

**X-RAY POWDER DIFFRACTION (XRPD) LIKE TOOL IN THE
CHARACTERIZATION OF SOLID STATE PHARMACEUTICAL PRODUCTS,
INNOVATIVE Vs GENERIC**

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A practical application of the x-ray powder diffraction is described in the characterization of crystalline pharmaceutical solids known as two particular denominations, innovative product, generated through of a patents system registered, Vs, generic, adapted to a system of national production. They are developed in both cases such procedures as identification of active principle and excipients, analysis of phase transitions when they undergo controlled variations of temperature over a range from 40 to 180 °C in steps of 20 °C, quantification of crystalline forms (active substance and excipients) in the mixture using the Rietveld method, determination of crystallinity percentage (crystalline – amorphous relationship) for Fourier methods and crystal size using complete pattern method Hall's. To illustrate this procedure to employ two characteristic presentations of the ranitidine hydrochloride, they have been used in one hand the innovative product (Zantac 150 mg) and for other the generic one (Ranitidina 150 mg), in this last case has been selected one of the most impact in the national market. The characteristic information obtained in both cases is prepared over a comparative parallel with the purpose of lifting approaches it has more than enough physical properties and stability that distinguish one by one.