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Title: Determining the effectiveness of the QDOT MICRO™ catheter for radiofrequency ablation in paroxysmal atrial fibrillation

### **What is this article about?**

Paroxysmal atrial fibrillation (PAF) is a condition associated with irregular beating of the heart. One safe and effective treatment for patients with PAF is radiofrequency ablation, a minimally invasive procedure performed with the help of a catheter, where small burns are made on the heart tissue to help break the electrical signals that are causing irregular heartbeats.

QDOT MICRO™ (QDOT) is a next generation catheter designed for faster cardiac ablation. But while preliminary studies point to its benefits in reducing PAF recurrence in patients, its effectiveness vis-à-vis other available catheters for this procedure has not been studied.

In this work, we compared the effectiveness of QDOT with that of two existing latest generation catheters: THERMOCOOL® SMARTTOUCH™ (ST) and THERMOCOOL SMARTTOUCH® Surround Flow (STSF). We used patient data from FDA trials involving adult patients with PAF who were followed up for 12 months after their ablation procedure.

### **What were the results?**

Compared with ST and STSF, total procedure duration and imaging time during the procedure were significantly reduced for QDOT. Twelve months after the procedure, patients who received catheter ablation via QDOT showed lower recurrence of PAF and similar clinical success as ST and STSF.

### **What do the results mean?**

Ablation with the QDOT can improve the standard of care for patients with PAF.

## Keywords/meta tag:

Atrial fibrillation, cardiac arrhythmia, catheter ablation, healthcare, clinical success, efficiency, safety

**Title of the original paper/book:** QDOT MICRO™ versus THERMOCOOL® SMARTTOUCH™ and THERMOCOOL SMARTTOUCH® Surround Flow in radiofrequency ablation of paroxysmal atrial fibrillation

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