DIRECTIONS FOR USE:

For the treatment of cystic ovaries in cattle, and cystic ovaries or anoestrous in mares, administer a total of 2 mL Receptal® 

If poisoning occurs, contact a doctor or the National Poisons Centre (0800 POISON).

FIRST AID:

Store below 25°C (Air conditioning). Protect from light.

DISPOSAL:

Needles should be from gamma irradiated packs or freshly sterilised by boiling intravenous or subcutaneous routes may also be used if desired. Syringes and needles should be disposed of correctly.

If needles are to be used, needles must be autoclaved or incinerated in an approved incinerator.

Each ml contains 4 μg Buserelin and 10 mg benzyl alcohol, Ph.Eur., as antimicrobial preservative. Buserelin is equivalent to the natural LH/FSH releasing hormone (LH/FSH-RH).

A ready-to-use colourless, aqueous injection solution for parenteral administration, containing synthetic releasing hormone analogue of both the luteinising and follicle stimulating hormones (GnRH equivalent to LH/FSH-RH).

PRESENTATION:

BUSERELIN 4 µg per ml

The induction of ovulation is not possible in the presence of a functional corpus luteum.

Note

For the treatment of cystic ovaries and anoestrous, Receptal® is preferably given by intramuscular injection. However, the treatment of cystic ovaries in dairy cows is best given approximately 6 hours prior to service. This may be achieved by administering Receptal® in the morning with service in the afternoon.

If ovulation has not occurred within 24 hours after treatment, then the injection should be repeated.

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In the treatment of follicular cysts in cattle, it is unnecessary and contraindicated to administer a further dose of Receptal® in the presence of a mature follicle. The induction of ovulation is not possible in the presence of a functional corpus luteum.

Note

Steroid hormones may be used concurrently with Receptal® to enlarge the mature follicle and thereby to synchronise ovulation more closely with mating in mares.

To induce ovulation of a mature follicle and thereby to synchronise ovulation more closely with mating in mares

To induce ovulation of a mature follicle and thereby to synchronise ovulation more closely with mating in mares

In anoestrous mares if no oestrous occurs within 10 days, Receptal® should be administered on the first day on which the follicle has reached its maximum size, this being determined by previous clinical history and rectal examinations.

Note

A high number of business cards and brochures can be produced at a very low cost. For more information, contact your nearest Intervet office.
The New Zealand dairy industry has a major problem with anoestrous cows, treating around 500,000 cows annually to increase pregnancy rate.

Ten fertility programmes for the treatment of anoestrous cows are recommended using Intervet’s Receptal – a synthetic gonadotrophin releasing hormone (GnRH), in conjunction with a progesterone device and prostaglandin analogue to stimulate the cow into oestrous prior to artificial insemination. The Fixed Time Ovulation programmes can also be used for synchronisation of oestrus cows and heifers.

### Fixed Time Insemination Programmes

<table>
<thead>
<tr>
<th>Programme</th>
<th>Start of GnRH dose</th>
<th>End of GnRH dose</th>
<th>Start of CIDR</th>
<th>End of CIDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Fixed</td>
<td>14 days</td>
<td>12 days</td>
<td>20 days</td>
<td>19 days</td>
</tr>
<tr>
<td>Luteal fixed</td>
<td>14 days</td>
<td>12 days</td>
<td>20 days</td>
<td>19 days</td>
</tr>
</tbody>
</table>

### Detection of Oestrous Programmes

<table>
<thead>
<tr>
<th>Programme</th>
<th>Start of Event</th>
<th>Event Type</th>
<th>End of Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial detection</td>
<td>Foll. phase</td>
<td>Luteal phase</td>
<td>Foll. phase</td>
</tr>
<tr>
<td>Detection of oestrus</td>
<td>Foll. phase</td>
<td>Luteal phase</td>
<td>Foll. phase</td>
</tr>
</tbody>
</table>

### Summary of GnRH analogues

- **Gonadorelin** has the same structure as the natural hormone (LH) and follicle stimulating hormone (FSH) from the pituitary.
- **Receptal** is a potent option.
- **Chenault et al. (1990)**: The largest dose (500μg) of gonadorelin recommended in cattle, but only 10μg of buserelin stimulated the largest release of LH in comparison to the other GnRH analogues tested.
- **Reeves et al. (1980)**: Results showed that higher levels of LH secretion were obtained with the use of Receptal, as compared to other GnRH analogues.

### Results

- **Chenault et al. (1990)**: This involved investigating the LH and FSH response of Holstein heifers to fertirelin acetate, gonadorelin and buserelin, aimed at:
  - stimulating high production of LH for efficient induction of ovulation and better support of corpus luteum
  - improving pregnancy rates with the use of GnRH analogues

### Uses of Receptal

- **Improves early luteal function**
- **Efficient induction of ovulation**
- **Minimises variation in response to GnRH**
- **Stimulates high production of LH**
- **Improve pregnancy rates**

### Conclusion

- The use of GnRH analogues in conjunction with a progesterone device and prostaglandin analogue to stimulate the cow into oestrous prior to artificial insemination is recommended for the treatment of anoestrous cows and heifers.