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Resumo	We evaluated pharmacokinetics (PK) and pharmacodynamics (PD) induced by new formulations of tramadol (TR) in thermoreversible gels. The poloxamer- (PL-) tramadol systems were prepared by direct dispersion of the drug in solutions with PL 407 and PL 188. The evaluated formulations were as follows: F1: TR 2% in aqueous solution and F2: PL 407 (20%) + PL 188 (10%) + TR 2%; F3: PL 407 (25%) + PL 188 (5%) + TR 2%; F4: PL 407 (20%) + TR 2%. New Zealand White rabbits were divided into four groups () and treated by subcutaneous route with F1, F2, F3, or F4 (10 $\mu g \cdot kg^{-1}$). PK evaluation used TR and M1 plasma levels. PD evaluation was performed with the measurement of both pupils' diameters. F2 showed higher TR plasma concentration after 180 minutes and presented lower M1 concentrations at almost all evaluated periods. Areas under the curve (and) and clearance of F2 presented differences compared to F1. F2 presented significant correlation (Pearson correlation) between the enhancement of TR and M1 concentrations and the decrease of pupil size (miosis). Thus, F2 was effective in altering pharmacokinetics and pharmacodynamics effects of TR.
Fomento	