

CONTRACT REGARDING OVUM PICK UP (OPU)

The ovum pick up and ICSI procedure

Ovum pick up (OPU), also called oocyte aspiration, is the process by which oocytes (eggs) are retrieved directly from a mare's ovaries via transvaginal aspiration (TVA). A long needle is passed through the vaginal wall and into the ovary, to aspirate each of the follicles present on the ovaries, using ultrasound guidance. The mare is standing under sedation and the procedure takes from 20-60 minutes depending on the number of follicles present on the ovaries. The retrieved oocytes are matured in the laboratory for approximately 30 hours and one healthy-looking sperm is injected into each mature oocyte under microscope by a micromanipulator. This process is called intra-cytoplasmic sperm injection or ICSI. The fertilized oocytes are then cultured in an incubator and media, mimicking the environment in the uterus. After 7-10 days, it can be seen if the fertilized oocytes have developed into an embryo and the embryo can at this stage either be transferred directly to a synchronized recipient or vitrified (frozen) for later transfer.

Semen and EU regulations

Both frozen and cooled/fresh semen can be used for ICSI. It is important that we have the semen here in the laboratory at the latest, on the day, where we expect the mature oocytes to be fertilized. If only limited semen is available, we can cut one straw of frozen semen into approximately 5 pieces, holding enough semen for 5 OPU/ICSI sessions.

If there are special conditions for the semen used for ICSI, we must emphasize that it is the responsibility of the mare owner to ensure that all conditions are met.

It is also the responsibility of the mare owner to keep track of the requirements for the semen and certificates for registration of ICSI foals in the desired breeding organization.

If the embryos are meant to be transported across the border, the mare must have an EU-approved health status, and so must the semen used (there must be a valid INTRA certificate). It is the client's responsibility to fulfill the EU requirements for sanitary tests and animal health certificates for semen, oocytes and embryos for intracommunity movements. If embryos should be exportable to countries outside the EU, this must be communicated in advance to have certain sanitary tests done and achieve certificates approved for the desired country.

Risks and responsibilities

Oocyte pick up

In general, the risks associated with OPU are extremely low, but as with any other procedure, complications can be seen. The potential risks include rectal tears, bleeding into the abdomen, infection/abscesses in the ovaries or peritonitis. These complications are extremely rare, but in worse case, life threatening. There is also a potential risk, that the sedation can result in mild colic for some mares.

Furthermore, in rare cases (less than 2% of the mares) – and especially among the young maiden mares, the mares may experience slight discomfort the first 1-2 days after an OPU session. If any complications arise following the OPU session, we hereby inform you, that the company **does not** have an insurance, that covers the value of the mare or the eventual loss of value. OPU is performed on the owner's own responsibility. Therefore we advise you to consider an insurance of your mare before the session.

Storage of embryos and semen

Storage of embryos in our laboratory is performed on the owner's own responsibility. The embryos are stored in containers with liquid nitrogen in a secured room with an alarm system connected, but VetEmbryo is not liable for any loss, damage or unforeseen incidents such as fire or theft. VetEmbryo does not insure the stored embryos. It is the owner's responsibility to purchase an insurance, if desired.

DNA mismatch

The client accepts that when using advanced reproductive techniques, there is a very small risk that errors may occur that could lead to an incorrect DNA parentage of the ICSI foal. If the pedigree in connection with a genetic analysis of the embryo or foal is incorrect and VetEmbryo can be held responsible for this, any liability in any case will be limited in amount to the costs of the OPU, ICSI and freezing of the embryo invoiced by VetEmbryo.

Pregnancy test

The client accepts that there is approximately 15% risk of pregnancy loss after the first confirmation of pregnancy on day 14. In addition, there is a small risk (~2%) of twin or triplet pregnancies arising from the transfer of one ICSI embryo. One must therefore be extra careful to have the recipient mare checked for a fetus with heartbeat around day 30. VetEmbryo cannot be held liable for any pregnancy loss due to twins/triplets.

Post OPU treatment

The mare is treated with antibiotics and painkillers at the day of the OPU. The mare can go back to work after 3 days. The day after the session the mare can go out on a paddock. Be aware that the mare cannot participate in any competitions until at least 2 weeks after the session due to doping regulations.

Success rate

In average there is a 65% chance of getting one or more embryos from one OPU session. Many factors such as the number of follicles and thereby number of oocytes recovered, the age and health-status of the mare, the quality of the oocytes and semen have an impact on the result. After transferring the embryo to a recipient mare, there is a 70% chance of the embryo establishing a pregnancy.

Cancel of engagement

If you have an engagement at VetEmbryo, you must make your cancellation at latest Friday at 3 pm the week before your appointment. In case of later cancellation, we will charge a cancellation fee of 100 euros.

Boarding of horses

Boarding at VetEmbryo is performed at owner's own responsibility. VetEmbryo cannot be held liable for any damage, disease, theft, death, or injury suffered by the horse, happening during the boarding at VetEmbryo. The owner fully understands and hereby acknowledges that VetEmbryo does not carry any insurance on boarded horses. All costs connected with the boarding are held by the owner of the horse.

VetEmbryo is hereby authorized to secure emergency veterinary care and/or blacksmith care, whenever VetEmbryo finds it necessary. The cost of such care shall be paid by the owner of the horse.

The horse is boarded in deep litter bedding and is fed with grain and hay/haylage unless anything else has been determined. The horse is turned out on a big paddock during the day alone or, as we prefer, together with a "friend".

Terms of payment

Payment for oocyte pick up, maturation of oocytes, purification of semen and ICSI must be available for VetEmbryo before the mare leaves the stable or in association with this. We accept bank transfer or payment with card. Payment for freezing of embryos will be invoiced afterwards.

We *do not* transfer or hand over any embryos if the client has unpaid invoices from VetEmbryo.

Prices (ex. VAT)

Ovum Pick Up (OPU) og ICSI

Ovum pick up (OPU)	733 €
Medicine during and after OPU	67 €
Maturation of oocytes	150 €
Microinsemination (ICSI)	333 €
Use of Zymot Fertily Chip (sperm separation)	146 €
Use of two different stallions (extra cost)	200 €

Here after the price depends on the result:

Per frozen embryo	427 €
Storage of embryos/semen per canister per month	10 €
Thawing and transfer of an embryo to a recipient	333 €
Medicine to the recipient in relation to embryo transfer	40 €

Preparation of *your own* recipient at VetEmbryo

Preparation of <i>your own</i> recipient per cycle (incl. daily u/s examinations)*	233 €
Pregnancy test (u/s examination, at least 2 scans)	80 €

*Ex. hormones or other kinds of treatments

Boarding fee

Boarding fee per day (in a box, all incl.)	20 €
Boarding fee per month (in a box, all incl.)	367 €

Shipment of frozen ICSI embryos from VetEmbryo

Processing and rental fee for frozen transport* incl. 5 days	137 €
Health document from the Danish authorities	122 €
Late fee for dryshipper return (per day)	20 €

* Includes filling of dryshipper with liquid nitrogen and packing of the embryo. The rental fee includes rental for 5 days. The price is exclusive expenses for the courier both ways.

If you would like to have OPU and ICSI performed on your mare, we kindly ask you to fill out the undermentioned information and sign the contract. The signed contract must be returned to info@vetembryo.dk before the OPU is taking place.

Mares (name and ID no.)	Desired stallion (name and ID no.)

Owner- and invoice information		
Name	Address	Telephone no. and e-mail
Company EU valid VAT nr.		

I hereby declare that I have read, understood and consent to the above-mentioned information.

I agree that my personal data must be passed on to the stallion owner, if semen from a commercial stallion owner is used.

By signing this contract, I warrant that I am the true and lawful owner of the donor mare(s) or if not the owner, then has actual authority to act as owner's agent for purposes of entering into this Contract, and to make any and all decisions regarding the animal and its veterinary care. The signatory shall be fully responsible for all charges incurred under this Contract and shall indemnify, defend and hold harmless VetEmbryo from any and all claims, of every kind and nature, arising as a result of or in connection with this Contract (including any claim that such person lacked the right or authority to execute this Contract on behalf of the true owner).

In the event of any dispute Danish case law applies, and the Danish courts have jurisdiction.

Date

Signature

Appendix 1

Total price examples (prices are ex VAT)

Price example for 1 OPU session that does not produce an embryo

Ovum pick up (OPU)	733 €
Medicine during and after OPU	67 €
Maturation of oocytes	150 €
Microinsemination (ICSI)	333 €
Use of Zymot Fertilitly Chip (sperm separation)	146 €
TOTAL PRICE	1.429 €

In addition to this, you might have to add sanitary tests, EU health certificate and semen expenses.

Price example for 1 OPU session that produces 1 embryo

Total price 1 OPU and ICSI session (as specified above)	1.429 €
1 embryo	427 €
TOTAL PRICE	1.856 €

Price example for 1 OPU session that produces 2 embryos

Total price 1 OPU and ICSI session (as specified above)	1.429 €
2 embryos	854 €
TOTAL PRICE	2283 €