(iii) **Limitations.** Federal law restricts this drug to use by or on the order of a licensed veterinarian.

(3) **Cattle.** Administer products described in paragraph (b) of this section as follows:

(i) **Amount.** 4 mg/lb body weight by deep intramuscular injection once daily for up to 5 days.

(ii) **Indications for use.** For the treatment of bovine respiratory disease (shipping fever complex and bacterial pneumonia) associated with *Pasteurella multocida* susceptible to erythromycin.

(iii) **Limitations.** Do not use in female dairy cattle over 20 months of age. Do not slaughter treated animals within 6 days of last treatment. A withdrawal period has not been established for this product in pre-ruminating calves. Do not use in calves to be processed for veal. To avoid excess trim, do not slaughter within 21 days of last injection.

[72 FR 68142, Dec. 7, 2007]

§ 522.840 **Estradiol.**

(a) **Specifications.** Each silicone rubber implant contains 25.7 or 43.9 milligrams (mg) estradiol and is coated with not less than 0.5 mg oxytetracycline powder.

(b) **Sponsor.** See No. 021641 in §510.600(c) of this chapter.

(c) **Related tolerances.** See §556.240 and 556.710 of this chapter.

(d) **Conditions of use.** For implantation in steers and heifers as follows:

(1) **Amount.** Insert one 25.7-mg implant every 200 days; insert one 43.9-mg implant every 400 days.

(2) **Indications for use.** For increased rate of weight gain in suckling and pastured growing steers; for improved feed efficiency and increased rate of weight gain in confined steers and heifers. No additional effectiveness may be expected from reimplanting in less than 200 days for the 25.7-mg implant or 400 days for the 43.9-mg implant.

(3) **Limitations.** For subcutaneous ear implantation in steers and heifers only. Safety and effectiveness have not been established in veal calves. A withdrawal period has not been established for this product in preruminating calves. Do not use in calves to be processed for veal.

[69 FR 67818, Nov. 22, 2004]

§ 522.842 **Estradiol benzoate and testosterone propionate.**

(a) **Sponsors.** See sponsors in §510.600(c) of this chapter for use as in paragraph (c) of this section.

(1) No. 000856 for use as in paragraph (c)(1), (c)(2), and (c)(3) of this section.

(2) No. 021641 for use as in paragraph (c) of this section.

(b) **Related tolerances.** See §§556.240 and 556.710 of this chapter.

(c) **Conditions of use.** For implantation in heifers as follows:

(1) **Amount.** (i) 20 milligrams (mg) estradiol benzoate and 200 mg testosterone propionate (one implant consisting of 8 pellets, each pellet containing 2.5 mg estradiol benzoate and 25 mg testosterone propionate) per implant dose.

(ii) 20 mg estradiol benzoate and 200 mg testosterone propionate (one implant consisting of 9 pellets, each of 8 pellets containing 2.5 mg estradiol benzoate and 25 mg testosterone propionate, and 1 pellet containing 29 mg tylosin tartrate) per implant dose.

(2) **Indications for use.** For increased rate of weight gain and improved feed efficiency.

(3) **Limitations.** For heifers weighing 400 pounds or more; for subcutaneous ear implantation, one dose per animal; not for use in dairy or beef replacement heifers. Safety and effectiveness have not been established in veal calves. A withdrawal period has not been established for this product in preruminating calves. Do not use in calves to be processed for veal.

[69 FR 68252, Nov. 24, 2004]

§ 522.850 **Estradiol valerate and norgestomet in combination.**

(a) **Specifications.** The product is a two-component drug consisting of the following:

(1) An implant containing 6.0 milligrams of norgestomet.

(2) An injectable solution (sesame oil) containing 3.0 milligrams of norgestomet and 5.0 milligrams of estradiol valerate per 2 milliliters.
(b) Sponsor. See 050604 in §510.600(c) of this chapter.

(c) Conditions of use—(1) Amount. One implant and 2 milliliters of injection at time of implantation.

(2) Indications for use. For synchronization of estrus/ovulation in cycling beef cattle and non-lactating dairy heifers.

(3) Limitations. Insert implant subcutaneously in the ear only; then immediately inject solution intramuscularly only. Counting the day of implantation as day 1, remove the implant on day 10. Collect all implants as they are removed and burn them. While animals are restrained for artificial insemination, avoid other treatments such as vaccinations, dipping, pour-on grub and louse prevention, spraying, etc. When inseminating without estrus detection, the entire treated group should be started at 48 hours after the last implant has been removed and should be completed within 6 hours. Where estrus detection is preferred, insemination should be approximately 12 hours after first detection of estrus. Those that do not conceive can be re-bred when they return to estrus approximately 17 to 25 days after implant removal. Do not use in cows producing milk for human consumption.


§522.863 Ethylisobutrazine hydrochloride injection.

(a) Specifications. The drug is a sterile aqueous solution. Each milliliter contains 100 milligrams (mg) etylisobutrazine hydrochloride.

(b) Sponsor. See No. 000010 in §510.600 of this chapter.

(c) Conditions of use in dogs—(1) Amount. Administer 4.5 to 6.8 mg/pound (10 to 15 mg/kilogram) body weight as a single, dorsoscapular subcutaneous injection. If needed, the daily dose of etodolac tablets as in §520.870 of this chapter may be given 24 hours after the injection.

(2) Indications for use. For the control of pain and inflammation associated with osteoarthritis.

(3) Limitations. Federal law restricts this drug to use by or on the order of a licensed veterinarian.


§522.883 Etorphine hydrochloride injection.

(a) Chemical name. 6,7,8,14-tetrahydro-alpha-methyl-alpha-propyl-6,14-endo-ethenooripavine-alpha-methanol hydrochloride.

(b) Specifications. Each milliliter of etorphine hydrochloride injection, veterinary, contains 1 mg of etorphine hydrochloride in sterile aqueous solution.

(c) Sponsors. See No. 053923 in §510.600(c) of this chapter.

(d) Conditions of use. (1) The drug is used for the immobilization of wild and exotic animals.

These conditions are NAS/NRC reviewed and deemed effective. Applications for these uses need not include effectiveness data as specified by §514.111 of this chapter, but may require bioequivalency and safety information.