Dual microRNA blockade increases expression of antioxidant protective proteins; implications for ischaemia reperfusion injury

**Methods**
- Ischaemic human kidneys
  - Identification of highly expressed microRNA
- Human endothelial cells in vitro
  - Ischaemia reperfusion (IRI)
  - Quantification of microRNA and targets
  - IRI with microRNA blockade
  - Antioxidant expression
  - ROS generation

**Results**
- Hypoxia
  - ↑ miR-24-3p
  - ↑ miR-145-5p
  - ↑ ROS
  - ↓ HMOX1
  - ↓ SOD2
- Reoxygenation
  - ↑ ROS

**Conclusion**
- Dual microRNA blockade
  - Synergistic upregulation of shared targets at the protein level
  - Decreased ROS production following ischaemia reperfusion injury

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