

**CENTER FOR DRUG EVALUATION AND  
RESEARCH**

*APPLICATION NUMBER:*

**212269Orig1s000**

**SUMMARY REVIEW**

## Summary Review for Regulatory Action

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|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Date</b>                         | May 18, 2020                                                                                                                     |
| <b>From</b>                         | Albert Deisseroth MD, PhD, Associate Division Director                                                                           |
| <b>Subject</b>                      | Division Director Summary Review                                                                                                 |
| <b>NDA #/Supplement#</b>            | NDA 212269                                                                                                                       |
| <b>Applicant</b>                    | ApoPharma                                                                                                                        |
| <b>Date of Submission</b>           | July 19, 2019                                                                                                                    |
| <b>PDUFA Goal Date</b>              | May 19, 2020                                                                                                                     |
| <b>Proprietary Name/Proper Name</b> | Ferriprox (twice daily)/Deferiprone                                                                                              |
| <b>Dosage Forms</b>                 | 1000 mg tablet given twice daily                                                                                                 |
| <b>Recommendation</b>               | Approval                                                                                                                         |
| <b>Recommended Indication</b>       | Treatment of patients with transfusional iron overload due to Thalassemia Syndromes when current chelation therapy is inadequate |

|                                 |                                  |
|---------------------------------|----------------------------------|
| Material Reviewed/Consulted     |                                  |
| Medical Officer Review          | Andrew Dmytrijuk/Kathy Robie Suh |
| Associate Director for Labeling | Virginia Kwitkowski              |
| Clinical Pharmacology           | Oluseyi Adeniyi                  |

### Summary Review for Regulatory Action:

(This review was derived in part from the reviews of Drs. Andrew Dmytrijuk, Oluseyi Adeniyi and Kathy Robie-Suh.)

On July 19, 2019, ApoPharma submitted NDA 212269 to the FDA requesting approval as a new formulation of deferiprone (Ferriprox) (b) (4) 1000 mg tablet to reduce the pill burden for patients and to increase the convenience by changing from the previously approved three times a day 1000 mg tablet to the proposed twice a day schedule for the new tablet.

This request was supported by study LA45-0116 which was entitled "Comparison of the pharmacokinetics and safety of multiple doses of deferiprone twice daily (Ferriprox (twice daily)) tablets in healthy volunteers". This study which enrolled 36 volunteers, was designed to be a bioequivalence study in which the Ferriprox (twice daily) was to be compared to the approved Ferriprox (three times daily) tablets. The result was that the 90% confidence intervals of the ratios of the PK parameters AUC<sub>0-t</sub>, AUC<sub>inf</sub>, and C<sub>max</sub> for Ferriprox (twice daily)/Ferriprox (three times daily) in serum were within the 0.8-1.25 bioequivalence range. On the basis of this finding, it was concluded that the Ferriprox (twice daily) formulation and the marketed Ferriprox (three times daily) formulation are bioequivalent. All adverse events in this study were mild to moderate.

Dr. Oluseyi Adeniyi of Clinical Pharmacology reported that in study LA53-0116, (b) (4) (b) (4) the Ferriprox (twice daily) tablet as compared to the Ferriprox (three times daily) tablet, (b) (4) (b) (4) for the Ferriprox (twice daily) may be misleading (see the review of Dr. Adeniyi for details). Therefore, it was decided to approve the request for the twice daily schedule for the new 1000 mg tablet (b) (4). Furthermore, in order to avoid confusion between the two 1000 mg tablets, it was decided to call the new twice daily formulation Ferriprox (twice daily) and to refer to the already marketed 1000 mg tablet as Ferriprox (three times daily).

### Recommended Regulatory Action of the Supervisory Associate Division Director:

This reviewer agrees with the recommendation of the review teams for approval of the new 100 mg formulation with the following designation: Ferriprox (twice daily).

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/s/  
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