NHSF Quality and Equivalence Assessment for Herbal Medicines

naturalhealth SCIENCE FOUNDATION

Background and basis of the quality and equivalence assessment

It is the purpose of this document to allow an independent assessment of products on the market, to validate that the product available for sale today is essentially the same as the product used in published clinical trial(s).

It is well recognised that natural health products, due to their natural source and often complex active components, are highly variable in their chemical composition and medicinal action. Therefore products appearing to contain the "same substance" cannot be considered equivalent without significant evidence to support their quality and equivalence

The quality of natural health products is defined by starting product (raw material) and process or manufacture (Key statement from NHSF White paper "Equivalence and Quality Principles") to finished product. Equivalence can then be assessed to determine the comparative relationship to product that has been clinically trialled. This may include providing data that establishes a bridge between current batches and batches used in clinical trials in the past.

Important parameters which influence the quality throughout the value chain of a natural health product can be utilized to establish the equivalence of products. The endpoint is a statement that the product that is being submitted by the applicant has the same quality and manufacturing as the product which has been clinically trialed, i.e. both products are essentially the same.

1.0 Market Authorisation Status of the Product

The availability of applicant product in defined markets is an indication of the safety of the product. The product has met all the authority requirements for market access and is sold in defined market (to be agreed), therefore it is deemed safe.

Requirements:

1.1 Documentation such as copies of registration certificates in defined countries, Certificates of Free Sales or Certificates of Pharmaceutical Product.

2.0 Raw Material Equivalence

Requirements:

2.1 Confirmation that the raw material used for the production of the active ingredient complies with the requirements of the Good Agricultural Collection Practice (GACP) standard.

2.2 Results of the current product against the Pharmacopoeial Monographs to show that the raw material in both products corresponds to the Monograph for example chromatographic profiles.

2.3 If there is no relevant Official Monograph, comparative qualitative assessment of raw material for example HPLC, TLC, or internal validated Monograph results.

3.0 Active Ingredient Equivalence

Active ingredient comparison between submitted product and clinically trialled product: Assessment of equivalence of Active Ingredients

Requirements:

3.1 Results of the current product and clinically trialled product against the Pharmacopoeial Monographs to show that the active ingredient in both products corresponds to the Monograph for example chromatographic profiles. In the case the extract/ API used for the manufacture of the clinical trial sample is too old, or not available anymore, a proof of equivalency can be made using several batches of API from different years demonstrating consistency

3.2 If there is no relevant Official Monograph, provide comparative qualitative assessment of active ingredients for example HPLC, TLC, or internal validated Monograph results.

3.3 The Manufacturing Flow chart of Active ingredient including extraction process, solvents used, timing, In process quality control (IPQC) and native DER (extract ratio)

3.4 Justification of any changes in active ingredient manufacture between current product and clinically trialled product

4.0 Finished Product equivalence

Herbal Medicine aspects to be compared between current products and clinically trialled products: Assessment of equivalence of Herbal Medicine

Requirements:

4.1 Manufacturing flow chart to include timing, In-process quality control (IPQC).

4.2 Comparative table of Formulations of the current product and the clinically trialled product with justifications of any changes

4.3 Comparative table of parameters included in Finished Product Specifications of the current product and the clinically trialled product, with justifications of changes.

Any other supporting documents (reports) to demonstrate that the current product and the clinically trialled product are equivalent in terms of, for example, stability or pharmacology, or in case of a different dosage form.

5.0 Post Marketing Surveillance

Requirements:

5.1 Description of a company process for collection, processing or follow-up of spontaneous Adverse Drug Reaction (ADR) reports

5.2 Confirmation that the company has product periodic safety update reports

5.3 Confirmation on whether in the last five years, the company has been the subject of a pharmacovigilance inspection that was conducted by a regulatory agency or an external auditor or a pharmaceutical company