

DEVELOPMENT OF A VISIBLE SPECTROPHOTOMETRIC METHOD FOR THE ANALYSIS OF CLONIDINE HYDROCHLORIDE IN PURE FORM AND PHARMACEUTICAL FORMULATIONS

WASAN NAJM ABDULLAH, MUTHANA SALEH MASHKOUR, HANAA KADTEM EGZAR

References:

1. Vijay Arjun Bagul, Sushama Raju Ambadekar, Anand Radheshyam Tiwari, Jayesh Pandharinath Tamhanekar, "Development and Validation of Simple and Rapid UV Spectroscopic Method for Estimation of Clonidine Hydrochloride in Tablet Dosage Form," *JETIR*, 2023, 10(3), 152-164.
2. Rahma Yuni Safitri, Roslinda Rasyid, Regina Andayani, Harrizul Rivai, "Overview of the Determination of Clonidine Levels in Pharmaceutical Preparations," *International Journal of Pharmaceutical Sciences and Medicine (IJPSM)*, 2021, 6(4), 12-24.
3. Kementerian Kesehatan Republik Indonesia. *Farmakope Indonesia*, Edisi VI, Jakarta: Kementerian Kesehatan Republik Indonesia; 2020.
4. Rim Said Haggag, Saied Fathalla Belal, Rasha Abdel-Aziz Shaalan, "Selective Stability-Indicating Methods for the Determination of Clonidine Hydrochloride and/or Its Related Substance, 2,6-Dichloroaniline," *Journal of Food and Drug Analysis*, 2011, 19(2), 174-182.
5. British Pharmacopoeia Commission Secretariat. *British Pharmacopoeia Volume III, Monograph Clonidine Tablets*, 2015.
6. European Directorate for the Quality of Medicines. *European Pharmacopoeia*, 7th ed. Council of Europe, 2011, pp. 1730-1.
7. Walters SM, Stonys DB, "Determination of Chlorthalidone and Clonidine Hydrochloride in Tablets by HPLC," *Journal of Chromatographic Science*, 1983, 21, 43-45.
8. Yong-Gui MA, Zi-Ming L, Min M, Guo-Fang HE, Qiu-Lan W, Wen-Qing W, "Determination of Clonidine Hydrochloride in Compound Clonidine Hydrochloride Tablets by RP-HPLC," *Herald of Medicine*, 2010, 29, 522-524.
9. Wolf CE, Poklis A, "A Rapid HPLC Procedure of Analysis of Analgesic Pharmaceutical Mixtures for Quality Assurance and Drug Diversion Testing," *Journal of Analytical Toxicology*, 2005, 29, 711-714.
10. Devanaboyina N, Kumar BC, Vijay B, Bhanu MA, Gayathri V, "Liquid Chromatography Method Development and Validation for Analysis of Clonidine in Pharmaceutical Dosage," *Journal of Atom and Molecule*, 2012, 2, 93-102.
11. Tawakkol MS, Jado Al, Aboul-Enein HY, "Colorimetric Determination of Clonidine," *Arzneimittelforschung*, 1981, 31, 1064-1066.
12. Zivanov-Stakic D, Panic L, Agbaba G, "Spectrophotometric Determination of Clonidine in Dosage Forms Using Bromocresol Green," *Farmaco*, 1990, 45, 381-383.
13. Guimaraes SS, Sousa GD, Grangeiro S Jr, Castelo Branco DM, Albuquerque MM, Leal LB, Santana DP, "Spectrophotometric Determination of Clonidine Hydrochloride through the Formation of an Ion-Pair Complex," *Latin American Journal of Pharmacy*, 2012, 31, 1222-1225.
14. Sastry CSP, Sailaja A, Rao TT, Krishna DM, "Spectrophotometric Determination of Clonidine Hydrochloride through the Formation of an Ion-Pair Complex," *Indian Drugs*, 1992, 29, 475-477.
15. Sheng-Rain SU, Yun-Qiu YU, "Simultaneous Determination of Clonidine Hydrochloride, Hydrochlorothiazide, and Rutin in Zhenju Tablet by Capillary Electrophoresis," *Journal of Chinese Pharmaceutical Sciences*, 2005, 14, 173-175.
16. Ganjali MR, Karimi A, Shahtaheri SJ, Norouzi P, "Determination of Clonidine by Potentiometry Using a PVC Membrane Electrode," *International Journal of Electrochemical Science*, 2013, 8, 1999-2008.
17. Sell E, Chmielewska A, Konieczna L, "Spectrophotometric Titration of Mixtures Containing Antihypertensive Agents in Non-Aqueous Differentiating Solvents," *Chemical Analysis (Warsaw)*, 2000, 45, 249-255.
18. Khawla Salman Abd-Alrassol, Mohammed Sattar, Mazin Nadhim Mosa, "Spectrophotometric Determination of Nitrofurantoin in its Bulk and Pharmaceutical Formulations," *Systematic Reviews in Pharmacy*, 2020, 11(10), 243-251.
19. Suraj R. Chaudhari, Atul A. Shirkhedkar, "Exploration of 1,2-Naphthoquinone-4-Sulfonate Derivatizing Reagent for Determination of Chlorthalidone in Tablets: A Spectrophotometric Investigation," *Future Journal of Pharmaceutical Sciences*, 2021, 7(27), 2-9. <https://doi.org/10.1186/s43094-021-00180-z>
20. Izabela Muszalska, Agnieszka Sobczak, I. Kiaszewicz, K. Rabiega, Monika Leśniewska, A. Jelińska, "1,2-Naphthoquinone-4-Sulfonic Acid Sodium Salt as a Reagent for Spectrophotometric Determination of Rimantadine and Memantine," *Journal of Analytical Chemistry*, 2015, 70(3), 320-327. DOI: 10.1134/S1061934815030120

21. Ibrahim A. Darwish, Sawsan M. Amer, Heba H. Abdine, Lama I. Al-Rayes, "New Spectrophotometric and Fluorimetric Methods for Determination of Fluoxetine in Pharmaceutical Formulations," *International Journal of Analytical Chemistry*, 2009, Article ID 257306, 1-9. <https://doi.org/10.1155/2009/257306>
22. Asmaa Ghanim Dawood, Lazeeza Sattar Omer, "Spectrophotometric Estimation of Losartan Potassium with Methylene Blue by Ion-Pair Extraction Method," *Iraqi Journal of Science*, 2020, 61(12), 3141-3153. DOI: 10.24996/ij.s.2020.61.12.1
23. Ibrahim A Darwish, Mona M Al-Shehri, Manal A El-Gendy, "Novel Spectrophotometric Method for Determination of Cinacalcet Hydrochloride in its Tablets via Derivatization with 1,2-Naphthoquinone-4-Sulphonate," *Chemistry Central Journal*, 2012, 6:11, 1-8. <http://journal.chemistrycentral.com/content/6/1/11>
24. Hussain J. Mohammed, Hana Khazal, Zahraa L. Razzaq, Durgham H. Khadum, Safaa H. Mohammed, Iqbal, "Diazotization Coupling Reaction for Micro Spectrophotometric Determination of Sulfamerazine in Pharmaceutical Preparations," *International Journal of Pharmaceutical Sciences Review and Research*, 2017, 44(2), 153-156.
25. Nahla N. Salama, Sawsan A. Abdel-Razeq, Shima Abdel-Atty, Naglaa El-Kosy, "Spectrophotometric Determination and Thermodynamic Studies of the Charge Transfer Complexes of Azelastine-HCl," *Bulletin of Faculty of Pharmacy, Cairo University*, 2011, 49, 13-18. doi:10.1016/j.bfopcu.2011.07.003