

**CENTER FOR DRUG EVALUATION AND
RESEARCH**

APPLICATION NUMBER:

22-058

CHEMISTRY REVIEW(S)

NDA 22-058

**SUPPRELIN[®] LA
(histrelin acetate)
Subcutaneous Implant**

Valera Pharmaceuticals Inc.

**Elsbeth Chikhale, Ph.D.
ONDQA – DPA I – Branch II
for
Division of Metabolism and Endocrinology Products**



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Chemistry Review Data Sheet

1. NDA 22-058
2. REVIEW #: 2 (with tracked labeling changes scanned)
3. REVIEW DATE: 17-APR-2007
4. REVIEWER: Elsbeth Chikhale, Ph.D.
5. PREVIOUS DOCUMENTS: NA

6. SUBMISSION(S) BEING REVIEWED:

| <u>Submission(s) Reviewed</u> | <u>Document Date</u> |
|------------------------------------|----------------------|
| Original | 30-JUN-2006 |
| Amendment to original ¹ | 15-SEP-2006 |
| Amendment to original ² | 27-MAR-2007 |
| Amendment to original ³ | 12-APR-2007 |

- 1) The 9/15/06 amendment provides a response to the information request in the 74 day filing letter, dated 8/17/06, including updated stability data, specifications, and pharmaceutical development.
- 2) The 3/27/07 amendment provides a response to the information request dated 3/12/07.
- 3) The 4/12/07 amendment provides a response to the information request dated 4/9/07.

7. NAME & ADDRESS OF APPLICANT:

Name: Valera Pharmaceuticals Inc.

Address: 8 Clark Drive
Cranbury, NJ 08512

Representative: William B. Gray (Senior Director, Regulatory Affairs)

Telephone: (609) 235- 3206

8. DRUG PRODUCT NAME/CODE/TYPE:

- a) Proprietary Name: Supprelin® LA
- b) Non-Proprietary Name (USAN): histrelin
- c) Code Name/#:



CHEMISTRY REVIEW



Chemistry Review Data Sheet

Chemical Names:

1. L-Pyroglutamyl-L-histidyl-L-tryptophyl-L-seryl-L-tyrosyl-N-benzyl-Dhistidyl-L-leucyl-L-arginyl-L-proline N-ethylamide, acetate salt
2. Pyr-His-Trp-Ser-Tyr-D-His(Bzl)-Leu-Arg-Pro-NHEt, acetate salt

Molecular formula: $C_{66}H_{86}N_{18}O_{12}$ (free base)
 $C_{66}H_{86}N_{18}O_{12} \cdot 2C_2H_4O_2$ (Histrelin Acetate)

Molecular mass: 1323.52 (base) + 120.2 (diacetate) = 1443.7 (Histrelin Acetate)

Chemical Abstracts Service (CAS) registry number: 76712-82-8

17. RELATED/SUPPORTING DOCUMENTS:

A. DMFs:

| DMF # | TYPE | HOLDER | ITEM REFERENCED | CODE ₁ | STATUS ₂ | DATE REVIEW COMPLETED | COMMENTS |
|-------|------|--------|-------------------|-------------------|---------------------|-----------------------|----------------------------|
| ● | II | ● | Histrelin acetate | 3 | Adequate | August 9, 2004 | Reviewed by Su Tran, Ph.D. |

¹ Action codes for DMF Table:

1 – DMF Reviewed.

Other codes indicate why the DMF was not reviewed, as follows:

2 – Type 1 DMF

3 – Reviewed previously and no relevant revision since last review

4 – Sufficient information in application

5 – Authority to reference not granted

6 – DMF not available

7 – Other (explain under "Comments")

² Adequate, Inadequate, or N/A (There is enough data in the application, therefore the DMF did not need to be reviewed)

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Chemistry Review Data Sheet

B. Other Documents:

| DOCUMENT | APPLICATION NUMBER | DESCRIPTION |
|----------|--------------------|--------------------------------------|
| IND | 67,582 | Histrelin subdermal implant |
| NDA | 21-732 | Vantas (histrelin subdermal implant) |

18. STATUS:

| CONSULTS/ CMC RELATED REVIEWS | RECOMMENDATION | DATE | REVIEWER |
|-------------------------------|--|---------|-------------------------|
| Biometrics | N/A | | |
| EES | Acceptable | 3/22/07 | |
| Pharm/Tox | N/A | | |
| CDRH | Acceptable with some labeling comments | 3/23/07 | Gail Gantt |
| Clinical Pharmacology | N/A | | |
| Methods Validation | Acceptable | 3/16/07 | Elsbeth Chikhale, Ph.D. |
| ODS/DMETS | Supprelin is acceptable, but the modifier "LA" is not recommended. | 1/26/07 | Loretta Holmes, PharmD. |
| EA | Satisfactory (consult not needed) | 3/16/07 | Elsbeth Chikhale, Ph.D. |
| Microbiology | Approval | 3/27/07 | John Metcalfe, Ph.D. |

19. ORDER OF REVIEW: N/A

The Chemistry Review for NDA 22-058

The Executive Summary

I. Recommendations

A. Recommendation and Conclusion on Approvability

NDA 22-058 is recommended for **Approval** from the standpoint of chemistry, manufacture and controls, **pending final labeling**.

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

None

II. Summary of Chemistry Assessments

A. Description of the Drug Product and Drug Substance

1) Drug Product

The product is a drug-device combination product. For the purpose of this review, "drug product" refers to the implant (in the sodium chloride solution). (The insertion device tool will be reviewed by CDRH). The drug product, Supprelin® LA (histralin acetate) subcutaneous implant, is a polymeric non-biodegradable implant for subcutaneous administration. Each implant consists of 4 drug pellets containing a total of 50 mg histrelin acetate inside a non-biodegradable, 35 mm x 3.1 mm, cylindrical hydrogel reservoir. The drug pellets also contain the inactive ingredient stearic acid NF. The hydrogel cartridge is composed of 2-hydroxyethyl methacrylate, 2-hydroxypropyl methacrylate, trimethylolpropane trimethacrylate, benzoin methyl ether, Perkadox-16, and Triton X-100. The ratio of 2-hydroxyethyl methacrylate and 2-hydroxypropyl methacrylate in the crosslinked copolymer controls the release rate of drug from the implant. Each cartridge is composed of 2-hydroxyethyl methacrylate, trimethylolpropane trimethacrylate, benzoin methyl ether, and Perkadox-16. The implant is stored in 2 mL of 1.8% sterile sodium chloride inside a 3.5 mL Type I clear glass vial with a teflon-coated stopper and an aluminum seal. The vial is packaged in an amber pouch in a carton. Supprelin® LA is supplied in a carton in a cooled box for the implant along with another carton for the implantation kit. The implantation kit contains: 1 # 11 disposable scalpel; 1 syringe with 18 ga. 1" needle; 1 25 Ga x 1.5" needle; 1 S/S mosquito clamp; 1 package betadine swabs; 2 alcohol prep pads; 1 fenestrated drape; 1 non-fenestrated drape; 1 sachet antiseptic ointment; 1

b(4)

b(4)

package gauze sponges; 1 package surgical closure strips; 1 vicryl sutures-coated; 1 package elastoplast; 1 vial Lidocaine HCL 1% w/epinephrine USP; ; and 1 implant insertion device tool in sterile bag. b(4)

The drug product is sterilized by . The hypertonic saline is necessary for storage in order to minimize drug elution from the hydrated implant during storage. The product is intended to be used for the treatment of central precocious puberty (CPP) in children. A very similar drug product made by the same manufacturer has already been approved (NDA 21-732 for Vantas (histralin subdermal implant)) for treatment of advanced prostate cancer. The only difference between Vantas and Supprelin® LA is that the new product releases drug at a higher rate than the Vantas product b(4)

The formulation used in the phase 1/2 study and the pivotal clinical phase 3 study is identical to the proposed commercial formulation. The implant is intended to provide continuous release of histrelin acetate at a nominal rate of 65 micrograms per day over 12 months. However, the drug product specifications allow the *in vitro* elution rate to vary between histrelin acetate per day, with a potential initial histrelin acetate per day. The *in vitro* elution rate has been shown to be predictive of the *in vivo* release rate, although no formal *in vitro-in vivo* correlation (IVIVC) has been established. The proposed storage condition is at 2-8 °C, and the proposed expiry date is 24 months. The provided stability data support the proposed expiry date of 24 months.

2) Drug Substance

The drug substance histrelin acetate is a synthetic nonapeptide, an agonist of the naturally occurring ganadotropin releasing hormone (GnRH) or luteinising hormone releasing hormone (LHRH). The drug substance is derived from the natural decapeptide LHRH b(4)

Reference is made to DMF for information on the chemistry, manufacturing and controls of the drug substance. This DMF was found adequate on 09-AUG-2004 (Chem. Review #2 by Su Tran, Ph.D.) in support of NDA 21-732, and no updates have been submitted since that review. A Letter of Authorization to allow the Agency to review this DMF was provided.

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

The implant is inserted subcutaneously in the inner aspect of the upper arm, using the insertion tool packaged in the implantation kit together with the implant, and kept in the arm for a period of 12 months. After 12 months, the implant must be removed and another implant may be inserted to continue the therapy.

C. Basis for Approvability or Not-Approval Recommendation

The NDA is recommended for **Approval** from chemistry, manufacturing and controls (CMC) perspective, **pending final labeling**, because:

- The sponsor has satisfactorily replied to all CMC information requests dated 8/17/06, 3/12/07 and 4/9/07.
- The CMC information for the drug substance histrelin acetate is adequate.
- The CMC information for the drug product Supprelin® LA is adequate.
- The regulatory specifications for the drug substance are acceptable.
- The proposed in-process controls and regulatory drug product specifications are acceptable and assure a high quality drug product.
- NDA 22-058 is recommended for approval from a product quality microbiology perspective (see Product Quality Microbiology review dated 3/27/07).
- The CDRH review of the insertion (device) tool (AKA trocar) dated 3/23/07, has no deficiencies listed and only has two labeling comments. The insertion tool is identical to that approved for use with Valera's Vantas implant (NDA 21-732).
- The cGMP status of all manufacturing and control facilities is acceptable per EER dated 3/22/07.
- Submitted stability data support the proposed **24 month** drug product shelf life when stored in the refrigerator at 2-8 °C.

III. Administrative

- A. Reviewer's Signature:** in DFS
- B. Endorsement Block:** in DFS
- C. cc Block:** in DFS

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X Trade Secret / Confidential (b4)

 Draft Labeling (b4)

 Draft Labeling (b5)

 Deliberative Process (b5)

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this page is the manifestation of the electronic signature.**

/s/

Elsbeth Chikhale
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resubmitted to DFS to show tracked labeling changes

Blair Fraser
4/20/2007 04:55:37 PM
CHEMIST

NDA 22-058

**SUPPRELIN[®] LA
(histrelin acetate)
Subcutaneous Implant**

Valera Pharmaceuticals Inc.

**Elsbeth Chikhale, Ph.D.
ONDQA – DPA I – Branch II
for
Division of Metabolism and Endocrinology Products**



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III. Administrative..... 9

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 C. CC Block 9

Chemistry Assessment..... 10

I. Review Of Common Technical Document-Quality (Ctd-Q) Module 3.2: Body Of Data..... 10

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 P DRUG PRODUCT [Supprelin®, Implant]..... 16

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Chemistry Review Data Sheet

1. NDA 22-058
2. REVIEW #: 1
3. REVIEW DATE: 16-MAR-2007
4. REVIEWER: Elsbeth Chikhale, Ph.D.
5. PREVIOUS DOCUMENTS: NA

6. SUBMISSION(S) BEING REVIEWED:

| <u>Submission(s) Reviewed</u> | <u>Document Date</u> |
|------------------------------------|----------------------|
| Original | 30-JUN-2006 |
| Amendment to original ¹ | 15-SEP-2006 |

- 1) The 9/15/06 amendment provides a response to the information request in the 74 day filing letter, dated 8/17/06, including updated stability data, specifications, and pharmaceutical development.

7. NAME & ADDRESS OF APPLICANT:

Name: Valera Pharmaceuticals Inc.

Address: 8 Clark Drive
Cranbury, NJ 08512

Representative: William B. Gray (Senior Director, Regulatory Affairs)

Telephone: (609) 235- 3206

8. DRUG PRODUCT NAME/CODE/TYPE:

- a) Proprietary Name: Supprelin® LA
- b) Non-Proprietary Name (USAN): histrelin
- c) Code Name/#:
- d) Chem. Type/Submission Priority:
 - Chem. Type: 5
 - Submission Priority: S

CHEMISTRY REVIEW

Chemistry Review Data Sheet

Molecular formula: C₆₆H₈₆N₁₈O₁₂ (free base)
C₆₆H₈₆N₁₈O₁₂•2C₂H₄O₂ (Histrelin Acetate)

Molecular mass: 1323.52 (base) + 120.2 (diacetate) = 1443.7 (Histrelin Acetate)

Chemical Abstracts Service (CAS) registry number: 76712-82-8

17. RELATED/SUPPORTING DOCUMENTS:

A. DMFs:

| DMF # | TYP E | HOLDER | ITEM REFERENCED | CODE ¹ | STATUS ² | DATE REVIEW COMPLETE D | COMMENTS |
|-------|-------|--------|-------------------|-------------------|---------------------|------------------------|----------------------------|
| ● | II | ● | Histrelin acetate | 3 | Adequate | August 9, 2004 | Reviewed by Su Tran, Ph.D. |

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Other codes indicate why the DMF was not reviewed, as follows:

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5 – Authority to reference not granted

6 – DMF not available

7 – Other (explain under "Comments")

² Adequate, Inadequate, or N/A (There is enough data in the application, therefore the DMF did not need to be reviewed)



CHEMISTRY REVIEW



Chemistry Review Data Sheet

B. Other Documents:

| DOCUMENT | APPLICATION NUMBER | DESCRIPTION |
|----------|--------------------|--------------------------------------|
| IND | 67,582 | Histrelin subdermal implant |
| NDA | 21-732 | Vantas (histrelin subdermal implant) |

18. STATUS:

| CONSULTS/ CMC RELATED REVIEWS | RECOMMENDATION | DATE | REVIEWER |
|-------------------------------|--|---------|-------------------------|
| Biometrics | N/A | | |
| EES | pending | pending | |
| Pharm/Tox | N/A | | |
| CDRH | pending | pending | |
| Clinical Pharmacology | N/A | | |
| Methods Validation | Acceptable | 3/16/07 | Elsbeth Chikhale, Ph.D. |
| ODS/DMETS | Supprelin is acceptable, but the modifier "LA" is not recommended. | 1/26/07 | Loretta Holmes, PharmD. |
| EA | Satisfactory (consult not needed) | 3/16/07 | Elsbeth Chikhale, Ph.D. |
| Microbiology | pending | pending | |

19. ORDER OF REVIEW: N/A

The Chemistry Review for NDA 22-058

The Executive Summary

I. Recommendations

A. Recommendation and Conclusion on Approvability

The recommendation from the standpoint of chemistry, manufacture and controls is pending:

- (1) a response to the information request to be forwarded to the applicant
- (2) an overall cGMP recommendation from the Office of Compliance
- (3) a recommendation from the Microbiology Staff
- (4) a recommendation from CDRH
- (5) final labeling

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

None

II. Summary of Chemistry Assessments

A. Description of the Drug Product and Drug Substance

1) Drug Product

The product is a drug-device combination product. For the purpose of this review, "drug product" refers to the implant (in the sodium chloride solution). (The device will be reviewed by CDRH). The drug product, Suprelin® LA (histralin acetate) implant, is a polymeric non-biodegradable implant for subcutaneous administration. Each implant consists of 4 drug pellets containing a total of 50 mg histrelin acetate inside a non-biodegradable, 35 mm x 3.1 mm, cylindrical hydrogel reservoir. The drug pellets also contains the inactive ingredient stearic acid NF. The hydrogel cartridge is composed of 2-hydroxyethyl methacrylate, 2-hydroxypropyl methacrylate, trimethylolpropane trimethacrylate, benzoin methyl ether, Perkadox-16, and Triton X-100. The ratio of 2-hydroxyethyl methacrylate and 2-hydroxypropyl methacrylate in the crosslinked copolymer controls the release rate of drug from the implant. Each cartridge composed of 2-hydroxyethyl methacrylate, trimethylolpropane trimethacrylate, benzoin methyl ether, and Perkadox-16. The implant is stored in 2 mL of 1.8% sterile sodium chloride inside a 3.5 mL Type I clear glass vial with a teflon-coated stopper and an aluminum seal. The vial is packaged in an amber pouch in a carton. Supprelin is

b(4)

supplied in a carton containing two cartons, one for the implant and one for the implantation kit. The implantation kit contains: 1 # 11 disposable scalpel; 1 syringe with 18 ga. 1" needle; 1 25 Ga x 1.5" needle; 1 S/S mosquito clamp; 1 package betadine swabs; 2 alcohol prep pads; 1 fenestrated drape; 1 non-fenestrated drape; 1 sachet antiseptic ointment; 1 package gauze sponges; 1 package surgical closure strips; 1 vicryl sutures- coated; 1 package elastoplast; 1 vial Lidocaine HCL 1% w/epinephrine USP; [redacted] and 1 implant insertion tool in sterile bag.

b(4)

The drug product is sterilized by [redacted]. The hypertonic saline is necessary for storage in order to minimize drug elution from the hydrated implant during storage. The product is intended to be used for the treatment of central precocious puberty (CPP) in children. A very similar drug product made by the same manufacturer has already been approved (NDA 21-732 for Vantas (histralin subdermal implant)) for treatment of advanced prostate cancer. The only difference between Vantas and Supprelin® LA is that the new product releases drug at a higher rate than the Vantas product [redacted].

b(4)

[redacted] The formulation used in the phase 1/2 study and the pivotal clinical phase 3 study is identical to the proposed commercial formulation. The implant is intended to provide continuous release of histrelin acetate at a nominal rate of 65 micrograms per day over 12 months. However, the drug product specifications allow the *in vitro* elution rate to vary between [redacted] histrelin acetate per day, with a potential initial [redacted] histrelin acetate per day. The *in vitro* elution rate has been shown to be predictive of the *in vivo* release rate, although no formal IVIVC has been established. The proposed storage condition is at 2-8 °C, and the proposed expiry date is 24 months. The adequacy of the proposed expiry date will be determined in CMC review #2, after review of updated stability data.

2) Drug Substance

The drug substance histrelin acetate is a synthetic nonapeptide, an agonist of the naturally occurring ganadotropin releasing hormone (GnRH) or luteinising hormone releasing hormone (LHRH). The drug substance is derived from the natural decapeptide LHRH [redacted].

[redacted] Reference is made to DMF [redacted] for information on the chemistry, manufacturing and controls of the drug substance. This DMF was found adequate on 09-AUG-2004 (Chem. Review #2 by Su Tran, Ph.D.) in support of NDA 21-732, and no updates have been submitted since that review. A Letter of Authorization to allow the Agency to review this DMF was provided.

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

The implant is inserted subcutaneously in the inner aspect of the upper arm, using the insertion device packaged in the implantation kit together with the implant, and kept in the arm for a period of 12 months. After 12 months, the implant must be removed and another implant may be inserted to continue the therapy

C. Basis for Approvability or Not-Approval Recommendation

The recommendation from the standpoint of chemistry, manufacture and controls is pending:

- (1) a response to the information request to be forwarded to the applicant.
- (2) an overall cGMP recommendation from the Office of Compliance
- (3) a recommendation from the Microbiology Staff
- (4) a recommendation from CDRH
- (5) final labeling

III. Administrative

A. Reviewer's Signature: in DFS

B. Endorsement Block: in DFS

C. cc Block: in DFS

53 Page(s) Withheld

X Trade Secret / Confidential (b4)

 Draft Labeling (b4)

 Draft Labeling (b5)

 Deliberative Process (b5)

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/s/

Elsbeth Chikhale
3/16/2007 04:49:03 PM
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3/16/2007 05:00:55 PM
CHEMIST

NDA 22-058

**Supprelin® LA
(histrelin acetate)
Subcutaneous Implant**

**Summary of the Basis for the Recommended Action
from Chemistry, Manufacturing, and Controls**

Applicant: Valera Pharmaceuticals Inc.
8 Clark Drive,
Cranbury, NJ 08512

Indication: Treatment of central precocious puberty (CPP).

Presentation: Supprelin® LA (histrelin acetate) subcutaneous implant is available as an implant for subcutaneous implantation containing 50 mg histrelin acetate.

Supprelin® LA is supplied in a box enclosing 2 inner cartons, one containing the Supprelin LA implant and one containing the implantation kit for use with the implant.

The Supprelin® LA implant carton contains a cold pack for refrigerated shipment and a small box containing an amber plastic pouch. Inside the pouch is a glass vial, sealed with a Teflon-coated stopper and an aluminum seal, containing the implant immersed in 2 mL of 1.8% sterile sodium chloride.

EER Status: Acceptable 3-MAR-2007

Consults: Clinical Pharmacology: Pending
EA – Categorical exclusion: Granted 16-MAR-2007
Methods Validation: Acceptable 16-MAR-2007
CDRH: Acceptable 23-MAR-2007
Microbiology: Acceptable 27-MAR-2007

Original Submission: 30-JUN-2006

Post-Approval Agreements:

In the amendment of 15-SEP-2006, the applicant agreed to and provided:

- A stability protocol for the commitment batches.
- A stability protocol for the continuing batches (minimum of one batch annually).
- An updated stability testing and acceptance criteria protocol for the commitment and continuing batches.

contains the inactive ingredient stearic acid NF. The hydrogel reservoir is a cartridge composed of 2-hydroxyethyl methacrylate, 2-hydroxypropyl methacrylate, trimethylolpropane trimethacrylate, benzoin methyl ether, Perkadox-16, and Triton X-100. Each hydrated implant is packaged in a glass vial containing 2.0 mL of 1.8% sodium chloride, sterile solution, so that it is primed for immediate release of the drug upon insertion.

A very similar drug product, made by the same manufacturer, has already been approved (NDA 21-732 for Vantas (histrelin subdermal implant)) for treatment of advanced prostate cancer. The only difference between Vantas and Supprelin® LA is that the new product releases drug at a higher rate than the Vantas product.

The ratio of 2-hydroxyethyl methacrylate and 2-hydroxypropyl methacrylate in the crosslinked copolymer controls the release rate of drug from the implant. The Supprelin® LA implant is intended to provide continuous release of histrelin acetate at a nominal rate of 65 micrograms per day over 12 months.

b(4)

Specifications for the drug product include: appearance, identification by FTIR and HPLC, assay, impurities, content uniformity, sterility, elution rate, and microbial limits. All tests methods have been appropriately validated for their intended purpose.

Submitted stability data support the proposed expiration dating of 24 months at 2-8 °C (refrigerated) for the drug product protected from light.

Conclusion: Drug product is satisfactory.

Additional Items:

All associated Drug Master Files (DMFs) are adequate or the pertinent information has been adequately provided in the application.

Overall Conclusion:

From a CMC perspective, the application is recommended for **Approval**, pending agreement on product labeling.

Blair Fraser, Ph.D.
Division Director
DPA I/ONDQA

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/s/

Blair Fraser
4/18/2007 03:04:39 PM
CHEMIST

ESTABLISHMENT EVALUATION REQUEST

DETAIL REPORT

| | | | |
|-----------------|------------------------|----------------|-------------------|
| Application: | NDA 22058/000 | Action Goal: | |
| Stamp: | 03-JUL-2006 | District Goal: | 04-MAR-2007 |
| Regulatory Due: | 03-MAY-2007 | Brand Name: | SUPPRELIN LA 50MG |
| Applicant: | VALERA PHARMACEUTICALS | Estab. Name: | |
| | NO CITY, , XX | Generic Name: | HISTRELIN ACETATE |
| | | | SUBCUTANEOUS IMPL |
| NT | | | |
| Priority: | 510 | Dosage Form: | (DRUG DELIVERY SY |
| | | | STEM) |
| Org Code: | | Strength: | 50 MG |

Application Comment: ORPHAN DRUG DESIGNATION GRANTED ON 18-NOV-2006.
NON-DEGRADABLE IMPLANT (RESERVOIR. (on 19-JUL-2006 by S.
TRAN ())
301-796-1764)

| | | | |
|---------------|-------------|--------------|------------|
| FDA Contacts: | J. JOHNSON | 301-796-2194 | , Project |
| anager | | | |
| | E. CHIKHALE | 301-796-1659 | , Review C |
| emist | | | |
| | S. TRAN | 301-796-1764 | , Team Lea |
| er | | | |

Overall Recommendation: ACCEPTABLE on 22-MAR-2007 by S. FERGUSON (HFD-322) 30
-827-9009

Establishment: FEI

b(4)

DMF No: AADA:

Responsibilities:

Profile:

CTX

OAI Status: NONE

Estab. Comment:
by S.

b(4)

TRAN () 301-796-1764)

| Milestone Name | Date | Type | Insp. Date | Decision & Reason | C |
|----------------|------|------|------------|-------------------|---|
|----------------|------|------|------------|-------------------|---|

| | | | | | |
|--------------------------|-------------|--|--|--|--|
| SUBMITTED TO OC TRANS | 19-JUL-2006 | | | | |
|--------------------------|-------------|--|--|--|--|

| | | | | | |
|----------------------------|-------------|-----|--|--|----|
| SUBMITTED TO DO BROGIOJ | 19-JUL-2006 | GMP | | | DA |
|----------------------------|-------------|-----|--|--|----|

| | | | | | |
|-----------------------------|-------------|--|--|------------------------------|--|
| DO RECOMMENDATION RPENTA | 24-AUG-2006 | | | ACCEPTABLE INSPECTION | |
|-----------------------------|-------------|--|--|------------------------------|--|

EI 8/16/06 OF TEAM IS NAI AND COVERED 76 755/004 AND 76 722/0

BIO EI OF 6/2/06 COVERED MFGR PORTION OF FACILITY AND A FDA483 WAS ISSUED.

b(4)

| | | | | | |
|------------------------------|-------------|--|--|------------|----|
| OC RECOMMENDATION BROGIOJ | 27-AUG-2006 | | | ACCEPTABLE | DA |
|------------------------------|-------------|--|--|------------|----|

DISTRICT RECOMMENDATION

Establishment:

FEI

b(4)

MF No:

AADA:

ESTABLISHMENT EVALUATION REQUEST

DETAIL REPORT

Responsibilities:

[REDACTED]

b(4)

Profile:

CSN

OAI Status:

NONE

Milestone Name
ator

Date

Type

Insp. Date

Decision & Reason

C

SUBMITTED TO OC
TRANS

19-JUL-2006

OC RECOMMENDATION
ADAMSS

20-JUL-2006

ACCEPTABLE

BASED ON PROFILE

Establishment:

[REDACTED]

FEI

[REDACTED]

b(4)

DMF No:

AADA:

Responsibilities:

[REDACTED]

Profile:

CTL

OAI Status:

NONE

Estab. Comment:

[REDACTED]

[REDACTED]

Milestone Name
ator

Date

Type

Insp. Date

Decision & Reason

C

SUBMITTED TO OC
TRANS

19-JUL-2006

SUBMITTED TO DO
BROGIOJ

19-JUL-2006

GMP

DA

ASSIGNED INSPECTION T
JARRELL

10-OCT-2006

PS

INSPECTION PERFORMED 23-FEB-2007
JARRELL

23-FEB-2007

[REDACTED]
RECOMMENDATION 20-MAR-2007
J. ELL

ACCEPTABLE

b(4)

INSPECTION

INSPECTION CONDUCTED 2/21-23/07.

OC RECOMMENDATION 22-MAR-2007
RGUSONS

ACCEPTABLE

F

DISTRICT RECOMMENDATION

Establishment:

FEI **[REDACTED]**

D No:

AADA:

b(4)

Responsibilities: **[REDACTED]**

Profile:

NEC

OAI Status: NONE

Estab. Comment:
-796- **[REDACTED]**

1764)

Milestone Name Date Type Insp. Date Decision & Reason C
ator

ESTABLISHMENT EVALUATION REQUEST

DETAIL REPORT

SUBMITTED TO OC TRANS 19-JUL-2006

SUBMITTED TO DO BROGIOJ 19-JUL-2006 GMP DA

ASSIGNED INSPECTION T MARTIN1 03-AUG-2006 PS

INSPECTION PERFORMED MARTIN1 24-JAN-2007 24-JAN-2007

DO RECOMMENDATION MARTIN1 26-JAN-2007 ACCEPTABLE INSPECTION

OC RECOMMENDATION BROGIOJ 29-JAN-2007 ACCEPTABLE DA

DISTRICT RECOMMENDATION

Establishment: CFN [redacted] FEI [redacted]

b(4)

DMF No: [redacted] AADA: [redacted]

Responsibilities: [redacted]

Profile: SSP OAI Status: NONE

| Milestone Name | Date | Type | Insp. Date | Decision & Reason | C |
|----------------|------|------|------------|-------------------|---|
|----------------|------|------|------------|-------------------|---|

| | | | | | |
|-------------------------|-------------|-----|--|--|----|
| SUBMITTED TO OC TRANS | 19-JUL-2006 | | | | |
| SUBMITTED TO DO BROGIOJ | 19-JUL-2006 | 10D | | | DA |

DO RECOMMENDATION
SPATARO

20-JUL-2006

ACCEPTABLE

BASED ON FILE REVIEW

INSPECTED 5/18/06, ALL PROFILES ACCEPTABLE, INSPECTION VAI

RECOMMENDATION
R. JONS

21-JUL-2006

ACCEPTABLE

F

DISTRICT RECOMMENDATION

Establishment:

FEI

b(4)

DMF No:

AADA:

Responsibilities:

Profile:

CTL

OAI Status: NONE

Estab. Comment:
S. TRAN

() 301-796-1764)

| Milestone Name | Date | Type | Insp. Date | Decision & Reason | C |
|----------------|------|------|------------|-------------------|---|
|----------------|------|------|------------|-------------------|---|

| | | | | | |
|--------------------------|-------------|--|--|--|--|
| SUBMITTED TO OC TRANS | 19-JUL-2006 | | | | |
|--------------------------|-------------|--|--|--|--|

| | | | | | |
|---------------------------|-------------|-----|--|--|--|
| SUBMITTED TO DO ADAMSS | 20-JUL-2006 | GMP | | | |
|---------------------------|-------------|-----|--|--|--|

| | | | | | |
|-----------------------------|-------------|--|--|------------|--|
| DO RECOMMENDATION ADAMSS | 26-JUL-2006 | | | ACCEPTABLE | |
|-----------------------------|-------------|--|--|------------|--|

ESTABLISHMENT EVALUATION REQUEST

DETAIL REPORT

OC RECOMMENDATION 26-JUL-2006
ADAMSS

BASED ON FILE REVIEW

ACCEPTABLE

DISTRICT RECOMMENDATION

Establishment:

FEI

b(4)

DMF No:

AADA:

Responsibilities:

Profile:

NEC

OAI Status:

NONE

| Milestone Name | Date | Type | Insp. Date | Decision & Reason | C |
|---------------------------------|-------------|------|------------|-------------------|----|
| SUBMITTED TO OC TRANS | 19-JUL-2006 | | | | |
| SUBMITTED TO DO BROGIOJ | 19-JUL-2006 | 10D | | | DA |
| ASSIGNED INSPECTION T NROLLI | 14-AUG-2006 | PS | | | |
| INSPECTION PERFORMED C/MIENA | 29-AUG-2006 | | | | J |

AUTOMATIC WITHHOLD STATUS ISSUED BY FACTS, DUE TO FIRM BEING OUT OF BUSINESS OR M
RGED

DO RECOMMENDATION 12-SEP-2006

ACCEPTABLE

INSPECTION CONDUCTED 8/24/06, CLASSIFIED NAI.

B RECOMMENDATION 12-SEP-2006
LOJ

ACCEPTABLE DA

DISTRICT RECOMMENDATION

