

## Foreword to the Special Issue

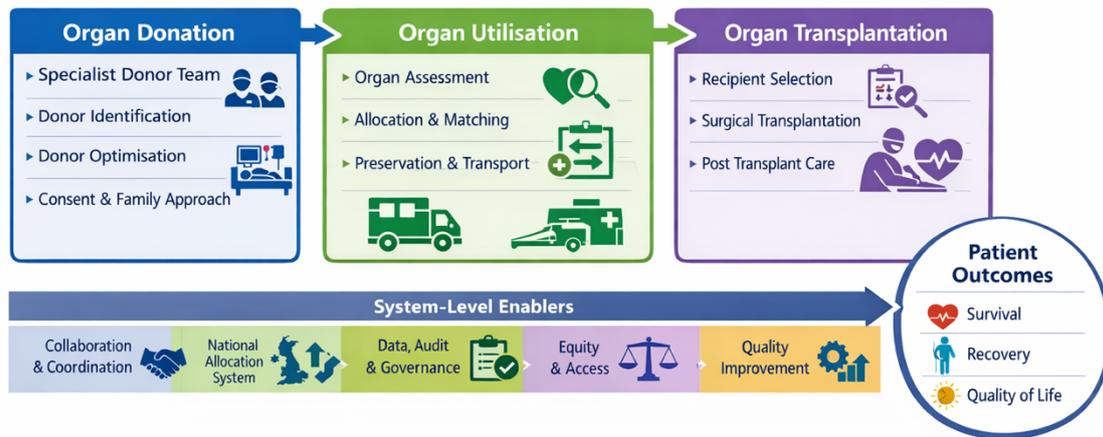
It is with great pleasure that we present this special issue of *Global Cardiology Science and Practice*, dedicated to the proceedings of the Royal Brompton, Harefield, and Imperial College Organ Donation, Utilisation and Transplantation Conference which was held on October 3<sup>rd</sup>, 2024 at the Emirates Stadium in London, UK. This unique interprofessional meeting brought together clinicians, surgeons, nurses, scientists, and policymakers with a shared commitment to advancing the science and practice of organ donation, utilisation and transplantation.

The conference welcomed over one hundred delegates from across the United Kingdom, representing a broad spectrum of disciplines, with a strong presence from intensive care, transplantation, and nursing communities. This multidisciplinary engagement reflects the very essence of modern transplantation: a collaborative endeavour that spans critical care, surgical expertise, ethical-legal frameworks, and patient-centred communication. Importantly, pre-conference data highlighted that many attendees had limited prior exposure to organ donation processes, reinforcing the need for continued education and structured training. The marked improvement in confidence following the conference—particularly in neurological death determination and donor optimisation—demonstrates the tangible impact of such initiatives on clinical practice.

The scientific contributions in this issue reflect both the breadth and depth of topics addressed during the meeting, as well as the exceptional expertise of the faculty.

A particular highlight of the conference was the outstanding keynote lecture delivered by Professor Sir Magdi Yacoub, who offered a compelling perspective on the past, present, and future of heart transplantation.

Central to conference discussions is the concept of organ utilisation—a critical determinant of transplant success and overall system efficiency. As highlighted by Khoshbin and colleagues, despite increasing donor referrals, only a small proportion of organs are ultimately utilised, underscoring persistent challenges in donor selection, logistics, and system coordination. These challenges extend beyond technical considerations and call for a paradigm shift towards optimised decision-making, the integration of emerging technologies, and strengthened national and international collaboration.



Equally important is the evolving framework of donor optimisation, which has emerged as a cornerstone of modern critical care practice. The UK model exemplifies how legislative reform, national coordination through NHS Blood and Transplant, and meticulous physiological management can enhance both organ yield and transplant outcomes . This aligns with a broader recognition that excellence in donor care is inseparable from excellence in intensive care medicine.

The issue also explores the complexity of transplant candidate selection, emphasising a multidimensional and holistic approach that integrates clinical severity, comorbidities, and psychosocial factors. Such frameworks ensure that transplantation remains both effective and equitable, safeguarding the optimal use of scarce donor organs .

Advances in diagnostics and technology are another key theme. The expanding role of lung ultrasound illustrates how point-of-care imaging can enhance donor assessment and real-time decision-making, potentially improving organ utilisation and outcomes . These innovations highlight the increasing integration of bedside technologies into transplantation pathways.

The conference also addressed the ethical and communicative dimensions of organ donation. Contributions on family discussions and end-of-life care underscore the profound emotional complexity of these conversations and the necessity for structured, compassionate communication strategies. The pivotal role of Specialist Nurses in Organ Donation further exemplifies how skilled coordination and advocacy can bridge the gap between donor potential and successful transplantation .

Finally, updates on the 2025 UK Code of Practice for death by neurological criteria reflect ongoing efforts to standardise and strengthen the foundations of organ donation, ensuring clinical rigour, ethical clarity, and public trust .

Together, the contributions in this special issue reflect a field in continuous evolution—one that is increasingly data-driven, multidisciplinary, and firmly patient-centred. The conference and its proceedings reaffirm a shared vision: to maximise the gift of donation through excellence in science, clinical practice, and collaboration, ultimately transforming outcomes for patients with end-stage organ failure.

We are deeply grateful for the invaluable contributions of colleagues from Royal Brompton and Harefield, Guy's and St Thomas', and Imperial College Healthcare NHS Trust. We extend our sincere thanks in particular to Sonia Fernandez, Anna Coombes, and Alice Workman from NHS Blood and Transplant, as well as Maria Rogers and Paul Harsley from the Magdi Yacoub Institute, for their outstanding efforts in organising this meeting—without whom this conference would not have been possible.

We hope this collection will inspire continued innovation, dialogue, and partnership across the global transplantation community.

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