

WHO Prequalification of Vector Control Products

Physical testing requirements for ITNs: Accreditation and compliance with international standards for the generation of data intended to be submitted to WHO prequalification

BACKGROUND

Data characterizing the physical attributes of the fabrics used in the construction of ITNs is required as part of a submission to WHO for assessment by the Prequalification Unit Vector Control Product Assessment Team (PQT/VCP). This includes the physical attributes for the mesh size, dimensional stability to washing, and the following indicators of physical durability: bursting strength, resistance to hole formation, abrasion, snag strength. The physical durability is the ability of the treated yarn/fabric and constructed ITN to resist wear and deterioration from continual use.

This document describes the requirements for accreditation and compliance with international standards for the generation of data for these physical tests intended to be included in a submission to WHO PQT/VCP.

IDENTIFICATION OF THE ISSUE

Based on feedback from industry, testing institutions, and researchers, it has been identified that the standard policy for WHO PQT/VCP requiring that submitted data be generated in accordance with Good Laboratory Practices (GLP) creates an undue burden for the generation of data related to the following physical characteristics of fabrics used in the construction of ITNs.

- [Mesh count](#)
- [Dimensional stability to washing](#)
- [Bursting strength \(fabric and seam\)](#)
- [Resistance to hole formation](#)
- [Abrasion](#)
- [Snag strength](#)

ANALYSIS

The standard requirement for the generation of data for inclusion of resulting study reports in a submission to WHO PQT/VCP is that the studies are conducted in compliance with GLP. In the evaluation of pesticides and health products containing public health pesticides, GLP is recognized as an appropriate standard for the generation of non-clinical data submitted as part of a regulatory dossier.

The physical tests, identified above, required for each fabric which is used in the construction of an ITN are common tests within the field of textiles. In the testing, assessment and regulation of textiles, GLP is not the applicable norm. Several points of reference exist within the textile industry and regulation of textiles where ISO/IEC 17025 is relied upon as the standard for generation of data to ensure the reliability and documentation of results for use in the assessment of textiles.

Further to this point, as GLP is not the norm for textile testing, there are limited existing contract research organizations/facilities which are accredited to GLP and little incentive for other institutions to achieve such accreditation.

CONCLUSIONS

Considering the available information and the differentiation of the physical and chemical test requirements for ITNs, PQT/VCP will accept studies conducted in compliance with GLP or ISO/IEC 17025 for the following data requirements:

- Mesh count
- Dimensional stability to washing
- Bursting strength (fabric and seam)
- Resistance to hole formation
- Abrasion
- Snag strength