

P-068: DETERMINATION OF THE APPETITE SUPPRESSANT P57 IN *HOODIA GORDONII* PLANT EXTRACTS AND DIETARY SUPPLEMENTS BY LIQUID CHROMATOGRAPHY/ELECTROSPRAY IONIZATION MASS SPECTROMETRY (LC-MSD-TOF) AND LC-UV METHODS

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Hoodia gordonii is traditionally used in S. Africa for its appetite suppressant properties. P57AS3 (P57), an oxypregnane steroidal glycoside, is the only reported active constituent from this plant as an appetite suppressant. Effective quality control of these extracts or products requires rapid methods to determine P57 content. New methods (LC-MS and LC-UV) for analysis of P57 from *H. gordonii* have been developed. The quantitative determination of P57 was achieved with a Phenomenex reversed phase C18 column using gradient mobile phase of water and acetonitrile, both containing 0.1% acetic acid. The method was validated for linearity, repeatability, limits of detection (LOD) and limits of quantification (LOQ). Good results were obtained in terms of repeatability (relative standard deviation (RSD) < 5.0 %) and recovery (98.5%-103.5%). The developed methods were applied to the determination of P57 for two *H. gordonii* plant samples, one related Genus (*Opuntia ficus-indica*) and dietary supplements that claim to contain *H. gordonii*.