



# Foreign AI-based solution implementation in NHS Trust

*Case study: Cibiltech x The Leeds Teaching Hospitals*



# Speakers



**Dr Karine Deville,  
Market Access Manager**

Wellcome Trust PhD in  
biophysics, research and project  
management experience in  
France and the UK



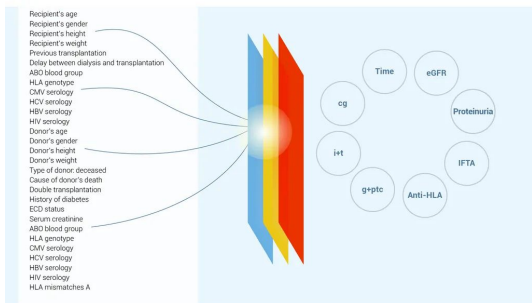
**Dr Sunil Kumar Daga, Consultant  
Nephrologist and Transplant  
Physician at Leeds Teaching  
Hospitals NHS Trusts**

Scientific advisor, interests in data  
analytics and machine learning  
approaches

# iBox algorithm: a AI-based predictive score to prolong graft survival

## iBox algorithm

World's most complete transplants database + AI expertise



Prediction system for risk of allograft loss in patients receiving kidney transplants: international derivation and validation study

Alexandre Loupy,<sup>1,2</sup> Olivier Aubert,<sup>1,2</sup> Babak J Orandi,<sup>3</sup> Maarten Naesens,<sup>4</sup> Yassine Bouatou,<sup>1</sup> Marc Raynaud,<sup>1</sup> Gillian Divard,<sup>1</sup> Annette M Jackson,<sup>5</sup> Denis Vigiotti,<sup>1,6</sup> Magali Giral,<sup>7</sup> Nassim Kamar,<sup>8</sup> Olivier Thauvat,<sup>9</sup> Emmanuel Morelon,<sup>9</sup> Michel Delahousse,<sup>10</sup> Dirk Kuypers,<sup>4</sup> Alexandre Hertig,<sup>11</sup> Eric Rondeau,<sup>11</sup> Elodie Bailly,<sup>11</sup> Farsad Eskandary,<sup>12</sup> Georg Böhmig,<sup>12</sup> Gaurav Gupta,<sup>13</sup> Denis Glotz,<sup>1,6</sup> Christophe Legendre,<sup>1,2</sup> Robert A Montgomery,<sup>14</sup> Mark D Stegall,<sup>15</sup> Jean-Philippe Epana,<sup>1,16</sup> Xavier Jouven,<sup>1</sup> Dorry L Segev,<sup>17</sup> Carmen Lefaucheur<sup>1,6</sup>



Integration into a CE-marked medical device platform to improve kidney transplanted patients follow-up

Earlier detection of events  
Improve graft survival  
Better quality of life



in clinical research to boost innovation

Reduce time to market up to 7 years



# How to drive early adoption by centers ?



Market research and  
defined needs



Dissemination of novel AI-based  
algorithms



Strategy to approach  
centers: early  
adopters



Clinical validation: evaluation of  
efficiency

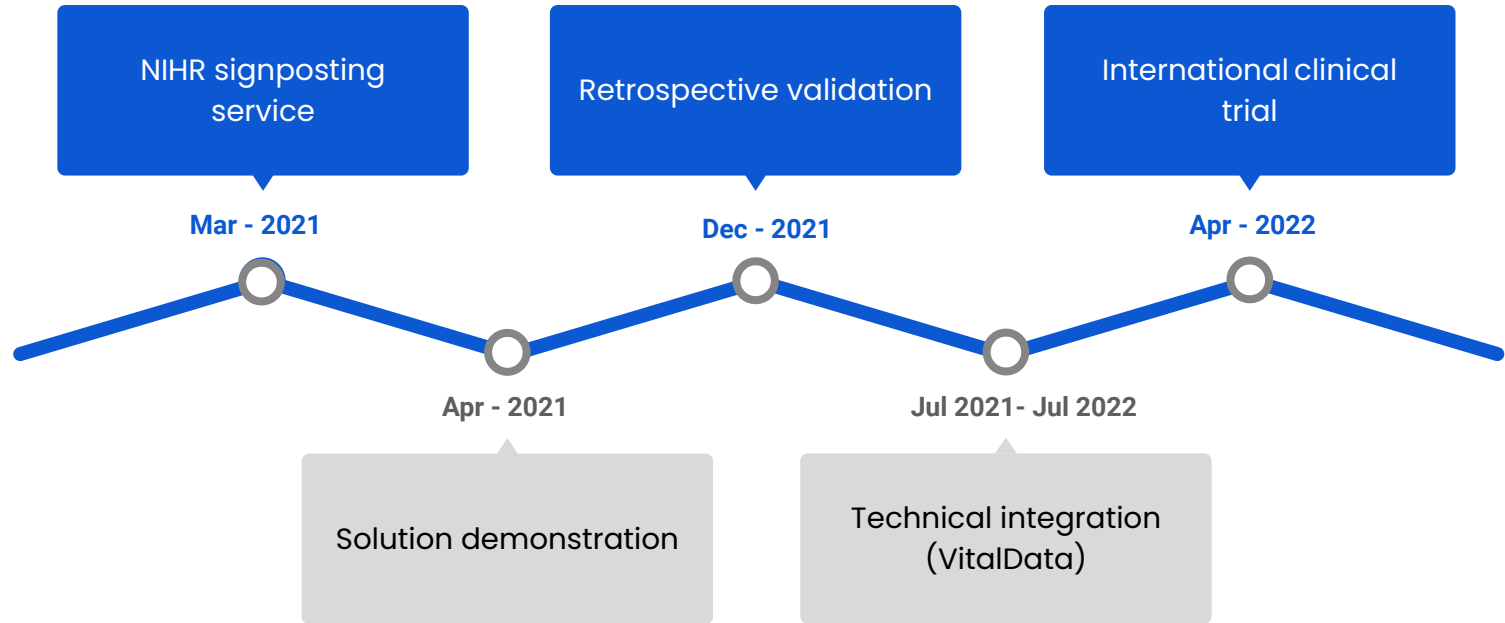


Technical integration: a  
tailored approach !



Build on collaboration:  
continuous performance  
monitoring and optimization

# Cibiltech x The Leeds Teaching Hospital : a rapid collaboration



**CIBILTECH**



**The Leeds Teaching Hospitals**  
NHS Trust

# iBox benefits and NHS alignment



- Improve **quality of life**
- Detect **early signs** of kidney failure
- **Personalize** treatment
- Reduce health **inequalities**
- **Empower** patients



- AI-based medical decision **support tool**
- Monitor **response to treatment**
- Long-term **risk stratification**
- Promote clinician **productivity**, better patients care and **clinical efficiency**



- **Interoperability**
- Support **digitalization** of the system
- Reduce healthcare **costs**
- **Harmonize** clinical practice



- Boost **innovation**
- Reduce burden on **long-term monitoring**
- Increase **availability of grafts**
- Support **prevention**

# As a foreign company how do we get information ?

## Public organizations and stakeholders

**NIHR** | National Institute for Health Research

The  
**AHSN**  
Network

**CRN**  
CLINICAL RESEARCH NETWORK

**NICE**  
National Institute for  
Health and Care Excellence

## End-users

**NHS**



**nkf**  
NATIONAL KIDNEY  
FEDERATION

## Ecosystem

**SME**



 Digital-Health.  
London | ACCELERATOR



A graphic with a blue background on the left and a Union Jack on the right. The word "BREXIT" is written in white, bold, sans-serif capital letters across the center. The letter 'R' is partially obscured by a yellow star from the European Union flag. There are other yellow stars scattered around the text.

**BREXIT**



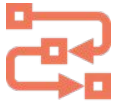
# Criteria for success



Contact IT for seamless integration into existing workflow: **interoperability**



Good **communication** between the different teams involved



Good **understanding** of Trusts processes and if possible IT infrastructures



Anticipate all legal and **regulatory requirements** (medical device and data)



Access to **structured data**



**Project management**



**Thank you for your attention!**

*Feel free to ask questions!*