Marson Group

MicroRNAs and Heme Oxygenase 1 in Kidney transplantation

- A kidney transplant is the most effective treatment for many patients with end stage renal failure
- Two significant clinical challenges remain: poor early kidney function, and long term development of fibrosis and loss of kidney function
- Heme oxygenase-1 (HO-1) is an endogenous stress response enzyme with anti-oxidant, anti-apoptotic effects
- Heme arginate (HA) upregulates HO-1 expression; we are currently leading a multicentre clinical trial aimed at determining its effect on early kidney transplant function
- MicroRNAs are small single strand noncoding RNAs that negatively regulate gene expression, gaining interest as biomarkers and therapeutic targets



