



Title	Xenotransplantation
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Reference	Technology Review Report, 011/07, 2007. http://medicaldev.moh.gov.my/uploads/xenotransplantation.pdf

Aim

To determine the safety, efficacy, and ethical issues of xenotransplantation.

Conclusions and results

There is *fair* evidence on the safety and efficacy of xenotransplantation, especially for human complement regulatory proteins. Xenotransplantation also involves consideration of animal rights. Xenotransplantation might give rise to a variety of psychosocial problems pertaining to emotional and personal identity issues associated with implanting organs from animals to humans. The potential risk of nonhuman organs transmitting infectious agents not yet detectable by current screening mechanisms must not be overlooked.

Recommendations

More clinical research is warranted in xenotransplantation as most of the evidence retrieved has been from animal studies. Ethical and religious issues should be explored.

Methods

The electronic database search included PubMed, Ovid search engine, and the UKM library (Blackwell Synergy). The following keywords were used either alone or in combination: Xenotransplant and safety, efficacy, xenogenic, xenogenous, xenosis, xenozoonosis, heterograft, heterologous graft, heteroplastic graft, xenogeneic graft, cross-species transplants, cross species transplant, cross-species transplantation, cross species transplantation, heterotransplants, heterotransplantation, xenograft, xenogeneic, hyperacute rejection, delayed xenograft rejection, porcine fetal neuronal cells, encapsulated porcine islet cells, encapsulated bovine adrenal and chromaffin cells. Most of studies were laboratory experiments using animal models.