

DAFTAR PUSTAKA

- Adib, N., Shekarchi, M., 2015. A new HPLC Method for Determination of Carvedilol in Human Plasma and its Application in Bioequivalence Studies. *Biosci. Biotechnol. Res. Asia* 12, 387–391. <https://doi.org/10.13005/bbra/1677>
- Ahmed, R., 2024a. High-Performance Liquid Chromatography (HPLC): Principles, Applications, Versatility, Efficiency, Innovation and Comparative Analysis in Modern Analytical Chemistry and In Pharmaceutical Sciences. <https://doi.org/10.20944/preprints202409.0057.v1>
- Ahmed, R., 2024b. High-Performance Liquid Chromatography (HPLC): Principles, Applications, Versatility, Efficiency, Innovation and Comparative Analysis in Modern Analytical Chemistry and In Pharmaceutical Sciences. <https://doi.org/10.20944/preprints202409.0057.v1>
- Akanksha -, Roopam Tomar -, Tanuja Singh -, Shalini Sharma -, 2024. Bioequivalence Study: Concepts, Approaches, Design, Various Regulatory Prospects and Considerations. *Int. J. Multidiscip. Res.* 6, 23864. <https://doi.org/10.36948/ijfmr.2024.v06i03.23864>
- Bae, K.-S., Choi, H.Y., Noh, Y.-H., Lee, S.H., Lim, H.-S., Kim, C., Kim, Y.H., 2015. Dose proportionality and pharmacokinetics of carvedilol sustained-release formulation: a single dose-ascending 10-sequence incomplete block study. *Drug Des. Devel. Ther.* 2911. <https://doi.org/10.2147/DDDT.S86168>
- Chakraborty, A., Jayaseelan, K., 2025. Analytical quality by design aided RP-HPLC method for the estimation of sunset yellow in commercial food samples employing green ultrasound assisted extraction: Greenness, blueness and whiteness evaluation. *Green Anal. Chem.* 12, 100183. <https://doi.org/10.1016/j.greeac.2024.100183>
- Chandra, B., Rivai, H., Apriansyah, E., 2017. PENGEMBANGAN DAN VALIDASI METODE ANALISIS PROPANOLOL HIDROKLORIDA TABLET DENGAN METODE ABSORBANSI DAN LUAS DAERAH DI BAWAH KURVA SECARA SPEKTROFOTOMETRI ULTRAVIOLET. *J. Farm. Higea* 9, 20–29.



i, V.V., Rao, Y.M., 2007. New RP-HPLC Method with UV-Vis Spectrophotometry for the Determination of Carvedilol in Human Serum. *J. Liq. Chromatogr. Relat. Technol.* 30, 1677–1685. <https://doi.org/10.1080/10826070701224937>

, Kim, Y.K., Shin, E.J., Sung, M.K., Kim, H.S., Kim, H.-K., 2025. A new HPLC method for detecting prostaglandin F_{2α} analogs in cosmetics: Application to the determination of prostaglandin F_{2α} analogs in cosmetics. *J. Liq. Chromatogr. Relat. Technol.* 48, 1–10. <https://doi.org/10.1080/10826070701224937>

Optimization for chromatographic separation and sample preparation. J. Pharm. Biomed. Anal. 260, 116788. <https://doi.org/10.1016/j.jpba.2025.116788>

Hansen, S., Pedersen-Bjergaard, S., 2015. Bioanalysis of Pharmaceuticals: Sample Preparation, Separation Techniques and Mass Spectrometry, First Edition. ed. John Wiley & Sons, United Kingdom.

Hokama, N., Hobara, N., Kameya, H., Ohshiro, S., Sakanashi, M., 1999. Rapid and simple micro-determination of carvedilol in rat plasma by high-performance liquid chromatography. J. Chromatogr. B. Biomed. Sci. App. 732, 233–238. [https://doi.org/10.1016/S0378-4347\(99\)00248-0](https://doi.org/10.1016/S0378-4347(99)00248-0)

International Council For Harmonisation, 2022. Bioanalytical Method Validation And Study Sample Analysis M10.

Johnson, A.P., Jyothi, S.L., Vikram, Pr.H., Pramod, K., Venkatesh, M., Osmani, R.A.M., Gangadharappa, H.V., 2024. Bioanalytical method development and validation for the quantification of raloxifene hydrochloride from mice plasma by RP-HPLC. Microchem. J. 201, 110541. <https://doi.org/10.1016/j.microc.2024.110541>

Kaplan, K., Gürkan Polat, T., Duman, O., Tunç, S., 2018. Development of a simple, rapid, accurate, and sensitive method for carvedilol analysis in human blood serum by reversed phase-high performance liquid chromatography with diode array detector. J. Liq. Chromatogr. Relat. Technol. 41, 532–543. <https://doi.org/10.1080/10826076.2018.1477795>

Kir, F., Dogan, A., Sahin, S., 2024. Development of a RP-HPLC method for simultaneous determination of atenolol, metoprolol tartrate and phenol red for in-situ rat intestinal perfusion studies. J. Chromatogr. B 1241, 124160. <https://doi.org/10.1016/j.jchromb.2024.124160>

Li, D., Zhao, G., Ai, W., Li, G., Si, L., Huang, J., Chen, Y., Wu, S., 2018. Simultaneous LC-MS/MS bioanalysis of etoposide and paclitaxel in mouse tissues and plasma after oral administration of self-microemulsifying drug-delivery systems. Biomed. Chromatogr. 32, e4192. <https://doi.org/10.1002/bmc.4192>



, K.W., Saad, B., Aboul-Enein, H.Y., 2020. Hollow fiber based microextraction with high performance liquid chromatography nination of trace carvedilol (β -blocker) in biological fluids. Acta 32, 149–155. <https://doi.org/10.1556/1326.2019.00654>

- Mineto, A.R., De Matos, S.P., Bordignon, I.M., Ribeiro, R., Apel, M.A., Da Veiga-Junior, V.F., Koester, L.S., 2024. Development by design of experiment and validation of a HPLC-UV method for simultaneous quantification of 1-nitro-2-phenylethane and methyleugenol: Application to nail permeation/retention studies. *J. Pharm. Biomed. Anal.* 239, 115889. <https://doi.org/10.1016/j.jpba.2023.115889>
- Ms. Pooja R. Gawandar, Dr. Kailash Biyani, 2024. Comprehensive Characterization and Comparative Assessment of Carvedilol Solid Dispersions: Insights into Enhanced Bioavailability and Stability Profiles. *Int. J. Adv. Res. Sci. Commun. Technol.* 171–183. <https://doi.org/10.48175/IJAR SCT-16828>
- Mulidini, Asri Yuniar Dwi Nanda, Nissa Khalida Hanum, Lina Nurfadhila, Marsah Rahmawati Utami, 2023. Analysis and Validation of Metformin in Human Plasma Using the HPLC Method. *J. Pharm. Sci.* 6, 741–749.
- Nguyen, D.T.A., Nguyen, H.T., 2024. Quantitative determination of carvedilol in human plasma by high-performance liquid chromatography using fluorescence detection. *Tạp Chí Dược Huế* 14, 41. <https://doi.org/10.34071/jmp.2024.6.5>
- Nyamba, I., Sombié, C.B., Yabré, M., Zimé-Diawara, H., Yaméogo, J., Ouédraogo, S., Lechanteur, A., Semdé, R., Evrard, B., 2024. Pharmaceutical approaches for enhancing solubility and oral bioavailability of poorly soluble drugs. *Eur. J. Pharm. Biopharm.* 204, 114513. <https://doi.org/10.1016/j.ejpb.2024.114513>
- Reikhart, D.V., Chistyakov, V.V., 2009. High-sensitivity analytical methods for estimating the bioequivalence of drugs. *Pharm. Chem. J.* 43, 680–686. <https://doi.org/10.1007/s11094-010-0380-2>
- Sharma, M., Sharma, R., Jain, D.K., Saraf, A., 2019. Enhancement of oral bioavailability of poorly water soluble carvedilol by chitosan nanoparticles: Optimization and pharmacokinetic study. *Int. J. Biol. Macromol.* 135, 246–260. <https://doi.org/10.1016/j.ijbiomac.2019.05.162>
- Sharma, S., Singh, D.K., Mettu, V.S., Yue, G., Ahire, D., Basit, A., Heyward, S., 2023. Quantitative Characterization of Clinically Relevant Drug-Enzymes and Transporters in Rat Liver and Intestinal Applications in PBPK Modeling. *Mol. Pharm.* 20, 1737–1749. <https://doi.org/10.1021/acs.molpharmaceut.2c00950>



- Shelke, M., Godage, R., 2024. Sample Preparation for Pharmaceuticals using A Bioanalytical Method: A Review. *Asian J. Pharm. Res.* 281–284. <https://doi.org/10.52711/2231-5691.2024.00043>
- Sohair M. Aboelghar, Maha A. Hegazy, Hebatallah A. Wagdy, 2024. Ecofriendly bioanalytical validated RP-HPLC method for simultaneous determination of COVID-19 co-prescribed drugs employing quality by design and green chemistry. *Microchem. J.* 200, 110292. <https://doi.org/10.1016/j.microc.2024.110292>
- Sundayani, L., Maswan, Moch., Satmigo, F., Hanafi, F., 2016. ANALISIS JUMLAH ERITROSIT PADA DARAH HEWAN COBA TIKUS PUTIH JANTAN (*Rattus novergicus*) STRAIN WISTAR SEBELUM DAN SETELAH PEMBERIAN FILTRAT TANAMAN PAKIS SAYUR (*Diplazium esculentum*). *J. Kedokt.* 1, 203–213.
- Tan, S.C., Lim, J.K., Guan, W.Y., Lee, W.Y., Liew, M.W.O., 2018. UV LED-based lightweight fixed-wavelength detector: for the development of a miniaturized high-performance liquid chromatography (HPLC) system (Erratum), in: Tu, L.-W., Strassburg, M., Kim, J.K., Krames, M.R. (Eds.), *Light-Emitting Diodes: Materials, Devices, and Applications for Solid State Lighting XXII*. Presented at the Light-Emitting Diodes: Materials, Devices, and Applications for Solid State Lighting XXII, SPIE, San Francisco, United States, p. 51. <https://doi.org/10.1117/12.2286230>
- The United States Pharmacopeia Convention, 2023. <621> Chromatography, in: *USP 2023 (Unites State Pharmacopeia 46 - NF 41)*. USP Convention, United State.
- Uddin, M.N., Das, S., Noyon, M.R.O.K., Islam, M.S.M.M., Khaled, A.S.M., Islam, M.A., Chakraborty, D., Uddin, M., Nabi, M.N., Chandra Bhattacharjee, S., 2025. Multi-matrix HPLC investigation of preservatives employing a recent validated method: A Monte Carlo simulation approach to health risks in Bangladeshi processed foods and healthcare. *Food Chem. Toxicol.* 197, 115282. <https://doi.org/10.1016/j.fct.2025.115282>
- Xu, S.-T., Jin, H.-W., Jin, X., Xu, B.-X., Zhang, Y., Xie, T., Wang, G., Wang, J., Zhen, J., 2023. Development and validation for bioanalysis of VK2809, its active metabolite VK2809A and glutathione-conjugated metabolite MB06588 in rat plasma by LC-MS/MS. *J. Pharm. Biomed. Anal.* 234, 115595. <https://doi.org/10.1016/j.jpba.2023.115595>



Yilmaz, B., Arslan, S., 2015. HPLC/Fluorometric Detection of Carvedilol in Real Human Plasma Samples Using Liquid–Liquid Extraction. J. Chromatogr. Sci. bmv157. <https://doi.org/10.1093/chromsci/bmv157>



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