

# Anatomic Pathology. Uveal Melanoma.

## What is this work about?

One of the goals of this study was to assess how the immunohistochemical expression of the markers that are part of the signaling act as independent **predictors of the risk of metastasis or variables of global survival.**

## Our collaborator

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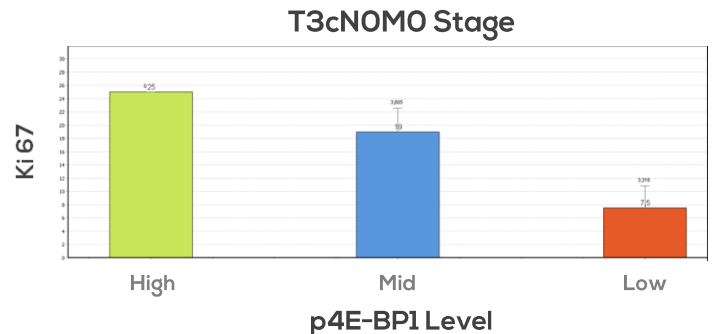


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## What problem did we face?

We combined up to 48 factors related to demographics, prognosis, biomarkers and clinical follow-up from 101 patients and provided that information to an external biostatistician.



Given the exhaustive exploratory approach of this study, we were forced to **invest a significant amount of time and money** in technical meetings with the biostatistician in order to discuss each step forward in the discovery process.

## Which was the contribution of **AutoDiscovery** ?

One of the most interesting relationship identified with AutoDiscovery was that patients at stage T3cNOMO and high levels of expression of p4E-BP1 show a higher index of Ki67 than those with low/mid levels of expression. This relationship supports the idea that **mTOR signalling way has a relevant role in the tumoral growth.**

In this work we combined classical statistical tools (hypothesis testing) with the automated exploratory analysis of AutoDiscovery. The key features applied to this work were:

- 👍 The **depth of analysis**, which allowed us to identify relevant relationships which were potentially associated to particular subsets of our patients (patients at different stages, samples with different levels of regulation of protein synthesis, etc.).
- 👍 The **Hypo Booster tool** to easily focus on the most relevant factors potentially involved to be tested in a further confirmatory study, and thus minimizing the number of meetings with the biostatistician.
- 👍 The **traceability of the results** provided by AutoDiscovery, which enabled an effective integration with classical statistical tools (such as SPSS).

SS-5



Success Case Sheet