



Press release

\$200,000 grant for lung cancer research at Hospital del Mar

- ***The team led by Dr. Edurne Arriola and Dr. Beatriz Bellosillo will receive a grant from Thermo Fisher Scientific for their research on the application of liquid biopsy in patients with metastatic small cell lung cancer.***
- ***The aim is to determine new treatment and prognostic biomarkers in patients with this type of tumour. They will also look for possible new therapeutic targets.***
- ***This innovative project is one of four selected from around the world to be promoted within the Oncomine Clinical Research Grant programme, and it will look at data from 300 patients with this pathology***

Barcelona, 6 August, 2021. - A Hospital del Mar project to determine **new** prognostic and predictive **markers** that could be beneficial in **metastatic small cell lung cancer** treatment, using **genetic analysis** techniques, has been awarded **\$200,000** from the [Oncomine Clinical Research Grant](#) programme, promoted by the US-based multinational biotech company [Thermo Fisher Scientific](#), which supports research that enables advances in the field of molecular patient profiling, with the aim of improving clinical outcomes. The research was led by Dr. Edurne Arriola, head of the lung cancer section in the Medical Oncology Service and a researcher at the Hospital del Mar Medical Research Institute (IMIM), and Dr. Beatriz Bellosillo, head of the Medical Oncology Service and also an IMIM researcher.

To undertake the project, they will analyse samples from 300 patients with this pathology, collected over the last 10 years. The research will focus on evaluating the potential of the liquid biopsy technique, which can detect DNA from tumour cells in the blood, to monitor the disease and its evolution, as well as detecting potential biomarkers of treatment benefit and predictors of long-term prognosis. In addition to the study of structural gene alterations (mutations, amplifications, deletions), the team will evaluate the methylation status of the genes, in other words, the modification of their structure without the basic sequence being altered by external factors, in order to gain a deeper understanding of small cell lung cancer biology. ***"This is an innovative study in which we will analyse new therapeutic strategies based on the study of genetic alterations and gene methylation in tumour cells in metastatic small cell lung cancer"***, says Dr. Arriola.

In this sense, as Dr. Bellosillo explains, ***"We will use the equipment in the Molecular Biology Laboratory to identify mutational profiles in both liquid biopsies and tissue, and then correlate this with clinical response. Most of these patients have undergone very similar treatments, so our intention is to identify biomarkers of response or potential targets for new treatments."*** To date, other avenues related to the genetic analysis of these patients have been explored without success.

One of the tumours with the lowest survival rates

Fifteen percent of lung cancer patients have metastatic small cell cancer. In these cases, the five-year survival rate is very low, less than 5%. ***"That is why it is so important to look for new approaches to the disease"***, says Dr. Arriola. At the moment, treatments include chemotherapy and immunotherapy, although this approach can only be offered, for the moment, in Spain, in the framework of clinical trials. In this respect, ***"We have a cohort of patients being treated with immunotherapy"***, says the lung cancer specialist, ***"in which we will be able to see if these genomic and methylation profiles that we are looking for in the study can guide us towards the most appropriate treatment for each patient, allow us to personalise it and fine-tune the prognostic factors."***

Personalised care and cutting-edge cancer research at Hospital del Mar



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Personalised care for cancer patients at Hospital del Mar is provided through pioneering and cutting-edge work in multidisciplinary functional units specific to each type of tumour. The units, comprising professionals specialising in each cancer type, offer the best therapeutic options in a model of shared decision-making with the patient. Nurse managers guide patients through the diagnostic and therapeutic process. This quality care is combined with ground-breaking cancer research at the Hospital del Mar Medical Research Institute (IMIM) and an extensive programme of clinical trials. The research areas focus on furthering immunotherapy and liquid biopsy, searching for biomarkers and new therapeutic targets, and developing new surgery and radiotherapy strategies to improve efficacy and the quality of life of patients. This research generates almost 200 articles in scientific publications each year, two out of three of which are in high-impact journals. This state-of-the-art care and research are the basis for teaching excellence at the Hospital del Mar Campus.

Further information

Hospital del Mar Communications Department. Tel. 932483537.
dcollantes@hospitaldelmar.cat / comunicacio@hospitaldelmar.cat