

## LETTER TO THE EDITORS

**The cold storage time of kidney grafts needs to be identical**

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Dear Sirs,

I have a question for the experimental design of Anja Gallinat *et al.* (2014 Jun 30) [1]. In their research, porcine kidneys were preserved in static HTK at 4 °C for 18 h. After that they divided the kidneys into the following three groups ( $n = 6$ , respectively):

Group 1: Cold-stored kidneys were used for the experiments without further treatment and served as controls.

Group 2: Cold-stored kidneys were subsequently subjected to hypothermic reconditioning consisting of 1 h of hypothermic machine perfusion in a pulsatile manner (30/20 mmHg) at 30 bpm with the recently developed Custodiol-N solution containing 5 g % of dextran 40. No active oxygenation was applied during machine perfusion.

Group 3: In this group, hypothermic reconditioning after cold storage was performed like in group 2, but the duration of machine perfusion was extended to 4 h.

I don't think this design of experimental groups is rigorous. In their experiment, cold storage time of the three groups is, respectively, 18 h, 19 h, and 22 h. Under the precondition of this design, I think the contrast between these groups is not strict.

I suggest that the experimental groups need to be designed as below: porcine kidneys should be preserved by 18 h static cold storage (Group 1), 17 h static cold storage followed by 1 h hypothermic machine perfusion (Group 2), and 14 h static cold storage followed by 4 h

hypothermic machine perfusion (Group 3). Thus, the experimental conditions of all the groups are consistent, they can be compared.

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**Conflict of interest**

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**References**

1. Gallinat A, Efferz P, Paul A, Minor T. One or 4 h of "in-house" reconditioning by machine perfusion after cold storage improve reperfusion parameters in porcine kidneys. *Transpl Int.* 2014; **27**: 1214.