## 2024 Transported Oocyte Contract for ICSI

This Contract made on	, 20	, by and between Equine Medical Services,
Inc., a Missouri Corporation, hereinafter called "E	MS", and	
hereinafter called "Owner", both of whom are here	einafter called	the "Parties".
	Recitals:	
<b>EMS</b> is in the business of embryo product	tion from ooc	ytes via ICSI (intracytoplasmic sperm injection).

Owner desires to enter a contract with EMS for such services.

Therefore, the Parties agree as follows:

- 1. During the calendar year 2024, Owner will attempt to have an oocyte(s) recovered from its mare, the "Donor Mare", named \_\_\_\_\_\_\_, and shipped to EMS. EMS shall mature the oocytes, evaluate them, and if apparently healthy, fertilize it (them) via ICSI in an attempt to produce embryos.
- 2. Owner agrees to pay EMS \$200 for oocyte culture and maturation per cycle, \$500 per ICSI session for sperm injection into mature oocytes, and \$1,000 for each blastocyst produced.
- 3. EMS will ship blastocysts for \$100 plus shipping expense to Owner's veterinarian or embryo transfer facility for embryo transfer. EMS will also ship oocyte transport media to Owner's veterinarian as needed for \$30 plus shipping expense.
  - 4. Owner shall indemnify and hold EMS harmless with respect to said losses and risks.
- 5. All notices required by this Contract shall be given as follows: if to EMS, then, Equine Medical Services, Inc., 5851 Deer Park Road, Columbia, MO 65201-9751; if to Owner, then the address shown at Owner's signature.
- 6. Owner understands and agrees that EMS is not responsible for the expense of transporting semen, oocytes, embryos or containers, and that Owner will pay these expenses. Further, Owner understands and agrees that EMS is not responsible for registration or blood-typing of the resultant foal.
- 7. It is specifically understood and agreed between the Parties that if Owner desires embryo biopsy and Pre-Implantation Genetic Diagnosis (PGD), Owner will pay to EMS \$500.00 for that service. It is further understood by the Parties that the success of embryo biopsy and PGD relies on many factors and while EMS will use its best efforts toward the success of the procedures, EMS does not guarantee results of those procedures.
- 8. Owner understands and agrees that many factors impact upon successful embryo production, transport, and/or establishment of pregnancy, and that although EMS shall use its best efforts to perform the services required by this Contract, EMS does not guarantee success of the procedures. If ICSI does not result in embryo production or pregnancy, Owner's damages shall be limited to EMS's continuing obligation to complete the same subject to the following limitations (all at the Owner's sole expense and risk):

If by December 1, 2024, Owner is unable to recover an oocyte from the Donor Mare, a blastocyst is not produced, or a pregnancy fails to result from transfer of an embryo into a Recipient Mare, EMS or Owner shall have the right to declare this Contract terminated. In such an event, Owner shall pay to EMS all sums due under this Contract. Thereafter the Parties shall have no further obligations to one another.

- 9. Owner agrees to place a valid credit card on file with EMS for payment of the fees in this contract. If owner wishes to pay via wire transfer, a deposit of \$1,275.00 must be received by EMS before each shipment.
  - 10. EMS reserves the right to refuse or suspend service when the Owner's account is past due.

- 11. For all purposes, this Contract shall be deemed to be negotiated, made and signed in Boone County, Missouri and the laws of Missouri shall control. At EMS's election, any litigation regarding the Contract shall occur in Boone County, Missouri.
- 12. This Contract is the final and complete agreement of the Parties and there are no other terms of the Parties in agreement other than those contained in this document.
- 13. This Contract shall be binding upon the Parties and their respective heirs, personal representatives, successors and assigns.
- 14. For all purposes, this Contract shall be deemed to be negotiated, made and signed in Boone County, Missouri and the laws of Missouri shall control. At EMS's election, any litigation regarding the Contract shall occur in Boone County, Missouri.

As Evidence of this Contract, the Parties have signed and dated this Contract as indicated below.

Owner's Signature	Authorized Representative of EMS			
Dated:	Dated:			
Owner's Address				
Owner's Telephone				
M/C, Visa, Amex or Discover		exp. date	CVV#	
Name on Credit Card				
Credit Card Billing Address				
Billing Address (if different than above):				
Mare name				
Breed	Age			
Person to contact with questions or status of c	oocytes/embryos:			
Preferred method of contact: telephone	or email?			
Telephone	e-mail			
Name and address of facility receiving shipm	ent of embryos from E	MS:		
Telephone	email			

# 2024 ICSI and Embryo Transfer Contract for Transported Oocytes

This Contract made on, 20,	by and between
This Contract made on, 20, Equine Medical Services, Inc., a Missouri Corporation, hereinafter	called "EMS", and
	Owner", both of whom are hereinafter
called the "Parties".	
Recitals:	
<b>EMS</b> is in the business of embryo production and transfer to sperm injection).	from oocytes via ICSI (intracytoplasmic
Owner desires to enter a contract with EMS for such service	ces.
Therefore, the Parties agree as follows:	
1. During the calendar year 2024, Owner will attempt to hat the "Donor Mare", named	, and shipped to EMS. EMS shall the it (them) via ICSI in an attempt to d into an EMS-owned Recipient Mare initial attempt or if a pregnancy does not
2. Upon the signing of this Contract, Owner shall pay to Enany circumstances) annual enrollment fee. Said fee shall be considered services: Recipient Mare preparation, embryo evaluation, processing Recipient Mare maintenance until 30 days gestation. The nomination "Donor Mare" and will be good from February 1, through December	ered payment for <b>only</b> the following g, ultrasound pregnancy detection and on fee is not transferable to another

- 3. Owner agrees to pay EMS \$200 for oocyte culture and maturation per cycle, \$500 per ICSI session for sperm injection into mature oocytes, \$250 for each embryo transfer, \$250 for each embryo vitrified, and \$1,000 for each blastocyst produced.
- 4. Upon each Recipient Mare reaching 30 days of gestation with a viable pregnancy, Owner shall pay to EMS \$4,350.00. EMS shall start charging boarding fees for the Recipient Mare after she reaches 30 days of gestation, at the rate of \$21.00 per day. The Owner may, and is encouraged to, transport the Recipient Mare any time after she reaches 30 days of gestation. Without prior arrangement, board for recipient mares after 60 days of gestation will be charged at the rate of \$23.00 per day and after 90 days of gestation board will be \$25.00 per day.

of embryos produced. The nomination fee for this "Donor Mare" is not transferable to another owner. Owner is responsible for, and agrees to pay for veterinary expenses of the recipient mare after 30 days of gestation.

- 5. Owner shall return each Recipient Mare to EMS in good health within 6 months following foaling. If Owner is unable to so-return the Recipient Mare due to the death of the mare, Owner agrees to pay EMS \$2,000.00 (\$3,250 if the Recipient Mare is a draft or draft cross mare), and to supply EMS with a letter from the examining veterinarian stating findings at the time of the death of the Recipient Mare. If Owner fails to return the Recipient Mare for any other reason Owner agrees to pay EMS \$5,000.00 (\$6,000.00 if the Recipient Mare is a draft or draft cross mare).
- 6. It is expected that each Recipient Mare will deliver a live foal (defined for this purpose as able to stand and nurse within 24 hours after birth). If a Recipient Mare loses the pregnancy after 30 days of gestation, the Owner will receive \$2,000 credit towards future embryo transfer services. The recipient mare

must be returned and a letter from the examining veterinarian stating findings at the time of loss must be presented for the credit to be issued. No credit will be issued if the loss is due to an inherited genetic defect such as, but not limited to, lethal white syndrome.

- 7. EMS recommends to Owner that Owner insure the Recipient Mare(s) and the embryo(s) against all losses and risks of any kind, nature and description. Owner shall indemnify and hold EMS harmless with respect to said losses and risks.
- 8. All notices required by this Contract shall be given as follows: if to EMS, then, Equine Medical Services, Inc., 5851 Deer Park Road, Columbia, MO 65201-9751; if to Owner, then the address shown at Owner's signature.
- 9. Owner understands and agrees that EMS is not responsible for the expense of transporting oocytes, semen, or containers. Further, Owner understands and agrees that EMS is not responsible for registration or blood-typing of the resultant foal.
- 10. Owner understands and agrees that many factors impact upon successful embryo production and/or implantation and that although EMS shall use its best efforts to perform the services required by this Contract, EMS does not guarantee success of the procedures. If a transfer does not result in a pregnancy, Owner's damages shall be limited to EMS's continuing obligation to complete the same subject to the following limitations (all at the Owner's sole expense and risk):

If by December 1, 2024, Owner is unable to recover an oocyte from the Donor Mare or a pregnancy fails to result from ICSI and transfer of an embryo into a Recipient Mare, EMS or Owner shall have the right to declare this Contract terminated. In such an event, Owner shall pay to EMS all sums due under this Contract. Thereafter the Parties shall have no further obligations to one another.

- 11. Owner agrees to contact EMS prior to oocyte collection. Owner also agrees to advise EMS on the proposed method and time of delivery of the oocyte(s). Owner agrees to contact EMS on the day of oocyte recovery and advise EMS of the results regardless of the success or failure of oocyte recovery.
- 12. It is understood by the Parties that if the owner desires that an embryo be frozen, Owner will pay EMS \$250.00 for that service as well as a monthly storage fee. It is further understood that when the embryo is transferred to a Recipient mare in the future Owner will pay the Recipient Lease fee currently in force at EMS for that year.
- 13. It is specifically understood and agreed between the Parties that if Owner desires an embryo to be transferred into a recipient mare and an appropriate recipient mare is not available at that time, that the embryo will be frozen and stored until it can be thawed and transferred into an appropriate recipient mare. Owner agrees to pay all fees associated with freezing, storing, and thawing the embryo(s).
- 14. It is specifically understood and agreed between the Parties that if Owner desires embryo biopsy and Pre-Implantation Genetic Diagnosis (PGD), Owner will pay to EMS \$500.00 for that service. It is further understood by the Parties that the success of embryo biopsy and PGD relies on many factors and while EMS will use its best efforts toward the success of the procedures, EMS does not guarantee results of those procedures. The Parties agree that if a pregnancy is to be terminated before 30 days of gestation due to the results of PGD, Owner will pay EMS \$500.00 for the use of the recipient mare during that cycle.
- 16. Owner agrees to place a valid credit card on file with EMS for payment of the fees in this contract. If owner wishes to pay via wire transfer, a deposit of \$1,275.00 must be received by EMS before each shipment.
  - 17. EMS reserves the right to refuse or suspend service when the Owner's account is past due.
  - 18. It is specifically understood and agreed between the Parties that prior to the transporting of the

Recipient Mare from EMS, all charges for services rendered in this Contract shall be paid in full. Further, by filing this Contract along with a detailed itemization of the unpaid charges owed to EMS by Owner, EMS shall have a possessory lien on the Recipient Mare and the fetus.

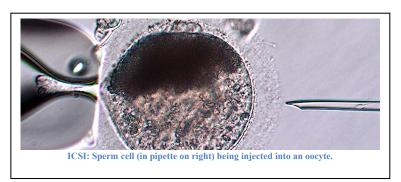
- 19. With regard to the transportation of the Recipient Mare(s), all risk of loss shall be borne by Owner and all transportation expenses shall be paid by Owner. Three business days notice must be provided to EMS by Owner prior to discharge of the Recipient Mare(s) to allow for processing of mares and paperwork. All Recipient Mare(s) shall be picked up and delivered during regular business hours. Owner agrees to pay EMS \$75 for each delivery or pick up not during regular business hours.
- 20. For all purposes, this Contract shall be deemed to be negotiated, made and signed in Boone County, Missouri and the laws of Missouri shall control. At EMS's election, any litigation regarding the Contract shall occur in Boone County, Missouri.
- 21. This Contract is the final and complete agreement of the Parties and there are no other terms of the Parties in agreement other than those contained in this document.
- 22. This Contract shall be binding upon the Parties and their respective heirs, personal representatives, successors and assigns.

As Evidence of this Contract, the Parties have signed and dated this Contract as indicated below.

Owner's Signature	Authorized R	Authorized Representative of EMS			
Dated:	Dated:				
Owner's Address					
Owner's Telephone	E-mail_				
M/C, Visa, Amex or Discover		Exp. Date	CVV#		
Name on Credit Card					
Credit Card Billing Address					
Mare name					
Breed					
Height	Weight				
Person to contact with questions or pregnand	cy status of recipients: _				
Telephone	e-mail				
Preferred method of contact: telephone	or email?				
Veterinarian performing oocyte recovery					
Telephone	e-mail				

## **Oocyte Recovery and ICSI**

Equine Medical Services is one of the world's leading producers of in vitro produced embryos. ICSI (Intracytoplasmic Sperm Injection), where an individual sperm cell is microscopically injected into each egg, is useful for mares that cannot make embryos on their own or for situations where supplies of semen are limited. The ability to recover multiple oocytes (eggs)



provides the possibility for multiple embryos to be produced. For this procedure oocytes are collected from the donor mare's follicles and cultured to finish maturation. The oocytes are fertilized in the laboratory by injecting a single sperm cell into each egg. The fertilized oocyte is then cultured and allowed to divide to become an embryo; each cellular division cycle takes about 24 hours. Once the embryo becomes a blastocyst (7-9 days), it is transferred to the uterus of a recipient mare or frozen (vitrified) for storage. Since only a single sperm cell is selected and injected, ICSI can utilize very small quantities of frozen semen.



### What to Expect

The results partially depend on the number of oocytes recovered and this is influenced by the number of follicles a mare has that are available for aspiration. The average oocyte recovery rate is about 60% per follicle aspirated. Approximately 65% of the recovered oocytes will mature to be fertilized. Fertilized oocytes will divide and grow around 70% of the time; an average of 20% of fertilized oocytes will grow in culture to the blastocyst stage for non-surgical transfer, but these numbers are highly variable between mares and even stallions. Oocyte quality and vigor decline with the donor mare's age so that older donors, especially those into their 20's tend to have lower success rates than

young mares. Pregnancy rates for ICSI embryos tend to run about 10% lower than for flushed embryos, but this is usually counterbalanced by the increased number of embryos available. The pregnancy loss rate is also about 10% higher for ICSI embryos than flushed embryos.

#### **EMS ICSI Embryo Production 2023**

	In-House		Transported oocytes		Total	
	Number	%	Number	%	Number	%
Aspirations	1,079		1,127		2,206	
Oocytes	7,453		12,314		19,767	
Maturation*	5,248	70.4 %	7,544	61.2 %	12,792	64.7 %
Cleaved**	3,753	71.5 %	5,407	71.7 %	9,160	71.6 %
Blastocysts (embryos)***	1,087	20.7 %	1,533	20.3 %	2,620	20.5 %

<sup>\*</sup>The number of oocytes presented that matured to allow fertilization (sperm injection).

<sup>\*\*</sup> The number of matured oocytes that, once fertilized, started dividing into multiple cells.

<sup>\*\*\*</sup> The number (or percentage) of fertilized oocytes that became blastocysts (transferrable embryos).