DAFTAR PUSTAKA

Abbaspour, M., Iraji, P., Mahmoudi, Z., Rahiman, N., & Akhgari, A. 2021. Design and physico-mechanical evaluation of fast-dissolving valsartan polymeric drug delivery system by electrospinning method. *Iranian Journal of Basic Medical Sciences*, ***24*(12)**: 1683–1694.

Ahad, A., Aqil, M., Kohli, K., Sultana, Y., & Mujeeb, M. 2014. Design, formulation and optimization of valsartan transdermal gel containing iso-eucalyptol as novel permeation enhancer: Preclinical assessment of pharmacokinetics in Wistar albino rats. *Expert Opinion on Drug Delivery*, ***11*(8)**: 1149–1162.

Alvarenga, B. R. de, Moseson, D. E., Carneiro, R. L., & Taylor, L. S. 2022. Impact of Polymer Type on Thermal Degradation of Amorphous Solid Dispersions Containing Ritonavir. *Molecular Pharmaceutics*, ***19*(1)**: 332–344.

AOAC.2019. 'Apendix F: Guidelines for Standar Method Performance Requierements', in AOAC Official Methods of Analysis. AOAC International, pp. 1–18.

B.N. Nalluri, R.M. Krishna, T.P. Rao, P.A. Crooks. 2012. Effect of recrystallization on the pharmaceutical properties of valsartan for improved therapeutic efficacy, J. Appl. Pharm. Sci. **2 (10)**:126–132.

Ban, E., Park, M., Jeong, S., Kwon, T., Kim, E. H., Jung, K., & Kim, A. 2017. Poloxamer-based thermoreversible gel for topical delivery of emodin: Influence of P407 and P188 on solubility of emodin and its application in cellular activity screening. *Molecules*, ***22*(2)**.

Basf, L. 1997. F68: Poloxamer 188 for the pharmaceutical industry. *Ludwigshafen, Germany*.

Batisai, E., Ayamine, A., Kilinkissa, O. E. Y., & Báthori, N. B. 2014. Melting point-solubility-structure correlations in multicomponent crystals containing fumaric or adipic acid.

Butreddy, A., Bandari, S., & Repka, M. A. 2021. Quality-by-design in hot melt extrusion based amorphous solid dispersions: An industrial perspective on product development. In *European Journal of Pharmaceutical Sciences* (Vol. 158). Elsevier B.V.

Chan, S. Y., Chung, Y. Y., Cheah, X. Z., Tan, E. Y. L., & Quah, J. 2015. The characterization and dissolution performances of spray dried solid dispersion of ketoprofen in hydrophilic carriers. *Asian Journal of Pharmaceutical Sciences*, ***10*(5)**, 372–385.

Chauhan, H., Hui-Gu, C., and Atef, E. 2013. Correlating the behavior of polymersin solution as precipitation inhibitor to its amorphous stabilization ability in solid dispersion systems. Journal of Pharmaceutical Sciences. **102(6)**: 1924-1935.

Chella, N. 2016. Formulation and Pharmacokinetic Evaluation of Polymeric Dispersions Containing Valsartan. *European Journal of Drug Metabolisme and Pharmacokinetics*. **41(5)**, pp. 517-526

Chen, Y., Wang, S., Wang, S., Liu, C., Su, C., Hageman, M., Hussain, M., Haskell, R., Stefanski, K., & Qian, F. 2016. Sodium Lauryl Sulfate Competitively Interacts with HPMC-AS and Consequently Reduces Oral Bioavailability of Posaconazole/HPMC-AS Amorphous Solid Dispersion. Molecular

Pharmaceutics, 13(8), 2787–2795.

Choi, J. S., & Park, J. S. 2017. Design of PVP/VA S-630 based tadalafil solid dispersion to enhance the dissolution rate. *European Journal of PharmaceuticalSciences*, ***97***: 269–276.

Chokshi, R. J., Shah, N. H., Sandhu, H. K., Malick, A. W., & Zia, H. 2008. Stabilization of low glass transition temperature indomethacin formulations: Impact of polymer-type and its concentration. *Journal of Pharmaceutical Sciences*, ***97*(6)**: 2286–2298.

Dashevsky, A., Wagner, K., Kolter, K., & Bodmeier, R. 2005. Physicochemical and release properties of pellets coated with Kollicoat® SR 30 D, a new aqueous polyvinyl acetate dispersion for extended release. *International Journal of Pharmaceutics*, ***290*(1–2)**, 15–23.

Davis, M. T., Potter, C. B., Mohammadpour, M., Albadarin, A. B., & Walker, G. M. 2017. Design of spray dried ternary solid dispersions comprising itraconazole, soluplus and HPMCP: Effect of constituent compositions. *International Journal of Pharmaceutics*, ***519*(1–2)**, 365–372.

De Matos Jensen, C. E., dos Santos, R. A. S., Denadai, A. M. L., Santos, C. F. F., Braga, A. N. G., & Sinisterra, R. D. 2010. Pharmaceutical composition of valsartan: β-Cyclodextrin: Physico-chemical characterization and anti-hypertensive evaluation. *Molecules*, ***15*(6)**: 4067–4084.

Depkes RI. Farmakope Indonesia Edisi VI. 2020 Kementerian Kesehatan Republik Indonesia.

Ekawa, B., Diogo, H. P., Castro, R. A. E., Caires, F. J., & Eusébio, M. E. S. 2023. Coamorphous Systems of Valsartan: Thermal Analysis Contribution to Evaluate Intermolecular Interactions Effects on the Structural Relaxation. *Molecules*, ***28*(17)**.

Ekdahl, A., Mudie, D., Malewski, D., Amidon, G., & Goodwin, A. 2019. Effect of Spray-Dried Particle Morphology on Mechanical and Flow Properties of Felodipine in PVP VA Amorphous Solid Dispersions. *Journal of Pharmaceutical Sciences*, ***108*(11)**, 3657–3666.

Figueirêdo, C. B. M., Nadvorny, D., Vieira, A. C. Q. de M., Schver, G. C. R. de M., Soares Sobrinho, J. L., Rolim Neto, P. J., Lee, P. I., & Soares, M. F. de L. R. 2018. Enhanced delivery of fixed-dose combination of synergistic antichagasic agents posaconazole-benznidazole based on amorphous solid dispersions. *European Journal of Pharmaceutical Sciences*, *119*, 208–218

File, B., & Valsartan, : 2007. Mehtap SAYDAM*, Sevgi TAKKA **°. In *J. Pharm. Sci* (Vol. 32).

Fiqri, M. al, Alhidayah, Nirmayanti, Athiyyah, U., Layadi, P., Angeleve Fadjar, T. G., & Permana, A. D. 2022. Enhanced localization of cefazoline sodium in the ocular tissue using thermosensitive-mucoadhesive hydrogels: Formulation development, hemocompatibility and in vivo irritation studies. *Journal of Drug Delivery Science and Technology*, *76*.

Flesch G, Muller PH, Lloyd P. 1997. Absolute bioavailability and pharmacokinetics of valsartan, an angiotensin II receptor antagonist, in man. Eur J Clin Pharmacol **52**:115–20.

Goyal, A., Sharma, V., Sihag, M. K., Tomar, S. K., Arora, S., Sabikhi, L., & Singh, A. K. 2015. Development and physico-chemical characterization of

microencapsulated flaxseed oil powder: A functional ingredient for omega-3 fortification. *Powder Technology*, **286**, 527–537.

Gupta, K.., Wadodkar, A.. and Wadodkar, S.. 2010 'UV-spectrophotometric method for estimation of telmisartan in bulk and tablet dosage form', International Journal of ChemTech Research: **2(2)**, pp. 657–660.

Guan, J., Jin, L., Liu, Q., Xu, H., Wu, H., Zhang, X., & Mao, S. 2019. Exploration of supersaturable lacidipine ternary amorphous solid dispersion for enhanced dissolution and in vivo absorption. European Journal of Pharmaceutical Sciences, 139(April)

Homayouni, A., Sadeghi, F., Nokhodchi, A., Varshosaz, J., & Afrasiabi Garekani, H. 2013. *Preparation and characterization of celecoxib solid dispersions; comparison of poloxamer-188 and PVP-K30 as carriers*.

Huang, Y., Zhang, Q., Wang, J. R., Lin, K. L., & Mei, X. 2017. Amino acids as co-amorphous excipients for tackling the poor aqueous solubility of valsartan. *Pharmaceutical Development and Technology*, ***22*(1)**, 69–76.

I. Rukhman, E. Flyaks, T. Koltai, J. Aronhime. 2006. Polymorphs of valsartan. United States Patent US 7:105-557

I. Rukhman, E. Flyaks, T. Koltai, J. Aronhime. 2008. Amorphous form of valsartan. European Patent Specification. EP 1950204 A1

Indrati, O., Martien R., Rahman, A. And Nugroho, A.K. 2020. Application of Simplex Lattice Design on the Optimazation of Andrographolide Self Nanoemulsifying Drug Delivery System (SNEDDS). *Indonesian Journal of Pharmacy,* **31**:124-130

J. Burgbacher, B.T. Hahn, F.A. Rampf, R. Schneeberger.2013. Highly crystalline valsartan. United States Patent US 2013/0137737 A1

KareDai WG, Dong LC, Song YQ. 2007. Nanosizing of a drug/carrageenan complex to increase solubility and dissolution rate. Int J Pharm **342**: 201–7

Kolašinac, N., Kachrimanis, K., Homšek, I., Grujić, B., Urić, Z., & Ibrić, S. 2012. Solubility enhancement of desloratadine by solid dispersion in poloxamers. *International Journal of Pharmaceutics*, ***436*(1–2)**: 161–170.

Krstić, M., Manić, L., Martić, N., Vasiljević, D., Mračević, S. Đ., Vukmirović, S., & Rašković, A. 2020. Binary polymeric amorphous carvedilol solid dispersions: In vitro and in vivo characterization. *European Journal of Pharmaceutical Sciences*, *150*.

Kumar, A., Davern, P., Hodnett, B.K., Hudson, S.P., 2019. Carrier particle mediated stabilization and isolation of valsartan nanoparticles. Colloids Surfaces B Biointerfaces**175**:554–563.

Lachman, L., Liebermen, H., dan Kanig, J. 1994. Teori dan Praktek Farmasi Industri. Edisi III. Universitas Indonesia Press. Jakarta

Lee S, Nam K, Kim MS, *et al*. 2005. Preparation and characterization of solid dispersions of itraconazole by using aerosol solvent extraction system for improvement in drug solubility and bioavailability. Arch Pharm Res **28**:866–74

Lehmkemper, K., Kyerematen, S. O., Heinzerling, O., Degenhardt, M., & Sadowski, G. 2017. Long-Term Physical Stability of PVP- and PVPVA-Amorphous Solid Dispersions. *Molecular Pharmaceutics*, ***14*(1)**: 157–171.

Leuner, C. and Dressman, J. 2000. Improving drug solubility for oral delivery using solid dispersions. *European Journal of Pharmaceutics and Biopharmaceutics.* **50**: 47-60.

Liao, J.-B., Liang, Y.-Z., Chen, Y.-L., Xie, J.-H., Liu, W.-H., Chen, J. N., Lai, X.-P., &

Su, Z.-R. 2015. Novel Patchouli Alcohol Ternary Solid Dispersion Pellets Prepared by Poloxamers. In *Shaheed Beheshti University of Medical Sciences and Health Services Iranian Journal of Pharmaceutical Research* (Vol. 14, Issue 1).

Liu, C., Chen, Z., Chen, Y., Lu, J., Li, Y., Wang, S., Wu, G., & Qian, F. 2016. Improving Oral Bioavailability of Sorafenib by Optimizing the "spring" and "parachute" Based on Molecular Interaction Mechanisms. Molecular Pharmaceutics, 13(2), 599–608.

Lu, Y., Chen, J., Yi, S., & Xiong, S. 2019. Enhanced felodipine dissolution from high drug loading amorphous solid dispersions with PVP/VA and sodium dodecyl sulfate. *Journal of Drug Delivery Science and Technology*, *53*.

M. Skotnicki, A. Gawel, P. Cebe, M. Pyda. 2013. Thermal behavior and phase identification of valsartan by standard and temperature-modulated differential scanning calorimetry, Drug Dev. Ind. Pharm. **39 (10)**:1508–15

Mandlik, S.K, Saugat, A. And Desphande, A.A. 2012. Application of Simplex Lattice Design in Formulation and Development of Buoyant Matrices of Dipyridamole, Journal of Applied of Pharmaceutical Sciences, **101**:4584-45496

Mangal, H., Kirsolak, M., & Kleinebudde, P. 2016. Roll compaction/dry granulation: Suitability of different binders. *International Journal of Pharmaceutics*, ***503*(1–2)**, 213–219.

Mbah CJ. 2005. Physicochemical properties of valsartan and the effect of ethyl alcohol, propylene glycol and pH on its solubility. Pharmazie **60**:849–50.

Medarevic, D. P., Kachrimanis, K., Mitric, M., Djuris, J., Djuric, Z., & Ibric, S. 2016. Dissolution rate enhancement and physicochemical characterization of carbamazepine-poloxamer solid dispersions. *Pharmaceutical Development and Technology*, ***21*(3)**: 268–276.

Medarevic, D., Cvijić, S., Dobričić, V., Mitrić, M., Djuriš, J., & Ibrić, S. 2018. Assessing the potential of solid dispersions to improve dissolution rate and bioavailability of valsartan: In vitro-in silico approach. *European Journal of Pharmaceutical Sciences.*

Meng, F., Gala, U., and Chauhan, H. 2015. Classification of Solid Dispersions:Correlation to (I) Stability and Solubility (II) Preparation and Characterization Techniques. Drug De. Ind. Pharm., **41(9)**: 1401-1415

Murphy D, Rodrı´guez-Cintron F, Langevin B, *et al*. Solution mediated phase transformation of anhydrous to dihydrate carbamazepine and the effect of lattice disorder. Int J Pharm 2002;**246**: 121–134.

Nekkanti, V., Wang, Z., & Betageri, G. v. 2016. Pharmacokinetic Evaluation of Improved Oral Bioavailability of Valsartan: Proliposomes Versus Self-Nanoemulsifying Drug Delivery System. *AAPS PharmSciTech*, ***17*(4)**: 851–862.

Okongi, S., Ogichi, T., Yonemochi, E., Puttipipatkhachorn, S., and Yamamoto, K.1997. Improved dissolution of ofloxacin via solid dispersion. International Journal of Pharmaceutics and Biopharmaceutics.**156(2)**: 175-180.

Palmieri GF, Cantalamessa F, Di Martino P, *et al*. 2002. Lonidamine solid dispersions: in vitro and in vivo evaluation. Drug Dev Ind Pharm **28**:1241–50

Park, J. B., Park, C., Piao, Z. Z., Amin, H. H., Meghani, N. M., Tran, P. H. L., Tran, T. T. D., Cui, J. H., Cao, Q. R., Oh, E., & Lee, B. J. 2018. pH-independent controlled release tablets containing nanonizing valsartan solid dispersions

for less variable bioavailability in humans. *Journal of Drug Delivery Science and Technology*, ***46***: 365–377.

Park, J. B., Park, C., Piao, Z. Z., Amin, H. H.,Parrot, E. 1970. Pharmaceutical Technology Fundamental Pharmaceutics. Burgess Publishing Company. United States of America.

Park, C. W., Tung, N. T., Rhee, Y. S., Kim, J. Y., Oh, T. O., Ha, J. M., Chi, S. C., & Park, E. S. 2013. Physicochemical, pharmacokinetic and pharmacodynamic evaluations of novel ternary solid dispersion of rebamipide with poloxamer 407. *Drug Development and Industrial Pharmacy*, *39*(6), 836–844.

Patel Bilara, R., & Mahajan, N. 2019. Co-Crystals of Valsartan: Preparation and Characterization. *Article in International Journal of Pharmacy and Biological Sciences*.

Pinto, J. M. O., Leão, A. F., Riekes, M. K., França, M. T., & Stulzer, H. K. 2018. HPMCAS as an effective precipitation inhibitor in amorphous solid dispersions of the poorly soluble drug candesartan cilexetil. *Carbohydrate Polymers*, *184*, 199–206.

Ponikowski, P.; Voors, A. A.; Anker, S. D.; Bueno, H.; Cleland, J. G. F.; Coats, A. J. S.; Falk, V.; González-Juanatey, J. R.; Harjola, V.-P.; Jankowska, E. A.; Jessup, M.; Linde, C.; Nihoyannopoulos, P.; Parissis, J. T.; Pieske, B.; Riley, J. P.; Rosano, G. M. C.; Ruilope, L. M.; Ruschitzka, F.; Rutten, F. H.; van der Meer, P. 2016. ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure. Eur. Heart J. 2016, **37**: 2129−2200.

Pradhan, R., Kim, S. Y., Yong, C. S., & Kim, J. O. 2016. Preparation and characterization of spray-dried valsartan-loaded Eudragit® E PO solid dispersion microparticles. *Asian Journal of Pharmaceutical Sciences*, ***11*(6)**, 744–750.

Prapti Desai, Nitin Deshmukh, Apeksha Rajguru, Rohini Khedkar, & Rahul Jadhav. 2023. Formulation and evaluation of valsartan solid dispersion for improvement of dissolution profile. *World Journal of Biology Pharmacy and Health Sciences*, ***15*(2)**, 208–224.

Que, C., Lou, X., Zemlyanov, D. Y., Mo, H., Indulkar, A. S., Gao, Y., Zhang, G. G. Z., & Taylor, L. S. 2019. Insights into the Dissolution Behavior of Ledipasvir-Copovidone Amorphous Solid Dispersions: Role of Drug Loading and Intermolecular Interactions. *Molecular Pharmaceutics*, *16*(12), 5054–5067.

Ramya Devi D, Sandhya P, Vedha Hari BN.2013. Poloxamer: A novel functional molecule for drug delivery and gene therapy. J Pharm Sci Res **5(8)**:159–165. ISSN:0975–1459

Rowe, R. C., Sheskey, P. J., & Owen, S. C. 2006. *Handbook of Pharmaceutical Excipients Fifth Edition*.

S'Ari, M., Blade, H., Cosgrove, S., Drummond-Brydson, R., Hondow, N., Hughes, L. P., & Brown, A. 2021. Characterization of Amorphous Solid Dispersions and Identification of Low Levels of Crystallinity by Transmission Electron Microscopy. *Molecular Pharmaceutics*, ***18*(5)**, 1905–1919.

Saha, S. K., Joshi, A., Singh, R., Jana, S., & Dubey, K. 2023. An investigation into solubility and dissolution improvement of alectinib hydrochloride as a third-generation amorphous solid dispersion. *Journal of Drug Delivery Science and Technology*, *81*.

Sharma, A., Prakash Jain, C., & Singh Tanwar, Y. 2013. Preparation And Characterization Of Solid Dispersions Of Carvedilol With Poloxamer 188. In *J. Chil. Chem. Soc* (Vol. 58).

Shi, X., Huang, W., Xu, T., Fan, B., & Sheng, X. 2020. Investigation of Drug–Polymer Miscibility and Solubilization on Meloxicam Binary Solid Dispersion. *Journal of Pharmaceutical Innovation*, ***15*(1)**: 125–137.

Siddiqui N., Husain A., Chaudhry L., Alam M.S., Mitra M, Bhasin P.S., 2011. Pharmacological and Pharmaceutical Profile of Valsartan A Review. Faculty of Pharmacy, Jamia Hamdard (Hamdard University), New Delhi, India. Vol.**1(4)**:12–9.

Song, C. K., Yoon, I. S., & Kim, D. D. 2016. Poloxamer-based solid dispersions for oral delivery of docetaxel: Differential effects of F68 and P85 on oral docetaxel bioavailability. *International Journal of Pharmaceutics*, ***507*(1–2)**, 102–108.

Song, G., Lin, Y., Zhu, Z., Zheng, H., Qiao, J., He, C., & Wang, H. 2015. Strong fluorescence of poly (N-vinylpyrrolidone) and its oxidized hydrolyzate. *Macromolecular Rapid Communications*, ***36*(3)**, 278–285.

Surwase, S.A., Itkonen, L., Aaltonen, J., Saville, D., Rades, T., Peltonen, L., Strachan, C.J., 2015. Polymer incorporation method affects the physical stability of amorphous indomethacin in aqueous suspension. Eur. J. Pharm. Biopharm.

Szafraniec-Szczęsny, J., Antosik-Rogóż, A., Kurek, M., Gawlak, K., Górska, A., Peralta, S., Knapik-Kowalczuk, J., Kramarczyk, D., Paluch, M., & Jachowicz, R. 2021. How does the addition of kollidon®va64 inhibit the recrystallization and improve ezetimibe dissolution from amorphous solid dispersions? *Pharmaceutics*, ***13*(2)**, 1–15.

Tian, Y., Jones, D. S., & Andrews, G. P. 2015. An investigation into the role of polymeric carriers on crystal growth within amorphous solid dispersion systems. *Molecular Pharmaceutics*, ***12*(4)**, 1180–1192.

Trunov, D., Francisco Wilson, J., Jeˇzkov´ a, M., Srom, ˇ O., Beranek, J., Dammer, O., Soˇ o´ˇs, M., 2021. Monitoring of particle sizes distribution during Valsartan precipitation in the presence of nonionic surfactant. Int. J. Pharm.

Tsinontides SC, Rajniak P, Pham D, *et al*. 2004. Freeze drying principles and practice for successful scale-up to manufacturing. Int J Pharm **280**:1–16.

Turek, M., Różycka-Sokołowska, E., Koprowski, M., Marciniak, B., & Bałczewski, P. 2021. Role of Hydrogen Bonds in Formation of Co-amorphous Valsartan/Nicotinamide Compositions of High Solubility and Durability with Anti-hypertension and Anti-COVID-19 Potential. *Molecular Pharmaceutics*,***18*(5)**:1970–1984.

Urban-Morlan, Z., Castro-Rios, R., Chavez-Montes, A., Melgoza-Contreras, L. M., Pinon-Segundo, E., Ganem-Quintanar, A., & Quintanar-Guerrero, D. 2008. Determination of poloxamer 188 and poloxamer 407 using high-performance thin-layer chromatography in pharmaceutical formulations. *Journal of Pharmaceutical and Biomedical Analysis*, ***46*(4)**: 799–803.

USP.2011. 'Apparent Intrinsic Dissolution', in The United States Pharmacopeial. Rockville: The United States Pharmacopeial Convention, p. 660.

Vasconcelos, T., Sarmento,B.,and Costa, P.2007. Solid dispersions as strategy to improve oral bioavailability of poor water soluble drugs. Drug Discov.Today. **12(23-240)**: 1068-1075.

Vasconcelos, T., Prezotti, F., Araújo, F., Lopes, C., Loureiro, A., Marques, S., & Sarmento, B. 2021. Third-generation solid dispersion combining Soluplus and poloxamer 407 enhances the oral bioavailability of resveratrol. *International Journal of Pharmaceutics*, *595*.

Vo, A. Q., Zhang, J., Nyavanandi, D., Bandari, S., & Repka, M. A. (2020). Hot melt

extrusion paired fused deposition modeling 3D printing to develop hydroxypropyl cellulose based floating tablets of cinnarizine. *Carbohydrate Polymers*, *246*.

Vo,C.,Park,C., and Lee, B.J. 2013. Current trends and future perspectives of solid dispersion containing poorly water-soluble drugs. Eur.J.Pharm. Biopharm.,**85(3 Pt B)**: 799-813.

Wenzel, T., Stillhart, C., Kleinebudde, P., & Szepes, A. 2017. Influence of drug load on dissolution behavior of tablets containing a poorly water-soluble drug: estimation of the percolation threshold. *Drug Development and Industrial Pharmacy*, *43*(8), 1265–1275.

Wlodarski, K., Sawicki, W., Haber, K., Knapik, J., Wojnarowska, Z., Paluch, M., Lepek, P., Hawelek, L., & Tajber, L. 2015. Physicochemical properties of tadalafil solid dispersions-Impact of polymer on the apparent solubility and dissolution rate of tadalafil. *European Journal of Pharmaceutics and Biopharmaceutics*,***94***:106–115.

Xu, W. J., Xie, H. J., Cao, Q. R., Shi, L. L., Cao, Y., Zhu, X. Y., & Cui, J. H. 2016. Enhanced dissolution and oral bioavailability of valsartan solid dispersions prepared by a freeze-drying technique using hydrophilic polymers. *Drug Delivery*, ***23*(1)**: 41–48.

Yadev, P., Rastogi,V. And Verma. A. 2020, Application of Box-Bhnken Design and Desirability Function in The Development and Optimization of Self Nanoemulsifying Drug Delivery System for Enhanced Dissolution of Ezetimibe, *Future Journal of Pharmaceutical Sciences,* **6**:1-20.

Yen, Y. D., Sung, J. H., Kim, K. K., Kim, D. W., Kim, J. O., Lee, B. J., Yong, C. S., & Choi, H. G. 2012. Novel valsartan-loaded solid dispersion with enhanced bioavailability and no crystalline changes. *International Journal of Pharmaceutics*, ***422*(1–2)**: 202–210.

Zajc, N., Obreza, A, Bele, M., and Srcic, S. 2005. Physical properties and dissolution behavior of nifedipine manitol solid dispersions prepared by hot melt method. International Journal of Pharmaceutics and Biopharmaceutics. **291(1-2)**: 51-58.