

SANARUS MEDICAL

Thermodynamics physics and electromagnetics for the world's first low pressure nitrogen cryoablation system

THE CHALLENGE >

With 500,000 cases of breast tumours every year, Sanarus Medical's minimally invasive Visica™ Treatment system looked to have a great future. But how could they turn that opportunity into a multimillion dollar business when success relied upon a low-cost outpatient procedure with a simple, effective device?

THE SOLUTION >

Sanarus called upon Cambridge Design Partnership's inventive engineering and physics knowledge, and walked away with a market-leading technology just 8 months later. Sanarus and Cambridge Design Partnership collaborated to invent the world's first low-pressure liquid nitrogen cryosurgery system, using thermodynamics physics, methodical laboratory experimentation and constructed electromechanical demo systems.



BENEFIT TO THE CLIENT >

A reduction in the mass of the system was achieved by a factor of 10, and procedure time was reduced by an impressive 50%. Low-cost materials and joining methods could be used on the disposable part, and the size of the nitrogen store was massively reduced. Visica™ is now used to kill breast tumours without the need for open surgery.

Sanarus has a revolutionary product on the market, and their business value is secured by a powerful patent portfolio enhanced by the work of Cambridge Design Partnership.

