**Title: TCT 24: INFINITY-SWEDEHEART: DynamX Bioadaptor in Patients with Complex Lesions**

**Participants: Dr David Erlinge**

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**Dr David Erlinge**

**What's the reasoning behind this trial?**

I'm presenting the INFINITY-SWEDEHEART trial, and it tries to address a problem that we have with today's drug-eluting stents and that is that they destroy the physiology of the coronary arteries by caging the vessels, and that results in event rates up to 10 years. It could be 45% event rates actually.

So, the DynamX Bioadapter opens up after six months. It has links all through its design, and it opens up and restores pulsatility, vasomotion and positive remodeling. And our thought is that this should reduce the event rates or complications of drug-eluting stents.

**What was the study design and the patient population?**

So, we enrolled 2,400 patients. 77% were ACS patients and 23% were chronic coronary. So, rather complex patient population. We randomized them one to one to DynamX or Onyx and then we followed them for one year. We will follow them longer, but today I'm presenting the one-year data.

**What were your key findings?**

First, we show non-inferiority to Onyx and that is of course very important with the new device on the market and so on, but the really interesting thing is what happens beyond six months.

So, the first six months we knew that nothing should be different from a regular drug-eluting stent, but beyond that, we did a landmark analysis from 6 to 12 months. And here is where the really interesting things happen. Then we suddenly see superiority for the DynamX bioadapter compared to a regular Onyx stent, and especially here at TCT, we present very special subgroups that are known to have a high restenosis rate and high complication rates.

That's for the LAD, for small vessels, for long lesions, and for the ACS population. And in all those four groups, we see superiority of the DynamX Bioadapter compared to a regular drug-eluting stent today from 6 to 12 months.

**What are the take-home messages for practice?**

What we think this means in the long term is that we reduce the long-term risk or complications to stenting or using a bioadapter. And that means that patients will not suffer from long-term complication risks by having a stent placed in their coronaries. If they get a bioadapter, hopefully, we see a plateauing of events and nearly no long-term risks.

**What further study is needed?**

Yeah, what is mostly needed is long-term data. That's what everyone asks for, and that's the solution we would try to give. So we will report 2, 3, 4, 5-year data as the data comes along.

But there are a lot of subgroups you can think about that could be interesting to look at. You could look at bifurcations, you could look at CTOs, you could look at calcified lesions, you could look at… there are many, long LAD lesions and so on. And some of that data we will have in our study already, but in the future, you could also do other new studies on selected patient populations and groups.