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Effects of fatigue on the chemical and mechanical degradation of model stent sub-units

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ABSTRACT

Understanding the fatigue and durability performance of implantable cardiovascular stents is critical for assessing their performance. When the stent is manufactured from an absorbable material, however, this durability assessment is complicated by the transient nature of the device. Widespread methodologies for evaluating the fatigue performance of absorbable stents while accurately simulating the degradation are limited. In this study, we investigated the fatigue behavior and effect of fatigue on degradation rate for a model absorbable cardiovascular stent.

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