*Dondossola et al.:*

**Procurement and *Ex-situ* Perfusion of Isolated Slaughterhouse-Derived Livers as a Model of Donors after Circulatory Death**

**Supplementary Data[[1]](#footnote-1)**

**Tab. S1:Instruments and materials employed during procurement and perfusion** 

|  |  |
| --- | --- |
| **Instruments** | **Manufacturer** |
| **Slaughterhouse procurement** |
| 7.0 Endotracheal Tube | Unomedical, Malaysia |
| Ambu Bag | General Electrics, USA |
| Surgical instruments |  |
| Organ bags  | Delta Med, Italy |
| Parenteral nutrition bags | Fresenius-Kabi, Germany |
| Blood bags | Macropharma, France |
| Organ transport box | IGL, France |
| 12 and 14 CH, Foley Catheter | Rüsch, Teleflex, USA |
| Urological set | Ferrari, Italy |
| 0 and 4-0 Vicryl tie | Ethicon, Sweden |
| 0, 3-0, 5-0 Prolene suture | Ethicon, Sweden |
| **NMP circuit** |
| Vigilance, cardiac monitor | Edwards Lifescience, USA  |
| Organ Chamber | Custom made |
| 7 Fr 3-way ARROW CVC | Teleflex, USA |
| Centrifugal pump, Biomedicus | Medtronic, USA |
| Membrane lung Quadrox ID Pediatric | Maquet, Germany |
| Hepatic artery Cannula, 14-16 Fr | Edwards, USA |
| Portal vein Cannula, 28 Fr | Edwards, USA |
| Temperature probe | Philips, Netherland |
| 40 micron filter  | Haemonetics, USA |
| Heparin-Coated Polyvinyl Tubing | Dideco-Sorin, Italy |
| Blood Gas Analyzser, ABL 800 Flex | Radiometer Medical ApS, Denmark |
| Precision Scale, PT150 | Sartorius AG, Germany |
| Oven Swallow fan incubator | LT Scientific, UK |
| Heat Exchanger, Medi-Therm II | Gaymar Industries Inc, USA |

**Tab. S2:** **Fluids, chemicals and drugs employed during procurement and perfusion**

|  |  |
| --- | --- |
| **Drugs** | **Manufacturer** |
| ***Slaughterhouse procurement*** |
| Sodium citrate 99.9% | Sigma-Aldrich, Germany |
| Sodium heparin 300 IU/kg | Farmaceutici caber S.p.A, Italy |
| Ceftriaxone, 1 g | Mylan, USA |
| Dialysis solution, 5 L |  |
| Celsior solution, 1 L | IGL, France  |
| ***NMP perfusate composition*** |
| Homologus concentrated red blood cells  |  |
| Gelofusine, 500 mL | B. Braun, Italy |
| Clinimix N14G30  | Baxter, Italy |
| Human albumin 200g/L | Kedrion, Italy |
| NaHCO3 8.4% 10 mg | S.A.L.F. S.p.A., Italy  |
| CaCl2, 1.36 mEq/mL 0,6 mg | Bioindustria L.I.M. S.p.A., Italy  |
| Metronidazole, 500 mg | Sandoz, Germany |
| Ceftriaxone, 1 g | Mylan, USA |
| Sodium heparin 300 IU/kg | Farmaceutici caber S.p.A, Italy |
| Cernevit | Baxter, Italy |
| Actrapid, 100 IU/mL | Novo Nordsik, Danmark  |
| Sterile H2O, 10 mL | S.A.L.F. Italy |
| Ringer lactate, 500 mL | Fresenius Kabi, Germany |

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**Fig. S1: Linear regression of lactates and potassium release ratio**



**Fig. S2: Hepatocellular damage markers during normothermic machine perfusion**

(A) Postoperative AST levels in nLT-G and LT-G. (B) Lactate dehydrogenase (LDH) levels in nLT-G and LT-G. Data expressed as mean ±SEM (\*, p < 0.001 by repeated measures analyses).



**Fig. S3:** **Cholangiocellular damage (ALP) during normothermic machine perfusion in the two study groups**

Data expressed as mean ±SEM (\*, p = 0.001 by repeated measures analyses).



**Fig. S4: Hemoglobin trend during normothermic machine perfusion**

nLT-G showed hemolysis compared to LT-G. Data expressed as mean ±SEM (\*, p = 0.009 by repeated measures analyses).

1. [doi:10.14573/altex.1909131s](https://doi.org/10.14573/altex.1909131s) [↑](#footnote-ref-1)