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Heart diseases



## **MICRO-RNA AS A NEW MARKER OF CARDIOVASCULAR FIBROSIS AND ECHOCARDIOGRAPHIC PROGRESSION IN PATIENTS WITH DEGENERATIVE AORTIC STENOSIS**

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*Transcript of the video recorded by Dr Begoña Benito Villabriga, summarising the results of her investigation that it has proved possible to apply in clinical practice*

This project was centred on aortic stenosis, a disease caused by progressive obstruction of the aortic valve of the heart, which, if left untreated, leads to heart failure. As things stand now, the only available treatment for this disease is the replacement of the aortic valve. Among patients with aortic stenosis there is a subgroup that has a particularly fast evolution of the disease. It is of the greatest interest to identify which are the patients who evolve fastest in order to offer them closer monitoring and earlier valve replacement treatment. The purpose of our project was to try to identify biomarkers, which are molecules that circulate in blood, that would allow us to identify patients whose aortic stenosis evolves faster. We were able to conclude that two biomarkers, increased levels of PCSK9 and decreased levels of micro-RNA 590, are related to a faster progression of this disease. This is very important because it allows us to identify the fast progressors of the disease while pointing us towards the physiopathological pathways involved in the progression of aortic stenosis and that could help us to develop therapies for the future.