Stryker’s CrossFire II Console Exhibits Highest Mass Ablation Rate

Top-Level Summary:
The ablative performance of the Stryker CrossFire II with SERFAS 90-S Accelerator RF ablation probe was compared to two competitive RF energy systems for arthroscopic knee surgery. The CrossFire II console was found to have the highest ablation rate.¹

Methods:
The ablative performance of three RF energy generators and their respective RF ablation probes was compared:

- Stryker CrossFire II console – SERFAS 90-S Accelerator RF ablation probe
- DePuy Mitek VAPR VUE console – Premier 90 RF ablation probe
- ArthroCare Quantum 2 console – Super Turbovac 90 RF ablation probe

Each generator was set to maximum power (400 watts) and the respective RF ablation probe was tested in an in-vitro study. The mass of the tissue before and after ablation and the ablation time was recorded from ten trials per system.¹ A single factor Analysis of Variance was used to compare mean rate of tissue ablation among the three systems tested. Statistical significance was assumed at p ≤ 0.05.

Results:
The CrossFire II console produced a significantly higher mass ablation rate than both competitive systems, averaging 13% faster than the Mitek VAPR VUE console and 44% faster than the ArthroCare Quantum 2 console.¹ Additionally, the ablation rate for the VAPR VUE console was significantly higher than the Quantum 2 console.¹

Clinical Relevance:
The significantly higher rate of ablation with use of the Stryker CrossFire II console means that tissue resection can be done faster, which may help shorten surgical time.
References:
1. Stryker DHFD11973 March 24, 2014