## s 2019 0007

The invention relates to regenerative medicine and tissue engineering, and can be used for reticulation of decellularized liver matrix for increasing the transplant's resistance to internal aggressive factors of the recipient organism.

Summary of the invention consists in that the decellularized liver matrix is washed from detergents by perfusion with distilled water and/or phosphate-saline buffer solution through the portal vein, then in 1 hour is performed the continuous perfusion with an aqueous or alcoholic riboflavin solution with a concentration of 0.2...0.25 mM, in a volume of 10 ml per 100 mg of decellularized liver matrix, at a rate of 1...5 ml/min, under the action of ultraviolet type A rays, with a wavelength of 365 nm, and the perfusion is prolonged up to discoloration of riboflavin solution, then the reticulated decellularized liver matrix is washed with distilled water and stored at a temperature of  $4^{\circ}$ C.

Claims: 1 Fig.: 2