**PROJECT CO-FUNDED BY EUROPEAN REGIONAL DEVELOPMENT FUNDS (ERDF)**

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**Title**: ‘Identification of biomarkers associated with the epithelial remodelling in allergic asthma’ (Identificación de biomarcadores asociados con el proceso de remodelado epitelial en asma alérgico).

**Financing Entity:** Spanish Ministry of Economy, Industry and Competitivity (Ministerio de Industria, Economía y Competitividad), Carlos III Health Institute (Instituto de Salud Carlos III).

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**Summary:**

Allergic diseases have been steadily increasing in our society, with a serious impact on the quality of life of patients and a high economic cost for society. This is the case of mite sensitisation, which in recent years has been increasing and now affects 15-20% of the population in industrialised countries. Mite sensitisation affects approximately 85% of asthma patients, in some cases leading to severe asthma processes that do not respond to standard treatment with corticosteroids or anti-IgE. The hypothesis of this project is that airway epithelial remodelling is an essential process to be considered in the design of new therapies for mite-sensitised patients who develop asthma. We postulate that the degree of airway remodelling would be related to GST levels, and that furthermore, this process of damage to the lung epithelium would be able to modify the inflammatory response mediated by macrophages, affecting the evolution of the disease. This project aims to identify new markers associated with airway remodelling that may be useful for assessing the progression of this pathology and for designing new therapies.