

# CENTER FOR DRUG EVALUATION AND RESEARCH

## Approval Package for:

### ***APPLICATION NUMBER:***

**022264Orig1s021**

***Trade Name:*** Invega Sustenna  
***Generic or Proper Name:*** (paliperidone palmitate)

***Sponsor:*** Janssen Pharmaceuticals Inc

***Approval Date:*** November 16, 2016

***Indication:*** Invega Sustenna is an atypical antipsychotic indicated for:

- Treatment of schizophrenia
- Treatment of schizoaffective disorder as monotherapy and as an adjunct to mood stabilizers or antidepressants

# CENTER FOR DRUG EVALUATION AND RESEARCH

022264Orig1s021

## CONTENTS

### **Reviews / Information Included in this NDA Review.**

<b>Approval Letter</b>	<b>X</b>
<b>Other Action Letters</b>	
<b>Labeling</b>	
<b>REMS</b>	
<b>Summary Review</b>	
<b>Officer/Employee List</b>	
<b>Office Director Memo</b>	
<b>Cross Discipline Team Leader Review</b>	
<b>Clinical Review(s)</b>	
<b>Product Quality Review(s)</b>	<b>X</b>
<b>Non-Clinical Review(s)</b>	
<b>Statistical Review(s)</b>	
<b>Clinical Microbiology / Virology Review(s)</b>	
<b>Clinical Pharmacology Review(s)</b>	
<b>Other Reviews</b>	
<b>Risk Assessment and Risk Mitigation Review(s)</b>	
<b>Proprietary Name Review(s)</b>	
<b>Administrative/Correspondence Document(s)</b>	<b>X</b>

**CENTER FOR DRUG EVALUATION AND  
RESEARCH**

*APPLICATION NUMBER:*

**022264Orig1s021**

**APPROVAL LETTER**



NDA 22264/S-021

**APPROVAL LETTER**

Janssen Pharmaceuticals, Inc.  
Attention: Beth Geter-Douglass, PhD, Associate Director, Global Regulatory Affairs  
1125 Trenton-Harbourton Rd., P. O. Box 200  
Titusville, NJ 08560

Dear Dr. Geter-Douglass:

Please refer to your Supplemental New Drug Application (sNDA) dated May 18, 2016, received May 18, 2016, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act (FDCA) for INVEGA SUSTENNA® (paliperidone palmitate) Extended-Release Injectable Suspension.

This “Changes Being Effected in 30 days” supplemental new drug application provides for the addition of Janssen Pharmaceuticals Inc., Titusville, NJ as an alternate facility for drug product stability testing.

We have completed our review of this supplemental new drug application. This supplement is approved.

We remind you that you must comply with the requirements for an approved NDA set forth under 21 CFR 314.80 and 314.81.

If you have any questions, call Teshara G. Bouie, Regulatory Business Process Manager, at (301) 796-1649.

Sincerely,

*{See appended electronic signature page}*

David Lewis, Ph.D.  
Branch Chief (Acting)  
Branch II, Division of Post Marketing Activities I  
Office of Lifecycle Drug Products  
Office of Pharmaceutical Quality  
Center for Drug Evaluation and Research



David  
Lewis

Digitally signed by David Lewis  
Date: 11/16/2016 03:39:12PM  
GUID: 508da7200029f287fa31e664741b577



**CENTER FOR DRUG EVALUATION AND  
RESEARCH**

*APPLICATION NUMBER:*

**022264Orig1s021**

**PRODUCT QUALITY REVIEW(S)**

**Office of Lifecycle Drug Products  
Division of Post-Marketing Activities I  
Review of Chemistry, Manufacturing, and Controls**

**1. NDA Supplement Number: NDA 022264 / S-021**

**2. Submission(s) Being Reviewed:**

Submission	Type	Submission Date	CDER Stamp Date	Assigned Date	PDUFA Goal Date	Review Date
Original Supplement	CBE-30	05/18/2016	05/17/2016	09/02/2016	11/18/2016	10/24/2016

**3. Provides For:** Addition of Janssen Pharmaceuticals Inc, Titusville, NJ as an alternate facility for drug product stability testing for Invega® Sustenna® (paliperidone palmitate) long acting injection.

**4. Review 1:**

**5. Clinical Review Division:**

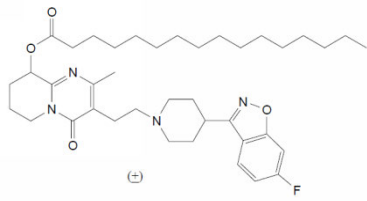
**6. Name and Address of Applicant:**

Janssen Pharmaceuticals Inc  
1125 Trenton-Harbourton Rd  
P. O. Box 200  
Titusville, NJ  
USA 08560

**7. Drug Product:**

Drug Name	Dosage Form	Strength	Route of Administration	Rx or OTC	Special Product
Invega® Sustenna® (paliperidone palmitate)	Suspension (extended release)	39 mg/0.25 mL 78 mg/0.5 mL 117 mg/0.75 mL 156 mg/mL 234 mg/1.5 mL	Intramuscular	Rx	No

**8. Chemical Name and Structure of Drug Substance:**

	<p><b>USAN:</b> Paliperidone Palmitate  <b>Chemical name:</b> (±)-3-[2-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]ethyl]-6,7,8,9-tetrahydro-2-methyl-4-oxo-4H-pyrido[1,2-a]pyrimidin-9-yl hexadecanoate  <b>Molecular formula:</b> C<sub>39</sub>H<sub>57</sub>FN<sub>4</sub>O<sub>4</sub>  <b>MW:</b>664.89 g/mol</p>
---	---

**9. Indication:** For the treatment of schizophrenia

**10. Supporting/Relating Documents:**

Manufacturer(s) [3.2.P.3.1](#)

Basis for submission statement ([1.12.11](#))

**11. Consults:**

Consults	Recommendation	Date	Reviewer
OPF/Facility	Approve	5/26/2016	Zhihao Peter Qiu
DMF			
Microbiology			
Pharm/Tox			
Biopharm			
Statistics			
DMEPA			
CDRH/ODE			
CDRH/OC			
EA			

**12. Executive Summary:** This CBE-30 supplement provides for the addition of Janssen Pharmaceuticals Inc, Titusville, NJ as an alternate facility for drug product stability testing for Invega® Sustenna® (paliperidone palmitate) long acting injection. This submission meets all four criteria outlined in the Guidance PAC-ATLS: Post-Approval Changes – Analytical Testing Laboratory Sites to qualify for CBE-30 submission (current satisfactory cGMP status for the facility, statement that all test methods at the alternate site are identical to those approved in the NDA, statement that there are no outstanding post-approval commitments relating to test methods, and a statement indicating that the alternate facility is capable of performing the intended testing). The facility was submitted in Panorama and a consult was requested from office of Process and Facilities (OPF). OPF recommended approval on 05/26/2016 based on profile. From CMC perspective applicant provides adequate information for the approval of proposed change.

**13. Conclusions & Recommendations:**

This supplement is recommended for approval.

**14. Comments/Deficiencies to be Conveyed to Applicant:** None

**15. Primary Reviewer:**

Rohit Kolhatkar, CMC reviewer, Branch 2, Division of Post-Marketing Activities I, Office of Lifecycle Drug Products, Office of Pharmaceutical Quality (OPQ)

**16. Secondary Reviewer:**

David Lewis, Branch Chief, Branch 2, Division of Post-Marketing Activities I, Office of Lifecycle Drug Products, OPQ

## CMC Assessment

### I. Background Information

Invega® Sustenna® (paliperidone palmitate) long acting injection is approved for the treatment of schizophrenia. Currently stability testing is approved to be performed at Janssen Pharmaceutica NV, Belgium.

### II. Proposed Changes

This CBE-30 supplement provides for the addition of Janssen Pharmaceuticals Inc, Titusville, NJ as an alternate facility for drug product stability testing for Invega® Sustenna® (paliperidone palmitate) long acting injection.

### III. Data Submitted to Support the Proposed Changes

1) List of Manufacturer(s) [3.2.P.3.1](#)

Following new facility as stated in the list of manufacturers was submitted in Panorama and received approval from OPF.

Janssen Pharmaceuticals Inc  
1125 Trenton-Harbourton Road,  
Titusville, New Jersey (NJ)  
08560,  
United States

FDA site registration number 2242843.

**Inspection Management Form**

**NDA-022264-SUPPL-21**  
**JANSSEN PHARMACEUTICALS INC, CTL CONTROL TESTING LABORATORY**

Facility Name: JANSSEN PHARMACEUTICALS INC	DUNS: 063137772	FEI: 2242843	Address: 1125 TRENTON HARBOURTON RD TITUSVILLE, NJ US 08560 1504	Business Operation: FDI STABILITY TESTER	Product Stage Code: FINISHED DOSAGE	Product Process Code: STABILITY TESTER	<a href="#">Report Data Issue</a>
--	--------------------	-----------------	--	---	---	--	-----------------------------------

Action Indicated Status: **None**  
Facility Summary Report  
FACTS Firm Profile Data  
Previous Inspections Findings ▾

Office of Process and Facilities Recommendation	District Office Recommendation	FACTS Results	Application and Facility Criteria
<input checked="" type="radio"/> Approve Facility <input type="radio"/> Withhold Approval	Inspection Type:	483 Issued:	Application-Specific Criteria
Recommendation Reasons Admin Closure - Ignore Recommend Based on File Review Based on Inspection Review Based on Profile	Recommendation:	GMP Classification:	Facility-Specific Criteria
	Recommendation Reasons:	Sample ID and Type:	
	Decision Factors:		
	Comments:		

2) Basis for submission statement ([1.12.11](#))

Applicant mentions that

- 1) *The alternate facility has a current and satisfactory cGMP profile as a testing site*
- 2) *The analytical test methods approved in the application will be used*
- 3) *There are no outstanding commitments relating to any test methods*
- 4) *The alternate facility is qualified and capable of performing the intended tests.*

Reviewer evaluation: Acceptable

List of manufacturers has been updated. Additional facility has been approved by OPF and there are no outstanding stability commitments for the product. The information provided is considered adequate from CMC perspective.

### IV. Risk Associated with the Proposed Changes and Impact to Product Quality and Patient Safety

None



David  
Lewis

Digitally signed by David Lewis

Date: 10/24/2016 11:57 00AM

GUID: 508da7200029f287fa31e664741b577

Comments: concur; the supplement is recommended for approval from the standpoint of CMC.



Rohit  
Kolhatkar

Digitally signed by Rohit Kolhatkar

Date: 10/24/2016 11:44 58AM

GUID: 57bf531500b52a2eccd5395bec77ebc2

**CENTER FOR DRUG EVALUATION AND  
RESEARCH**

*APPLICATION NUMBER:*

**022264Orig1s021**

**ADMINISTRATIVE AND CORRESPONDENCE  
DOCUMENTS**

**From:** Gill-Sangha, Gurpreet  
**To:** [Bouie, Teshara](#); [Qi, Lin](#)  
**Subject:** RE: New Work Request: Quality Filing Determination - IQA for N22264/S21  
**Date:** Friday, June 03, 2016 10:25:00 AM  
**Attachments:** [image001.png](#)

---


Initial Quality Assessment – OLDP Division of Post Marketing Activities I  
NDA Supplement #: N22264/S21  
Applicant: Janssen Pharmaceuticals Inc.  
Product: Invega Sustenna Injection  
Receipt Date: 5/18/16 PDUFA Goal Date: 11/18/16  
Final Category: CBE-30

Consults: Janssen site is entered in Panorama for OPF evaluation.



Comments: This CBE-30 provides for addition of an alternate drug product stability testing site as Janssen Pharmaceuticals Inc., NJ. Site is entered in Panorama and has been given an overall acceptable recommendation by OPF “Based on Profile” as of 5/26/16.

Thanks  
**Gurpreet**

**From:** Teshara Bouie [mailto:[teshara.bouie@fda.hhs.gov](mailto:teshara.bouie@fda.hhs.gov)]  
**Sent:** Thursday, May 26, 2016 12:57 PM  
**To:** Gill-Sangha, Gurpreet  
**Subject:** New Work Request: Quality Filing Determination

 **Quality Filing Determination** REF# 8080246  
[NDA-022264-SUPPL-21](#)

---

Assigned   **You**  
Due May 31, 2016 (in 5 days) - [See it in Workfront](#)

[Work On It](#)

---

Hi Gurpreet,

[Teshara Bouie](#) just requested you to work on [Quality Filing Determination](#). It's all yours.

[Change Notification settings](#) 