CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

216142Orig1s000

SUMMARY REVIEW

NDA Summary Review

NDA #	216142
Applicant	Baxter HealthCare Corporation
Date of Submission	November 30, 2022
PDUFA Goal Date	September 30, 2023
Proprietary Name / Established (USAN) names	Micafungin in Sodium Chloride Injection
Dosage forms/Strength	Injection, 50 mg/50 mL, 100 mg/100 mL, and 150 mg/150 mL
Proposed Indications	• Treatment of Candidemia, Acute Disseminated Candidiasis, *Candida* Peritonitis and Abscesses in adult and pediatric patients 4 months of age and older for whom appropriate dosing with this formulation can be achieved. • Treatment of Candidemia, Acute Disseminated Candidiasis, *Candida* Peritonitis and Abscesses ***without*** meningoencephalitis and/or ocular dissemination in pediatric patients younger than 4 months of age for whom appropriate dosing with this formulation can be achieved. • Treatment of Esophageal Candidiasis in adult and pediatric patients 4 months of age and older for whom appropriate dosing with this formulation can be achieved. • Prophylaxis of *Candida* Infections in adult and pediatric patients 4 months of age and older undergoing Hematopoietic Stem Cell Transplantation (HSCT) for whom appropriate dosing with this formulation can be achieved.
Regulatory Action	Approval

* *No proprietary/trade name was proposed for the drug product*

1. Background

Micafungin is an echinocandin antifungal drug that inhibits synthesis of (1,3)-β-D-glucan, a key component of the fungal cell wall, resulting in the loss of wall rigidity and subsequent cell lysis. First approved in the US on March 16, 2005 (Mycamine, Astellas Pharma US, Inc.), micafungin is fungicidal against most *Candida* species. It is formulated for intravenous administration only and given once daily. It has a generally favorable safety profile and does not require dose adjustment for renal or hepatic insufficiency.

Micafungin is approved for the treatment of candidemia, acute disseminated candidiasis, *Candida* peritonitis and abscesses in adults and pediatric patients 4 months of age and older; esophageal candidiasis in adults and pediatric patients 4 months of age and older; prophylaxis of *Candida* infections in adults and pediatric patients receiving HSCT; and for treatment of candidemia, acute disseminated candidiasis, *Candida* peritonitis and abscesses without meningoencephalitis and/or ocular dissemination in pediatric patients younger than 4 months of age.

The review and regulatory decision for this application is discussed within this Summary Review.

2. Regulatory History

On November 30, 2022, Baxter HealthCare Corporation (Applicant) submitted New Drug Application (NDA) 216142 via the 505(b)(2) regulatory pathway for Micafungin in Sodium Chloride Injection in Galaxy containers. The application proposes a new dosage form, relying on FDA's finding of safety and efficacy for the listed drug (LD), Mycamine (micafungin for injection), a sterile, lyophilized powder for solution, 50 mg/vial and 100 mg/vial. NDA 021506, held by Astellas Pharma US, Inc., was first approved in the US on March 16, 2005.

The Applicant's proposal for a new dosage form triggered the Pediatric Research Equity Act (PREA); therefore, the Applicant was requested to submit a Pediatric Study Plan (PSP) which the FDA received on May 18, 2023. For additional details regarding the PSP, refer to the Clinical section, *Pediatric Assessment and Request for Partial Waiver for Pediatric Patients from Birth to Less Than 4 Months of Age with Esophageal Candidiasis and Prophylaxis of Candida infections in HSCT Recipients,* below.

NDA 216142 was filed on February 9, 2023 and has a Prescription Drug User Fee Act (PDUFA) goal date of September 30, 2023.

3. Current Submission

As proposed by the Applicant, Micafungin in Sodium Chloride Injection is a premixed, sterile solution, supplied in a flexible Galaxy single-dose plastic container containing the active drug, micafungin, and the excipients 0.9% sodium chloride, anhydrous citric acid, sodium citrate dihydrate, and water for injection.

The proposed product is a new dosage form as it is a pre-mixed formulation as compared to the LD which is a lyophilized powder for reconstitution. Micafungin in Sodium Chloride Injection is intended for intravenous (IV) administration, is composed of 1 mg micafungin per mL, and is provided in three sizes: 50 mg/50 mL, 100 mg/100 mL, and 150 mg/150 mL.

There are no proposed changes to the active ingredients, dosing regimen, or route of administration when compared to the LD. There are differences in excipients as discussed below. The Applicant has updated the Indications and Usage section of the Prescribing Information (PI) to reflect the limitations of the available strengths and administration requirements of the proposed drug product in pediatric patients (see section on *Labeling to Address Limitations of the Galaxy Container for further details*).

Chemistry, Manufacturing and Controls (CMC)/Product Quality

The NDA has provided sufficient CMC information to assure the identity, strength, purity, and quality of the proposed drug substance (micafungin sodium) and the drug product (micafungin in sodium chloride injection). The overall drug substance and drug product information provided in the original NDA and subsequent amendments, submitted in response to FDA comments and recommendations, was found acceptable. That includes stability information to support the Applicant's proposed 12-month expiration dating for the drug product, to be stored in a refrigerator at 2°C to 8°C. Similarly, information provided regarding the drug product manufacturing process and its microbiological quality has been found adequate. From the biopharmaceutics perspective, adequate data were provided to support the bridge between the proposed drug product and the listed drug (LD). In addition, all manufacturing and testing facilities have been found acceptable and an overall "Approve" recommendation for this NDA was entered into Panorama on February 21, 2023. Therefore, this NDA is recommended for approval by the Office of Pharmaceutical Quality (OPQ); for details refer to the OPQ Review in DARRTS.

Clinical

No new clinical studies were conducted for this NDA. The application contained a review of the safety of micafungin from published literature from January 2019 to June 2022 since the last FDA approved supplement for Mycamine (Micafungin for Injection) using Ovid, MEDLINE, Embase and other bibliographic sources and a search of the FDA Adverse Event Reporting System (FAERS) database for all micafungin cases received from January 1, 2020, through May 3, 2023. Both the Applicant and clinical reviewer's evaluation of the published literature and the FAERS database have not identified any new safety signals for micafungin.

Safety of Excipients from a Clinical Perspective:

The excipients include sodium chloride ((b) (4)); citric acid, anhydrous ((b) (4)) sodium citrate dihydrate ((b) (4)) and water for injection; each United States Pharmacopeia (USP) grade. The composition of the dosage form is provided in Table 1.

Table 1: Composition of Dosage Form and Component Concentrations

Component	Quality Standard	Function	Component Quantity			
			per 50 mL	per 100 mL	per 150 mL	per mL
Micafungin Sodium	In House	Drug substance	50 mg[a]	100 mg[a]	150 mg[a]	1 mg
Sodium Chloride	USP	(b) (4)	450 mg	900 mg	1350 mg	9.0 mg
Citric Acid, Anhydrous	USP		36 mg	72 mg	108 mg	0.72 mg
Sodium Citrate, Dihydrate	USP		92 mg	184 mg	276 mg	1.84 mg
Water for Injection	USP		QS[b]	QS[b]	QS[b]	QS[b]

a. Expressed as Micafungin.
b. QS = Quantity Sufficient
Source: Adapted from NDA Module 3.2.P.1, Tables 2 and 3, p. 3/7.

The following table provides the Maximum Daily Intake (MDI) of the inactive ingredients compared with the Maximum Daily Exposure (MDE) based on the Inactive Ingredient Database (IID).

Table 2: Comparison of Inactive Ingredient Levels in Micafungin in 0.9% Sodium Chloride Injection versus the Inactive Ingredient Database (IID)

Inactive Ingredient / Excipient	Excipient Amount in Micafungin in 0.9% Sodium Chloride Injection	Excipient Amount per 150 mL Container	Maximum Daily Intake (MDI) of Inactive Ingredient[a]	Maximum Daily Exposure (MDE) based on IID Levels (MDE IID) for Intravenous Route of Administration[b]	Is MDI ≤ IID MDE?

Sodium Chloride, USP	9 mg/mL (0.9%)	1350 mg/150 mL	1350 mg	28773 mg (UNII 451W47IQ8X)	Yes
Citric Acid, Anhydrous, USP	0.72 mg/mL (0.072%)	108 mg/150 mL	108 mg	510 mg (UNII XF417D3PSL)	Yes
Sodium Citrate, Dihydrate, USP	1.84 mg/mL (0.184%)	276 mg/150 mL	276 mg	984 mg (UNII B22547B95K)	Yes
Water for Injection, USP	QS	N/A	N/A	N/A	N/A

IID = Inactive Ingredient Database; MDE = Maximum Daily Exposure; MDI = Maximum Daily Intake; USP = United States Pharmacopeia; QS = Quantity Sufficient; N/A = Not Applicable

[a] The Maximum Daily Dose (MDD) of Micafungin is 150 mg. The MDI of an inactive ingredient is taken from the amount in the 150 mg/150 mL strength as this would represent the worst-case exposure.

[B] http://www.accessdata.fda.gov/scripts/cder/iig/index.cfm.

Source: Adapted from NDA Module 3.2.P.1, Table 4.

The Applicant states that the excipients used in Micafungin in Sodium Chloride Injection have been used in other FDA-approved parenteral drug products. Specifically, several CDER-approved products contain sodium chloride, anhydrous citric acid, sodium citrate dihydrate above the proposed concentrations in Micafungin in Sodium Chloride Injection, including Brevibloc (Esmolol Hydrochloride) Injection, Zyvox IV injection (linezolid), and Penicillin G Potassium Injection, as discussed below.

Sodium Chloride as an excipient:

Brevibloc (Esmolol Hydrochloride) Injection, NDA 019386, Original Approval Date: 1986[1], is formulated as 100 mg/10 mL (10 ml vial), 2500 mg/250 mL (250 mL premixed IV bag), and 2000 mg/100 mL (100 ml premixed IV bag). The sodium chloride content for each formulation is 5.9 mg/mL, 5.9 mg/mL, and 4.1 mg/mL, respectively.[2] The maximum amount of sodium chloride administered per day in Brevibloc is 11,894 mg in a total of 2016 mL, based on maintenance infusion rates and not including boluses. In contrast, the maximum daily amount of sodium chloride administered from Micafungin in Sodium Chloride Injection is 1350 mg from one 150 mL IV container.

See additional discussion below under *Labeling to Address the High Sodium Load from Micafungin in Sodium Chloride Injection.*

[1] NDA 019386 (6/2023), Brevibloc (Esmolol Hydrochloride) Injection, Prescribing Information, available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2023/019386s053lbl.pdf

[2] All Brevibloc Injection dosage forms (Baxter) are iso-osmotic solutions in sodium chloride; see: https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=220a07b8-5c68-41a3-8705-fd91f14c50b4#section-14.1 and https://dailymed.nlm.nih.gov/dailymed/getFile.cfm?setid=220a07b8-5c68-41a3-8705-fd91f14c50b4&type=pdf.

Sodium citrate dihydrate and citric acid anhydrous as excipients:

Zyvox IV Injection (linezolid), NDA 021131, Original Approval Date: 2000[3], is formulated in a single-dose 300 mL ready-to-use infusion bag and contains sodium citrate dihydrate at 6.64 mg/mL and citric acid anhydrous 0.85 mg/mL[4]. The maximum daily dose of Zyvox IV Injection is 600 mg IV (one 300 mL bag) every 12 hours (600 mL total).[2] Based on the sodium citrate dihydrate and citric acid, anhydrous in mg/mL in Zyvox IV Injection and the prescribed dosing regimen, the maximum amount of sodium citrate dihydrate a patient could receive with the highest approved dose is 1800 mg/day, and the maximum amount of citric acid, anhydrous a patient could receive with the highest approved dose is 510 mg/day. In comparison to Micafungin in Sodium Chloride Injection, the maximum amount of sodium citrate dihydrate a patient could receive with the highest approved dose is 276 mg/day and the maximum amount of citric acid anhydrous a patient could receive with the highest approved dose is 108 mg/day.

Penicillin G Potassium Injection, USP, NDA 050638, Original Approval Date 1990[5], is formulated in 50 mL single-dose containers as follows: 1,000,000 units/50 mL, 2,000,000 units/mL, and 3,000,000 units/mL and contains 0.10 g, 0.20 g and 0.30 g sodium citrate dihydrate, respectively.[6] Based on the sodium citrate dihydrate in mg/mL in Penicillin G Potassium Injection and the prescribed dosing regimen, the maximum amount a patient could receive with the highest approved dose is 2400 mg/day.[7] In comparison for Micafungin in Sodium Chloride Injection, the maximum amount of sodium citrate dihydrate a patient could receive with the highest approved dose is 276 mg/day.

Labeling to Address Limitations of the Galaxy Container

Micafungin in Sodium Chloride Injection is a premixed formulation in Galaxy single-dose containers which should not be used for fractional dosing. The Division of Anti-Infectives (Division) recommended inclusion of language in

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[3] NDA 021131(7/2023), Zyvox (Linezolid Injection), Prescribing information, available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2023/021130s044,021131s041,021132s043lbl.pdf

[4] Zyvox IV Injection is formulated in 600 mg/300 mL in single dose, ready to use infusion bags; See: https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=3e5e9975-6f36-42e4-ab46-0e75dda83592

[5] NDA 050638s020 (2017) Penicillin G Potassium Injection Prescribing Information, available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2017/050638s020lbl.pdf

[6] Penicillin G Potassium Injection, (equivalent to 1, 2, or 3 million units of penicillin G) is a formulated in 50 mL premixed, single-dose containers; see: https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=9e58122f-5c75-4905-a774-d3a4dae4ff8c

[7] The maximum daily dose of Penicillin G Potassium Injection per prescribing information is 24 million units/day. 24 million units/3 million unit per 50 mL = 400 mL. The maximum daily intake of sodium citrate, dihydrate is 6 mg/mL sodium citrate, dihydrate x 400 mL = 2400 mg)

relevant sections of the PI noting that Micafungin in Sodium Chloride Injection is indicated in adult and pediatric patients for whom appropriate dosing with this formulation can be achieved. The revised PI includes the statement in Indications and Usage (Section 1), Dosage and Administration (Section 2), and Pediatric Use (Section 8.4) stating that if a dose is required that does not equal 50 mg, 100 mg, or 150 mg, this product is not recommended for use and an alternative formulation of micafungin should be considered. Per the Division's recommendation, this statement was also added to the Indications and Usage and Dosage and Administration section within the HIGHLIGHTS OF PRESCRIBING INFORMATION. Please refer to the Labeling section of this review for additional information.

Labeling to Address the High Sodium Load from Micafungin in Sodium Chloride Injection

Micafungin in Sodium Chloride Injection is available as a pre-mixed solution of micafungin in 0.9% Sodium Chloride (normal saline) administered in single-dose plastic containers (IV bags) of three sizes: 50 mg/50 mL, 100 mg/100 mL, and 150 mg/150 mL. As a result, patients receiving this formulation are subject to higher sodium loads than patients who receive the LD which is reconstituted in 5 mL of either 0.9% Sodium Chloride Injection or 5% Dextrose Injection.[8] Other antimicrobial drug products that contain Warnings/Precautions for a high sodium load in labeling include: Vancomycin Hydrochloride Injection (Baxter), maximum recommended daily dose delivers 1416 mg sodium; Moxifloxacin Injection (Fresenius Kabi), maximum recommended daily dose delivers 1207 mg sodium; Zosyn (piperacillin and tazobactam), maximum recommended daily dose in adults delivers 1040 mg sodium, and Meropenem for Injection and Sodium Chloride Injection (Braun), maximum recommended daily dose in adults delivers 870.6 mg sodium and in pediatric patients >50 kg (meningitis indication) delivers 1740 mg sodium.

In addition, other sources were reviewed regarding high sodium content from food intake and drugs. The FDA considers a food serving that has 20% or more of the daily value for sodium (upwards of 460 mg assuming a daily value of 2300 mg per day) to be a high sodium food. [9] The September 2022 FDA Guidance for Industry: "Quantitative Labeling of Sodium, Potassium, and Phosphorus for Human Over-the-Counter and Prescription Drug Products"[10] mentions the importance of quantifying the sodium content in drug labeling because health care providers generally recommend that patients with certain

[8] Mycamine Prescribing Information (2019), available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2019/021506s023lbl.pdf

[9] FDA webpage, Food Labeling & Nutrition, Nutrition Education Resources & Materials, Sodium in Your Diet, see: https://www.fda.gov/food/nutrition-education-resources-materials/sodium-your-diet.

[10]

clinical conditions—such as heart failure, hypertension, or chronic kidney disease—restrict dietary intake of sodium, potassium, and/or phosphorus.

Thus, given the higher sodium content in Micafungin in Sodium Chloride Injection compared with the LD, the Warnings and Precautions related to high sodium load in the PIs of other approved antimicrobial drug products, and the American Heart Association (AHA)[11] and FDA recommendations on daily sodium intake from food sources, the Division recommended the addition of language in the Micafungin in Sodium Chloride Injection PI, Warnings and Precautions (Section subsection 5.6), Geriatric Use (Section subsection 8. 5), and Patient Counseling Information Section 17.

Please refer to the Labeling section of this review for additional information.

Pediatric Assessment and Request for Partial Waiver for Pediatric Patients from Birth to Less Than 4 Months of Age with Esophageal Candidiasis and Prophylaxis of Candida infections in HSCT Recipients

Pediatric Research Equity Act (PREA) was triggered by this application as Micafungin in Sodium Chloride is considered a new dosage form. The Applicant was requested to submit a Pediatric Study Plan (PSP) which was received May 18, 2023.

The Applicant's PSP stated (b) (4) n consultation with CDER's Division of Pediatric and Maternal Health, the Division determined that the Applicant needed a partial waiver for pediatric patients from birth to less than 4 months of age for both esophageal candidiasis as well as for prophylaxis of *Candida* infections in patients undergoing HSCT. Notably, the 2019 Approval Letter for NDA 021506 S023 waived the pediatric study requirement to evaluate the efficacy and safety of micafungin for the treatment of esophageal candidiasis and prophylaxis of *Candida* infections in patients undergoing HSCT from birth to less than 4 months of age because studies are impossible or highly impractical as pediatric patients in this age group rarely develop these conditions.

On August 8, 2023, PeRC met to review the PSP and discuss the partial waiver request. The Division considers the product fully assessed for disseminated *Candida* infections, based on the studies conducted with the LD that failed to establish safety and efficacy of micafungin in patients < 4 months of age with meningoencephalitis and/or ocular candidiasis. The labeling for the LD already includes this limitation of use.

[11] 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines; available at: https://www.ahajournals.org/doi/full/10.1161/CIR.0000000000001063.

PeRC agreed with the Division's proposal to grant a partial waiver in pediatric patients from birth to less than 4 months of age for both esophageal candidiasis as well as for prophylaxis of *Candida* infections in patients undergoing HSCT. The PeRC chair confirmed that the data provided by the reference product supported a full assessment of disseminated candidiasis with meningoencephalitis and/or ocular dissemination in patients < 4 months of age because studies were not feasible and the labeling provides specific limitations of use for these indications. Therefore, no additional pediatric studies are required for this 505(b)(2) application.

Pharmacology/Toxicology

Impurities detected in Micafungin in 0.9% Sodium Chloride at levels higher than the LD and ICH Q3B(R2) qualification threshold (i.e., (b) (4)) were adequately qualified for safety. In silico (Q)SAR analysis predicted the impurities to be negative for bacterial mutagenicity. Findings from the submitted 30-day impurity qualification toxicity study with bone marrow micronucleus evaluation in rat indicate that exposures to micafungin pre-mix containing the detected impurities were well tolerated at approximately 1- to 4-fold safety margins based on body surface area (BSA) comparisons and that the impurities were non-clastogenic. The Applicant also provided a comprehensive toxicological risk assessment that adequately qualified the leachables associated with the (b) (4) GALAXY container for safety, i.e., (b) (4) . Based on the calculated permissible daily exposure (PDE) values for the individual leachable and/or surrogate compounds, safety margins ranged from (b) (4) -fold the anticipated clinical exposures in adult, pediatric and neonatal patients. From a Pharmacology/Toxicology perspective, the NDA is recommended for approval.

Prescription Drug Labeling:

Prescribing information

This PI review includes a high-level summary of the rationale for major changes incorporated into the finalized PI (the PI that will be approved or is close to being approved). The finalized PI was compared to the Applicant's draft PI submitted on November 30, 2022 (see the table below). The PI was reviewed to ensure that the it meets regulatory/statutory requirements, is consistent (if appropriate) with labeling guidance, conveys clinically meaningful and scientifically accurate information needed for the safe and effective use of the drug, and provides clear and concise information for the healthcare practitioner.

Table 1. Major Labeling Changes and the Rationale for the Changes

Prescribing Information (PI) Sections	Rationale for Major Changes Incorporated into the Finalized PI
Highlights of the PI	• This section was updated with the revisions made to the Indications and Usage, Dosage and Administration, Dosage Forms and Strengths, Warnings and Precautions and the Adverse Reactions section of the Full Prescribing Information described below. • The Adverse Reactions listing in pediatric patients younger than 4 months of age in the Highlights was updated to reflect the decreasing frequency of common adverse reactions to read as "≥15%: hypokalemia, acidosis, sepsis, anemia, and oxygen saturation decreased" instead of "≥15%: sepsis, acidosis, anemia, oxygen saturation decreased and hypokalemia." This revision is based on the labeling recommendations in the FDA Guidance for Industry: Implementing the PLR Content and Format Requirements.
Full Prescribing Information	
1 INDICATIONS AND USAGE	• The Applicant's addition of the statement "for whom appropriate dosing with this formulation can be achieved" to the Indication statements is acceptable. This is because Micafungin in Sodium Chloride Injection is a premixed formulation in Galaxy single-dose containers which should not be used for fractional dosing. Refer to the Clinical section above for additional details.
2 DOSAGE AND ADMINISTRATION	• Added the statement "If a dose of Micafungin in Sodium Chloride Injection is required that does not equal 50 mg, 100 mg, or 150 mg, this product is not recommended for use and an alternative formulation of micafungin should be considered" in subsections 2.1, 2.3 and 2.4 of this section. This statement recommends against fractional dosing due to the limitations imposed by the available strengths of the premixed formulation. Refer to the Clinical section above for additional details. • Directions for Administration Preparation and Storage Conditions for Stability were revised based

	on the formatting recommendations in the January 2023 Guidance for Industry: Dosage and Administration Section of Labeling for Human Prescription Drug and Biological Products.
5 WARNINGS AND PRECAUTIONS	• Due to the high sodium load administered to patients receiving Micafungin in Sodium Chloride Injection, the following statement was added to the Warnings and Precautions section (subsection 5.6 High Sodium Load): “Each 50 mg/50 mL Galaxy container of Micafungin in Sodium Chloride Injection contains 200 mg of sodium, each 100 mg/100 mL Galaxy container of Micafungin in Sodium Chloride Injection contains 400 mg of sodium, and each 150 mg/150 mL Galaxy container of Micafungin in Sodium Chloride Injection contains 600 mg of sodium. Avoid use of Micafungin in Sodium Chloride Injection in patients with congestive heart failure, elderly patients, and patients requiring restricted sodium intake.” Refer to the Clinical section above for additional details.
8 USE IN SPECIFIC POPULATIONS	• Added statement that recommends against fractional dosing due to the limitations imposed by the available strengths of the premixed formulation to subsection 8.4 Pediatric Use. Refer to the Clinical section above for additional details. • Added statement regarding the effect on geriatric patients of the high sodium load content in Micafungin in Sodium Chloride Injection to subsection 8.5 Geriatric Use. • Refer to the Clinical section above for additional details on the changes made to subsection 8.4 and 8.5.
17 PATIENT COUNSELING INFORMATION	Added the following statement to this section regarding the high sodium load: “Advise patients to inform their healthcare provider if they are on a salt-restricted diet or have congestive heart failure as increased blood sodium can occur in people who receive Micafungin in Sodium Chloride Injection.”
Product Quality Sections (i.e., DOSAGE FORMS AND STRENGTHS, DESCRIPTION, HOW SUPPLIED/STORAGE AND HANDLING)	• Section 3 Dosage Form and Strengths: Added a description of identifying characteristics in accordance with 21 CFR 201.57(c)(4)(ii). • Section 11 Description: Added sodium content as per the FDA Guidance for Industry: Quantitative Labeling of Sodium, Potassium, and Phosphorus for Human Over-the-Counter and Prescription Drug Products as follows: o Each 50 mg/50 mL Galaxy container of

	Micafungin in Sodium Chloride Injection contains 200 mg of sodium. o Each 100 mg/100 mL Galaxy container of Micafungin in Sodium Chloride Injection contains 400 mg of sodium. o Each 150 mg/150 mL Galaxy container of Micafungin in Sodium Chloride Injection contains 600 mg of sodium. • Refer to OPQ review in DARRTS dated July 29, 2023, for additional details.

Approved Labeling Types
Upon approval of this application, the following labeling documents will be FDA-approved:

- Prescribing Information
- Carton labeling
- Container labeling

4. Regulatory Action

This 505(b)(2) NDA (216142) for Micafungin in Sodium Chloride Injection [50 mg/mL, 100 mg/mL, and 150 mg/mL Intravenous] will receive an approval action.

Reviewers:

Clinical Reviewer: Leslie Ball, M.D.
Clinical Team Leader: Shabnam Naseer, D.O., M.M.S.
Nonclinical Reviewer: Kelly Brant, Ph.D.
Nonclinical Team Leader: Terry J. Miller, Ph.D.
OPQ Application Technical Lead and Cross-Discipline Team Leader: Dorota Matecka, Ph.D.
Associate Director for Labeling: Abimbola Adebowale, Ph.D.
Deputy Division Director: Dmitri Iarikov, M.D., Ph.D.
Division Director: Peter Kim, M.D., M.S.

Signatures: *{See appended electronic signature page}*

This is a representation of an electronic record that was signed electronically. Following this are manifestations of any and all electronic signatures for this electronic record.

/s/

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