

Saudi Public Assessment Report

Lypfen®

Active Pharmaceutical Ingredient(s): Fenofibrate

ATC code/CAS no.: C10 AB 05

Pharmaceutical/Dosage Form: Capsule, hard

Dosage Strength: 200 mg

Marketing Authorization Holder: Alpha Pharma Industry

Shelf life: 24 months

Date: 22 June 2022

Storage conditions: Store below 30°C.

Registration No.: 1304221942

Decision and Decision Date: Approved on 17/02/2022



Saudi Food and Drug Authority (SFDA)

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1. Terms, Definitions, Abbreviations

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| Terms | Definitions | | |
|--------------------|--|--|--|
| AUC _{0-t} | Area under the concentration-time curve (time 0 to time of last quantifiable concentration | | |
| AUC _{0-∞} | Area under the serum concentration-time curve from time 0 to infinite time | | |
| CI | Confidence Intervals | | |
| C _{max} | Maximum serum concentration | | |
| GCC | Gulf Cooperation Council | | |
| GCP | Good Clinical Practice | | |
| GLP | Good Laboratory Practices | | |
| HDL | High-Density Lipoprotein | | |
| INN | International Nonproprietary Names | | |
| KSA | Kingdom of Saudi Arabia | | |
| SA | Saudi Arabia | | |
| SDI | Saudi Drug Information System | | |
| SFDA | Saudi Food and Drug Authority | | |
| SPC | Summary of Product Characteristics | | |
| USAN | United States Adopted Names | | |



2. Background

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2.1 Submission Details

Type of submission: Human Generic Drug

Reference product in SA: Lipanthyl 200 mg Capsule

<u>Pharmacological class:</u> Serum Lipid Reducing Agents/Cholesterol and Triglyceride Reducers/Fibrates

Submitted Indication:

Indicated as an adjunct to diet and other nonpharmacological treatment (e.g. exercise, weight reduction) for the following:

- Treatment of severe hypertriglyceridaemia with or without low HDL cholesterol.
- Mixed hyperlipidaemia when a statin is contraindicated or not tolerated.
- Mixed hyperlipidaemia in patients at high cardiovascular risk in addition to a statin when triglycerides and HDL cholesterol are not adequately controlled.

Submitted Dosage: 200 mg

2.2 Regulatory Background

This product is considered a human generic drug for Saudi regulatory purposes. Furthermore, this product is qualified to follow the regular review pathway.

2.3 Product Information

The officially approved Summary of Product Characteristics (SPC) can be accessed via Saudi Drug Information System (SDI) at: https://sdi.sfda.gov.sa/

3. Scientific discussion about the product:

3.1 Quality Aspects

3.1.1 Drug Substance

- Fenofibrate is a white or almost white, crystalline powder. Fenofibrate is very soluble in methylene chloride, slightly soluble in alcohol and practically insoluble in water.

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Fenofibrate does not have any chiral centers. Polymorphism has been observed (Form-I).

- The drug substance is manufactured by a multiple-step chemical synthesis.
- The structure of Fenofibrate has been fully elucidated using several spectroscopic techniques.
- The drug substance specification includes relevant tests for proper quality control. The control methods are validated according to international guidelines.
- Appropriate stability data have been presented and justify the established re-test period.

3.1.2 Drug Product

- The finished product is available as hard-shell gelatin capsule with orange opaque cap and orange opaque body filled with white to off-white powder, imprinted "JS28" on cap and "200" on body. Each capsule contains 200mg of Fenofibrate. The composition of the drug product is adequately described, qualitatively and quantitatively. Suitable pharmaceutical development data have been provided for the finished product composition and manufacturing process.
- The manufacturing process is described narratively and in sufficient detail, taking into account pharmaceutical development data. Batch manufacturing formulas and inprocess controls are included.
- The drug product specification covers appropriate parameters for this dosage form, which allow for proper control of the finished drug product. The control methods are validated according to international guidelines. Batch data show consistent quality of the drug product.
- The drug product is packaged in a carton box, containing 3 Alu PVC-PE-PVDC Blisters, containing 10 capsules in each blister.



- Appropriate stability data have been generated in the packaging material intended for commercial use and following relevant international guidelines. The data show good

stability of the finished product and support the shelf life.

3.2 Clinical Aspects

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3.2.1 Bioequivalence study

A randomized, open label, two treatment, two period, two sequence, single dose, crossover, bioequivalence study of Lypfen[®] (fenofibrate) 200 mg of Alpha Pharma, SA and Lipanthyl[®] (fenofibrate) 200 mg of Recipharm Fontaine, France, in healthy human adult subjects, under fed condition. The study was conducted in accordance with Gulf Cooperation Council (GCC) Guidelines for Bioequivalence, standards of Good Clinical Practice (GCP) and Good Laboratory Practices (GLP).

Blood samples were taken pre-dose (0.0) and at a specified time points up to 96 hours after administration of test or reference product. Plasma levels of fenofibrate were detected by a validated LC-MS/MS method.

Thirty-four (34) volunteers completed the study and all data were analyzed. No significant protocol deviations were reported. There were no serious adverse events reported in the study.

The ratio and 90% Confidence Intervals of Test versus Reference for fenofibrate are tabulated below:

Table 1: Ratio and 90% Confidence Intervals (CI) of Test versus Reference for fenofibrate:

| Pharmacokinetic Parameter | Point Estimate | 90% CI |
|----------------------------------|----------------|----------------|
| C _{max} | 96.63 | 90.7 – 102.95 |
| AUC _{0-t} | 99.74 | 94.3 – 105.49 |
| $\mathrm{AUC}_{0\text{-}\infty}$ | 100.06 | 95.03 – 105.36 |



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Based on the results obtained in this study, Lypfen® (Fenofibrate) 200 mg of Alpha Pharma, SA, is bioequivalent to Lipanthyl® (Fenofibrate) 200 mg of Recipharm Fontaine, France, under fed conditions.

4. Risk Management Plan

4.1 Artwork and Trade Name assessment (Artwork available in appendix)

| Proposed trade Name | Dosage Form |
|---------------------|-------------|
| Lypfen | Capsules |

Look –alike/Sound-alike (LA/SA) Error Risk Potential:

Lypfen name LA/SA confusion risk potential has been assessed based on the evaluation of LA/SA similarities from our data sources (SFDA registered Drug List, Martindale, ISMP Confused Drug Name List, INN International Nonproprietary Names and USAN United States Adopted Names STEM) and the pharmaceutical characteristic of the product:

| LA/SA for Product name | SFDA | Shared File/ Excel Sheet | Martindale | Stem Book 2018 |
|---------------------------|------|-----------------------------|------------|-------------------|
| Lypfen | NO | NO | NO | NO |

Trade Name Recommendation:

Based on the submitted data, the proposed name Lypfen is accepted.

Outer and Inner Package:

Based on the submitted data, the proposed artwork is accepted.



5. Overall Conclusion

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Based on a review of data on quality, safety and efficacy, SFDA considered that the benefit/risk profile of Lypfen was favorable and decided to grant the marketing authorization of Lypfen for the indication of an adjunct to diet and other non-pharmacological treatment (e.g. exercise, weight reduction) for the following:

- Treatment of severe hypertriglyceridaemia with or without low HDL cholesterol.
- Mixed hyperlipidaemia when a statin is contraindicated or not tolerated.
- Mixed hyperlipidaemia in patients at high cardiovascular risk in addition to a statin when triglycerides and HDL cholesterol are not adequately controlled.



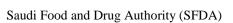


6. Appendix

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The date of revision of this text corresponds to that of the Saudi PAR. New information concerning the authorized medicinal product in question will not be incorporated into the Saudi PAR. New findings that could impair the medicinal product's quality, efficacy, or safety are recorded and published at (SDI or Summary Saudi-PAR report).

For inquiry and feedback regarding Saudi PAR, please contact us at Saudi.PAR@sdfa.gov.sa

Lypfen® SDR No. H0000021168

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