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## **Prequalification Unit Inspection Services** WHO PUBLIC INSPECTION REPORT (WHOPIR)

## Desk Assessment of Active Pharmaceutical Ingredient (API) Manufacturer

Part 1	General information			
Company information				
Name of Manufacturer	Aurore Pharmaceuticals Private Limited- Unit I			
Corporate address of	Plot # 68,69, 2nd Floor, Jubilee Heights,			
manufacturer	Beside Shilparamam, Madhapur, Hyderabad,			
	Telangana.			
	Pin Code: 500081			
	India			
	Telephone +91-40-68303211			
	Fax: +91-40-23110044			
Contact person	Mr. Dr. G. Sampath Kumar Reddy (Head – Quality & Regulatory)			
	Phone: +91-40-68150349			
	Mobile: +91-8185804214			
	Email: drsampath@aurorels.com			
	Mr. N. Shanmugavelu (Vice President Operation)			
	Phone: +91-40-68150309			
	Mobile: +91-9063239680			
	Email: <u>Velu.NS@aurorels.com</u>			
Inspected site				
Name & address of	Aurore Pharmaceuticals Private Limited- Unit I			
manufacturing site	Plot No. 35, 36, 38 to 40, 49 to 51,			
	Phase IV, IDA, Jeedimetla, Quthbullapur (M)			
	Medchal-Malkajigiri District,			
	Hyderabad, Telangana State			
	Pin: 500055,			
	India			
	Phone: +91-40-68150333, 23097777			
	Fax: +91-40-23098572			
	1 dx. +71-40-23070372			
	DUNS: 91-656-8827			
	Latitude N: 17° 31.842			
	Longitude E: 78° 26.184			
	FEI NUMBER 3003937580			
Synthetic	Unit 1			
Unit/Block/Workshop				



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Manufacturing	License no. 99/RR/AP/B/CC				
license number					
Desk assessment details	1 636 1 2025				
Start and end dates of review	4 – 6 March 2025				
Inspection record number	INSP-API-2022-0040				
APIs covered by this	WHOAPI-435 Dolutegravir Sodium				
desk assessment	APIMF461 Nirmatrelvir				
Part 2	Summary of SRA/NRA inspection evidence considered (from most				
	recent to last) and comments				
United States Food and	Dates of inspection:	27 – 31 May 2024			
Drug Administration	Type of inspection:	Surveillance and Pre-Approval inspection			
(USFDA).	Block/Unit/Workshop:	Aurore Pharmaceuticals Private Limited (Unit I)			
	APIs covered:	The commercial APIs covered during the surveillance portion of the inspection were:  Clozapine (ZCL) - DMF 036645  Valganciclovir (VGN) - DMF 034600  Telmisartan III (TST) - contract manufactured product for Mylan laboratories.  Armodafinil (RMF) - contract manufactured product for Mylan laboratories.  Candesartan Cilexetil (CDC)  Levothyroxine Sodium (LTS): nonsterile API for injectable products - DMF034044  Benazepril HCl (BHAF) - contract manufactured product for Aurobindo Pharma Limited  Oxcarbazepine (OCZF) - DMF 034484  Itraconazole (ITCF)  Pre-approval coverage during the inspection was provided to the following APIs:  Verapamil HCl (VPH) - DMF 034043  Acyclovir (ALV) - DMF 034516			
	Physical areas	Surveillance portion of the inspection			
	inspected:	included coverage for Quality, Facilities and			



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	Equipment, Materials, and Laboratory Controls systems.  The inspection covered manufacturing blocks I, II, and IV.		
Part 3	Summary of the last WHO inspection		
Date and conclusion of	The last onsite audit of this site was performed from 13 to 16th March		
most recent WHO	2018. The site changed name from Mylan Unit III to Aurore		
inspection	Pharmaceuticals Private Limited in August 2018.		
Additional products to	None		
be covered by this desk			
assessment:			
Abbreviations	Meaning		
BMR	Batch manufacturing record		
BPR	Batch production record		
CAPA	Corrective and preventive action		
CC	Change control		
GMP	Good manufacturing practices		
NC	Non conformity		
NRA	National regulatory agency		
PQR	Product quality review		
PQS	Pharmaceutical quality system		
QA	Quality assurance		
QC	Quality control		
QCL	Quality control laboratory		
QMS	Quality management system		
QRM	Quality risk management		
RA	Risk assessment		
RCA	Root cause analysis		
SOP	Standard operating procedure		

Part 4 Summary of the assessment of supporting documentation
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## a) Manufacturing authorization and GMP certificate granted by the local authority:

Drug Control Administration, Government of Telangana had issued manufacturing license No. 99/RR/AP/B/CC, which was valid until 28 October 2028. Dolutegravir and Nirmatrelvir were among the list of products approved to be manufactured in the letter associated with the of the manufacturing license.

The company had Good Manufacturing Certificate No. 168476/TS/2025 dated 25 February 2025 and valid until 24 February 2026, issued by Drug Control Administration Government of Telangana.



## b) Site master file (SMF):

A detailed SMF (APLU1/SMF/001/10) effective 16 January 2025 was submitted and found acceptable.

c) List of all the APIs or other products (intermediates, dosage forms) manufactured on-site:

A list of all the APIs and intermediates manufactured on-site was provided and reviewed. No issues of concerns were found with respect to the provided list.

## d) List of all regulatory inspections performed in the last 3 years and their outcomes:

Authority	Date	Outcome
MFDS – Republic of Korea	19-21 November 2024	Approved
US - FDA	27-31 May 2024	Approved (VAI)
ANVISA - Brazil	27 November – 1 December 2023	Approved
CDSCO/ DCA - India	22-23 May 2023	Approved
CDSCO/ DCA - India	17-19 January 2022	Approved

## e) Most recent product quality review(s) (PQR)(s) of the concerned WHO API(s):

The Product Quality Review for Dolutegravir Sodium (DGS) covering the period from January 2024 to December 2024 and Product Quality Review for Nirmatrelvir (LCC) covering the period from January 2024 to December 2024 were reviewed.

Generally, the PQRs were acceptable.

# f) Batch manufacturing and packaging record(s), including the analytical part, for the most recently released batch of relevant API(s):

Batch manufacturing and packaging record(s), including the analytical part of the last commercial batches of Dolutegravir Sodium and Nirmatrelvir were submitted. These were generally found acceptable.

## g) Master batch manufacturing and packaging record(s) of the API(s) of interest:

Master batch manufacturing and packaging records of Dolutegravir Sodium and Nirmatrelvir were submitted and reviewed.

The documents were generally found acceptable.

## h) Recalls in the past three years related to APIs with quality defects:

The company provided a statement confirming that no recalls had taken place prior to submission of the application for the desk assessment.

# i) Confirmation by the senior quality assurance representative that a full self-inspection or external audit dedicated to the API(s) has been performed and all matters dealt with:

The company had in place a system for intra audits. The intra audit report and its CAPA response were submitted and the same were reviewed. The documents were generally found acceptable.



## j) Copy of any warning letter, or equivalent regulatory action, issued by any authority for their market, to which the site provides or has applied to provide the API(s):

The company submitted a statement confirming that no warning letters had been issued by any regulatory authorities against the site until the application for desk assessment was submitted.

#### k) Out-of-stock situations:

The company submitted a statement confirming that no out-of-stock situation was foreseen for WHO PQ products.

#### 1) Additional documents submitted:

The company submitted upcoming inspection declaration letter to confirm that there was no notification from competent national regulatory authorities and no regulatory audits were planned for the next 6 months.

## Part 5 Conclusion – Desk assessment outcome

Based on the GMP evidence received and reviewed, it is considered that a desk assessment is acceptable in lieu of a WHO onsite inspection. The site Aurore Pharmaceuticals Private Limited-Unit I located at Plot No. 35, 36, 38 to 40, 49 to 51, Phase IV, IDA, Jeedimetla, Medchal-Malkajigiri District, Hyderabad, 500055, India is considered to be operating at an acceptable level of compliance with WHO GMP guidelines.

This WHOPIR will remain valid for 3 years, provided that the outcome of any inspection conducted during this period is positive.

## Part 6 List of guidelines referenced in this inspection report

1. WHO good manufacturing practices for pharmaceutical products: main principles. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Forty-eighth Report Geneva, World Health Organization, 2014 (WHO Technical Report Series, No. 986), Annex 2.

*Short name: WHO TRS No. 986, Annex 2* https://www.who.int/publications/m/item/trs986-annex2

2. WHO good manufacturing practices for active pharmaceutical ingredients. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Forty-fourth Report. Geneva, World Health Organization, 2010 (WHO Technical Report Series, No. 957), Annex 2.

Short name: WHO TRS No. 957, Annex 2

https://www.who.int/publications/m/item/annex-2-trs-957



3. WHO guidance on good practices for desk assessment of compliance with good manufacturing practices, good laboratory practices and good clinical practices for medical products regulatory decisions. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fifty-second Report. Geneva, World Health Organization, 2018 (WHO Technical Report Series, No. 1010), Annex 9.

Short name: WHO TRS 1010, Annex 9

https://www.who.int/publications/m/item/trs1010-annex9

4. WHO Good Manufacturing Practices: water for pharmaceutical use. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fifty-fifth Report. Geneva, World Health Organization, 2021 (WHO Technical Report Series, No. 1033), Annex 3.

Short name: WHO TRS No. 1033, Annex 3

https://www.who.int/publications/m/item/annex-3-trs-1033

5. WHO guidelines for sampling of pharmaceutical products and related materials. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Thirty-ninth Report. Geneva, World Health Organization, 2005 (WHO Technical Report Series, No. 929), Annex 4.

Short name: WHO TRS No. 929, Annex 4

https://www.who.int/publications/m/item/annex-4-trs-929

6. WHO good practices for pharmaceutical quality control laboratories. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fifty-seventh Report. Geneva, World Health Organization, 2024 (WHO Technical Report Series, No. 1052), Annex 4.

Short name: WHO TRS No. 1052, Annex 4

https://www.who.int/publications/i/item/9789240091030

7. WHO Good Practices for Pharmaceutical Products Containing Hazardous Substances. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Forty-fourth Report. Geneva, World Health Organization, 2010 (WHO Technical Report Series, No. 957), Annex 3.

Short name: WHO TRS No. 957, Annex 3

https://www.who.int/publications/m/item/trs957-annex3

8. Guidelines on heating, ventilation and air-conditioning systems for non-sterile pharmaceutical products. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fifty-second Report Geneva, World Health Organization, 2018 (WHO Technical Report Series, No. 1010), Annex 8.

Short name: WHO TRS No. 1010, Annex 8

https://www.who.int/publications/m/item/Annex-8-trs-1010



9. Guidelines on heating, ventilation and air-conditioning systems for non-sterile pharmaceutical products. Part 2: Interpretation of Guidelines on heating, ventilation and air-conditioning systems for non-sterile pharmaceutical products. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fifty-third Report Geneva, World Health Organization, 2018 (WHO Technical Report Series, No. 1019), Annex 2.

Short name: WHO TRS No. 1019, Annex 2

https://www.who.int/publications/m/item/trs1019-annex2

10. WHO guidelines on transfer of technology in pharmaceutical manufacturing WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fifty-fifth Report Geneva, World Health Organization, 2022 (WHO Technical Report Series, No. 1044), Annex 4.

Short name: WHO TRS No. 1044, Annex 4

 $\frac{https://cdn.who.int/media/docs/default-source/medicines/norms-and-standards/guidelines/production/trs1044-annex4-technology-transfer-in-pharmaceutical-manufacturing.pdf}$ 

11. WHO good manufacturing practices for sterile pharmaceutical products. Expert Committee on Specifications for Pharmaceutical Preparations. Fifty-fifth Report Geneva, World Health Organization, 2022 (WHO Technical Report Series, No. 1044), Annex 4.

Short name: WHO TRS No. 1044, Annex 2

https://www.who.int/publications/m/item/trs1044-annex2

- 12. General guidelines for the establishment maintenance and distribution of chemical reference substances. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Forty-first Report Geneva, World Health Organization 2007 (WHO Technical Report Series, No.943) Annex 3. *Short name: WHO TRS No. 943, Annex 3* <a href="https://www.who.int/publications/m/item/trs943-annex3">https://www.who.int/publications/m/item/trs943-annex3</a>
- 13. WHO good practices for pharmaceutical microbiology laboratories. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Forty-fifth Report Geneva, World Health Organization, 2011 (WHO Technical Report Series, No. 961), Annex 2.

Short name: WHO TRS No. 961, Annex 2

https://www.who.int/publications/m/item/trs961-annex2

14. WHO guidelines on quality risk management. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Forty-seventh Report Geneva, World Health Organization, 2013 (WHO Technical Report Series, No. 981), Annex 2.

Short name: WHO TRS No. 981, Annex 2

https://www.who.int/publications/m/item/trs981-annex2

15. WHO guidelines on variation to a prequalified product. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Forty-seventh Report Geneva, World Health Organization, 2013 (WHO Technical Report Series, No. 981), Annex 3.

Short name: WHO TRS No. 981, Annex 3

https://www.who.int/publications/m/item/annex-3-trs-981

Aurore Pharmaceuticals Private Limited- Unit I, Hyderabad, India

4-6 March 2025



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16. WHO guidelines for drafting a site master file. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Forty-fifth Report Geneva, World Health Organization, 2011 (WHO Technical Report Series, No. 961), Annex 14.

Short name: WHO TRS No. 961, Annex 14

https://www.who.int/publications/m/item/tr961-annex14

17. Good Manufacturing Practices: Guidelines on validation. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fifty-third Report Geneva, World Health Organization, 2019 (WHO Technical Report Series, No. 1019), Annex 3.

Short name: WHO TRS No. 1019, Annex 3

https://www.who.int/publications/m/item/trs1019-annex3

18. WHO General guidance on hold-time studies WHO Expert Committee on Specifications for Pharmaceutical Preparations. Forty-ninth Report Geneva, World Health Organization, 2015 (WHO Technical Report Series, No. 992), Annex 4.

Short name: WHO TRS No. 992, Annex 4

https://www.who.int/publications/m/item/trs992-annex4

19. Model guidance for the storage and transport of time-and temperature-sensitive pharmaceutical products. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Forty-fifth Report Geneva, World Health Organization, 2011 (WHO Technical Report Series, No. 961), Annex 9.

Short name: WHO TRS No. 961, Annex 9

https://www.who.int/publications/m/item/trs961-annex9-modelguidanceforstoragetransport

20. WHO Technical supplements to Model Guidance for storage and transport of time – and temperature – sensitive pharmaceutical products. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Forty-ninth Report Geneva, World Health Organization, 2015 (WHO Technical Report Series, No. 992), Annex 5.

Short name: WHO TRS No. 992, Annex 5

https://www.who.int/publications/m/item/trs992-annex5

21. WHO Recommendations for quality requirements when plant – derived artemisinin is used as a starting material in the production of antimalarial active pharmaceutical ingredients. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Forty-ninth Report Geneva, World Health Organization, 2015 (WHO Technical Report Series, No. 992), Annex 6.

Short name: WHO TRS No. 992, Annex 6

https://www.who.int/publications/m/item/trs-992-annex-6

22. Guideline on data integrity. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fifty-fifth Report Geneva, World Health Organization, 2021 (WHO Technical Report Series, No. 1033), Annex 4.

Short name: WHO TRS No. 1033, Annex 4

https://www.who.int/publications/m/item/annex-4-trs-1033



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23. WHO general guidance on variations to multisource pharmaceutical products. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fiftieth Report Geneva, World Health Organization, 2016 (WHO Technical Report Series, No. 996), Annex 10.

Short name: WHO TRS No. 996, Annex 10

https://www.who.int/publications/m/item/trs966-annex10

24. Stability testing of active pharmaceutical ingredients and finished pharmaceutical products. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fifty-second Report Geneva, World Health Organization, 2018 (WHO Technical Report Series, No. 1010), Annex 10.

Short name: WHO TRS No. 1010, Annex 10

 $\underline{https://www.who.int/publications/m/item/trs1010-annex10}$ 

25. Points to consider when including Health-Based Exposure Limits in cleaning validation. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fifty-fifth Report Geneva, World Health Organization, 2021 (WHO Technical Report Series, No. 1033), Annex 2.

Short name: WHO TRS No. 1033, Annex 2

https://www.who.int/publications/m/item/annex-2-trs-1033

26. Points to consider for manufacturers and inspectors: environmental aspects of manufacturing for the prevention of antimicrobial resistance. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fifty-fourth Report Geneva, World Health Organization, 2020 (WHO Technical Report Series, No. 1025), Annex 6.

Short name: WHO TRS No. 1025, Annex 6

https://www.who.int/publications/m/item/trs-1025-annex-6

27. Production of water for injection by means other than distillation. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fifty-fourth Report. Geneva, World Health Organization, 2020 (WHO Technical Report Series, No. 1025), Annex 3.

Short name: WHO TRS No. 1025, Annex 3

https://www.who.int/publications/m/item/trs-1025-annex-3-water-for-injection

27. Good chromatography practice. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fifty-fourth Report. Geneva, World Health Organization, 2020 (WHO Technical Report Series, No. 1025), Annex 4.

Short name: WHO TRS No. 1025, Annex 4

https://www.who.int/publications/m/item/trs1025-annex4

28. Good trade and distribution practices for pharmaceutical starting materials. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fiftieth Report Geneva, World Health Organization, 2016 (WHO Technical Report Series, No. 996), Annex 6.

Short name: WHO TRS No. 996, Annex 6

https://www.who.int/publications/m/item/annex-6-trs-996



29. WHO guidelines for preparing a laboratory information file. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Forty-fifth Report Geneva, World Health Organization, 2011 (WHO Technical Report Series, No. 961), Annex 13.

Short name: WHO TRS No. 961, Annex 13

https://www.who.int/publications/m/item/trs961-annex13

30. WHO good manufacturing practices for excipients used in pharmaceutical products. WHO Expert Committee on Specifications for Pharmaceutical Preparations. Fifty-seventh Report. Geneva, World Health Organization, 2024 (WHO Technical Report Series, No. 1052), Annex 1.

Short name: WHO TRS No. 1052, Annex 1

https://www.who.int/publications/i/item/9789240091030