Vytelle ADVANCE

CREATING SUCCESS WITH FRESH OR FROZEN VYTELLE EMBRYOS

Vytelle’s hormone-free in vitro fertilization (IVF) process is the most accessible way to multiply offspring from your elite genetics. No donor set up, no added labor. Our system is easy on the animals and simple for you.

FROZEN EMBRYO PROGRAM

Frozen embryos grant the flexibility to build customized transfer programs that support the goals of your operation. The freezing process allows embryos to remain viable for many years, allowing the time for smart genetic decisions to be made.

In order to keep their calving window tight, some beef producers will OPU their donors several times throughout the year to create a large inventory of frozen embryos, preparing for one or two large transfer days. In a dairy setting, calves are needed year round. In order to maximize the number of pregnancies, some operations utilize natural heats for embryo transfer, which may only require a few frozen embryos at a time.

That’s the beauty of the frozen embryo— it’s always ready whenever you need it, regardless of your goals.

Tips for Success

FROZEN EMBRYOS

- Follow the Direct Thaw SOP provided by Vytelle during implantation
- Utilize AETA certified transfer technician
- Use recipient synchronization protocol designed for 7 to 8 day heats
- Ensure proper handling of embryo inventory
- Investigate export regulations prior to the OPU

Transferring Frozen Embryos

Vytelle uses the Direct Thaw (DT) method—it’s as simple as 1, 2, 3.

1. Air thaw the embryo for 10 seconds in a room temperature of 60-80 degrees Fahrenheit.
2. Submerge in a 95 degrees Fahrenheit water bath for 30 seconds.
3. Load into a warmed transfer gun and implant into a qualified recipient.

Our protocols surrounding the frozen embryo product all support a predictable, successful pregnancy rate while being an accessible and flexible way to progress your genetics, regardless of time frames or goals.

95% of all embryos produced with Vytelle are grade 1, providing producers the best quality product.

DT frozen embryos are export eligible. Investigate export requirements prior to OPU.
FRESH EMBRYO PROGRAM

Utilizing fresh embryos can increase your pregnancy rate. Some beef producers synchronize a large group of recipients and OPU several donors, enabling all quality embryos to be transferred fresh. To improve performance of lower quality embryos, some dairy producers prefer to transfer grade 2 embryos fresh while freezing the grade 1s for later use. That’s the power of fresh embryos-you can maximize results while creating genetic progress, faster.

Tips for Success

FRESH EMBRYOS

- Monitor and record visual heats
- Create an embryo priority list
- Always have frozen embryos in the tank
- Use recipient synchronization protocol designed for 7 to 8 day heats
- Utilize AETA certified transfer technician

OPU & Recipient Synchronization

For fresh embryo transfers, the time frames for the OPU and the recipient synchronization protocol overlap. Heat detection begins on the day of the follicle aspiration and is a vital piece to success. Monitoring and recording good visual heats aid in better conception rates.

EXAMPLE USING 7 DAY CIDR PROTOCOL

<table>
<thead>
<tr>
<th>WEEK</th>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
<th>SUNDAY</th>
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</thead>
<tbody>
<tr>
<td>WEEK 1</td>
<td>CIDR in + GnRH</td>
<td>Vytelle OPU</td>
<td></td>
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<tr>
<td>WEEK 2</td>
<td>CIDR out + PGF</td>
<td>Heat Detect AM/PM</td>
<td>Heat Detect AM</td>
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<td>WEEK 3</td>
<td></td>
<td>Embryo Predictions</td>
<td>Embryo Transfer AM</td>
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EMBRYO PREDICTIONS

Vytelle will provide predictions for the quantity of grade 1 embryos expected to develop on each mating. This will be delivered in a range format to account for variability, as some embryos develop faster than others.

Once the predictions are provided, developing a priority list and discussing the number of quality observed heats (being mindful that 10% of the heats will not be used) is vital to success. In the event there are more embryos than recipients, we are happy to freeze the additional embryos at the lab. The price per embryo remains the same, regardless if they are fresh or frozen. *Embrmos are not able to be frozen on farm.*

EMBRYO TRANSFER

Utilizing the priority list and maximum embryo quantity, our lab technicians load the fresh embryos the morning of transfer day. Matching embryo stages with heats supports a successful pregnancy rate. If there are younger structures on the morning of transfer day, we recommend keeping those embryos in the lab to continue development. In order to make an adaptable plan, please be available at this point so we can communicate and update the embryo priority if needed.

TRANSPORTATION

Occurring the morning of embryo transfer

Fresh embryos are graded and loaded into straws, then transported in a straw incubator, adding ease and efficiency to your transfer day. To ensure dependable, on time delivery, we do not use commercial carriers for our fresh products. The straw incubator will either be hand delivered by a Vytelle employee or driven by a trusted courier. To take advantage of our fresh embryo service, it’s recommended that recipients be no more than seven hours from our lab. If the distance is greater, this will change our embryo packaging plans and should be discussed with your local Vytelle representative.