



## New Alternative Analytical to Quantify the Anti-Leprosy Drug Dapsone by UV Spectrophotometry

Rian F.M. ARAUJO <sup>1</sup>, Mayara L. COELHO <sup>1</sup>, Monica F.L.R. SOARES <sup>1</sup>,  
Larissa A. ROLIM <sup>2</sup>, Pedro J.R. NETO, José L. SOARES-SOBRINHO <sup>1\*</sup>

<sup>1</sup> *Core of Pharmaceutical Technology. Federal University of Piauí, Brazil.*

<sup>2</sup> *Pharmaceutical Technology Laboratory. Federal University of Pernambuco, Brazil.*

---

**SUMMARY.** Dapsone is the drug of choice for leprosy treatment. Despite the existence of previous analytical methods, this study aimed to develop a new analytical alternative for dapsone quantification by UV spectrophotometry. Since the pharmacopeial method uses methanol, a toxic solvent, the method was developed using first dilution in ethanol (500 µg/mL) and second dilution in water (5 µg/mL), with quantification in 295 nm. For validation, the specificity was confirmed by quantification of degraded samples using the developed method in comparison with a second analytical technique (HPLC-DAD). The proposed method proved to be specific, linear, precise, accurate and robust, with analytical low cost and toxicity, besides presenting operational ease.

---

**KEY WORDS:** Analytical method, Dapsone, UV Spectrophotometry.

\* Author to whom correspondence should be addressed. *E-mail:* joselamartine@hotmail.com