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Quantitative Structure Activity Relationship Studies of Some 5-Aryl Thiazolidine-2, 4-Diones as Antidiabetic Agents

Lalit V. SONAWANE * & Sanjaykumar B. BARI

R.C. Patel Institute of Pharmaceutical Education and Research, Karwand naka, Shirpur, Dist-Dhule - Maharashtra - 425405 - India

SUMMARY. Quantitative Structure Activity Relationship (QSAR) studies were carried out for a series of 16 compounds which acts as ligands for PPAR-γ receptor. TSAR software was used to identify the essential structural and physicochemical features for their PPAR-γ agonistic activity by performing multiple regression analysis. Significant correlation coefficients (q^2 = 0.9178) was obtained. The predicted values are in good agreement with the observed activity, suggesting that the model could be useful in the design of novel, more potent PPAR-γ agonist.

KEY WORDS: PPAR-γ receptor, QSAR, Thiazolidinedione, TSAR software.

* Author to whom correspondence should be addressed. E-mail: lal303@rediffmail.com

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