CGA/19/68 - Therapeutic efficacy of ex vivo treatment of human kidneys with senolytic ABT263

Kidneys containing more senescent (dysfunctional, growth-arrested) cells function less well after transplantation. New treatments – "senolytics" should allow senescent cell killing, leading to better functioning transplanted kidneys. In this study we will administer the senolytic ABT263 to human kidneys. Kidneys (already deemed unsuitable for transplantation) will receive ABT263 during machine transfusion with blood. Tissue analysis will determine ABT263' s efficacy in removing senescent cells, whilst testing for any unexpected toxicity. No humans will be exposed to the drug. No kidneys for transplant will be damaged. If ABT263 functions as predicted, then funding will be sought for clinical trials, validating the use of ABT263 in human transplantation.