Reliability of Cardiovascular Stents

Abstract:

Cardiovascular stents have demonstrated significant therapeutic benefit in maintaining vessel patency for the treatment of a wide variety of vascular disorders, including atherosclerosis, aneurysms, and heart valve dysfunction. Designs have evolved over the years with enhanced performance, owing to better understanding of use conditions and population variance. However, risk of failure still exists, with the potential for significant adverse events and poor outcomes. Considering the functionality of a stent as a vessel support structure, application of structural design principles is critical to ensure reliability. This talk will cover requirements for stent design and methodologies utilized to evaluate product performance and reliability.