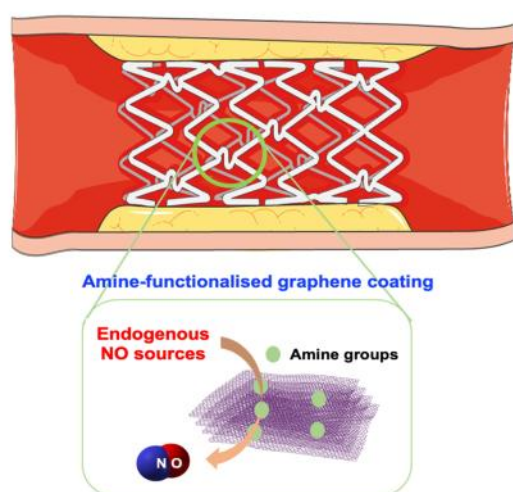


Method for creating a nitric oxide generating coating for medical devices

A method for generating therapeutic gas, nitric oxide (NO), from a coating of amine-functionalised graphene that can be used for medical devices, such as stents.

Applications: Medical devices for cardiovascular disease, Cerebrovascular disease, Eye diseases and aneurysms



Features	Benefits
Novel amine-functionalised graphene oxide material that generates NO, negating external NO sources	Allows commercially viable in-vivo NO generating medical devices to be engineered
Method provides a stable and strong coating that can be added to medical devices, and the coating thickness can be easily varied	Maintains structural integrity and is non-toxic; Coating biodegradable medical devices has minimal effect on their degradation

Features	Benefits
The coating generates therapeutic levels of NO in a sustained, controlled and slow manner at the site of need in the body, with trials ongoing	Reduces the risk of medical complications after implantation of a medical device such as restenosis, bacterial infection and biofilm formation
Straightforward and simple application of the coating using a dip coating method	Can easily apply a smooth and uniform coating to complex 3D geometries and form factors; Cost-effective functionalisation approach; Scalable method of manufacturing medical devices

Patented and Available for

- Co-development
- Consulting
- Licensing

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

The above information is provided 'as is' without conditions or warranties. Oxford University Innovation makes no representation and gives no warranty that it is the owner of the intellectual property rights in the technology described. © Oxford University Innovation Ltd 2026, Buxton Court, 3 West Way, Oxford, OX2 0JB.