

Prof. Mariell Jessup: new drugs for heart failure may be the first break-through in a long time

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Prof. Mariell Jessup, the past president [2013-2014] of American Heart Association and medical director of the Penn Heart and Vascular Center in Philadelphia, is a nationally recognized expert in heart failure. At 2014 China Heart Congress, she gave an excellent report on “Heart Failure: State of the ART and Challenge” and presentation on “The Progress and the Puzzle of HFpEF”. After the congress, ATM is of great honor to interview Dr. Jessup (Figure 1).

ATM: *You mentioned some new drugs for heart failure at the congress, so could you give us some example? What about the significance of these drugs?*

Prof. Jessup: A potential drug that will be discussed further at the European Society of Cardiology is a drug called LCZ936 and it is an exciting drug that is both an inhibitor of angiotensin and neprilysin. We are looking forward to hearing the results of the trial, PARADIGM-HF where the new drug is compared to enalapril in patients who are otherwise on optimal medical therapy. There is a great deal of excitement that this drug may be the first break-through in a long time.

ATM: *Have these drugs been applied clinically now?*

Prof. Jessup: The PARADIGM-HF trial is a big trial that will be presented at the European Society of Cardiology; over 8,000 patients were enrolled, including many patients from China. So we are excited to hear about it and it may be a new break-through.

ATM: *That how to control the heart failure is also included in your speech, so could you give a summary?*

Prof. Jessup: What we have known for many years is that if we could adequately control blood pressure we can prevent a lot of heart failure. Thus, since about 60% of all heart failure is associated with hypertension, if we could adequately control hypertension we could probably reduce



Figure 1 Interview with Professor Jessup.

the amount of heart failure by 50%, which is very high. As an alternative to spending a lot of money taking care of patients once they have heart failure, we could control hypertension which is less expensive, and we would have less heart failure.

ATM: *How do you think have the technologies and devices on heart failure developed these years?*

Prof. Jessup: I think two new devices that we use in patients with heart failure with reduced ejection fraction, or HFrEF are worth noting. CRT or cardiac resynchronization therapy not only saves lives but makes people feel better and has the potential for making the heart better as well, although not everybody is a good candidate for CRT. One aspect of CRT is interesting since it appears that women respond better to CRT than men.

ATM: *How long can an artificial heart stay in our body?*

Prof. Jessup: It is said that the mechanical circulatory support devices can stay in patients for any number of years. The newer devices don't have many mechanical problems.

Primarily, the challenges are avoiding infection, and avoiding bleeding or thrombosis.

ATM: One year ago, a French research group had a trial to make a total artificial heart, but they failed at last. What do you think about this research?

Prof. Jessup: There is a total artificial heart that we use but right now we are only using that for patients waiting for transplant. We are not using it as a definitive therapy.

ATM: What's your expectation on the stem cell transplantation?

Prof. Jessup: We always dream that stem cells are going to work, but there is still much to learn in order to apply our understanding in a widespread way. I would not be surprised in 10 or 15 years that we may be using stem cells in many different clinical scenarios. But right now I think there are more questions than there are answers. There are a lot of

challengers and many opportunities.

ATM: Finally, could you talk about your impression on the congress?

Prof. Jessup: I appreciate the eagerness of everyone who is here, ready to learn more and to develop many technologies and medicine for China. I think it will be the key to understand how Chinese patients are the same and how they may be different to patients with heart failure in the rest of the world. And, I see so much enthusiasm and diligence on the part of the attendees.

ATM: Thank you so much for your informative talk!

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