TMDA/DMC/MRE/F/016 Rev #:02

TMDA

THEUNITEDREPUBLICOFTANZANIA



MINISTRYOFHEALTH

TANZANIA MEDICINES ANDMEDICAL DEVICES AUTHORITY

PUBLIC ASSESSMENT REPORT FOR GAMOK 1000, 625,375 (AMOXICILLIN TRIHYDRATE AND CLAVULANATE POTASSIUM 875/125MG, 500/125 MG,250/125 MG) TABLETS

> Version number 1.0 12 October 2012

TMDA Headquarters, Plot No. 56/1, Block E, Kisasa B Centre, Hombolo Road, P. O. Box 1253, Dodoma - Tanzania, Tel: +255 (26) 2961989/2061990/ +255(22) 2450512/2450751/2452108, Email: info@tmda.go.tz, Website: www.tmda.go.tz, Toll free: 08001100834

1. Introduction

Gamok 1000/625/375 is a generic medicine of Amoxicillin Trihydrate and Clavulanate Potassium. Gamok is an antibiotic medicine belonging to J01CR02 combinations of penicillins, incl. beta-lactamase inhibitors group. Gamok exerts its activity by inhibiting one or more enzymes (often referred to as penicillin-binding proteins, PBPs) in the biosynthetic pathway of bacterial peptidoglycan, which is an integral structural component of the bacterial cell wall resulting to cell lysis and death. Gamok is approved in Tanzania for use in adults and children.

Registration number	Gamok 1000: TAN 20 HM 0412
	Gamok 625: TAN 20 HM 0414
	Gamok 375: TAN 20 HM 0413
Brand name	Gamok 1000
	Gamok 625
	Gamok 375
Generic name, strength and form	Gamok 1000:Amoxicillin Trihydrate equivalent to
	Amoxicillin 875mg + Clavulanate Potassium equivalent to
	Clavulanic acid 125mg
	Gamok 625:Amoxicillin Trihydrate equivalent to
	Amoxicillin 500mg + Clavulanate Potassium equivalent to
	Clavulanic acid 125mg
	Gamok 375:Amoxicillin Trihydrate equivalent to
	Amoxicillin 250mg + Clavulanate Potassium equivalent to
	Clavulanic acid 125mg
ATC classification	J01CR02 combinations of penicillins, incl. beta-
	lactamase inhibitor
Distribution category	POM
Distribution category Country of origin	POM
	POM NA
Country of origin	
Country of origin Associated product	NA
Country of origin Associated product	NA Guilin Pharmaceutical (Shanghai) Co., Ltd.
Country of origin Associated product	NA Guilin Pharmaceutical (Shanghai) Co., Ltd. Rm. 1101, Bldg. B, #1289 Yishan Rd., Shanghai 200233,
Country of origin Associated product	NA Guilin Pharmaceutical (Shanghai) Co., Ltd. Rm. 1101, Bldg. B, #1289 Yishan Rd., Shanghai 200233, P.R. China.
Country of origin Associated product Marketing Authorization Holder	NA Guilin Pharmaceutical (Shanghai) Co., Ltd. Rm. 1101, Bldg. B, #1289 Yishan Rd., Shanghai 200233, P.R. China. E-mail: <u>overseas@guilinpharma.com</u>

1.1 Product details

1.2 Assessment procedure

Plot No 70, Keko Mwanga Dar Es salaam – Tanzania.

The application for registration of Gamok was submitted on 26/09/2018. The product underwent full assessment. Assessment was completed in 4 rounds of evaluation. Gamok 1000/625/375 was registered on 25/09/2020.

1.3 Information	for users
-----------------	-----------

Visual description of the finished product	Gamok 1000: white, film-coated and shaped tablets, one side is smooth and the another side has a hand-break line Gamok 625: white, film-coated and shaped tablets, one side is smooth and the another side has a hand-break line. Gamok 375: white, film-coated and shaped tablets, one side is smooth and the another side
Primany pool/ing motorial	has a hand-break line.
Primary packing material	Al-Al blister Sachet of 2 × 7's blisters
Secondary packing materials	36 months
Shelf-life and storage condition	
Deute of a decisionation	Do not store above 30°C
Route of administration	Oral
Therapeutic indications	GAMOK tablets is used in adults and children to
	treat the following infections:
	 middle ear and sinus infections
	respiratory tract infections
	urinary tract infections
	 skin and soft tissue infections including dental infections
	 bone and joint infections intra-abdominal infections
	 Genital organ infections in women. GAMOK tablet is used in adults and children to
	prevent infections associated with major surgical
	procedures.

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 <u>here</u>.

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, 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: Gamok

Composition:

Gamok 1000:Amoxicillin(as trihydrate) 875mg, Clavulanic acid(as Potassium Clavulanate)125mg

Gamok 625: Amoxicillin(as trihydrate) 500mg, Clavulanic acid(as Potassium Clavulanate)125mg Gamok 375: Amoxicillin(as trihydrate) 250mg, Clavulanic acid(as Potassium Clavulanate)125mg Pack size: 2 × 7 tablets

Manufacturing details: batch number, manufacturing date, expiry date

Storage conditions: Do not store above 30°C

Manufacturer address: Reyoung Pharmaceutical Co., Ltd., No.1 Ruiyang Road, Yiyuan County, Shandong Province, China

Unique identifier: <state the unique identification used> Special warnings/precautions or instructions for use: <include warnings or IFU if applicable>

The details of the primary pack include:

Brand name and strength:

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

Name of manufacturer: <name only>

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.

Describe any approved deviation to the requirements and the justification for the deviation.

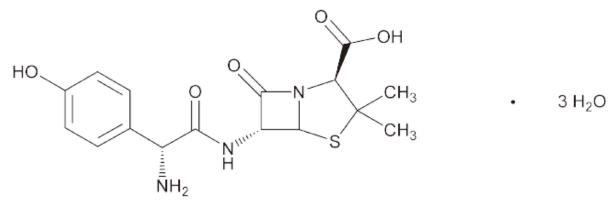
3. Scientific discussion

Quality of Active Pharmaceutical Ingredient(s)

Amoxicillin trihydrate

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

<u>General properties</u> Amoxicillin trihydrate API is compendial in USP/BP. Molecular formula: C₁₆H₁₉N₃O₅S · 3H₂O Chemical name: 4-Thia-1-azabicyclo[3.2.0] heptane-2-carboxylic acid, 6-[[amino (4-hydroxyphenyl) acetyl] amino]-3,3-dimethyl-7-oxo-, trihydrate [2S-[2a,5a,6b(S*)]]-; (2S,5R,6R)-6- [(R)-(-)-2-Amino-2-(p-hydroxyphenyl)- acetamido] -3,3-dimethyl-7-oxo-4-thia-1-azabicyclo [3.2.0] heptane-2carboxylic acid trihydrate Structure:



Critical physico-chemical properties of the API were highly soluble belonging to BCS class I and has four chiral centers.

Manufacture

The API manufacturing site, Zhuhai United Laboratories Co., Ltd., Sanzao Science & Technology Park, National Hi-Tech Zone, Zhuhai, Guangdong 519040, P.R. China was noted to comply with WHO GMP requirements as evidenced by the GMP certificate issued by China Food and Drug Administration (CFDA). Amoxicillin trihydrate API is manufactured by chemical 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 standards and ICHQ3A. The parameters monitored during quality control are: appearance, identification, organic impurities, crystallinity, dimethylaniline, pH, water, microbial limits, residual solvents. Compliance to these specifications were established via batch analysis data and stability studies.

Stability and container closure system

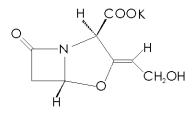
The re-test period of Amoxicillin trihydrate API is 48 months when packed in Low Density Polyethylene (LDPE) bags and stored at 25°C.

Potassium Clavulanate

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

<u>General properties</u> Potassium Clavulanate API is compendia in USP. Molecular formula: C₈H₈KNO₅ Chemical name: Potassium(2R,3Z,5R)-3-(2-Hydroxyethylidene)-7-oxo-1-azabicyclo [3.2.0]heptane-2-carboxylate

Structure:



Critical physico-chemical properties of the API were freely soluble in water, slightly soluble in ethanol, very slightly soluble in acetone.

Manufacture

The API manufacturing site, Sinopharm Weiqida Pharmaceutical Co., Ltd,: Economic & Technological Development Zone, First Medical Zone, Datong, Shanxi, China was noted to comply with WHO GMP requirements as evidenced by the GMP certificate issued by China Food and Drug Administration (CFDA). Potassium Clavulanate API is manufactured by fermentation and chemical 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 in-house standards and ICHQ3A. The parameters monitored during quality control are: description, identification, water, pH, bulk density, tap density, microbial limit, assay, residual solvents. Compliance to these specifications were established via batch analysis data and stability studies.

Stability and container closure system

The re-test period of Potassium Clavulanate API is 36 months when packed in two lays of polyethylene plastic bag and aluminum-PE bag and stored at 25°C.

Quality of the Finished Pharmaceutical Product

Formulation

Gamok 1000 is a white, film-coated and shaped tablets, one side is smooth and the another side has a hand-break line.

Gamok 625 is a white, film-coated and shaped tablets, one side is smooth and the another side has a hand-break line.

Gamok 375 is a white, film-coated and shaped tablets, one side is smooth and the another side has a hand-break line.

Gamok tablet contains Amoxicillin Trihydrate and Clavulanate Potassium and other ingredients listed here after microcrystalline cellulose, sodium starch glycolate, crospovidone, magnesium stearate, silicon dioxide, absolute ethyl alcohol, polyacrylic resin IV, macrogol 4000, purified

talc, titanium dioxide, polysorbate 80, film coating premix agent and ethanol 80%. Gamok 375 contains lactose as one of the excipients. The quantities of all ingredients are confirmed to be in line with the recommendations of Handbook of Pharmaceutical Excipients, Edition 8th in terms of function and quantities. Ingredient, lactose is of safety concern therefore appropriate warnings were included in the product label.

Manufacture

The finished product was manufactured at

Reyoung Pharmaceutical Co., Ltd., No.1 Ruiyang Road, Yiyuan County, Shandong Province, China. The compliance of the site to TMDA GMP standards was confirmed through site inspection on 20 and 21 October 2017.

Specifications

The FPP is compendial in BP/USP. The manufacturer controls the quality of the finished product as per BP, USP and ICHQ3B requirements. The parameters monitored during quality control are: description, identification, dissolution, uniformity of dosage units, related substances, content of amoxicillin and content of clavulanic acid. Compliance to the standard was established using batch analysis data and stability data.

Stability and container closure system

Stability studies were conducted on 3 batches of the finished product stored at $30\pm5^{\circ}C/75\pm5\%$ RH for 36 months and $40\pm2^{\circ}C/75\pm5\%$ RH for 6 months. Based on the stability data presented, the approved shelf-life is 36 months when stored in Al-Al at below $30^{\circ}C$.

Safety and efficacy information

Gamok 1000

Safety and efficacy of Gamok 1000 was established through biowaiver application. Comparative dissolution report number <number> was submitted.

The biowaiver was approved based on BCS classification.

Gamok 1000 fulfilled the criteria for waiving an in-vivo bioequivalence study as per relevant TMDA guidance. Dissolution profiles of Gamok 1000 was compared to Augmentin 1g Tablets. At least 85% of the labelled amount of Amoxicillin and Clavulanic acid had dissolved in all three media. Therefore, confirming similarity.

Gamok 625

Safety and efficacy of Gamok 625 was established through biowaiver application. Comparative dissolution report number <number> was submitted.

The biowaiver was approved based on BCS classification.

Gamok 625 fulfilled the criteria for waiving an in-vivo bioequivalence study as per relevant TMDA guidance. Dissolution profiles of Gamok 625 was compared to Augmentin 625 mg Tablets. At least 85% of the labelled amount of Amoxicillin and Clavulanic acid had dissolved in all three media. Therefore, confirming similarity.

Gamok 375

Safety and efficacy of Gamok 375 was established through biowaiver application. Comparative dissolution report number <number> was submitted.

The biowaiver was approved based on BCS classification.

Gamok 375 fulfilled the criteria for waiving an in-vivo bioequivalence study as per relevant TMDA guidance. Dissolution profiles of Gamok 375 was compared to Augmentin 375 mg Tablets. At least 85% of the labelled amount of Amoxicillin and Clavulanic acid had dissolved in all three media. Therefore, confirming similarity.

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. Gamok 1000/625/375 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

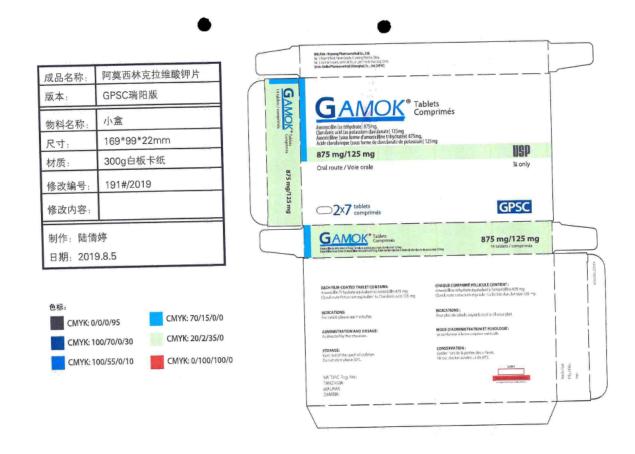
Application for renewal of registration was submitted on <DDMMYYYY>. The application was finalized in <number> rounds of evaluation. The product was confirmed to still be compliant to the standards of quality, safety and efficacy, hence registration was renewed on <DDMMYYYY>.

PART 5: CHANGE HISTORY

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

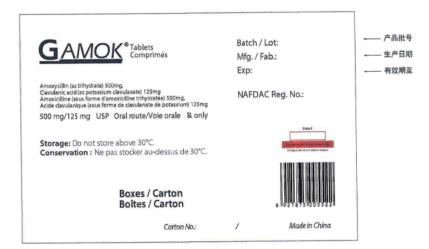
Annex I: Mock up label

Gamok 1000



Gamok 625





Gamok 375



GAMOK [®] Tablets Comprimés	Batch / Lot:	产品打
Comprimés	Mfg. / Fab.:	生产
Amoxycillin (as trihydrate) 250mg.	Exp:	有效
Clavulanic acid (as potassium clavulanate) 125mg Amoxicilline (sous forme d'amoxicilline trihydratée) 250mg, Acide clavulanique (sous forme de clavulanate de potassium) 125mg	NAFDAC Reg. N	o.:
250 mg/125 mg USP Oral route/Vole orale & only		
Storage: Do not store above 30°C. Conservation : Ne pas stocket au-clessus de 30°C.		
120 Boxes / Carton		Listel
120 Boîtes / Carton Carton No.:	/ Repet	View March (Construction)