Supplementary Materials

Table S1: Embryo management, according to the cryoprotectant agent, to perform the embryo transfer in Holstein heifers.

Embryo preservation	Management description
Fresh	1. After collection, the embryos were washed according to the IETS recommendations 2. The embryos were placed into a sterile 0.25 mL straw as follows: cotton end, conservation medium column, air column, conservation medium column, air column, conservation medium with embryo column, air column, conservation medium column 3. Transfer to the recipient
Ethylene glycol	1. The straw was air – exposed for 6 seconds 2. It was introduced 30 seconds in water at 30ºC 3. Direct transfer
Glycerol	1. The straw was air – exposed for 6 seconds 2. It was introduced 30 seconds in water at 30ºC 3. The content of the straw was placed on a Petry dish and a thawing 4 – steps procedure was followed (EMCARE™, ICP_{bio}, Auckland, New Zealand) 4. First step: the embryo was placed in a medium containing 6 % glycerol and 10.3 % sucrose for 5 minutes 5. Second step: the embryo was placed in a medium containing 3 % glycerol and 10.3 % sucrose for 5 minutes 6. Third step: the embryo was placed in a medium containing 10.3 % sucrose for 5 minutes 7. Fourth step: the embryo was placed in a maintenance medium for 5 minutes 8. The embryo was placed into a sterile 0.25 mL straw for its subsequent transfer