

Research goal

Development of a In vitro method for detecting tumor growth and diagnosing or prognosticating the risk of metastasis in a human subject that has been diagnosed with uveal melanoma.

Problem to solve

Uveal ocular melanoma is the most common primary ocular malignancy in adults, with an incidence of approximately 7 cases per million inhabitants per year. Its incidence is therefore not very high, but it is a disease for which there are no alternatives for more than 50 years. In addition, the American Cancer Society has published an increase in the incidence, having been diagnosed in the United States only 2,730 new cases in 2014. By the year 2018 there are anticipated 3540 new cases in the USA.

According to www.cancer.gov, the database of the National Cancer Institute of the USA, the age-adjusted average incidence of uveal melanoma in the United States is about 4.3 new cases per million inhabitants, without a clear variation related to latitude. Men have a higher incidence than women (4.9 vs. 3.7 per million). The age-adjusted incidence of this cancer remained stable since at least the first years of the 1970s. Incidence rates in the United States are low compared to other countries that report them, ranging from 5.3 to 10, 9 cases per million. Part of the variation may be the result of differences in the inclusion criteria and calculation methods.

Innovation

The present invention provides an in vitro method for detecting tumor growth and diagnosing or prognosticating the risk of metastasis in a human subject that has been diagnosed with uveal melanoma.

This method incorporates new techniques that differentiate it from the potential competitors in several aspects. Our method is non-invasive (does not require a tumor biopsy), it does not require specific training, sampling is included in the hospital routine (blood extraction). It allows to be used after the application of the treatment, optimizing the monitoring. It would allow to monitor the tumor advance, the early development of metastasis and the monitoring of the effect of the treatment. And it is a low cost method.

Market opportunity

The global melanoma drug market was valued at approximately USD2 billion in 2016, with an expected growth of USD 4710 million for 2022. The CAGR annual growth rate would be around 15.0% between 2016 and 2022.

Research team

Obesidomics and Intraocular tumors in the adult Research Groups of the Health Research Institute of Santiago de Compostela:

- María José Blanco Teijeiro: PhD in medicine and surgery

- María Pardo Pérez: Doctor in Biology.
- Antonio Piñeiro Ces: PhD in medicine and surgery

Intellectual property

Patent Application.

Development stage:



Available for: Licensing, co-development