

FREEDOM OF INFORMATION SUMMARY

I. GENERAL INFORMATION

A. File Number

NADA 113-232

B. Sponsor

Pfizer Animal Health
Exton, Pennsylvania 19341

C. Proprietary Name

LIQUAMYCIN® LA-200®

D. Established Name

oxytetracycline amphoteric

E. Dosage Form

LIQUAMYCIN® LA-200® is a sterile, ready-to-use broad spectrum antibiotic parenteral formulation. Each milliliter contains 200 milligrams of oxytetracycline base as oxytetracycline amphoteric in an aqueous vehicle containing 2-pyrrolidone and povidone.

F. Dispensing Status

OTC

G. Dosage Regimen

CATTLE

A single dose of 9 mg of LIQUAMYCIN® LA-200® per pound of body weight administered intramuscularly is recommended in the treatment of the following conditions: 1) bacterial pneumonia caused by *Pasteurella* spp. (shipping fever) in calves and yearlings, where retreatment is impractical due to husbandry conditions, such as cattle on range, or where their repeated restraint is inadvisable; 2) infectious bovine keratoconjunctivitis (pinkeye) caused by *Moraxella bovis*.

LIQUAMYCIN® LA-200® can also be administered by intravenous or intramuscular injection at a level of 3 to 5 mg of oxytetracycline per pound of body weight per day. In the treatment of severe foot-rot and advanced cases of other indicated diseases, a dosage level of 5 mg per pound of body weight per day is recommended. Treatment should be continued 24 to 48 hours following remission of disease signs; however, not to exceed a total of four consecutive days. Consult your veterinarian if improvement is not noted within 24 to 48 hours of the beginning of treatment.

SWINE

In swine a single dose of 9 mg of LIQUAMYCIN® LA-200® per pound of body weight administered intramuscularly is recommended in the treatment of bacterial pneumonia caused by *Pasteurella multocida* in swine, where retreatment is impractical due to husbandry conditions or where repeated restraint is inadvisable.

LIQUAMYCIN® LA-200® can be administered by intramuscular injection at a level of 3 to 5 mg of oxytetracycline per pound of body weight per day. Treatment should be continued 24 to 48 hours following remission of disease signs; however, not to exceed a total of four consecutive days. Consult your veterinarian if improvement is not noted within 24 to 48 hours of the beginning of treatment.

For sows, administer once intramuscularly at a dose of 3 mg of oxytetracycline per pound of body weight approximately 8 hours before farrowing or immediately after completion of farrowing.

For swine weighing 25 lb of body weight and under, LIQUAMYCIN® LA-200® should be administered undiluted for treatment at 9 mg/lb but should be administered diluted for treatment at 3 or 5 mg/lb.

H. Route of Administration

LIQUAMYCIN® LA-200® should be administered by intramuscular or intravenous injection to beef cattle and nonlactating dairy cattle, and by intramuscular injection to swine.

I. Indication

In beef cattle and nonlactating dairy cattle, LIQUAMYCIN® LA-200® is indicated in the treatment of pneumonia and shipping fever complex associated with *Pasteurella* spp. and *Haemophilus* spp.; bovine keratoconjunctivitis caused by *Moraxella bovis*; foot-rot and diphtheria caused by *Fusobacterium necrophorum*; bacterial enteritis (scours) caused by *Escherichia coli*; wooden tongue caused by *Actinobacillus ligniersii*; leptospirosis caused by *Leptospira pomona*; and wound infections and acute metritis caused by strains of staphylococci and streptococci organisms sensitive to oxytetracycline.

In swine, LIQUAMYCIN® LA-200® is indicated in the treatment of bacterial enteritis (scours, colibacillosis) caused by *Escherichia coli*; pneumonia caused by *Pasteurella multocida*; and leptospirosis caused by *Leptospira pomona*.

In sows, LIQUAMYCIN® LA-200® is indicated as an aid in control of infectious enteritis (baby pig scours, colibacillosis) in suckling pigs caused by *Escherichia coli*.

J. Effect of Supplement

This supplement provides for the codification of a revised tolerance for residues of oxytetracycline in edible tissues.

II. HUMAN FOOD SAFETY

TOLERANCE

Recently, the Center for Veterinary Medicine (CVM) conducted a re-evaluation of the toxicology and metabolism data that were used to support the original tolerance for oxytetracycline

The Center also reviewed published studies performed after product approval.

At this time there is sufficient information in the published literature to show that adverse effect on the intestinal microflora is the appropriate endpoint for establishing the safe concentration for oxytetracycline residues. Since all tetracycline drugs have similar effects on intestinal microflora, changing the tolerance for oxytetracycline required an evaluation of the cumulative effect of all tetracyclines approved for use as new animal drugs. Based on this evaluation, the safe concentration for total tetracycline microbiological activity was limited to 1 ppm in the total diet (1.5 mg/person/day), according to the guidance document announced in the Federal Register January 30, 1996 (61 FR 3043), entitled Microbiological Testing of Antimicrobial Drug Residues in Food.

The limit of 1 ppm is equal to an Acceptable Daily Intake (ADI) of 0.025 mg/kg of body weight (bw) per day. Sixty percent (60%) of the ADI is reserved for milk and 40% for edible tissues. The ADI for edible tissues is calculated as follows:

ADI for edible tissues = $0.025 \times 0.40 = 0.01$ mg/kg bw/day

Using the above ADI and the current consumption factors, the tolerances for edible tissues are calculated as follow:

Tolerance for muscle = 0.01 mg/kg bw/day \times 60 kg = 2 ppm
0.3 kg

Tolerance for liver = 0.01 mg/kg bw/day \times 60 kg = 6 ppm
0.1 kg

Tolerance for kidney = 0.01 mg/kg bw/day \times 60 kg = 12 ppm
0.05 kg

Tolerance for fat = 0.01 mg/kg bw/day \times 60 kg = 12 ppm
0.05 kg

III. AGENCY CONCLUSIONS

Following a re-evaluation of toxicology and metabolism data for oxytetracycline, the Center has established a new uniform tolerance for all tetracycline drugs. The new tolerance is applicable to all approved tetracycline drugs listed under 21 CFR 556.

Under the Center's supplemental approval policy [21 CFR 514.106(b)(2)(xi)], this is a Category II supplement which required a re-evaluation of the tolerance according to current food safety guidance. This supplement did not require a re-evaluation of target animal safety or effectiveness data. The agency has determined under 21 CFR 25.24 (d)(1)(i) that this action is of the type that does not individually or cumulatively have a

significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

Under section 512(c)(2)(F)(iii) of the Federal Food, Drug, and Cosmetic Act, this approval for food producing animals does NOT qualify for an exclusivity period because the application does NOT contain reports of new clinical or field investigations (other than bioequivalence or residue studies) or new human food safety studies (other than bioequivalence or residue studies) essential to the approval of the supplement and conducted or sponsored by the applicant.

LIQUAMYCIN® LA-200® patent number U.S. 4,018,889 expired April 19, 1994.

IV. ATTACHMENTS

Copies of applicable labels may be obtained by writing to the:

Food and Drug Administration
Freedom of Information Staff (HFI-35)
5600 Fishers Lane
Rockville, MD 20857

Or requests may be sent via fax to: (301) 443-1726. If there are problems sending a fax, call (301) 443-2414.

The format of this FOI Summary document has been modified from its original form to conform with Section 508 of the Rehabilitation Act (29 U.S.C. 794d). The content of this document has not changed.