Pharmaceutical Development of Paracetamol Oral Suspension

Felícia P.S. SILVA 1, Janete S. SOARES 1, Larissa A. ROLIM 2, Magaly A.M. de LYRA 2, Keyla E.R. da SILVA 2, Rosali M.F. da SILVA 1 & Pedro J. ROLIM-NETO 2*

1 Instituto de Ciências da Saúde, Universidade Federal do Pará, Departamento, 66075-110, Belém, PA-Brasil.
2 Laboratório de Tecnologia dos Medicamentos – Departamento de Ciências Farmacêuticas, Universidade Federal de Pernambuco, 50740-520 - Recife - PE, Brasil.

SUMMARY. The aims of this work are obtaining and evaluating paracetamol oral suspension 32 mg/mL, by qualitative and quantitative planning of the ingredients. The observations of the physical-chemical formulations were based in comparison with the specifications of paracetamol solution contained in the Brazilian Pharmacopoeia and editing with some analysis on the same reference drug (Tylenol® child 32 mg / mL). We sought to develop a low cost and good quality formulation, acceptable to the children’s market, since the suspension dosage form is characterized by disguising the unpleasant taste of drugs. The chosen formulation showed good rheology properties, excellent sensory and values of pH, viscosity, density and content within the pharmacopoeia specifications. We obtained a satisfactory formulation, with smaller amount of excipients in relation to the reference product, which can be used by diabetics and is compatible with the official specifications, with respect to physical-chemical tests performed.

KEY WORDS: Paracetamol, Planning excipients, Physical-chemical control, Suspension.

* Author to whom correspondence should be addressed. E-mail: rolim.pedro@gmail.com