CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

022432Orig1s000

CHEMISTRY REVIEW(S)

NDA 22-432

H.P. Acthar® Gel
(repository corticotropin injection)

Questcor Pharmaceuticals

Martha R. Heimann, Ph.D.
Division of New Drug Quality Assessment 1

for the

Division of Neurology Products

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Chemistry Review Data Sheet

1. NDA 22-432

2. REVIEW #: 1

3. REVIEW DATE: June 1, 2010

4. REVIEWER: Martha R. Heimann, Ph.D.

5. PREVIOUS DOCUMENTS: N/A

Previous Documents	Document Date
Original NDA (originally submitted as NDA 8-372/S-039)	23-Jun-2006
J. Brown review of claimed categorical exclusion (reviewed under NDA 8-372/S-039)	31-Oct-2006

6. SUBMISSION(S) BEING REVIEWED:

Submission(s) Reviewed	Document Date
Labeling/Package Insert	28-Apr-2010

7. NAME & ADDRESS OF APPLICANT:

Name:	Questcor Pharmaceuticals, Inc
Address:	3260 Whipple Road Union City, CA 94587
Representative:	David Young Chief Scientific Officer 8550 Stanford Blvd. Columbia, MD 21045
Telephone:	(410) 953-0336

8. DRUG PRODUCT NAME/CODE/TYPE:

a) Proprietary Name: H. P. Acthar® Gel
b) Non-Proprietary Name (USAN): corticotropin injection
c) Code Name
d) Chem. Type/Submission Priority:

- Chem. Type: 6
- Submission Priority: S

Chemistry Review Data Sheet

9. LEGAL BASIS FOR SUBMISSION: N/A

10. PHARMACOLOGICAL. CATEGORY: treatment of infantile spasms

11. DOSAGE FORM: Injection

12. STRENGTH/POTENCY: 80 USP Units/mL

13. ROUTE OF ADMINISTRATION: Intramuscular

14. Rx/OTC DISPENSED: _X_Rx ___OTC

15. SPOTS (SPECIAL PRODUCTS ON-LINE TRACKING SYSTEM):

__X__SPOTS product – Form Completed

_____Not a SPOTS product

16. CHEMICAL NAME, STRUCTURAL FORMULA, MOLECULAR FORMULA, MOLECULAR WEIGHT:

Chemical name: corticotropin

Structural formula:

H-Ser-Tyr-Ser-Met-Glu-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-Gly-Lys-Lys-Arg-Arg-Pro-Val-Lys-Val-Try-Pro-Asp-Gly-Ala-Glu-Asp-Gln-Leu-Ala-Glu-Ala-Phe-Pro-Leu-Glu-Phe-OH

Molecular formula: not provided in NDA

Molecular weight: not provided in NDA

17. RELATED/SUPPORTING DOCUMENTS:

A. DMFs: N/A

B. Other Documents:

DOCUMENT	APPLICATION NUMBER	DESCRIPTION
Acthar® Gel NDA	NDA 8-372	Indication is for diagnostic testing of adrenocortical function.

Chemistry Review Data Sheet

18. STATUS:

CONSULTS/CMC RELATED REVIEWS	RECOMMENDATION	DATE	REVIEWER
Biometrics	Not required	---	---
EES	Not required	---	---
Pharm/Tox	Not required	---	---
Biopharmaceutics	Not required	---	---
LNC	Not required	---	---
Methods Validation	Not required	---	---
DMETS	Not applicable	---	---
EA	Claim for categorical exclusion is acceptable	01-JUN-2010	M. Heimann
Microbiology	Not required	---	---

The Chemistry Review for NDA 22-432

The Executive Summary

I. Recommendations

A. Recommendation and Conclusion on Approvability

From the chemistry perspective, approval of this application is recommended.

B. Recommendation on Phase 4 (Post-Marketing) Commitments, Agreements, and/or Risk Management Steps, if Approvable

No post-approval commitments are required.

II. Summary of Chemistry Assessments

Reviewer Note: The application was originally submitted as efficacy supplement S-039 to the approved application for Acthar® Gel (repository corticotropin injection), 80 USP Units/mL (NDA 8-372). The Agency issued a Not Approvable letter for NDA 8-372/S-039 on 10-May-2007. Upon resubmission, the supplemental application was reclassified as a Type 6 NDA.

A. Description of the Drug Products and Drug Substance

H. P. Acthar Gel (repository corticotropin injection) is marketed by Questcor Pharmaceuticals for diagnostic testing of adrenocortical function. The product is a sterile preparation of "highly purified" adrenocorticotropic hormone in 16% gelatin to provide a prolonged release after intramuscular injection. It also contains 0.5% phenol, not more than 0.1% cysteine (added), sodium hydroxide and/or acetic acid to adjust pH, and water for injection. The current labeling (approved under NDA 8-372) indicates that it has limited therapeutic value in conditions responsive to corticosteroid therapy. Several disorders for which the drug may be employed are identified in the current labeling.

B. Description of How the Drug Product is Intended to be Used

The applicant seeks approval of H. P. Acthar Gel for treatment of infantile spasms. The product is currently used "off-label" for this indication and the applicant estimates that approximately (b) (4)% of the current sales are for this indication. In the treatment of infantile spasms, the drug product may be administered intramuscularly at a daily dose of 150 U/m^2 divided into twice daily intramuscular injections of 75 U/m^2. After two weeks of treatment, dosing should then be tapered, gradually eliminating administration over a 2-week period.

C. Basis for Approvability or Not-Approval Recommendation

H. P. Acthar Gel is an approved product under NDA 8-372. The current application proposes use of the same product for a new indication. No CMC changes have been made to the approved drug substance or drug product.

The applicant claims categorical exclusion under the provisions of 21 CFR §25.31(a). because it will not increase use of the drug The request for categorical exclusion was reviewed under the original efficacy supplement and found acceptable. [J. Brown review for NDA 8-372/S-039 dated 31-Oct-2006]

The proposed product labeling provides for minor format changes to the How Supplied sections as part of the conversion to PLR as shown below. The additional instructions *"H.P. Acthar Gel (repository corticotropin injection) should be warmed to room temperature before using. Do not over pressurize the vial prior to withdrawing the product."* are also contained in the Dosage and Administration sections of both the approved and proposed labeling. Inclusion of this information in the How Supplied section of the labeling is acceptable from a CMC perspective.

Approved Labeling

HOW SUPPLIED
H.P. Acthar Gel
(Repository Corticotropin Injection)

Presentation	NDC
5 mL multi-dose vial containing 80 USP Units per mL	63004-7731-1

Storage: Store **H.P. Acthar Gel** (Repository Corticotropin Injection) under refrigeration between 2°-8°C (36°-46°F).

Product is stable for the period indicated on the label when stored under the conditions described.

Proposed Labeling

16 HOW SUPPLIED / STORAGE AND HANDLING

H.P. Acthar Gel (repository corticotropin injection) is supplied as 5 mL multi-dose vial (63004-7731-1) containing 80 USP Units per mL. H.P. Acthar Gel (repository corticotropin injection) should be warmed to room temperature before using. Do not over pressurize the vial prior to withdrawing the product.

Store H.P. Acthar Gel (repository corticotropin injection) under refrigeration between 2°-8°C (36°-46°F). Product is stable for the period indicated on the label when stored under the conditions described.

In view of the approved status of this product, it should also be approved under the current application.

III. Administrative

A. Reviewer's Signature

See electronic signature in DARRTS.

B. Endorsement Block

See electronic signatures in DARRTS.

C. CC Block

ONDQA/DNDQA-1/H. Patel
ONDQA/DNDQA-1/M. Heimann
ONDQA/DNDQA-1/T. Bouie
DNP/S. Daugherty
DMEP/J. Weber

Application Type/Number	Submission Type/Number	Submitter Name	Product Name
NDA-22432	ORIG-1	QUESTCOR PHARMACEUTICALS INC	H.P.ACTHAR GEL (Repository Corticotropin Injection)

This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

MARTHA R HEIMANN
06/01/2010

HASMUKH B PATEL
06/01/2010