

# Ultra-low field MRI

## Swoop<sup>®</sup> Portable MR Imaging<sup>®</sup> System

### ABOUT SWOOP

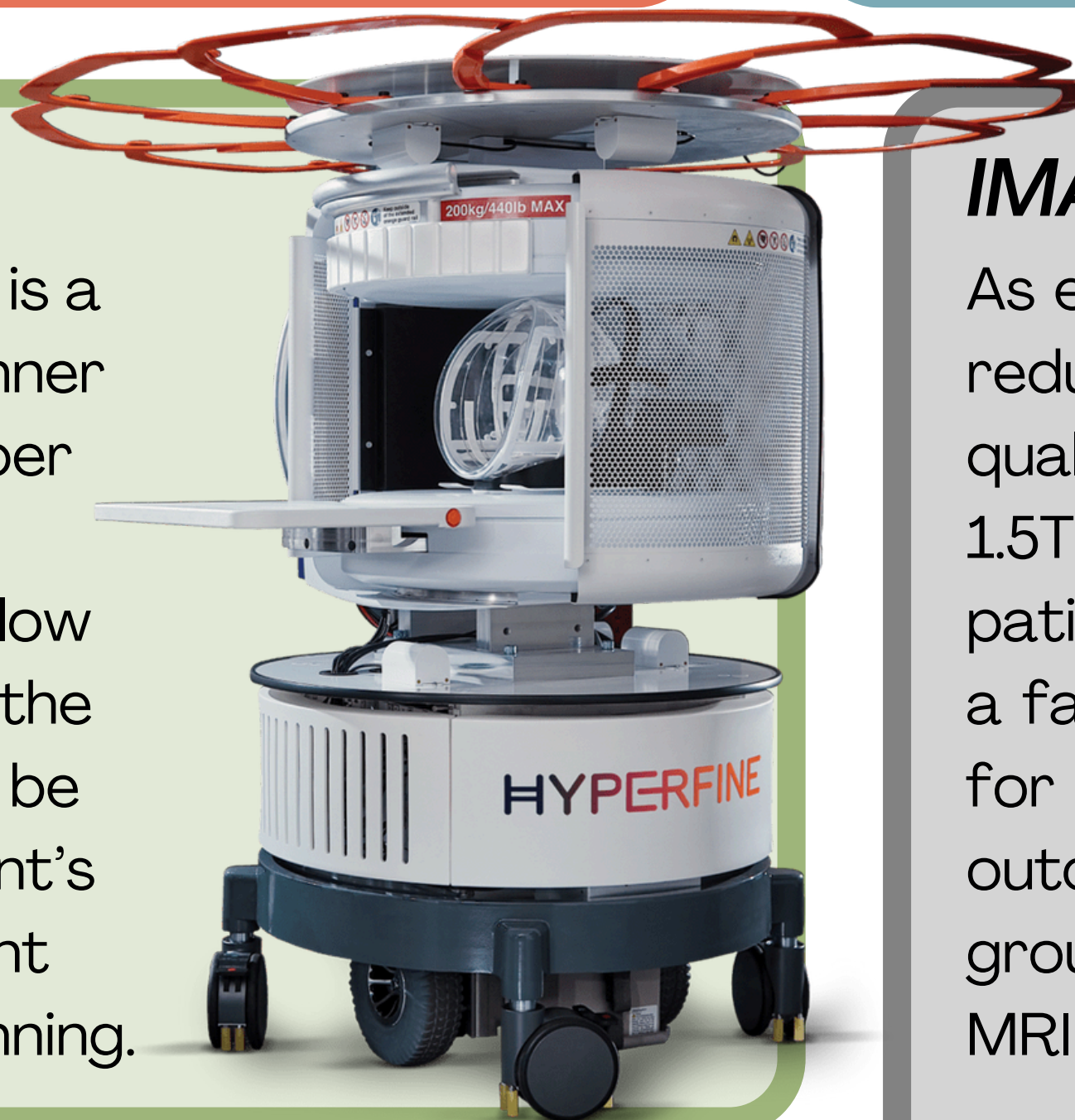
The Swoop system (Hyperfine, Inc.) is an ultra-low field portable MRI scanner with a magnetic field strength of 0.064T. For context, clinical MRI scanners are usually 1.5T, so Swoop has less than 5% of a typical clinical magnetic field strength.

### WHAT IS MRI?

Magnetic Resonance Imaging (MRI) scanners use magnetic fields and radiofrequency waves to generate images of a patient's body.

### CLINICAL USE

The Swoop system is a brain-only MR scanner with a limited number of sequences, but due to being ultra-low field and portable, the Swoop system can be wheeled to a patient's bedside for efficient point-of-care scanning.

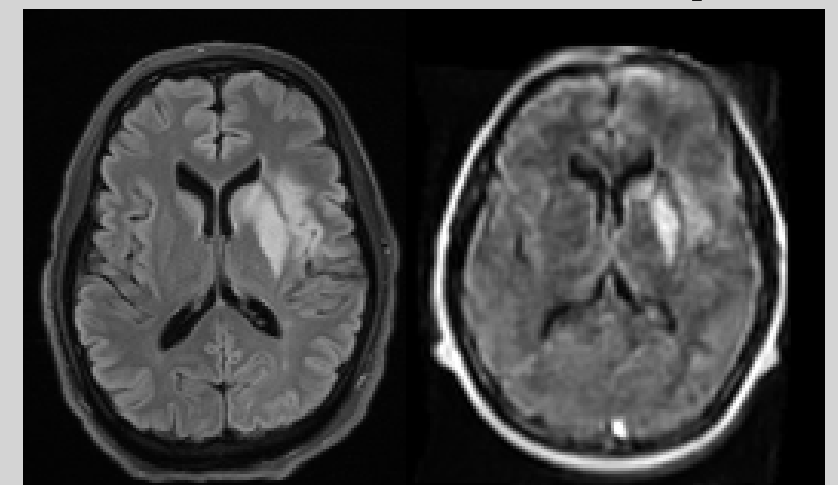


### IMAGE QUALITY

As expected, there is a reduction in image quality compared with 1.5T. However, for patient groups where a fast diagnosis is vital for improved patient outcomes, Swoop is groundbreaking for MRI accessibility.

1.5T

0.064T  
(Swoop)



### THE MIRACLES STUDY

A clinical research study in Glasgow (MIRACLES) investigated the use of Swoop in A&E to evaluate the potential of a portable MRI scanner in stroke work up. Preliminary results suggest that the Swoop system was able to detect stroke at least as well as other acute imaging, although further work is required with a larger study population to confirm these results.

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Images were sourced with thanks to Hyperfine and the MIRACLES study.