

WHO Prequalification Programme / Vector Control Product Assessment

WHO Public Assessment Report: WHOPAR Part 5

UNET G5 LN
(Sino Africa Medical Devices Co., Ltd)
P-13229

Efficacy Assessment



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1. Introduction

The primary purpose for the use of a pesticide is the control of a pest, including disease transmitting vectors. Vector control tools, including formulated pesticides, which provide effective management or control of vectors, may be used as part of a resistance management programme. Vector control products for use in public health are a component of Integrated Vector Management (IVM), which is a programme that relies on a suite of diverse interventions and implementations of best practices to manage the vector and chemical/behavioural resistance.

UNET G5 LN is a homogenous ITN coated with alpha-cypermethrin 2.4 g Al/kg and chlorfenapyr 4.8 g Al/kg that is intended to provide personal and community protection from Anopheline mosquitoes as part of malaria control programmes.

Semi-field studies that were previously submitted and assessed supporting the prequalified product Yorkool G5 (P-12507) were submitted to characterize the performance of UNET G5 LN against free-flying mosquitoes. Supplementary bioassays were included to characterize the availability of active ingredients and insecticidal effect of the fabric of the ITN on Anopheline mosquito species.

2. Semi-field studies

The data that were submitted for Yorkool G5 (P-12507) were submitted for UNET G5. This was deemed acceptable to support the prequalification of the product based on the defined starting material and identicality of manufacturing release specifications for the two products. It is not expected that there would be any deviations in performance between the two products. Therefore, for full information on the supporting studies, please refer to the Yorkool G5 WHOPAR Part 5.

3. Efficacy conclusions

Based on the studies and information provided, all data requirements for the prequalification assessment of product efficacy have been satisfied. These data have been relied upon to assess the bioavailability and the impact on free-flying mosquitoes of the proposed product for the purpose of characterising the fabric of the product and establishing the duration of biological impact using products prepared with a defined wash interval.

The efficacy component of the dossier is considered complete, and the assessment of the submitted information on efficacy supports prequalification of the product.



Table 1. List of efficacy studies submitted to WHO as part of the prequalification dossier			
Studies that were relied upon for decision making			
Study number	Study title		
	Experimental hut evaluation of the efficacy and wash resistance of Yorkool® G5 (a new		
22-04	alphacypermethrin and chlorfenapyr mixture bed nets by Tianjin Yorkool International Trading Co.,		
	Ltd) against wild, pyrethroid-resistant Anopheles gambiae sl in Covè, Southern Benin		
DITOGO M/D2	The non-inferiority evaluation of Yorkool G5 Insecticide treated nets in comparison to Interceptor G2		
BIT080 WP2	and MiraNet in the experimental huts against wild mosquitoes in Tanzania.		
TE2023-032	Chemical analysis of Yorkool G5 LN IHI Phase 2 experimental hut study		
TE2023-004	Chemical analysis of Yorkool G5 LN experimental hut study		
Studies that were not used to inform decision making			
	None		