

**CENTER FOR DRUG EVALUATION AND
RESEARCH**

APPLICATION NUMBER:

210906Orig1s000

CLINICAL REVIEW(S)

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Memorandum

Public Health Service
Food and Drug Administration
Center for Drug Evaluation and Research

Date: October 22, 2018

From: Marina Zemsanova M.D., Team Leader, Division of Metabolism and Endocrinology Products

Through: William H Chong, M.D., Acting Division Director, Division of Metabolism and Endocrinology Products

Subject: Calcium gluconate in Sodium Chloride Injection; 1000 mg/50 mL, and 2000 mg/100 mL single use bags

To: File (NDA 210906)

On September 29, 2017, HQ Specialty Pharma Corporation submitted a New Drug Application (NDA) for Calcium gluconate injection for intravenous use; 1000 mg/50 mL, and 2000 mg/100 mL single use bags under Section 505(b) (2) of the Federal Food, Drug, and Cosmetic Act. The Division extended the user fee goal date to 10/29/2018 due to the submission of a major amendment to the application addressing the CMC issues.

Calcium Gluconate in Sodium Chloride is a form of calcium for intravenous infusion. The proposed indication is treatment of acute symptomatic hypocalcemia in adult and pediatric patients.

FDA's findings for use of Calcium Gluconate Injection (1 g/10 ml and 5 g/50 ml single-dose vials, Pharmacy Bulk Package, 10 g/100 ml vial) (NDA 208418, Fresenius Kabi) in treatment of acute symptomatic hypocalcemia in adult and pediatric patients are relied upon by the applicant as permitted under 505(b)(2). Both products have the same active ingredient and there are no novel excipients in the proposed product. The only differences between the two NDAs are: the proposed product is pre-diluted therefore no dilution needed prior to use and the proposed product contains sodium chloride whereas the reference product does not (refer to Clinical Pharmacology review in DARRTS from 5/4/2018). Pharmacology/toxicology reviewers also noted that at the maximum recommended doses of Calcium Gluconate Injection, and based on the Applicant's proposed release specification for aluminum, the daily aluminum exposure will be below 4 mcg/kg/day (refer to Pharmacology/toxicology review in DARRTS from 9/28/2018).

No clinical studies were conducted with the new product and no new clinical efficacy and/or safety data essential for the risk/benefit assessment of Calcium gluconate in Sodium Chloride Injection was included in this application.

A biowaiver for Calcium gluconate in Sodium Chloride Injection was granted (refer to Biopharmaceutics review from 6/11/2018). Biopharmaceutics reviewer concluded that "NDA 210906 for Calcium Gluconate Injection 1 g/50 mL and 2 g/100 mL (20 mg/mL) was reviewed and found adequate, and the waiver for the proposed product is also granted. This NDA is, therefore, recommended for approval."

The Office of Pharmaceutical Quality (OPQ) review recommends Approval (refer to the review from 5/9/2018). The reviewer concluded: “The overall assessment finds the facilities adequate. There are no significant risks to the manufacturing process or final product based on the individual and composite evaluation of the listed facilities’ inspectional history, relevant experience, and capabilities. No Pre-Approval Inspections were recommended to support the review of the NDA210906.”

In conclusion, I concur with the recommendations that recommend Approval.

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/

MARINA ZEMSKOVA
10/22/2018

WILLIAM H CHONG
10/22/2018
Agree with Dr. Zemskova's assessment and recommendation.