§ 524.2620 Liquid crystalline trypsin, Peru balsam, castor oil.

(a) Specifications—(1) Each gram of liquid or aerosol contains 0.12 milligram of crystalline trypsin, 87.0 milligrams of Peru balsam, and 788.0 milligrams of castor oil.

(2) Each gram of liquid or aerosol contains 0.1 milligram of crystalline trypsin, 72.5 milligrams of Peru balsam, and 800 milligrams of castor oil.

(b) Sponsors. See sponsor numbers in § 510.600(c) of this chapter for use as in paragraph (c) in this section:

(1) No. 051079 for use of product described in paragraph (a)(1).

(2) No. 017135 for use of product described in paragraph (a)(2).

(c) Conditions of use—(1) Amount. Apply directly to the wound site.

(2) Indications for use. As an aid in the treatment of external wounds and assists healing by facilitating the removal of necrotic tissue, exudate, and organic debris.

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

[79 FR 10973, Feb. 27, 2014]
(ii) Indications for use. For use in lactating dairy cattle:
(A) For the treatment of clinical mastitis associated with coagulase-negative staphylococci, *Streptococcus dysgalactiae*, and *Escherichia coli*; and
(B) For the treatment of subclinical mastitis associated with coagulase-negative staphylococci and *S. dysgalactiae*.

(iii) Limitations. Milk taken from cows during treatment (a maximum of eight daily infusions) and for 72 hours after the last treatment must not be used for human consumption. Following label use for up to 8 consecutive days, a 2-day preslaughter withdrawal period is required. Federal law restricts this drug to use by or on the order of a licensed veterinarian. Federal law prohibits extra-label use of this drug in lactating dairy cattle for disease prevention purposes; at unapproved doses; frequencies, durations, or routes of administration; and in unapproved major food producing species/production classes.

(2) Dry cows—(i) Amount. Infuse 500 mg per affected quarter at the time of dry off.

(ii) Indications for use. For the treatment of subclinical mastitis in dairy cattle at the time of dry off associated with *Staphylococcus aureus*, *Streptococcus dysgalactiae*, and *Streptococcus uberis*.

(iii) Limitations. Milk taken from cows completing a 30-day dry-off period may be used for food with no milk discard due to ceftiofur residues. Following intramammary infusion, a 16-day preslaughter withdrawal period is required for treated cows. Following label use, no preslaughter withdrawal period is required for neonatal calves from treated cows regardless of colostrum consumption. Federal law restricts this drug to use by or on the order of a licensed veterinarian. Federal law prohibits extra-label use of this drug in lactating dairy cattle for disease prevention purposes; at unapproved doses; frequencies, durations, or routes of administration; and in unapproved major food producing species/production classes.
§ 526.464 Cloxacillin intramammary dosage forms.

§ 526.464a Cloxacillin benzathine.

(a) Specifications. Each dose contains cloxacillin benzathine equivalent to 500 milligrams of cloxacillin.

(b) Related tolerances. See §556.165 of this chapter.

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

(1) Amount. Administer aseptically into each quarter immediately after last milking.

(2) Indications for use. For the treatment of mastitis caused by Staphylococcus aureus and Streptococcus agalactiae including penicillin resistant strains in dairy cows during the dry period.

(3) Limitations. For use in dry cows only. Not to be used within 30 days of calving. Milk taken from treated cows prior to 72 hours (6 milkings) after calving must not be used for human food. Animals infused with this product must not be slaughtered for food from the time of infusion until 72 hours after calving. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

§ 526.464b Cloxacillin benzathine for intramammary infusion, sterile.

(a) Specifications. Each milliliter dose contains cloxacillin benzathine equivalent to 500 milligrams of cloxacillin.

(b) Related tolerances. See §556.165 of this chapter.

(c) Sponsor. See No. 000061 in §510.600(c) of this chapter.

(1) Amount. One dose per infected quarter immediately after last milking.

(2) Indications for use. Treatment and prophylaxis of bovine mastitis in non-lactating cows due to Streptococcus agalactiae and Staphylococcus aureus.

(3) Limitations. For use in dry cows only. Not to be used within 4 weeks (28 days) of calving. Animals infused with this product must not be slaughtered for food use for 4 weeks (28 days) after the latest infusion. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

§ 526.464c Cloxacillin sodium for intramammary infusion, sterile.

(a) Specifications. Each milliliter contains cloxacillin sodium equivalent to 20.0 milligrams of cloxacillin.

(b) Sponsor. See No. 000061 in §510.600(c) of this chapter.

(c) Related tolerances. See §556.165 of this chapter.

(d) Conditions of use. Lactating cows—

(1) Amount. 10 milliliters (one dose of 200 milligrams) per infected quarter.

(2) Indications for use. Treatment of mastitis in lactating cows due to Streptococcus agalactiae and Staphylococcus aureus including strains resistant to penicillin.

(3) Limitations. If improvement is not noted within 48 hours after treatment, consult your veterinarian. Milk that has been taken from animals during treatment and for 96 hours after the last treatment must not be used for food. Treated animals must not be slaughtered for food until 4 days after the last treatment.

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(3) **Limitations.** Administer after milking, cleaning, and disinfecting, and as early as possible after detection. Treatment should be repeated at 12-hour intervals for a total of three doses. Milk taken from treated animals within 48 hours (four milkings) after the latest treatment should not be used for food. Treated animals should not be slaughtered for food within 10 days after the latest treatment. Federal law restricts this drug to use by or on the order of a licensed veterinarian.


§ 526.820 Erythromycin.

(a) **Specifications.** (1) Each 6-milliliter, single-dose, disposable syringe contains 300 milligrams of erythromycin (as the base), 0.45 milligram of butylated hydroxyanisole, and 0.45 milligram of butylated hydroxytoluene.

(2) Each 12-milliliter, single-dose, disposable syringe contains 600 milligrams of erythromycin (as the base), 0.90 milligram of butylated hydroxyanisole, and 0.90 milligram of butylated hydroxytoluene.

(3) The vehicle is triglyceride of saturated fatty acids from coconut oil.

(4) The drug may or may not be sterile.

(b) **Sponsor.** See Nos. 054771 and 061623 in § 510.600(c) of this chapter.

(c) **Conditions of use—** (1) **Amount.** (i) Lactating cows: After milking, cleaning, and disinfecting, infuse contents of a single 6-milliliter syringe into each infected quarter; repeat procedure at 12-hour intervals for a maximum of 3 consecutive infusions.

(ii) Dry cows: After milking, cleaning, and disinfecting, infuse contents of a single 12-milliliter syringe into each infected quarter at the time of drying off.

(2) **Indications for use.** Treatment of mastitis due to *Staphylococcus aureus*, *Streptococcus agalactiae*, *Streptococcus dysgalactiae*, and *Streptococcus uberis* in lactating or dry cows.

(iii) **Limitations.** Milk taken from animals during treatment and for 36 hours (3 milkings) after the latest treatment must not be used for food.


§ 526.1130 Hetacillin infusion.

(a) **Specifications.** Each 10 milliliter syringe contains hetacillin potassium equivalent of 62.5 milligrams of ampicillin.

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

(c) **Conditions of use.** Lactating cows— (1) **Amount.** 10 milliliters of hetacillin potassium equivalent to 62.5 milligrams ampicillin into each infected quarter. Repeat at 24-hour intervals until a maximum of three treatments has been given.

(2) **Indications for use.** Treating acute, chronic, or subclinical bovine mastitis in lactating cows caused by susceptible strains of *Streptococcus agalactiae*, *Streptococcus dysgalactiae*, *Staphylococcus aureus*, and *Escherichia coli*.

(3) **Limitations.** Milk that has been taken from animals during treatment and for 72 hours (6 milkings) after the latest treatment must not be used for food. Treated animals must not be slaughtered for food until 10 days after the latest treatment. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

[57 FR 37335, Aug. 18, 1992, as amended at 75 FR 10168, Mar. 5, 2010]

§ 526.1590 Novobiocin infusion.

(a)(1) **Specifications.** Each 10 milliliters of oil suspension contains the equivalent of 400 milligrams of novobiocin (present as sodium novobiocin).

(b) **Sponsor.** See No. 054771 in § 510.600(c) of this chapter.

(c) **Related tolerances.** See § 556.460 of this chapter.

(2) **Indications for use.** Treatment of mastitis due to *Staphylococcus aureus*, *Streptococcus agalactiae*, *Streptococcus dysgalactiae*, and *Streptococcus uberis* in lactating or dry cows.

(iii) **Limitations.** Infuse each quarter at the time of drying off, but not less
than 30 days prior to calving. Do not slaughter treated animals for food use for 30 days following udder infusion.

For udder installation for the treatment of mastitis in dry cows only.

(b)(1) Specifications. Each 10 milliliters of oil suspension contains the equivalent of 150 milligrams of novobiocin (present as sodium novobiocin).

(2) Sponsor. See No. 054771 in §510.600(c) of this chapter.

(3) Related tolerances. See §556.460 of this chapter.

(4) Conditions of use—(i) Amount. Infuse 10 milliliters (equivalent to 150 milligrams of novobiocin) in each quarter after milking. Repeat treatment once after 24 hours.

(ii) Indications for use. Use in lactating cows for treatment of mastitis caused by susceptible strains of Staphylococcus aureus.

(iii) Limitations. Do not milk for at least 6 hours after treatment; afterwards, milk at regular intervals. Milk taken from treated animals within 72 hours (6 milkings) after latest treatment must not be used for food. Do not slaughte
§ 526.1696c Penicillin G procaine-dihydrostreptomycin sulfate for intramammary infusion (dry cows).

(a) Specifications. Each 10 milliliters of suspension contains penicillin G procaine equivalent to 1 million units of penicillin G and dihydrostreptomycin sulfate equivalent to 1 gram of dihydrostreptomycin.

(b) Sponsor. See No. 042791 in § 510.600(c) of this chapter.

(c) Related tolerances. See §§ 556.200 and 556.510 of this chapter.

(d) Conditions of use. Dairy cows—(1) Amount. One syringe per quarter at the last milking prior to drying off.

(2) Indications for use. Intramammary use to reduce the frequency of existing infection and to prevent new infections with Staphylococcus aureus in dry cows.

(3) Limitations. Not to be used within 6 weeks of freshening. Not for use in lactating cows. Milk taken from animals within 96 hours (8 milkings) after calving must not be used for food. Animals infused with this drug must not be slaughtered for food within 60 days from the time of infusion nor within 96 hours after calving. Federal law restricts this drug to use by or on the order of a licensed veterinarian.


§ 526.1696d Penicillin G procaine-novobiocin for intramammary infusion.

(a) Specifications. For lactating cattle: each 10-milliliter dose contains 100,000 units of penicillin G procaine and 150 milligrams of novobiocin as novobiocin sodium. For dry cows: 200,000 units of penicillin G procaine and 400 milligrams of novobiocin as novobiocin sodium.

(b) Sponsor. See No. 054771 in § 510.600(c) of this chapter.

(c) Related tolerances. See § 556.515 of this chapter.

(d) Conditions of use. Dairy cows—(1) Amount. One syringe per quarter at time of drying off.

(2) Indications for use. Intramammary use to reduce the frequency of existing infection and to prevent new infections with Staphylococcus aureus in dry cows.

(3) Limitations. Not to be used within 6 weeks of freshening. Not for use in lactating cows. Milk taken from animals within 72 hours (6 milkings) after calving must not be used for food. Treated animals must not be slaughtered for food within 15 days following the last treatment. If redness, swelling, or abnormal milk persists, discontinue use and consult a veterinarian.


§ 526.1810 Pirlimycin.

(a) Specifications. Each 10-milliliter syringe contains 50 milligrams (mg) pirlimycin (as pirlimycin hydrochloride).

(b) Sponsor. See No. 054771 in § 510.600(c) of this chapter.

(c) Related tolerances. See § 556.515 of this chapter.

(d) Conditions of use. In cattle—(1) Amount. Infuse 50 mg into each infected quarter. Repeat treatment after 24 hours. Repeat treatment at 24-hour intervals for up to 8 consecutive days.

(2) Indications for use. For the treatment of clinical and subclinical mastitis in lactating dairy cattle associated with Staphylococcus species such as Staphylococcus aureus and Streptococcus species such as Streptococcus agalactiae, Streptococcus dysgalactiae, and Streptococcus uberis.

(3) Limitations. Do not milk for at least 6 hours after treatment; thereafter, milk at regular intervals. Milk taken from treated animals within 72 hours (6 milkings) after the latest treatment must not be used for food. Treated animals must not be slaughtered for food for 15 days following the last treatment. If redness, swelling, or abnormal milk persists, discontinue use and consult a veterinarian.

days. Following any extended duration of therapy (infusion longer than twice at a 24-hour interval, up to 8 consecutive days), animals must not be slaughtered for 21 days. Federal law restricts this drug to use by or on the order of a licensed veterinarian.


PART 528—NEW ANIMAL DRUGS IN GENETICALLY ENGINEERED ANIMALS

Sec.
528.1070 Bc6 recombinant deoxyribonucleic acid construct.
528.1092 opAFP–GHc2 recombinant deoxyribonucleic acid construct.
528.2010 Human lysosomal acid lipase recombinant deoxyribonucleic acid construct.


SOURCE: 74 FR 6823, Feb. 11, 2009, unless otherwise noted.

§ 528.1070 Bc6 recombinant deoxyribonucleic acid construct.

(a) Specifications and indications for use. Five copies of a human Bc6 recombinant deoxyribonucleic acid (rDNA) construct located at the GTC 155–92 site in a specific hemizygous diploid line of dairy breeds of domestic goats (Capra aegagrus hircus) directing the expression of the human gene for antithrombin (which is intended for the treatment of humans) in the mammary gland of goats derived from lineage progenitor 155–92.

(b) Sponsor. See No. 086047 in § 510.600 of this chapter.

(c) Limitations. Food or feed from GTC–155–92 goats is not permitted in the food or feed supply.

[74 FR 6823, Feb. 11, 2009, as amended at 80 FR 34279, June 16, 2015]

§ 528.1092 opAFP–GHc2 recombinant deoxyribonucleic acid construct.

(a) Specifications. A single copy of the α-form of the opAFP–GHc2 recombinant deoxyribonucleic acid (rDNA) construct located at the α-locus in the EO–1 α lineage of triploid, hemizygous, all-female Atlantic salmon (Salmo salar).

(b) Sponsor. See No. 086035 in § 510.600 of this chapter.

(c) Indications for use. Significantly more of these Atlantic salmon grow to at least 100 grams within 2,700 Celsius degree-days than their comparators.

(d) Limitations. These Atlantic salmon are produced as eyed-eggs and grown-out only in physically-contained, freshwater culture facilities specified in an FDA-approved application.

[80 FR 73104, Nov. 24, 2015]

§ 528.2010 Human lysosomal acid lipase recombinant deoxyribonucleic acid construct.

(a) Specifications. A single copy of a human lysosomal acid lipase (hLAL) recombinant deoxyribonucleic acid (rDNA) gene construct located at the SYN LAL–C site in chromosome 6 in a specific, diploid line (SBC LAL–C) of hemizygous and homozygous domestic chickens (Gallus gallus), derived from the lineage progenitor XLL 109.

(b) Sponsor. See No. 069334 in § 510.600 of this chapter.

(c) Conditions of use—(1) Intended use. The gene construct directs the expression of that encoding gene such that recombinant, human lysosomal acid lipase (rhLAL) protein intended for the treatment of human disease is present in SBC LAL–C chicken egg whites.

(2) Limitations. Food or feed from XLL 109 chickens is not permitted in the food or feed supply.

[81 FR 17608, Mar. 30, 2016]

PART 529—CERTAIN OTHER DOSAGE FORM NEW ANIMAL DRUGS

Sec.
529.40 Albuterol.
529.56 Amikacin.
529.382 Chloramine-T.
529.400 Chlorhexidine tablets and suspension.
529.536 Detomidine.
529.539 Dexmedetomidine.
529.778 Doxycycline.
529.1030 Formalin.
529.1044 Gentamicin in certain other dosage forms.
529.1044a Gentamicin solution for infusion.
529.1044b Gentamicin solution for dipping eggs.
529.1115 Halothane.
529.1150 Hydrogen peroxide.
529.1186 Isoflurane.