**Title: CRT 24: 5Y Follow-Up of Absorb Bioresorbable Vascular Scaffold**

**Participants: Dr David Power**

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**Dr David Power**

"Hi. My name is Dr. David Power. I'm an interventional cardiology fellow at Mount Sinai Hospital in New York City.

**What is the importance of this study?**

Our study focused on five previously published randomized controlled trials from the ABSORB clinical trial program, which investigated bioresorbable vascular scaffolds (BVS). Originally, these scaffolds were designed to improve outcomes compared to metallic stents by facilitating complete resorption, restoring physiological function, and preserving coronary bypass targets.

**Could you tell us a bit more about the study device?**

The ABSORB BVS, manufactured by Abbott Vascular, is a polylactic acid-based scaffold eluting everolimus, with a thicker strut platform compared to contemporary stents.

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

Our study was an individual patient data pooled analysis from five ABSORB trials, including ABSORB 2, ABSORB Japan and China, ABSORB 3, and ABSORB 4. These trials, conducted in North America, Europe, and Asia, enrolled nearly 6000 patients from 333 centers, with comprehensive follow-up data up to five years. The patient population was predominantly male, in their early 60s, with a mix of chronic and acute coronary syndromes and comorbidities such as diabetes and prior PCI.

**What are your key findings?**

The key finding of our study was that the upfront risk associated with bioresorbable stents ends at three years. While these scaffolds initially showed higher rates of target lesion failure (TLF) compared to stents, between three and five years, there was no significant difference in outcomes between BVS and Xience everolimus-eluting stents. This shift in outcomes may be attributed to improvements in scaffold design, implantation techniques, and patient selection over time.

**What further study is still needed?**

Moving forward, optimizing scaffold design to reduce strut thickness and employing intravascular imaging for precise sizing and deployment could enhance both short-term and long-term outcomes. Additionally, considering longer dual antiplatelet therapy durations aligned with the scaffold resorption time and utilizing intravascular imaging for accurate sizing before deployment may further improve outcomes during the critical first three years post-implantation.”