

# Accepted Manuscript

Update on donkey embryo transfer and cryopreservation

Duccio Panzani, Alessandra Rota, Matteo Tesi, Diana Fanelli, Francesco Camillo

PII: S0737-0806(17)30677-9

DOI: [10.1016/j.jevs.2017.11.012](https://doi.org/10.1016/j.jevs.2017.11.012)

Reference: YJEVS 2426

To appear in: *Journal of Equine Veterinary Science*

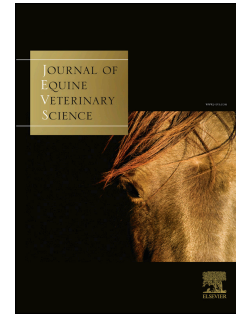
Received Date: 12 October 2017

Revised Date: 15 November 2017

Accepted Date: 22 November 2017

Please cite this article as: Panzani D, Rota A, Tesi M, Fanelli D, Camillo F, Update on donkey embryo transfer and cryopreservation, *Journal of Equine Veterinary Science* (2017), doi: 10.1016/j.jevs.2017.11.012.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



## 1 Update on donkey embryo transfer and cryopreservation

2  
3 Duccio Panzani, Alessandra Rota, Matteo Tesi, Diana Fanelli, Francesco Camillo  
4 Dipartimento di Scienze Veterinarie, Università di Pisa, Via Livornese 1289, 56122, San Piero a  
5 Grado, Pisa (PI), Italy

### 7 **Abstract:**

8 Donkey species reproductive biotechnology studies had a dramatic increase after the Convention  
9 of Biological Diversity that took place in Rio de Janeiro (Brazil) in 1992. The mechanization of  
10 agriculture of the 20th century took most of the developed countries donkey breeds close to  
11 extinction and, after Rio, the development of effective reproductive programs to save them were  
12 encouraged. Moreover, the recent interest in donkey milk, meat and skin products transformed  
13 the donkey in a potential productive animal leading to the research and dissemination of desired  
14 productive tracts into its population. Amongst reproductive biotechnologies the production and  
15 cryopreservation of embryos has a key role due to the possibility of producing and stocking  
16 valuable genetics potentially forever. Each species gametes and embryos from each species need  
17 specific media and protocols due to their particular characteristics. After more than 10 years of  
18 unsatisfactory results, embryo transfer and cryopreservation in the donkey moved from horse  
19 protocols to procedures more specifically tailored to the donkey species  
20 Nowadays pregnancy rates of 50% and 36% after the transfer of fresh and vitrified embryos,  
21 respectively, is possible in this species.

22  
23 **Keywords:** Donkey, Embryo Transfer, Embryo cooling, Vitrification

24  
25 **Corresponding author:** Duccio Panzani, Dipartimento di Scienze Veterinarie, Università di  
26 Pisa, Via Livornese 1289, 56122, San Piero a Grado, Pisa (PI), Italy. [duccio.panzani@unipi.it](mailto:duccio.panzani@unipi.it)

### 28 **1. Introduction:**

29 Embryo transfer (ET) is an assisted reproductive technique that consists in the transfer of one or  
30 more embryos from a female, called donor, to one or more females, called recipients [1].  
31 Embryo transfer is a valuable tool able to maximize the reproductive potentialities of a female.  
32 Using this reproductive technology, we could be, theoretically, able to give birth to a living  
33 being for each ovulation of its mother throughout all of her reproductive life. To be eligible for  
34 this technique a female should be able to ovulate, the oocyte to be fertilized and the genital

Download English Version:

<https://daneshyari.com/en/article/8483068>

Download Persian Version:

<https://daneshyari.com/article/8483068>

[Daneshyari.com](https://daneshyari.com)