
References

Abdulkareem I. and Zurmi I., "Review of hormonal treatment of breast cancer," *Nigerian journal of clinical practice*, (1),15(2012).

Ajmal G., Bonde G.V., Thokala S., Mittal P., Khan G., Singh J., Pandey V.K. and Mishra B., "Ciprofloxacin HCl and quercetin functionalized electrospun nanofiber membrane: fabrication and its evaluation in full thickness wound healing," *Artificial cells, nanomedicine, and biotechnology*, (1),47(2019)228-240.

Al Kayal T., Panetta D., Canciani B., Losi P., Tripodi M., Burchielli S., Ottoni P., Salvadori P.A. and Soldani G., "Evaluation of the effect of a gamma irradiated DBM-pluronic F127 composite on bone regeneration in Wistar rat," *PloS one*, (4),10(2015)e0125110.

Alakhova D.Y. and Kabanov A.V., "Pluronic and MDR reversal: an update," *Molecular pharmaceutics*, (8),11(2014)2566-2578.

Alam M.A., Ali R., Al-Jenoobi F.I. and Al-Mohizea A.M., "Solid dispersions: a strategy for poorly aqueous soluble drugs and technology updates," *Expert opinion on drug delivery*, (11),9(2012)1419-1440.

Alvarez-Rivera F., Fernández-Villanueva D., Concheiro A. and Alvarez-Lorenzo C., " α -lipoic acid in soluplus® polymeric nanomicelles for ocular treatment of diabetes-associated corneal diseases," *Journal of pharmaceutical sciences*, (9),105(2016)2855-2863.

Baidya D., Kushwaha J., Mahadik K. and Patil S., "Chrysin-loaded folate conjugated PF127-F68 mixed micelles with enhanced oral bioavailability and anticancer activity against human breast cancer cells," *Drug development and industrial pharmacy*, (5),45(2019)852-860.

BASF; <https://pharmaceutical.basf.com/global/en/drug-formulation/products/kolliphor-hs-15.html> (Accessed on 26/01/2020)

BASF; <https://pharmaceutical.basf.com/global/en/drug-formulation/products/kolliphor-p-407.html> (Accessed on 26/01/2020)

Batrakova E.V., Bronich T.K., Vetro J.A. and Kabanov A.V. (2006) Nanoparticulates as drug carriers, pp. 57-93, World Scientific.

Bazak R., Houry M., El Achy S., Kamel S. and Refaat T., "Cancer active targeting by nanoparticles: a comprehensive review of literature," *Journal of cancer research and clinical oncology*, (5),141(2015)769-784.

Bender E.A., Adorne M.D., Colomé L.M., Abdalla D.S., Guterres S.S. and Pohlmann A.R., "Hemocompatibility of poly (ϵ -caprolactone) lipid-core nanocapsules stabilized with polysorbate 80-lecithin and uncoated or coated with chitosan," *International journal of pharmaceutics*, (1-2),426(2012)271-279.

- Bennett N.C. and Farah C.S., "Next-generation sequencing in clinical oncology: next steps towards clinical validation," *Cancers*, (4),6(2014)2296-2312.
- Bernabeu E., Gonzalez L., Cagel M., Gergic E.P., Moretton M.A. and Chiappetta D.A., "Novel Soluplus®—TPGS mixed micelles for encapsulation of paclitaxel with enhanced in vitro cytotoxicity on breast and ovarian cancer cell lines," *Colloids and Surfaces B: Biointerfaces*, 140(2016)403-411.
- Bhuptani R.S., Jain A.S., Makhija D.T., Jagtap A.G., Hassan P.A.R. and Nagarsenker M.S., "Soluplus Based Polymeric Micelles and Mixed Micelles of Lornoxicam: Design, Characterization and In vivo Efficacy Studies in Rats," *Indian J. Pharm. Educ. Res*, 50(2016)277-286.
- Bonde G.V., Yadav S.K., Chauhan S., Mittal P., Ajmal G., Thokala S. and Mishra B., "Lapatinib nano-delivery systems: a promising future for breast cancer treatment," *Expert opinion on drug delivery*, (5),15(2018)495-507.
- Bozzuto G. and Molinari A., "Liposomes as nanomedical devices," *International Journal of Nanomedicine*, 10(2015)975.
- Bray F., Ferlay J., Soerjomataram I., Siegel R.L., Torre L.A. and Jemal A., "Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries," *CA: a cancer journal for clinicians*, (6),68(2018)394-424.
- Burris H.A., Taylor C.W., Jones S.F., Koch K.M., Versola M.J., Arya N., Fleming R.A., Smith D.A., Pandite L. and Spector N., "A phase I and pharmacokinetic study of oral lapatinib administered once or twice daily in patients with solid malignancies," *Clinical Cancer Research*, (21),15(2009)6702-6708.
- Burris III H.A., Hurwitz H.I., Dees E.C., Dowlati A., Blackwell K.L., O'neil B., Marcom P.K., Ellis M.J., Overmoyer B. and Jones S.F., "Phase I safety, pharmacokinetics, and clinical activity study of lapatinib (GW572016), a reversible dual inhibitor of epidermal growth factor receptor tyrosine kinases, in heavily pretreated patients with metastatic carcinomas," *Journal of clinical oncology*, (23),23(2005)5305-5313.
- Buttacavoli M., Albanese N.N., Di Cara G., Alduina R., Faleri C., Gallo M., Pizzolanti G., Gallo G., Feo S. and Baldi F., "Anticancer activity of biogenerated silver nanoparticles: an integrated proteomic investigation," *Oncotarget*, (11),9(2018)9685.
- Cagel M., Bernabeu E., Gonzalez L., Lagomarsino E., Zubillaga M., Moretton M.A. and Chiappetta D.A., "Mixed micelles for encapsulation of doxorubicin with enhanced in vitro cytotoxicity on breast and ovarian cancer cell lines versus Doxil®," *Biomedicine & Pharmacotherapy*, 95(2017)894-903.
- Cancemi P., Buttacavoli M., D'Anna F., Feo S., Fontana R.M., Noto R., Sutera A., Vitale P. and Gallo G., "The effects of structural changes on the anti-microbial and anti-proliferative activities of diimidazolium salts," *New Journal of Chemistry*, (9),41(2017)3574-3585.
- Cao A., Ma P., Yang T., Lan Y., Yu S., Liu L., Sun Y. and Liu Y., "Multifunctionalized micelles facilitate intracellular doxorubicin delivery for reversing multidrug resistance of breast cancer," *Molecular pharmaceutics*, (6),16(2019)2502-2510.

- Castellino S., O'Mara M., Koch K., Borts D.J., Bowers G.D. and MacLauchlin C., "Human metabolism of lapatinib, a dual kinase inhibitor: implications for hepatotoxicity," *Drug Metabolism and Disposition*, (1),40(2012)139-150.
- Castellino S., O'Mara M.J., Koch K.M., Borts D., Bowers G.D. and MacLauchlin C., "Human metabolism of lapatinib, a dual kinase inhibitor: implications for hepatotoxicity," *Drug Metabolism and Disposition*, 2011)dmd. 111.040949.
- Chen G., Jaskula-Sztul R., Harrison A., Dammalapati A., Xu W., Cheng Y., Chen H. and Gong S., "KE108-conjugated unimolecular micelles loaded with a novel HDAC inhibitor thailandepsin-A for targeted neuroendocrine cancer therapy," *Biomaterials*, 97(2016)22-33.
- Chen Y., Feng X., Li L., Song K. and Zhang L., "Preparation and antitumor evaluation of hinokiflavone hybrid micelles with mitochondria targeted for lung adenocarcinoma treatment," *Drug Delivery*, (1),27(2020)565-574.
- Custodio J.M., Wu C.-Y. and Benet L.Z., "Predicting drug disposition, absorption/elimination/transporter interplay and the role of food on drug absorption," *Advanced drug delivery reviews*, (6),60(2008)717-733.
- D'Suze G., Rosales A., Salazar V. and Sevcik C., "Apoptogenic peptides from Tityus discrepans scorpion venom acting against the SKBR3 breast cancer cell line," *Toxicol*, (8),56(2010)1497-1505.
- Dai C.-l., Tiwari A.K., Wu C.-P., Su X.-d., Wang S.-R., Liu D.-g., Ashby C.R., Huang Y., Robey R.W. and Liang Y.-j., "Lapatinib (Tykerb, GW572016) reverses multidrug resistance in cancer cells by inhibiting the activity of ATP-binding cassette subfamily B member 1 and G member 2," *Cancer research*, (19),68(2008)7905-7914.
- Dai C., Ma S., Wang F., Zhao H., Wu X., Huang Z., Chen Z., To K. and Fu L., "Lapatinib promotes the incidence of hepatotoxicity by increasing chemotherapeutic agent accumulation in hepatocytes," *Oncotarget*, (19),6(2015a)17738.
- Dai X., Li T., Bai Z., Yang Y., Liu X., Zhan J. and Shi B., "Breast cancer intrinsic subtype classification, clinical use and future trends," *American journal of cancer research*, (10),5(2015b)2929.
- Dehghan Kelishady P., Saadat E., Ravar F., Akbari H. and Dorkoosh F., "Pluronic F127 polymeric micelles for co-delivery of paclitaxel and lapatinib against metastatic breast cancer: preparation, optimization and in vitro evaluation," *Pharmaceutical development and technology*, (8),20(2015)1009-1017.
- Demirci U., Buyukberber S., Yilmaz G., Kerem M., Coskun U., Uner A., Baykara M., Pasali H. and Benekli M., "Hepatotoxicity associated with lapatinib in an experimental rat model," *European Journal of Cancer*, (2),48(2012)279-285.
- Deshpande P.P., Biswas S. and Torchilin V.P., "Current trends in the use of liposomes for tumor targeting," *Nanomedicine*, (9),8(2013)1509-1528.
- Di Leo A., Gomez H.L., Aziz Z., Zvirbule Z., Bines J., Arbushites M.C., Guerrero S.F., Koehler M., Oliva C. and Stein S.H., "Phase III, double-blind, randomized study

comparing lapatinib plus paclitaxel with placebo plus paclitaxel as first-line treatment for metastatic breast cancer," *Journal of Clinical Oncology*, (34),26(2008)5544-5552.

Di Marzio L., Marianecchi C., Petrone M., Rinaldi F. and Carafa M., "Novel pH-sensitive non-ionic surfactant vesicles: comparison between Tween 21 and Tween 20," *Colloids and Surfaces B: Biointerfaces*, (1),82(2011)18-24.

Dian L., Yu E., Chen X., Wen X., Zhang Z., Qin L., Wang Q., Li G. and Wu C., "Enhancing oral bioavailability of quercetin using novel soluplus polymeric micelles," *Nanoscale research letters*, (1),9(2014)684.

Dowsett M. and Dunbier A.K., "Emerging biomarkers and new understanding of traditional markers in personalized therapy for breast cancer," *Clinical Cancer Research*, (24),14(2008)8019-8026.

Ellis I.O., Cornelisse C.J., Schnitt S.J., Sasco A.J., Sastre-Garau X., Kaaks R., Bussolati G., Pisani P., Tavassoli F.A., Goldgar D.E., V. E., Devilee P., Peterse J.L., Cleton-Jansen M.J., Mukai K., Børresen-Dale A.L., Tabár L., van't Veer L., Jacquemier J. and Sapino A. (2003) Pathology and Genetics of Tumours of the Breast and Female Genital Organs : Tumors of the breast. Tavassoli, F.A. and Devilee, P. (eds), IARCPress, Lyon, France.

Fang J., Sawa T. and Maeda H. (2004) Polymer Drugs in the Clinical Stage, pp. 29-49, Springer.

Feng X., Chen Y., Li L., Zhang Y., Zhang L. and Zhang Z., "Preparation, evaluation and metabolites study in rats of novel amentoflavone-loaded TPGS/soluplus mixed nanomicelles," *Drug Delivery*, (1),27(2020)137-150.

Ferlay J., Soerjomataram I., Dikshit R., Eser S., Mathers C., Rebelo M., Parkin D.M., Forman D. and Bray F., "Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012," *International journal of cancer*, (5),136(2015).

Gao H., Wang Y., Chen C., Chen J., Wei Y., Cao S. and Jiang X., "Incorporation of lapatinib into core-shell nanoparticles improves both the solubility and anti-glioma effects of the drug," *International journal of pharmaceutics*, (1),461(2014)478-488.

Gao H., Yang Z., Cao S., Xi Z., Zhang S., Pang Z. and Jiang X., "Behavior and anti-glioma effect of lapatinib-incorporated lipoprotein-like nanoparticles," *Nanotechnology*, (43),23(2012)435101.

Gothwal A., Khan I. and Gupta U., "Polymeric micelles: recent advancements in the delivery of anticancer drugs," *Pharmaceutical research*, (1),33(2016)18-39.

Greenshields A.L., Fernando W. and Hoskin D.W., "The anti-malarial drug artesunate causes cell cycle arrest and apoptosis of triple-negative MDA-MB-468 and HER2-enriched SK-BR-3 breast cancer cells," *Experimental and molecular pathology*, 107(2019)10-22.

Grimaudo M.A., Pescina S., Padula C., Santi P., Concheiro A., Alvarez-Lorenzo C. and Nicoli S., "Topical application of polymeric nanomicelles in ophthalmology: a review on

- research efforts for the non-invasive delivery of ocular therapeutics," *Expert opinion on drug delivery*, (just-accepted),2019).
- Guan Y., Huang J., Zuo L., Xu J., Si L., Qiu J. and Li G., "Effect of pluronic P123 and F127 block copolymer on P-glycoprotein transport and CYP3A metabolism," *Archives of pharmacal research*, (10),34(2011)1719-1728.
- Guo C., Li M., Qi X., Lin G., Cui F., Li F. and Wu X., "Intranasal delivery of nanomicelle curcumin promotes corneal epithelial wound healing in streptozotocin-induced diabetic mice," *Scientific reports*, 6(2016)29753.
- Guo Z., Liang E., Sui J., Ma M., Yang L., Wang J., Hu J., Sun Y. and Fan Y., "Lapatinib-loaded acidity-triggered charge switchable polycarbonate-doxorubicin conjugate micelles for synergistic breast cancer chemotherapy," *Acta Biomaterialia*, 118(2020)182-195.
- Gusterson B.A., Ross D.T., Heath V.J. and Stein T., "Basal cytokeratins and their relationship to the cellular origin and functional classification of breast cancer," *Breast Cancer Research*, (4),7(2005)143.
- Higgins M.J. and Baselga J., "Targeted therapies for breast cancer," *The Journal of clinical investigation*, (10),121(2011)3797.
- Hou J., Sun E., Sun C., Wang J., Yang L., Jia X.-b. and Zhang Z.-h., "Improved oral bioavailability and anticancer efficacy on breast cancer of paclitaxel via Novel Soluplus®—Soluto1® HS15 binary mixed micelles system," *International journal of pharmaceutics*, (1),512(2016)186-193.
- Hu H., Lin Z., He B., Dai W., Wang X., Wang J., Zhang X., Zhang H. and Zhang Q., "A novel localized co-delivery system with lapatinib microparticles and paclitaxel nanoparticles in a peritumorally injectable in situ hydrogel," *Journal of Controlled Release*, 220(2015)189-200.
- Hu M., Zhang J., Ding R., Fu Y., Gong T. and Zhang Z., "Improved oral bioavailability and therapeutic efficacy of dabigatran etexilate via Soluplus-TPGS binary mixed micelles system," *Drug development and industrial pharmacy*, (4),43(2017)687-697.
- Huo Z.J., Wang S.J., Wang Z.Q., Zuo W.S., Liu P., Pang B. and Liu K., "Novel nanosystem to enhance the antitumor activity of lapatinib in breast cancer treatment: Therapeutic efficacy evaluation," *Cancer science*, (10),106(2015)1429-1437.
- Hurvitz S. and Mead M., "Triple-negative breast cancer: advancements in characterization and treatment approach," *Current Opinion in Obstetrics and Gynecology*, (1),28(2016)59-69.
- Jafarzadeh-Holagh S., Hashemi-Najafabadi S., Shaki H. and Vasheghani-Farahani E., "Self-assembled and pH-sensitive mixed micelles as an intracellular doxorubicin delivery system," *Journal of colloid and interface science*, 523(2018)179-190.
- Jagiello-Gruszfeld A., Tjulandin S., Dobrovolskaya N., Manikhas A., Pienkowski T., DeSilvio M., Ridderheim M. and Abbey R., "A single-arm phase II trial of first-line paclitaxel in combination with lapatinib in HER2-overexpressing metastatic breast cancer," *Oncology*, (1-2),79(2010)129.

- Jeong E.-G., Yoo H.J., Song B., Kim H.-P., Han S.-W., Kim T.-Y. and Cho D.-I.D., "Evaluation of Lapatinib Powder-Entrapped Biodegradable Polymeric Microstructures Fabricated by X-Ray Lithography for a Targeted and Sustained Drug Delivery System," *Materials*, (2),8(2015)519-534.
- Jiang Y., Zhou Y., Zhang C.Y. and Fang T., "Co-Delivery of Paclitaxel and Doxorubicin by pH-Responsive Prodrug Micelles for Cancer Therapy," *International Journal of Nanomedicine*, 15(2020)3319.
- Jin X., Zhou B., Xue L. and San W., "Soluplus® micelles as a potential drug delivery system for reversal of resistant tumor," *Biomedicine & Pharmacotherapy*, 69(2015)388-395.
- Kaliberov S.A. and Buchsbaum D.J., "Cancer treatment with gene therapy and radiation therapy," *Advances in cancer research*, 115(2012)221.
- Kandekar S.G., Singhal M., Sonaje K.B. and Kalia Y.N., "Polymeric micelle nanocarriers for targeted epidermal delivery of the hedgehog pathway inhibitor vismodegib: formulation development and cutaneous biodistribution in human skin," *Expert opinion on drug delivery*, 2019)1-8.
- Knop S., Jansen T.L.C., Lindner J. and Vöhringer P., "On the nature of OH-stretching vibrations in hydrogen-bonded chains: Pump frequency dependent vibrational lifetime," *Physical Chemistry Chemical Physics*, (10),13(2011)4641-4650.
- Kou L., Sun R., Bhutia Y.D., Yao Q. and Chen R., "Emerging advances in P-glycoprotein inhibitory nanomaterials for drug delivery," *Expert opinion on drug delivery*, (9),15(2018)869-879.
- Lee J.-Y., Kang W.-S., Piao J., Yoon I.-S., Kim D.-D. and Cho H.-J., "Soluplus®/TPGS-based solid dispersions prepared by hot-melt extrusion equipped with twin-screw systems for enhancing oral bioavailability of valsartan," *Drug design, development and therapy*, 9(2015)2745.
- Lee J.H. and Nan A., "Combination drug delivery approaches in metastatic breast cancer," *Journal of drug delivery*, 2012(2012).
- Li F., Danquah M., Singh S., Wu H. and Mahato R.I., "Paclitaxel-and lapatinib-loaded lipopolymer micelles overcome multidrug resistance in prostate cancer," *Drug delivery and translational research*, (6),1(2011a)420-428.
- Li S.-D. and Huang L., "Nanoparticles evading the reticuloendothelial system: role of the supported bilayer," *Biochimica et Biophysica Acta (BBA)-Biomembranes*, (10),1788(2009)2259-2266.
- Li X., Zhang Y., Fan Y., Zhou Y., Wang X., Fan C., Liu Y. and Zhang Q., "Preparation and evaluation of novel mixed micelles as nanocarriers for intravenous delivery of propofol," *Nanoscale research letters*, (1),6(2011b)275.
- Ligresti G., Libra M., Militello L., Clementi S., Donia M., Imbesi R., Malaponte G., Cappellani A., McCubrey J.A. and Stivala F., "Breast cancer: Molecular basis and therapeutic strategies," *Molecular medicine reports*, (4),1(2008)451-458.

- Lin S.-Y., Lin H.-L., Chi Y.-T., Hung R.-Y., Huang Y.-T., Hsieh W.-H. and Kao C.-Y., "Influence of Soluplus on Solid-State Properties and Physical Stability of Indomethacin-Saccharin Co-crystal Formation Prepared by Air-Drying Process," *Journal of Pharmaceutical Innovation*, (2),11(2016)109-119.
- Lombardo D., Kiselev M.A., Magazù S. and Calandra P., "Amphiphiles self-assembly: basic concepts and future perspectives of supramolecular approaches," *Advances in Condensed Matter Physics*, 2015(2015).
- Lu X., Fang M., Yang Y., Dai Y., Xu J., Zhao D., Lu Y., Chen X., Lu S. and Li N., "PEG-conjugated triacontanol micelles as docetaxel delivery systems for enhanced anti-cancer efficacy," *Drug delivery and translational research*, (1),10(2020)122-135.
- Lu Y. and Park K., "Polymeric micelles and alternative nanonized delivery vehicles for poorly soluble drugs," *International journal of pharmaceutics*, (1),453(2013)198-214.
- Majumder N., G Das N. and Das S.K., "Polymeric micelles for anticancer drug delivery," *Therapeutic Delivery*, (10),11(2020)613-635.
- Makki J., "Diversity of breast carcinoma: histological subtypes and clinical relevance," *Clinical medicine insights. Pathology*, 8(2015)23.
- Malhotra G.K., Zhao X., Band H. and Band V., "Histological, molecular and functional subtypes of breast cancers," *Cancer biology & therapy*, (10),10(2010)955-960.
- Manjappa A.S., Kumbhar P.S., Patil A.B., Disouza J.I. and Patravale V.B., "Polymeric mixed micelles: improving the anticancer efficacy of single-copolymer micelles," *Critical Reviews™ in Therapeutic Drug Carrier Systems*, (1),36(2019).
- Marmé F. and Schneeweiss A., "Personalized therapy in breast cancer," *Oncology Research and Treatment*, (Suppl. 1),35(2012)28-33.
- McDonald E.S., Clark A.S., Tchou J., Zhang P. and Freedman G.M., "Clinical diagnosis and management of breast cancer," *Journal of Nuclear Medicine*, (Supplement 1),57(2016)9S-16S.
- Medina P.J. and Goodin S., "Lapatinib: a dual inhibitor of human epidermal growth factor receptor tyrosine kinases," *Clinical therapeutics*, (8),30(2008)1426-1447.
- Meng X., Liu J., Yu X., Li J., Lu X. and Shen T., "Pluronic F127 and D- α -tocopheryl polyethylene glycol succinate (TPGS) mixed micelles for targeting drug delivery across the blood brain barrier," *Scientific reports*, (1),7(2017)2964.
- Mittal P., Vardhan H., Ajmal G., Bonde G.V., Kapoor R., Mittal A. and Mishra B., "Formulation, Optimization, Hemocompatibility and pharmacokinetic evaluation of PLGA Nanoparticles containing Paclitaxel," *Drug development and industrial pharmacy*, (just-accepted),2018)1-43.
- Mittal P., Vardhan H., Ajmal G., Bonde G.V., Kapoor R., Mittal A. and Mishra B., "Formulation, optimization, hemocompatibility and pharmacokinetic evaluation of PLGA nanoparticles containing paclitaxel," *Drug development and industrial pharmacy*, (3),45(2019)365-378.

- Mobasseri R., Karimi M., Tian L., Naderi-Manesh H. and Ramakrishna S., "Hydrophobic lapatinib encapsulated dextran-chitosan nanoparticles using a toxic solvent free method: fabrication, release property & in vitro anti-cancer activity," *Materials Science and Engineering: C*, 74(2017)413-421.
- Mourtas S., Michanetzis G.P., Missirlis Y.F. and Antimisiaris S.G., "Haemolytic activity of liposomes: effect of vesicle size, lipid concentration and polyethylene glycol-lipid or arsonolipid incorporation," *Journal of biomedical nanotechnology*, (4),5(2009)409-415.
- Muherei M.A. and Junin R., "Investigating synergism in critical micelle concentration of anionic-nonionic surfactant mixtures: surface versus interfacial tension techniques," *Asian J Appl Sci*, 2(2009)115-127.
- Munagala R., Aqil F. and Gupta R.C., "Promising molecular targeted therapies in breast cancer," *Indian journal of pharmacology*, (3),43(2011)236.
- Nagarajan R. (2001) Polymer-surfactant interactions, American Oil Chemists Society and Consumer Specialty Products Association
- Nasr M., Karandikar H., Abdel-Aziz R.T., Mofteh N. and Paradkar A., "Novel nicotinamide skin-adhesive hot melt extrudates for treatment of acne," *Expert opinion on drug delivery*, (12),15(2018)1165-1173.
- National; <https://www.cancer.gov/about-cancer/treatment/drugs/fda-lapatinib> (Accessed on August)
- Oerlemans C., Bult W., Bos M., Storm G., Nijssen J.F.W. and Hennink W.E., "Polymeric micelles in anticancer therapy: targeting, imaging and triggered release," *Pharmaceutical research*, (12),27(2010)2569-2589.
- Pellosi D.S., Calori I.R., de Paula L.B., Hioka N., Quaglia F. and Tedesco A.C., "Multifunctional theranostic Pluronic mixed micelles improve targeted photoactivity of Verteporfin in cancer cells," *Materials Science and Engineering: C*, 71(2017)1-9.
- Perou C.M., Sorlie T., Eisen M.B. and Van De Rijn M., "Molecular portraits of human breast tumours," *Nature*, (6797),406(2000)747.
- Pignatello R. and Corsaro R., "Polymeric Nanomicelles of Soluplus® as a Strategy for Enhancing the Solubility, Bioavailability and Efficacy of Poorly Soluble Active Compounds," *Current Nanomedicine (Formerly: Recent Patents on Nanomedicine)*, (3),9(2019)184-197.
- Polyak K., "Heterogeneity in breast cancer," *The Journal of clinical investigation*, (10),121(2011)3786.
- Ratain M.J. and Cohen E.E., "The value meal: how to save \$1,700 per month or more on lapatinib," *Journal of clinical oncology*, (23),25(2007)3397-3398.
- Ravar F., Saadat E., Kelishadi P.D. and Dorkoosh F.A., "Liposomal formulation for co-delivery of paclitaxel and lapatinib, preparation, characterization and optimization," *Journal of liposome research*, (3),26(2016)175-187.

- Rehman N., Ullah H., Alam S. and Jan A.K., "Surface and thermodynamic study of micellization of non ionic surfactant/diblock copolymer system as revealed by surface tension and conductivity," *J. Mater. Environ. Sci*, 8(2017)1161-1167.
- Ryan Q., Ibrahim A., Cohen M.H., Johnson J., Ko C.-w., Sridhara R., Justice R. and Pazdur R., "FDA drug approval summary: lapatinib in combination with capecitabine for previously treated metastatic breast cancer that overexpresses HER-2," *The oncologist*, (10),13(2008)1114-1119.
- Sarabu S., Bandari S., Kallakunta V.R., Tiwari R., Patil H. and Repka M.A., "An update on the contribution of hot-melt extrusion technology to advance drug delivery in the 21st century: Part II," *Expert opinion on drug delivery*, (just-accepted),2019).
- Schnitt S.J., "Classification and prognosis of invasive breast cancer: from morphology to molecular taxonomy," *Modern Pathology*, (S2),23(2010)S60.
- Senapati S., Mahanta A.K., Kumar S. and Maiti P., "Controlled drug delivery vehicles for cancer treatment and their performance," *Signal transduction and targeted therapy*, (1),3(2018)1-19.
- Senthilkumar M. and Dash S., "Interaction of methylparaben and propylparaben with P123/F127 mixed polymeric micelles," *Colloids and Surfaces B: Biointerfaces*, 176(2019)140-149.
- Shen H., Liu Y., Zhang H., Ding P., Zhang L., Zhang L. and Ju J., "Enhancing the oral bioavailability of baicalein via Solutol® HS 15 and Poloxamer 188 mixed micelles system," *Journal of Pharmacy and Pharmacology*, (5),71(2019)765-773.
- Sheng J.J. (2013) Enhanced Oil Recovery Field Case Studies, pp. 117-142, Elsevier.
- Singh J., Mittal P., Vasant Bonde G., Ajmal G. and Mishra B., "Design, optimization, characterization and in-vivo evaluation of Quercetin enveloped Soluplus®/P407 micelles in diabetes treatment," *Artificial cells, nanomedicine, and biotechnology*, (sup3),46(2018)S546-S555.
- Spraggs C.F., Xu C.-F. and Hunt C.M., "Genetic characterization to improve interpretation and clinical management of hepatotoxicity caused by tyrosine kinase inhibitors," *Pharmacogenomics*, (5),14(2013)541-554.
- Srivastava R., Srivastava S. and Singh S.P., "Thermoreversible in-situ nasal gel formulations and their pharmaceutical evaluation for the treatment of allergic rhinitis containing extracts of moringa olifera and embelia ribes," *Int J Appl Pharm*, 9(2017)16-20.
- Stingl J. and Caldas C., "Molecular heterogeneity of breast carcinomas and the cancer stem cell hypothesis," *Nature reviews. Cancer*, (10),7(2007)791.
- Sun Y., Li Y., Nan S., Zhang L., Huang H. and Wang J., "Synthesis and characterization of pH-sensitive poly (itaconic acid)–poly (ethylene glycol)–folate–poly (l-histidine) micelles for enhancing tumor therapy and tunable drug release," *Journal of colloid and interface science*, 458(2015)119-129.

- Tevaarwerk A.J. and Kolesar J.M., "Lapatinib: A small-molecule inhibitor of epidermal growth factor receptor and human epidermal growth factor receptor—2 tyrosine kinases used in the treatment of breast cancer," *Clinical therapeutics*, 31(2009)2332-2348.
- Trivedi R. and Kompella U.B., "Nanomicellar formulations for sustained drug delivery: strategies and underlying principles," *Nanomedicine*, (3),5(2010)485-505.
- van Erp N.P., Gelderblom H. and Guchelaar H.-J., "Clinical pharmacokinetics of tyrosine kinase inhibitors," *Cancer treatment reviews*, (8),35(2009)692-706.
- Varela-Garcia A., Concheiro A. and Alvarez-Lorenzo C., "Soluplus micelles for acyclovir ocular delivery: Formulation and cornea and sclera permeability," *International journal of pharmaceutics*, (1-2),552(2018)39-47.
- Vergara D., Bellomo C., Zhang X., Vergaro V., Tinelli A., Lorusso V., Rinaldi R., Lvov Y.M., Leporatti S. and Maffia M., "Lapatinib/Paclitaxel polyelectrolyte nanocapsules for overcoming multidrug resistance in ovarian cancer," *Nanomedicine: Nanotechnology, Biology and Medicine*, (6),8(2012)891-899.
- Wan X., Zheng X., Pang X., Zhang Z., Jing T., Xu W. and Zhang Q., "The potential use of lapatinib-loaded human serum albumin nanoparticles in the treatment of triple-negative breast cancer," *International journal of pharmaceutics*, (1),484(2015a)16-28.
- Wan X., Zheng X., Pang X., Zhang Z. and Zhang Q., "Incorporation of lapatinib into human serum albumin nanoparticles with enhanced anti-tumor effects in HER2-positive breast cancer," *Colloids and Surfaces B: Biointerfaces*, 136(2015b)817-827.
- Wang H., Li F., Du C., Wang H., Mahato R.I. and Huang Y., "Doxorubicin and lapatinib combination nanomedicine for treating resistant breast cancer," *Molecular pharmaceutics*, (8),11(2014)2600-2611.
- Wang Y.-L., Overstreet A.-M., Chen M.-S., Wang J., Zhao H.-J., Ho P.-C., Smith M. and Wang S.-C., "Combined inhibition of EGFR and c-ABL suppresses the growth of triple-negative breast cancer growth through inhibition of HOTAIR," *Oncotarget*, (13),6(2015)11150.
- Wei Y., Xu S., Wang F., Zou A., Zhang S., Xiong Y., Cao S., Zhang Q., Wang Y. and Jiang X., "A novel combined micellar system of lapatinib and Paclitaxel with enhanced antineoplastic effect against human epidermal growth factor receptor-2 positive breast tumor in vitro," *Journal of pharmaceutical sciences*, (1),104(2015a)165-177.
- Wei Y., Xu S., Wang F., Zou A., Zhang S., Xiong Y., Cao S., Zhang Q., Wang Y. and Jiang X., "A Novel Combined Micellar System of Lapatinib and Paclitaxel with Enhanced Antineoplastic Effect Against Human Epidermal Growth Factor Receptor-2 Positive Breast Tumor In Vitro," *Journal of pharmaceutical sciences*, (1),104(2015b)165-177.
- WHO 2018; <https://www.who.int/en/news-room/fact-sheets/detail/cancer> (Accessed on 31/05/2019)
- Wieduwilt M. and Moasser M., "The epidermal growth factor receptor family: biology driving targeted therapeutics," *Cellular and Molecular Life Sciences*, (10),65(2008)1566-1584.

- Xia D., Yu H., Tao J., Zeng J., Zhu Q., Zhu C. and Gan Y., "Supersaturated polymeric micelles for oral cyclosporine A delivery: The role of Soluplus–sodium dodecyl sulfate complex," *Colloids and Surfaces B: Biointerfaces*, 141(2016)301-310.
- Xia W., Mullin R.J., Keith B.R., Liu L.-H., Ma H., Rusnak D.W., Owens G., Alligood K.J. and Spector N.L., "Anti-tumor activity of GW572016: a dual tyrosine kinase inhibitor blocks EGF activation of EGFR/erbB2 and downstream Erk1/2 and AKT pathways," *Oncogene*, (41),21(2002)6255.
- Yadav S.K., Khan G., Bansal M., Thokala S., Bonde G.V., Upadhyay M. and Mishra B., "Multiparticulate based thermosensitive intra-pocket forming implants for better treatment of bacterial infections in periodontitis," *International journal of biological macromolecules*, 116(2018)394-408.
- Yamashita T. and Takatsuka K., "Hydrogen-bond assisted enormous broadening of infrared spectra of phenol-water cationic cluster: An ab initio mixed quantum-classical study," *The Journal of chemical physics*, (7),126(2007)074304.
- Yan H.-m., Song J., Zhang Z.-h. and Jia X.-b., "Optimization and anticancer activity in vitro and in vivo of baohuoside I incorporated into mixed micelles based on lecithin and Solutol HS 15," *Drug delivery*, (8),23(2016)2911-2918.
- Yersal O. and Barutca S., "Biological subtypes of breast cancer: Prognostic and therapeutic implications," *World journal of clinical oncology*, (3),5(2014)412-424.
- Yoncheva K., Calleja P., Agüeros M., Petrov P., Miladinova I., Tsvetanov C. and Irache J.M., "Stabilized micelles as delivery vehicles for paclitaxel," *International journal of pharmaceutics*, (1-2),436(2012)258-264.
- You J., Hu F.-Q., Du Y.-Z., Yuan H. and Ye B.-F., "High cytotoxicity and resistant-cell reversal of novel paclitaxel loaded micelles by enhancing the molecular-target delivery of the drug," *Nanotechnology*, (49),18(2007)495101.
- Younes N.F., Abdel-Halim S.A. and Ellassasy A.I., "Solutol HS15 based binary mixed micelles with penetration enhancers for augmented corneal delivery of sertaconazole nitrate: optimization, in vitro, ex vivo and in vivo characterization," *Drug delivery*, (1),25(2018)1706-1717.
- Yu D., Liu B., Tan M., Li J., Wang S.-S. and Hung M.-C., "Overexpression of c-erbB-2/neu in breast cancer cells confers increased resistance to Taxol via mdr-1-independent mechanisms," *Oncogene*, (6),13(1996)1359-1365.
- Yu H., Xia D., Zhu Q., Zhu C., Chen D. and Gan Y., "Supersaturated polymeric micelles for oral cyclosporine A delivery," *European Journal of Pharmaceutics and Biopharmaceutics*, (3),85(2013)1325-1336.
- Zeng Y.-c., Li S., Liu C., Gong T., Sun X., Fu Y. and Zhang Z.-r., "Soluplus micelles for improving the oral bioavailability of scopoletin and their hypouricemic effect in vivo," *Acta Pharmacologica Sinica*, (3),38(2017)424.
- Zhang Y., Huang Y. and Li S., "Polymeric micelles: nanocarriers for cancer-targeted drug delivery," *Aaps Pharmscitech*, (4),15(2014)862-871.

Zhang Y., Liu Y., Luo Y., Yao Q., Zhong Y., Tian B. and Tang X., "Extruded Soluplus/SIM as an oral delivery system: characterization, interactions, in vitro and in vivo evaluations," *Drug delivery*, (6),23(2016)1902-1911.

Zhao J., Xu Y., Wang C., Ding Y., Chen M., Wang Y., Peng J., Li L. and Lv L., "Soluplus/TPGS mixed micelles for dioscin delivery in cancer therapy," *Drug development and industrial pharmacy*, (7),43(2017)1197-1204.

List of Publications

Sr. No.	Title	Indexing
1.	Bonde GV, Ajmal G, Yadav SK, Mittal P, Mishra B, "Lapatinib-loaded nanocolloidal polymeric micelles for efficient treatment of breast cancer," <i>Journal of Applied Pharmaceutical Sciences</i> , (9),10 (2020)23-29.	Scopus
2.	Bonde GV, Ajmal G, Yadav SK, Mittal P, Singh J, Bakde BV, Mishra B, "Assessing the viability of Soluplus® self-assembled nanocolloids for sustained delivery of highly hydrophobic lapatinib (anticancer agent): Optimisation and in-vitro characterization," <i>Colloids and Surfaces B: Biointerfaces</i> , 185 (2020)110611.	SCI SCIE Scopus
3.	Bonde GV, Yadav SK, Chauhan S, Mittal P, Ajmal G, Thokala S, Mishra B, "Lapatinib nano-delivery systems: a promising future for breast cancer treatment," <i>Expert Opinion on Drug Delivery</i> , (5),15(2018)495-507.	SCI Scopus
