Organ transplantation is a medical treatment for end-stage organ failure. When organs are removed, they can immediately begin to deteriorate, leading to loss of structure and function. This technology describes an organ transplant method which employs an anti-inflammatory and anti-apoptotic therapeutic to maintain the viability of the organs and protect it from organ deterioration. The therapeutic is supplied to the organ by adding it to typical perfusion buffers used for organ transplantation.

**Treated organs displayed improved structure preservation and function**

The technology utilizes an ex vivo heart Langendorff System to assay the efficacy of the treatment. The technology involves adding a specific lipid molecule to the perfusion buffer. Excised mice hearts treated using this technology demonstrated improved outcomes compared to control conditions. In addition, markers for myocardial infarctions (heart attack) such as creatine kinase are reduced in hearts treated with the technology’s perfusion buffer. Thus, due to the anti-inflammatory and anti-apoptotic properties of the technology, this technology can potentially improve the outcome of organ transplantation for patients.

**Lead Inventor:**

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**Applications:**

- Preserve organs during transplantation.
- Reduce patient rejection during organ transplantation.

**Advantages:**

- Retains organ structure
- Reduces cell death in organs and loss of function.
• Extends organ lifetime during transplantation.

**Patent information:**
Patent Pending
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