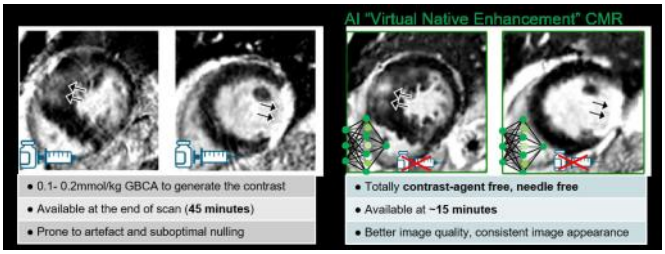
PROJECT NUMBER

17042

Virtual native enhancement – a gadolinium-free, needle-free method for cardiac imaging

An AI method that monitors the need for gadolinium-based contrast agents whilst creating images of the heart in high quality.

Late gadolinium enhancement (LGE) is currently the standard for assessing the scarring of heart muscle. However, LGE involves the administration of gadolinium-based contrast agents (GBCA). AI “virtual native enhancement” as a new method obviates the need for GBCA whilst creating images of the same information and better quality.



Features	Benefits
Matches information provided by an LGE image; Obviates choice of correct inversion time	Delivers the same knowledge as conventional LGE, without the downfalls of injecting gadolinium
Non-invasive and needle-free features reduce scan time	Provides more comfort to patients and simpler administration for MRI units
Images can be universally understood by practitioners who are familiar with LGE imaging	No additional training or education needed to understand images
No GBCA contraindications in patients	Wider accessibility of CMR to patients with contraindications to GBCA; No need of medical staff to supervise CMR scans

Features	Benefits
Saves 20 minutes of CMR scan time	Saves both money and time, scans 2X as many patients using same MRI facilities

Awaiting patent and Available for

- Co-development
- Consulting
- Licensing

To find out more, contact enquiries@innovation.ox.ac.uk and quote the project number.

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