CENTER FOR DRUG EVALUATION AND RESEARCH

Approval Package for:

APPLICATION NUMBER:
21-277

Trade Name: Avelox I.V.

Generic Name: moxifloxacin hydrochloride
in sodium chloride injection

Sponsor: Bayer Corp.

Approval Date: November 30, 2001

Indications: Provides for the use of Avelox I.V. for the treatment of adults with infections caused by susceptible strains of the designated microorganisms in the following conditions following indications:

1. Acute Bacterial Sinusitis.
2. Acute Bacterial Exacerbation of Chronic Bronchitis.
3. Community Acquired Pneumonia
4. Uncomplicated Skin/Skin Structure Infections.

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	Included	Pending Completion	Not Prepared	Not Required
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Final Printed Labeling	X			
Medical Review(s)	X			
Chemistry Review(s)	X			
EA/FONSI				
Pharmacology Review(s)	X			
Statistical Review(s)	X			
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Clinical Pharmacology Biopharmaceutics Review(s)	X			
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APPLICATION NUMBER:

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APPROVAL LETTER

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug
Administration
Rockville MD 20857

NDA 21-277

Bayer Corporation
Attention: Andrew S. Verderame
Deputy Director, Regulatory Affairs
400 Morgan Lane
West Haven, CT 06516-4175

Dear Mr. Verderame:

Please refer to your new drug application (NDA) dated November 2, 2000, received November 2, 2000, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for Avelox I.V. (moxifloxacin hydrochloride in sodium chloride injection) 400 mg/250 mL.

We acknowledge receipt of your submissions dated:

December 14, 2000	February 9, 2001	March 6, 2001	March 9, 2001	March 19, 2001
March 23, 2001	May 8, 2001	June 13, 2001	June 28, 2001 (2)	July 3, 2001
July 5, 2001	July 6, 2001	July 16, 2001	July 17, 2001	July 19, 2001
July 26, 2001	August 30, 2001	September 13, 2001	October 31, 2001	November 2, 2001
November 5, 2001	November 9, 2001	November 15, 2001	November 21, 2001	November 26, 2001
November 29, 2001 (2)	November 30, 2001			

This new drug application provides for the use of Avelox I.V. (moxifloxacin hydrochloride in sodium chloride injection) for the treatment of adults (greater than or equal to 18 years of age) with infections caused by susceptible strains of the designated microorganisms in the following conditions:

- **Acute Bacterial Sinusitis** caused by *Streptococcus pneumoniae, Haemophilus influenzae*, or *Moraxella catarrhalis*
- **Acute Bacterial Exacerbation of Chronic Bronchitis** caused by *Streptococcus pneumoniae, Haemophilus influenzae, Haemophilus parainfluenzae, Klebsiella pneumoniae, Staphylococcus aureus,* or *Moraxella catarrhalis*
- **Community Acquired Pneumonia** caused by *Streptococcus pneumoniae, Haemophilus influenzae, Moraxella catarrhalis, Klebsiella pneumoniae, Staphylococcus aureus, Mycoplasma pneumoniae* or *Chlamydia pneumoniae*
- **Uncomplicated Skin/Skin Structure Infections** caused by *Staphylococcus aureus* or *Streptococcus pyogenes.*

We have completed the review of this application, as amended, and have concluded that adequate information has been presented to demonstrate that the drug product is safe and effective for use as recommended in the agreed upon labeling text. Accordingly, the application is approved effective on the date of this letter.

The final printed labeling (FPL) must be identical to the submitted draft labeling (package insert submitted November 29, 2001, immediate and container labels submitted November 2, 2000). Marketing the product with FPL that is not identical to the approved labeling text may render the product misbranded and an unapproved new drug.

Please submit the copies of final printed labeling (FPL) electronically according to the guidance for industry titled *Providing Regulatory Submissions in Electronic Format - NDA* (January 1999). Alternatively, you may submit 20 paper copies of the FPL as soon as it is available but no more than 30 days after it is printed. Please individually mount ten of the copies on heavy-weight paper or similar material. For administrative purposes, this submission should be designated "FPL for approved NDA 21-277." Approval of this submission by FDA is not required before the labeling is used.

We remind you of your postmarketing study commitments in your submission dated November 29, 2001. These commitments are listed below.

1. Ongoing Intravenous Study #100244 Assessing Safety and Effectiveness

Protocol Submission:	N/A, study is ongoing
Study Start:	N/A, study is ongoing
Interim Summary Submission:	March 1, 2002; June 1, 2002; September 1, 2002; December 1, 2002
Final Report Submission:	December 31, 2002

2. Ongoing Intravenous Study #100272 Assessing Safety and Effectiveness

Protocol Submission:	N/A, study is ongoing
Study Start:	N/A, study is ongoing
Interim Summary Submission:	March 1, 2002; June 1, 2002; September 1, 2002; December 1, 2002
Final Report Submission:	Within 6 months of completion of study

3. Ongoing Intravenous Study #100273 Assessing Safety and Effectiveness

Protocol Submission:	N/A, study is ongoing
Study Start:	N/A, study is ongoing
Interim Summary Submission:	March 1, 2002; June 1, 2002; September 1, 2002; December 1, 2002
Final Report Submission:	Within 6 months of completion of study

4. Ongoing Intravenous Study #100353 Assessing Safety and Effectiveness

Protocol Submission:	N/A, study is ongoing
Study Start:	N/A, study is ongoing
Interim Summary Submission:	March 1, 2002; June 1, 2002; September 1, 2002; December 1, 2002
Final Report Submission:	Within 6 months of completion of study

5. Blinded, Comparative Study in Elderly Patients with a Clinical Diagnosis of Pneumonia

Protocol Submission:	March 30, 2002
Study Start:	October 31, 2002
Final Report Submission:	June 1, 2004

Submit clinical protocols to your IND for this product. Submit nonclinical and chemistry, manufacturing, and controls protocols and all study final reports to this NDA. In addition, under 21 CFR 314.81(b)(2)(vii) and 314.81(b)(2)(viii), you should include a status summary of each commitment in your annual report to this NDA. The status summary should include expected summary completion and final report submission dates, any changes in plans since the last annual report, and, for clinical studies, number of patients entered into each study. All submissions, including supplements, relating to these postmarketing study commitments must be prominently labeled **"Postmarketing Study Protocol", "Postmarketing Study Final Report", or "Postmarketing Study Correspondence."**

Be advised that, as of April 1, 1999, all applications for new active ingredients, new dosage forms, new indications, new routes of administration, and new dosing regimens are required to contain an assessment of the safety and effectiveness of the product in pediatric patients unless this requirement is waived or deferred (63 *FR* 66632). We note that you have not fulfilled the requirements of 21 CFR 314.55 (or 601.27). We are deferring submission of your pediatric studies until November 30, 2007. However, in the interim, please submit your pediatric drug development plans within 120 days from the date of this letter unless you believe a waiver is appropriate. Within approximately 120 days of receipt of your pediatric drug development plan, we will review your plan and notify you of its adequacy.

If you believe that this drug qualifies for a waiver of the pediatric study requirement, you should submit a request for a waiver with supporting information and documentation in accordance with the provisions of 21 CFR 314.55 within 60 days from the date of this letter. We will notify you within 120 days of receipt of your response whether a waiver is granted. If a waiver is not granted, we will ask you to submit your pediatric drug development plans within 120 days from the date of denial of the waiver.

Pediatric studies conducted under the terms of section 505A of the Federal Food, Drug, and Cosmetic Act may result in additional marketing exclusivity for certain products (pediatric exclusivity). You should refer to the *Guidance for Industry on Qualifying for Pediatric Exclusivity* (available on our web site at www.fda.gov/cder/pediatric) for details. If you wish to

qualify for pediatric exclusivity you should submit a "Proposed Pediatric Study Request" (PPSR) in addition to your plans for pediatric drug development described above. We recommend that you submit a Proposed Pediatric Study Request within 120 days from the date of this letter. If you are unable to meet this time frame but are interested in pediatric exclusivity, please notify the division in writing. FDA generally will not accept studies submitted to an NDA before issuance of a Written Request as responsive to a Written Request. Sponsors should obtain a Written Request before submitting pediatric studies to an NDA. If you do not submit a PPSR or indicate that you are interested in pediatric exclusivity, we will review your pediatric drug development plan and notify you of its adequacy. Please note that satisfaction of the requirements in 21 CFR 314.55 alone may not qualify you for pediatric exclusivity. FDA does not necessarily ask a sponsor to complete the same scope of studies to qualify for pediatric exclusivity as it does to fulfill the requirements of the pediatric rule.

In addition, please submit three copies of the introductory promotional materials that you propose to use for this product. All proposed materials should be submitted in draft or mock-up form, not final print. Please submit one copy to this Division and two copies of both the promotional materials and the package insert directly to:

Division of Drug Marketing, Advertising, and Communications, HFD-42
Food and Drug Administration
5600 Fishers Lane
Rockville, Maryland 20857

Please submit one market package of the drug product when it is available.

We remind you that you must comply with the requirements for an approved NDA set forth under 21 CFR 314.80 and 314.81. We also remind you of your commitment submitted November 29, 2001, to provide expedited (15 day) reporting of certain post-marketing serious adverse events in intravenously-treated geriatric patients (age $\geq$ 65 years and patients where age is unknown) until December 1, 2002.

If you have any questions, call Yoon J. Kong, Pharm.D., Regulatory Project Manager, at (301) 827-2127.

Sincerely,

{See appended electronic signature page}

Renata Albrecht, M.D.
Acting Director
Division of Special Pathogen and Immunologic
Drug Products
Office of Drug Evaluation IV
Center for Drug Evaluation and Research