Development and Validation of New Analytical Method for Simultaneous Estimation of Drospirenone and Ethinyl Estradiol

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Abstract: Simple, accurate and precise spectroscopic technique for simultaneous estimation of drospirenone and ethinyl estradiol in tablet and bulk dosage form by first order derivative technique has been developed. The spectrophotometric technique for estimation of drospirenone and ethinylestradiol employed first order derivative method for analysis using methyl alcohol as solvent. Drospirenone has absorbance maxima 242nm and ethinyl estradiol has absorbance maxima 218nm these two drugs obey beer’s law in range of 10-50µg/ml concentration for drospirenone and 32-38µg/ml for ethinyl estradiol. The recovery studies determined the accuracy of the proposed technique and the results were established as per ICH guidelines. The results were got satisfactory and. The technique was used successfully for the estimation of drospirenone and ethinyl estradiol in tablet form without the interference of common excipients.

Keywords: Drospirenone, Ethinyl Estradiol, First Order Derivative Method.