

Requirements for Stability Studies of Finished Pharmaceutical Products

Principle

Stability data must demonstrate stability of the medicinal product throughout its intended shelf-life under the climatic conditions prevalent in the target countries. Merely applying the same requirements applicable to other markets could potentially lead to substandard products, e.g. stability studies conducted for countries in Climatic Zone I/II when the products are supplied in Climatic Zones III and IV.

Background

The WHO Expert Committee on Specifications for Pharmaceutical Preparations decided to split Climatic Zone IV into Zone IVa (hot and humid) with storage conditions of 30°C/65% RH and Zone IVb (hot and very humid) with storage conditions of 30°C/75% RH. The WHO guidelines¹ on the stability testing of finished pharmaceutical products, including the Guideline on submission of documentation for a multisource (generic) finished pharmaceutical product (FPP): quality part, should be consulted for detailed guidance on conducting stability studies.

To date, the WHO Prequalification Programme has encouraged the submission of long-term stability data at Zone IV conditions (30°C/65% for IVa or 30°C/75% for IVb, respectively), while still accepting data generated at Zone II (25°C/60%) conditions.

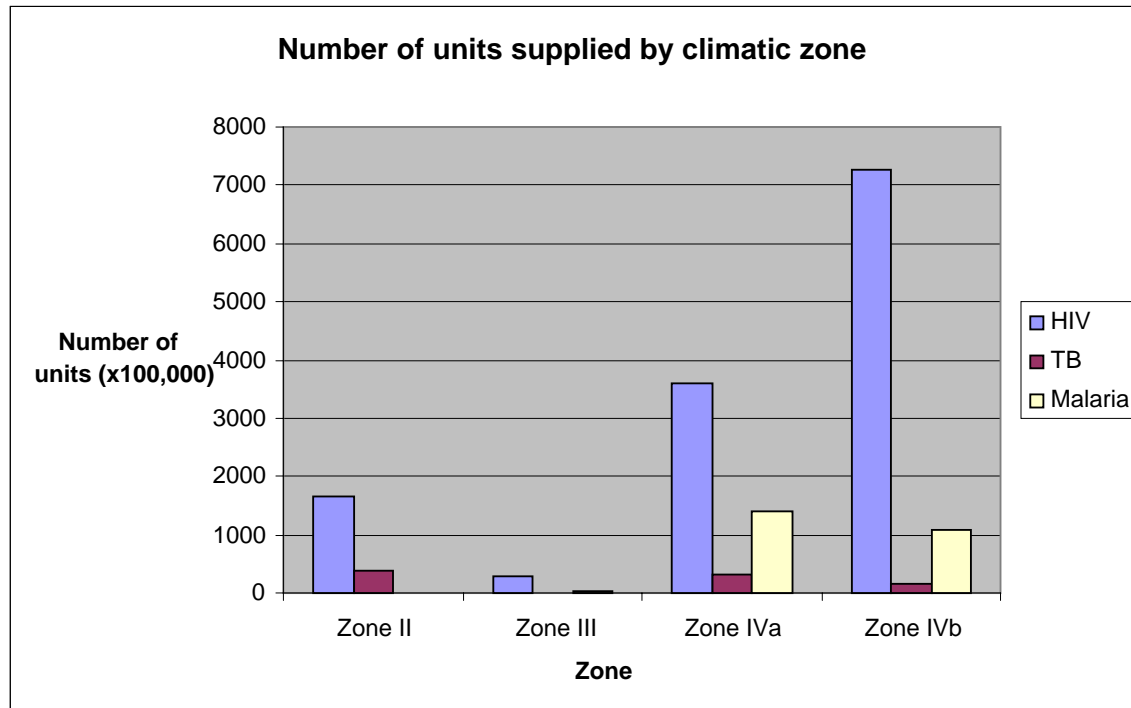
New requirement

With effect from September 2011, when evaluating applications WHO will assume that all the medicines prequalified will be used in all sub-zones of Climatic Zones III and IV, unless otherwise properly justified by the applicant and confirmed by WHO (see diagram below with supply data per climatic zone). Therefore, in order to safeguard product quality throughout its entire intended shelf-life, stability studies under the conditions defined for Climatic Zones IVb should be performed and the data submitted, i.e. the shelf-life should be established based on complete* long-term data at 30°C ±2°C/75% RH ±5% RH.

Furthermore, in order to aid procurement decisions, it is proposed that the conditions under which stability studies were performed and the established shelf-life, will be included in the WHO List of Prequalified Medicinal Products

*"Complete" refers to the length of data required at the time of dossier submission.

The following diagram shows the number of units of HIV, TB and malaria products supplied to Zones II, III, IVa or IVb countries during the period 2007 - March 2010 (based on data from Global Fund's Price & Quality Reporting database).



Reference:

¹WHO Technical Report Series, No. 953, 2009, Annex 2: Stability testing of active pharmaceutical ingredients and finished pharmaceutical products
http://www.who.int/medicines/publications/pharmprep/pdf_trs953.pdf#page=101