

OR-88**Quality Control Methods for Standardization of Herbal Products Using Phytomarkers**

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In recent years there is great demand throughout world to use herbal products in healthcare system. Plant materials and its products are becoming popular because of their wide biological activities, higher safety margin than the synthetic products and lesser costs. Standardization of herbal products is essential for their acceptance of herbal products as remedies for various diseases and ailments. It is necessary to establish consistent potency from batch to batch and to control the full spectrum of bioactive chemical constituent/s (biomarker/s), naturally occurring in medicinal plants. 'Marker Based Standardization' is one of the widely accepted methods which is based on the analysis of phytochemical markers using sophisticated chromatographic techniques such as HPTLC, HPLC etc. Recently, the concept of marker-based standardization of herbal drugs is gaining momentum. Identification of major and unique compounds in herbs as markers and development of analytical methodologies for monitoring them are the key steps involved in marker-based standardization. Marker compounds help to establish internationally recognized guidelines for assessing the quality of phytomedicines. A marker compound is a chemically defined constituent of an herbal drug with or without therapeutic activity; It serves as a reference for standardizing test materials and can therefore be used for the quality assurance of a finished product. In the lecture, isolation of some phytomarkers and HPLC/HPTLC method development and validation using markers such as agnuside, betaine catechin, scopoletin, β -sitosterol, bacoside A, withaferin A, kampferol, rutin, quercetin etc. will be discussed. Application of these methods for analysis of commercial herbal products will be discussed.
