newly diagnosed cases of melanoma per year, with growing incidence. Especially for advanced stages of melanoma, life expectancy is often dramatically short.

The protein lactate dehydrogenase (LDH) is routinely used as prognostic biomarker. However, LDH is a rather unspecific marker, its expression being influenced by a multitude of factors. Thus, better prognostic tools like **new biomarkers to estimate life expectancy and predict response to melanoma therapy would be of immense clinical use.**

INNOVATION

The innovation describes eosinophil cationic protein (ECP) as a novel prognostic and predictive biomarker for patients with malignant melanoma. Patient serum is used to determine the **concentration of ECP, which correlates directly with the life expectancy of the patient** (see figure below). This information enables medical personnel to make important decisions, like choosing more aggressive therapy or milder therapy options, on a rational basis. In addition, ECP can be used to **estimate the success of specific immunotherapies for individual melanoma patients.**



COMMERCIAL OPPORTUNITIES

The innovative biomarker can be used to implement a test system to estimate melanoma patient life expectancy and the success of planned therapy options. Thus, potential applications for the melanoma biomarker are:

- Clinical tests for melanoma patients
- Point-of-care tests

DEVELOPMENT STATUS

Proof of concept. Two independent patient cohorts were tested.