

TMDA/DMC/MRE/F/016

Version#1

TANZANIA MEDICINES AND MEDICAL DEVICES AUTHORITY



**PUBLIC ASSESSMENT REPORT FOR PEG NEUKINE (PEGFILGRASTIM 6 MG/ 0.6
ML) SOLUTION FOR INJECTION**

Version number 0.1

March 2022

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1. Introduction

Peg Neukine is a generic medicine of Pegfilgrastim. Peg Neukine is an antineoplastic and immunomodulating medicine belonging to colony stimulating factor group. Peg Neukine exerts its activity by acting on hematopoietic cells through binding to specific cell surface receptors, thereby stimulating proliferation, differentiation, commitment, and end cell functional activation. Peg Neukine is approved in Tanzania for use in adults and children.

1.1 Product details

Registration number	TAN 21 HM 0032
Brand name	Peg Neukine
Generic name, strength and form	Pegfilgrastim PFS 6 mg/0.6 mL
ATC classification	L03AA02
Distribution category	POM
Country of origin	India
Associated product	Nil
Marketing Authorization Holder	Intas Pharmaceuticals Limited, Plot No. 423/P/A Sarkhej – Bavla Highway, Moraiya, Taluka: Sanand, Ahmedabad – 382 213, Gujarat, India.
Local Technical Representative	Metro Pharmaceuticals Limited, P. O. Box 2797, Indira Gandhi Street, Dar es Salaam.

1.2 Assessment procedure

The application for registration of Peg Neukine was submitted on 28.11.2019. The product underwent full assessment. Assessment was completed in two (2) rounds of evaluation. Peg Neukine was registered on 24/12/2020.

1.3 Information for users

Visual description of the finished product	Clear and colorless liquid
Primary packing material	1 mL glass (USP Type 1), single-use, pre-filled syringe
Secondary packing materials	Printed carton box along with package insert
Shelf-life and storage condition	36 months
Route of administration	Subcutaneous use
Therapeutic indications	Reduction in the duration of neutropenia and the incidence of febrile neutropenia in adult patients treated with cytotoxic chemotherapy for malignancy (with the exception of chronic myeloid leukaemia and myelodysplastic syndromes).

2. Labelling and product information

Summary of product characteristics

The SmPC included all the relevant information to ensure correct and safe use of the medicine by healthcare providers. The complete SmPC can be accessed [here](#).

Package insert/leaflet

The package insert is confirmed to be derived from the SmPC and contains sufficient data for the end user. Since the product is POM that is intended for long term use, the package insert contains full prescribing information as per SmPC.

Container labels

The product label information is presented in English. Details in the secondary pack label include:

Brand name: Peg Neukine

Composition: Pegfilgrastim PFS 6 mg/0.6 mL

Pack size: One (1) mL prefilled-syringe in a carton box

Manufacturing details: batch number, manufacturing date, expiry date

Storage conditions: Store at 2°C – 8°C.

Manufacturer address: Intas Pharmaceuticals Limited, Plot No. 423/P/A Sarkhej – Bavla Highway, Moraiya, Taluka: Sanand, Ahmedabad – 382 213, Gujarat, India

Unique identifier: TMDA registration number

The details of the primary pack include:

Brand name and strength: Peg Neukine, PFS 6 mg/0.6 mL

Manufacturing details: <batch number, manufacturing date, expiry date>

Name of manufacturer: Intas Pharmaceuticals Limited,

The content of the primary and secondary labels was aligned to the requirements of the Part V of the Compendium: Guidelines on Format and Content of Product Labels for Medicinal products. The label contains sufficient information for proper identification of the medicine and post marketing follow up of the product.

Mock labels are appended as annex I

3. Scientific discussion

Quality of Active Pharmaceutical Ingredient(s)

Information on quality of the API was submitted in form of Full details.

General properties

Filgrastim API is compendia in USP/BP.

Molecular formula: C₈₄₅H₁₃₃₉N₂₂₃O₂₄₃S₉

Structure:

MTPLGPASSL PQSFLLKCLE QVRKIQGDGA ALQEKL[⏟]CATY KLCHPEELVL
LGHSLGIPWA PLSS[⏟]CPSQAL QLAGCLSQLH SGLFLYQGLL QALEGISPEL
GPTLDTLQLD VADFATTIWQ QMEELGMAPA LQPTQGAMPA FASAFQRRAG
GVLVASHLQS FLEVSYRVLR HLAQP

Manufacture

The API manufacturing site, Intas Pharmaceuticals Limited, Plot No. 423/P/A Sarkhej – Bavla Highway, Moraiya, Taluka: Sanand, Ahmedabad – 382 213, Gujarat, India was noted to comply with WHO GMP requirements. Filgrastim API is manufactured by fermentation synthesis using conventional techniques. Sufficient controls of quality of materials and in-process checks were employed throughout the manufacturing process.

Specifications

The API specifications were set as per <USP/BP/Ph.Eur/Inhouse standards and ICHQ3A. The parameters monitored during quality control are: Clarity & degree of opalescence; degree of coloration; pH); Assay; Identity; Purity; Potency, safety. Compliance to these specifications were established via batch analysis data and stability studies.

Stability and container closure system

The shelf-life period of Filgrastim Critical Intermediate is 24 months when packed in CX5-14 film fifty liter (50 L) single use bag and stored at 5 ± 3 °C.

Quality of the Finished Pharmaceutical Product

Formulation

Peg Neukine is a clear colourless liquid in a 1 mL USP type I glass pre-filled syringe packed in a carton box. Peg Neukine contains Filgrastim and other ingredients listed here after are glacial acetic acid, sorbitol, polysorbate 20, sodium hydroxide and water for injection. The quantities of all ingredients are confirmed to be in line with the recommendations of Handbook of Pharmaceutical Excipients, Edition 17 in terms of function and quantities.

Manufacture

The finished product was manufactured at <physical site>. The compliance of the site to TMDA GMP standards was confirmed through <site inspection/desk-review> on <date of GMP compliance>.

Specifications

The Drug Product is compendia in BP/USP/Ph.Eur/in-house. The manufacturer controls the quality of the finished product as per reference monograph (BP/USP/International Ph/in-house)> and ICHQ3B requirements. The parameters monitored during quality control are: physical appearance, pH, extractable volume, osmolality, particulate matter, assay, identity, purity, and microbiological safety. Compliance to the standard was established using batch analysis data and stability data.

Stability and container closure system

Stability studies were conducted on three (3) batches of the finished product stored at $5^{\circ}\text{C} \pm 3^{\circ}\text{C}$ for 36 months and $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ for 6 months. Based on the stability data presented, the approved shelf-life is 36 months when stored in one mL pre-filled syringe at $+5^{\circ}\text{C} \pm 3^{\circ}\text{C}$.

Safety and efficacy information

The clinical study was done to demonstrate the safety and efficacy of drug product with the reference product Neulata. The reference product has already been approved in the European Union; therefore, its safety and efficacy were established. In view of this, the reliance mode was applied and the clinical study data were considered acceptable demonstrating the similarity of the safety profile between the test product and reference product.

4. Benefit-Risk Assessment and Conclusion

On basis of the data submitted, the current state of knowledge and compliance to Good Manufacturing Practice, the benefit of the product outweighs the risks associated with its use when used in accordance to the summary of product characteristics. PEG neukine is recommended for registration.

5. Post-approval updates

Variation applications

Reference number	Date submitted	Change requested	Recommendation	Granting date

Feedback from pharmacovigilance, post marketing surveillance and enforcement activities

Type of feedback	Impact	Response

Re-registration applications

NA

PART 5: CHANGE HISTORY

Version number	Date	Description of update	Section(s) Modified	Approval date

Annex I: Mock up label

PEG NEUKINE

^{Rx} Pegfilgrastim Injection PFS 6 mg
Pegylated Recombinant Human Granulocyte Colony Stimulating Factor (rHu GCSF) Injection 6 mg

PEG NEUKINE

PFS 6 mg / 0.6 mL
For subcutaneous (s.c.) use only
1 x 0.6 mL single-dose pre-filled syringe



Mfg. Lic. No.: G/28D/BIO/01
Manufactured by:



INTAS PHARMACEUTICALS LTD.
Plot No. 423/P/A, Sarkhej - Bavla Highway,
Village - Moraiya, Taluka - Sanand,
District - Ahmedabad-382 213, Gujarat, INDIA.

Each pre-filled syringe of 0.6 mL contains:
Pegylated r-Human Granulocyte Colony
stimulating Factor (rHu GCSF) 6 mg

Dosage: As directed by physician.
Preservative free sterile solution.
Store at 2°C to 8°C.
Do not freeze or shake. Protect from light.
Keep out of reach and sight of children.

Warning: To be sold by retail on the prescription
of an Oncologist only.

PEG NEUKINE

^{Rx} Pegfilgrastim Injection PFS 6 mg
Pegylated Recombinant Human Granulocyte Colony Stimulating Factor (rHu GCSF) Injection 6 mg



PFS 6 mg / 0.6 mL
For subcutaneous (s.c.) use only
1 x 0.6 mL single-dose pre-filled syringe

Batch No.:
Mfg. Date :
Exp. Date :

PANTONE 295 C

PANTONE 641 C

PANTONE 363 C

Black

Varnish Free Area

AMU-CA-0000-00

35 mm

45 mm

Rx
Pegfilgrastim Injection PFS 6 mg
Pegylated Recombinant Human Granulocyte
Colony Stimulating Factor (rhG-CSF) Injection 6 mg

PEG NEUKINE

PFS 6 mg / 0.6 mL

For subcutaneous (s.c.) use only
Each pre-filled syringe of 0.6 mL contains:
Pegylated r-Human Granulocyte Colony
Stimulating Factor (rhG-CSF) 6 mg

Dosage: As directed by physician.
Preservative free sterile solution.
Store at 2°C to 8°C.
Do not freeze or shake. Protect from light.
Keep out of reach and sight of children.

TFDA Reg. No. :

Manufactured by:

INTAS

INTAS PHARMACEUTICALS LTD.
Plot No. 423P/A, Sarkhej - Bavela Highway,
Village - Khorajiya, Taluka - Sarand,
District - Ahmedabad-382 213, Gujarat, INDIA.
Mfg. Lic. No.: Q28DBIO01

Batch No. :
Mfg. Date :
Exp. Date :

PMA000
AW-QA-0000-00

Warning: To be sold by retail on the
prescription of an Oncologist only.