

Innovation Brief

Medical Technology Innovation Dynamic Purchasing System - The Centauri system supplied by Cardiofocus Inc.

Summary

Disruptive innovation

This briefing introduces a disruptive innovation newly available via NHS Supply Chain: The Centauri system. Reviewed by clinical specialists and supported by key stakeholders, this device offers a novel approach to managing cardiac arrhythmias by using Pulsed Field Ablation (PFA) to create ablation lesions. The CardioFocus Centauri™ System integrates easily into existing focal catheter workflows to achieve, transmural lesions. Its open-platform design supports multiple commercial contact-force catheters, offering flexibility, consistent energy delivery.

Introduction

This document is intended to inform clinical stakeholders and procurement teams about innovative products that have undergone a clinical review and are now accessible through NHS Supply Chain.

Products featured in this brief may be classified as:

- Disruptive innovations
 - A disruptive innovation is novel.
 - It should offer improvements compared to the existing provision of care.
 - The proposed format should not exist elsewhere (either within or beyond the health and care sector).

Note: While robust evidence or validated savings may not yet be available, early data and clinical insights support the potential for patient and system-level improvements.

Departments / stakeholders for engagement

- NHS Procurement teams
- Cardiac electrophysiology centres / units
- Consultant electrophysiologists and cardiologists
- Consultant electrophysiologists and cardiac surgeons performing hybrid cardiac ablation

Opportunity

The Centauri Focal PFA System presents an opportunity to enhance cardiac ablation care and facilitate ease of adoption and use of focal pulse field ablation therapy. Integrating easily in to existing 3-D mapping and focal ablation procedures integrating in to existing clinical / capital infrastructure by:

- Integrates and compliments existing 3-D Cardiac Anatomical Mapping Systems and ablation catheters, without the need to purchase additional capital equipment or add new, complex and expensive ablation catheters to the supply chain.
- The ability for this PFA platform to use existing mapping systems and cardiac ablation catheters means that the physician's learning curve is minimal, with the focus being on the patient and the procedure vs new technology adoption / learning curve and understanding.

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- The Centauri System uses a custom monopolar PFA energy construct intended to achieve consistent, transmural lesions in combination with contact force (measured via existing contact force cardiac ablation catheters visualised via establish 3-D Cardiac Mapping Systems), while minimizing microbubble formation and skeletal muscle stimulation.
- Centauri offers three selectable monopolar focal PFA dose levels (19, 22, and 25 A), at up to 3.5kV in amplitude, with impedance-balanced energy delivery and a current-control algorithm to support predictable energy output & lesion size across all patients.

Product overview

The CardioFocus Centauri™ PFA System is an open-platform pulsed field ablation system designed to integrate seamlessly into standard focal contact-force catheter workflows. It leverages a custom monopolar PFA energy construct intended to achieve consistent, transmural lesions while minimizing microbubble formation and skeletal muscle stimulation. Centauri offers three selectable monopolar PFA dose levels (19, 22, and 25 A), at up to 3.5kV in amplitude, with impedance-balanced energy delivery and a current-control algorithm to support predictable energy output across patients. The system is compatible with commercially available contact-force catheters, including TactiCath Sensor Enabled™, THERMOCOOL SMARTTOUCH™, and INTELLANAV STABLEPOINT™.



Clinical relevance

- Enables deep, durable ablation lesions through monopolar PFA energy, optimised to minimise microbubbles and muscle stimulation for improved procedural safety.
- Integrates with widely used contact-force catheters, supporting familiar workflows and reducing training burden.
- Demonstrates strong clinical performance, including high arrhythmia-free survival and pulmonary vein isolation durability at 12 months.

Cautions

- Like all PFA technologies, lesion formation may vary with tissue impedance, requiring operator awareness during energy delivery.

Supply details

Complete requirements in form on <https://www.supplychain.nhs.uk/dps>

Route - eDirect
Supplier - Cardio Focus Inc.
Brand - Centauri

Centauri PEF Generator
Centauri Connect
IVY EKG Monitoring System

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Supporting evidence / notes

<https://cardiofocus.com/technology/-centauri>

Supplier website with additional product information.

<https://news.gsmmedtech.com/cardiofocus-has-positive-pulsed-field-ablation-data-for-its-centauri-system/>

Guided solutions article - CardioFocus has positive pulsed field ablation data for its Centauri system.

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