

Title: HFA 23: APOLLO-B: Patisiran Treatment for Cardiac Amyloidosis
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Prof Marianna Fontana

" My name is Marianna Fontana. I am a professor of cardiology at the National Medicine Center in London and professor at the University College London.

What is the importance of this study?

Today we reported the interim analysis at 18 months of the phase three Apollo B study, a study assessing the patisiran against placebo over twelve months of double-blind period and that showed benefit in patients with ATTR cardiomyopathy. So here we assessed the 18 months analysis during the open level extension, and we reported changes from baseline to 18 months in the six-minute walking test, KCCQ overall score, NT-proBNP and troponin levels.

What is the mechanism of action of the study drug (patisiran)?

So patisiran is a small interference RNA, and what it does, it leads to degradation of the mRNA with reduction in production of the protein. And so, it interferes with a crucial step in the main mechanism that is responsible at the clinical phenotype and the prognosis in patients with ATTR amyloidosis, which is the production of transthyretin and then the deposition as amyloid.

What was study design, outcome measures and patient population?

So, APOLLO-B is a phase three randomized placebo-controlled trial in 360 patients with ATTR cardiomyopathy with one type of variant disease with cardiomyopathy and heart failure symptoms. So, patients, after having completed the twelve months of double-blind period where they were randomized to patisiran or placebo, entered the open-level extension. And here we report the analysis after all patients have completed the 18 months visit.

What are the findings to date? What conclusions can be made?

So, the findings to date are that treatment with patisiran compared to placebo, the beneficial effects were confirmed during this analysis. So, we confirmed the results that were already seen at the end of the double-blind period, but this is an extension with the open level extension at 18 months. So, we confirmed the findings, but also we have seen that in patients who have initially randomized to placebo did not fully recover what they lost in terms of functional capacity and quality of life, highlighting how important it is to initiate the treatment early in this population. So basically, it confirmed the benefit of patisiran, the safety profile, but also confirmed the importance of early treatment initiation.

Are there any specific patient subgroups with cardiomyopathy for whom patisiran may be effective?

So, in this specific trial, we didn't do any subgroup analysis in this sense, but as a clinician working with these patients every day, I would prescribe this drug across all patients with ATTR cardiomyopathy and symptomatic heart failure.

What are the next steps?

So, the next step is to follow up these patients for the 36 months of the open-label extension period and to follow up all these different endpoints. So, starting from the 6-minute walking test, KCCQ overall score, NT-proBNP troponin, but also mortality and hospitalization to 36 months, and see the overall trend.”