Research Paper

ANALYTICAL METHOD VALIDATION FOR ESTIMATION OF TELMISARTAN AND ROSUVASTATIN CALCIUM IN THE COMBINATION

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In this research work, an attempt has been made to develop a validated stability-indicating method for TLS and RST. The peaks of telmisartan and rosuvastatin were eluted at 2.553 min and 4.505 min, respectively, with the resolution of 9.40 between them. During the system suitability and system repeatability testing, the parameters like retention time (min), theoretical plate count, tailing factor, resolution, % RSD, and % RD were checked to ensure reproducibility of the chromatographic system. The specificity of the method was established by verifying blank interference The value of squared correlation coefficient (R2) was found 1.000 for TLS and 0.999 for RST, indicating the method is linear and suitable to use in the studied concentration range. Recovery results show the method is accurate and with no interference from excipients.

The method is repeatable and precise as the % RSD results below 2.0. The SS and SR parameters are used for establishing the robustness of change in chromatographic parameters; the results within the acceptance limits indicate its robustness.

Keywords: Telmisartan, Rosuvastatin calcium, RP-HPLC and Validationwww.pharmaerudition.org May. 2025, 15(1), 12-17