

DAFTAR PUSTAKA

- Abbe, C., & Mitchell, C. M. (2023). *approaches to treatment and prevention*. May, 1–13. <https://doi.org/10.3389/frph.2023.1100029>
- Abd Ellah, N. H., Abdel-Aleem, J. A., Abdo, M. N., Abou-Ghadir, O. F., Zahran, K. M., & Hetta, H. F. (2019). Efficacy of ketoconazole gel-flakes in treatment of vaginal candidiasis: Formulation, in vitro and clinical evaluation. *International Journal of Pharmaceutics*, 567(June). <https://doi.org/10.1016/j.ijpharm.2019.118472>
- Abdeltawab, H., Svirskis, D., & Sharma, M. (2020). Formulation strategies to modulate drug release from poloxamer based in situ gelling systems. *Expert Opinion on Drug Delivery*, 17(4), 495–509.
- Arafat, M., & Sarfraz, M. (2021). *Development and In Vitro Evaluation of Controlled Release Viagra ® Containing Poloxamer-188 Using Gastroplus™ PBPK Modeling Software for In Vivo Predictions and Pharmacokinetic Assessments*.
- Argenta, D. F., Bernardo, B. da C., Chamorro, A. F., Matos, P. R., & Caon, T. (2021). Thermosensitive hydrogels for vaginal delivery of secnidazole as an approach to overcome the systemic side-effects of oral preparations. *European Journal of Pharmaceutical Sciences*, 159(January). <https://doi.org/10.1016/j.ejps.2021.105722>
- Bai, L., Lei, F., Luo, R., Fei, Q., Zheng, Z., He, N., & Gui, S. (2022). Development of a thermosensitive in-situ gel formulations of vancomycin hydrochloride: design, preparation, in vitro and in vivo evaluation. *Journal of Pharmaceutical Sciences*, 111(9), 2552–2561.
- Baig, K., Sultana, A., & Rahman, K. (2022). A randomized comparative study of Kakrasingi (*Pistacia integerrima* J. L. Stewart ex Brandis) and metronidazole in bacterial vaginosis. *Journal of Herbal Medicine*, 36(May), 100609. <https://doi.org/10.1016/j.hermed.2022.100609>
- Bercea, M., Constantin, M., Plugariu, I.-A., Oana Daraba, M., & Luminita Ichim, D. (2022). Thermosensitive gels of pullulan and poloxamer 407 as potential injectable biomaterials. *Journal of Molecular Liquids*, 362, 119717. <https://doi.org/https://doi.org/10.1016/j.molliq.2022.119717>
- Bouchemal, K., Frelichowska, J., Martin, L., Lievin-Le Moal, V., Le Grand, R., Dereuddre-Bosquet, N., Djabourov, M., Aka-Any-Grah, A., Koffi, A., & Ponchel, G. (2013). Note on the formulation of thermosensitive and mucoadhesive vaginal hydrogels containing the miniCD4 M48U1 as anti-HIV-1 microbicide. *International Journal of Pharmaceutics*, 454(2), 649–652. <https://doi.org/10.1016/j.ijpharm.2013.02.055>
- Chowhan, A., & Giri, T. K. (2020). International Journal of Biological Macromolecules Polysaccharide as renewable responsive biopolymer for in situ gel in the delivery of drug through ocular route. *International Journal of Biological Macromolecules*, 150, 559–572. <https://doi.org/10.1016/j.ijbiomac.2020.02.097>
- Cunha, S., Forbes, B., Sousa Lobo, J. M., & Silva, A. C. (2021). Improving drug delivery for Alzheimer's disease through nose-to-brain delivery using nanoemulsions, nanostructured lipid carriers (NLC) and in situ hydrogels. *International Journal of Nanomedicine*. 4373–4390.
- T., Sulistiawati, S., Ardika, K. A. R., Wijaya, S., Asri, R. M., A., Donnelly, R. F., & Permana, A. D. (2021a). Development of and mucoadhesive gels of cabotegravir for enhanced permeation profiles in vaginal tissue: A proof of concept study. *International of Pharmaceutics*, 609(August), 121182. <https://doi.org/10.1016/j.ijpharm.2021.121182>
- T., Sulistiawati, S., Ardika, K. A. R., Wijaya, S., Asri, R. M., A., Donnelly, R. F., & Permana, A. D. (2021b). Development of



- thermosensitive and mucoadhesive gels of cabotegravir for enhanced permeation and retention profiles in vaginal tissue: A proof of concept study. *International Journal of Pharmaceutics*, 609(October), 121182. <https://doi.org/10.1016/j.ijpharm.2021.121182>
- Gupta, H., & Sharma, A. (2011). Ion activated bioadhesive in situ gel of clindamycin for vaginal application. *International Journal of Drug Delivery*, 1(1), 32–40. <https://doi.org/10.5138/ijdd.2009.0975.0215.01004>
- Jones, K. A., & Harmanli, O. (2010). *Pessary Use in Pelvic Organ Prolapse and Urinary Incontinence*. 3(1), 3–9. <https://doi.org/10.3909/riog0110>
- Khattab, A., & Nattouf, A. (2021). Optimization of entrapment efficiency and release of clindamycin in microsponge based gel. *Scientific Reports*, 11(1), 1–10. <https://doi.org/10.1038/s41598-021-02826-7>
- Kondapalli, S. (2023). *Efficacy of tablet metronidazole and clindamycin in management of bacterial vaginosis in a tertiary care hospital in Chengalpattu district*. 10(2), 147–150.
- Loquet, A., Le Guern, R., Grandjean, T., Duployez, C., Bauduin, M., Kipnis, E., Brabant, G., Subtil, D., & Dessein, R. (2021). Classification and Regression Trees for Bacterial Vaginosis Diagnosis in Pregnant Women Based on High-Throughput Quantitative PCR. *Journal of Molecular Diagnostics*, 23(2), 234–241. <https://doi.org/10.1016/j.jmoldx.2020.11.004>
- Mauck, C., Hillier, S. L., Gendreau, J., Dart, C., Wu, H., Chavouste, S., Sorkin-wells, V., Nicholson-uhl, C. S., Perez, B., Jacobs, M., Zack, N., & Friend, D. (2023). Acceptability of Single-dose Clindamycin Gel for Bacterial Vaginosis: A Randomized Controlled Trial. *Clinical Therapeutics*, 45(5), 415–425.
- Mohanty, T., Doke, P. P., & Khuroo, S. R. (2023). Effect of bacterial vaginosis on preterm birth: a meta-analysis. *Archives of Gynecology and Obstetrics*, 308(4), 1247–1255. <https://doi.org/10.1007/s00404-022-06817-5>
- Muzny, C. A., & Kardas, P. (2020). *REVIEW A Narrative Review of Current Challenges in the Diagnosis and Management of Bacterial Vaginosis*. 47(7), 441–446. <https://doi.org/10.1097/OLQ.0000000000001178>
- Muzny, C. A., & Sobel, J. D. (2022). *The Role of Antimicrobial Resistance in Refractory and Recurrent Bacterial Vaginosis and Current Recommendations for Treatment*.
- Notario-pérez, F., Martín-illana, A., Cazorla-luna, R., & Ruiz-caro, R. (2019). Development of mucoadhesive vaginal films based on HPMC and zein as novel formulations to prevent sexual transmission of HIV. *International Journal of Pharmaceutics*, 570(May), 118643. <https://doi.org/10.1016/j.ijpharm.2019.118643>
- Nurul, A., Marzaman, F., Mudjahid, M., Puspita, T., Sam, A., & Dian, A. (2022). *Development of chloramphenicol whey protein-based microparticles incorporated into thermoresponsive in situ hydrogels for improved wound healing treatment*. 628(September).
- Paradis, N., Marois, L., Paradis, L., Graham, F., Bégin, P., & Roches, A. Des. (2020). Anaphylaxis to clindamycin following cutaneous exposure. *Allergy, Asthma & Clinical Immunology*, 1–3. <https://doi.org/10.1186/s13223-020-00452-y>
- Patel, P., & Patel, P. (2015). Formulation and evaluation of clindamycin HCL in situ gel cation. *International Journal of Pharmaceutical Investigation*, 5(1), 1g/10.4103/2230-973x.147233
- K., & Saudagar, R. B. (2019). A Review on Topical Gels as Drug n. *Journal of Drug Delivery & Therapeutics*, 9(3), 989–994. <https://doi.org/10.22270/jddt.v9i3.2678>
- J., Balkus, J. E., McClelland, R. S., & Ruanne, V. (2019). *High and Costs of Bacterial Vaginosis: A Systematic Review and Meta-*304–311. <https://doi.org/10.1097/OLQ.0000000000000972>



- Permana, A. D., Asri, R. M., Amir, M. N., Himawan, A., Arjuna, A., Juniarti, N., Utami, R. N., & Mardikasari, S. A. (2023). Development of Thermoresponsive Hydrogels with Mucoadhesion Properties Loaded with Metronidazole Gel-Flakes for Improved Bacterial Vaginosis Treatment. *Pharmaceutics*, 15(5). <https://doi.org/10.3390/pharmaceutics15051529>
- Permana, A. D., Utomo, E., Pratama, M. R., Amir, M. N., Anjani, Q. K., Mardikasari, S. A., Sumarheni, S., Himawan, A., Arjuna, A., Usmanengsi, U., & Donnelly, R. F. (2021). Bioadhesive-Thermosensitive in Situ Vaginal Gel of the Gel Flake-Solid Dispersion of Itraconazole for Enhanced Antifungal Activity in the Treatment of Vaginal Candidiasis. *ACS Applied Materials and Interfaces*, 13(15), 18128–18141. <https://doi.org/10.1021/acsami.1c03422>
- Protocol, I. (2010). ICCVAM-Recommended test method protocol: Hen's Egg Test—Chorioallantoic Membrane (HET-CAM) test method. *NIH Publication*, 13, B30-8.
- Qadri, N., Anugerah, F., Ramadhani, Y., Muhamad, A., Ramadhan, G., & Permana, A. D. (2024). Development of pH - Sensitive Nanoparticle Incorporated into Dissolving Microarray Patch for Selective Delivery of Methotrexate. *AAPS PharmSciTech*. <https://doi.org/10.1208/s12249-024-02777-y>
- Rezky, N., Ilyas, A., Paramitha, A., Putri, D., Anandha, F., Arnita, D., Abdullah, P., Shafi, K., & Dian, A. (2024). European Journal of Pharmaceutics and Biopharmaceutics Implantable trilayer microneedle transdermal delivery system to enhance bioavailability and brain delivery of rivastigmine for Alzheimer treatment: A proof-of-concept study. *European Journal of Pharmaceutics and Biopharmaceutics*, 201(February), 114382. <https://doi.org/10.1016/j.ejpb.2024.114382>
- Roska, T. P., Mudjahid, M., Nurul, A., Marzaman, F., Novriana, N., Datu, P., & Permania, A. D. (2022). Biomaterials Advances Development of chloramphenicol wound dressing protein-based microparticles in chitosan hydrogel system for improved effectiveness of dermal wound therapy. *Biomaterials Advances*, 143(September), 213175. <https://doi.org/10.1016/j.bioadv.2022.213175>
- Russo, E., & Villa, C. (2019). *Poloxamer Hydrogels for Biomedical Applications*. 1–17. <https://doi.org/10.3390/pharmaceutics11120671>
- Sam, A., Nurul, A., Marzaman, F., Mudjahid, M., Roska, T. P., Permania, A. D., & Manggau, M. A. (2024). Ex Vivo and In Vivo Retention Time Evaluation of Fucoidan Isolated from *Macrocystis pyrifera* Through a Thermosensitive Gel System in The Vaginal Route. 02005.
- Sanz, R., Clares, B., Mallandrich, M., Suñer-Carbó, J., Montes, M. J., & Calpena, A. C. (2018). Development of a mucoadhesive delivery system for control release of doxepin with application in vaginal pain relief associated with gynecological surgery. *International Journal of Pharmaceutics*, 535(1–2), 393–401. <https://doi.org/10.1016/j.ijpharm.2017.11.027>
- Singh, V. K., Anis, A., Banerjee, I., Pramanik, K., Bhattacharya, M. K., & Pal, K. (2014). Preparation and characterization of novel carbopol based bigels for topical delivery of metronidazole for the treatment of bacterial vaginosis. *Materials Science and Engineering C*, 44, 151–158. <https://doi.org/10.1016/j.msec.2014.08.026>
- Sobel, J., Peipert, J. F., Mcgregor, J. A., Livengood, C., Martin, M., Robbins, J., & . (2001). Efficacy of Clindamycin Vaginal Ovule (3-Day Treatment vs . cin Efficacy of clindamycin vaginal ovule (3-day treatment) vs . vaginal cream (7-day treatment) in bacterial vaginosis. February. 0.1155/S1064744901000035
- , G., & Abbas, A. M. (2017). Thermosensitive bioadhesive gels for delivery of sildenafil citrate: in vitro characterization and clinical application using clomiphene citrate for induction of ovulation. In *Drug and Industrial Pharmacy* (Vol. 43, Issue 3).



- <https://doi.org/10.1080/03639045.2016.1254239>
- Sulistianiati, Enggi, C. K., Isa, H. T., Wijaya, S., Ardika, K. A. R., Asri, R. M., Donnelly, R. F., & Permana, A. D. (2022). Validation of spectrophotometric method to quantify cabotegravir in simulated vaginal fluid and porcine vaginal tissue in ex vivo permeation and retention studies from thermosensitive and mucoadhesive gels. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, 267, 120600. <https://doi.org/10.1016/j.saa.2021.120600>
- Taurin, S., Almomen, A. A., Pollak, T., Kim, S. J., Maxwell, J., Peterson, C. M., Owen, S. C., & Janát-Amsbury, M. M. (2018). Thermosensitive hydrogels a versatile concept adapted to vaginal drug delivery. *Journal of Drug Targeting*, 26(7), 533–550. <https://doi.org/10.1080/1061186X.2017.1400551>
- Tomás, M., Palmeira-de-Oliveira, A., Simões, S., Martinez-de-Oliveira, J., & Palmeira-de-Oliveira, R. (2020). Bacterial vaginosis: Standard treatments and alternative strategies. *International Journal of Pharmaceutics*, 587(June), 119659. <https://doi.org/10.1016/j.ijpharm.2020.119659>
- Walfish, S. (2006). Analytical methods: a statistical perspective on the ICH Q2A and Q2B guidelines for validation of analytical methods. *BioPharm International*, 19(12), 1–6.
- Yu, Y.-Q., Yang, X., Wu, X.-F., & Fan, Y.-B. (2021). Enhancing permeation of drug molecules across the skin via delivery in nanocarriers: novel strategies for effective transdermal applications. *Frontiers in Bioengineering and Biotechnology*, 9, 646554.



Optimized using
trial version
www.balesio.com