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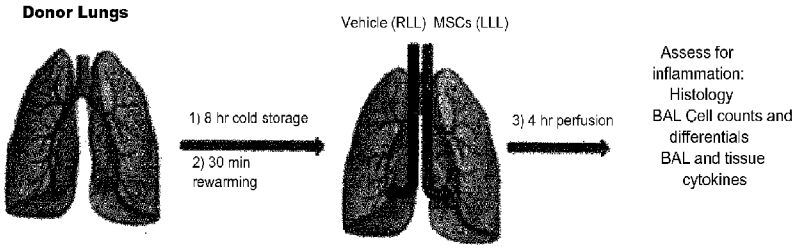


Fig. 1

(57) Abstract: The invention provides methods and compositions that improve the success of organ transplantation. The methods and compositions are directed to exposing a desired organ to stem cells prior to, during, and/or after transplantation. In one embodiment, the stem cells reduce the deleterious effects of ischemia on an organ designated to be harvested for transplantation or that has been harvested for transplantation. In another embodiment in which an organ designated for transplantation is perfused *ex vivo*, the method involves reducing ischemic reperfusion injury by perfusing the organ with a medium that contains stem cells.

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