

## DAFTAR PUSTAKA

- Bagwe, P., Bajaj, L., Gala, R.P., D'souza, M.J. and Zughair, S.M. (2022) 'Assessment of In Vitro Immunostimulatory Activity of an Adjuvanted Whole-Cell Inactivated *Neisseria gonorrhoeae* Microparticle Vaccine Formulation', *Vaccines*, 10(7), pp. 1–16. Available at: <https://doi.org/10.3390/vaccines10070983>.
- Beretta, B., Conti, A., Fiocchi, A., Gaiaschi, A., Galli, C.L., Giuffrida, M.G., Ballabio, C. and Restani, P. (2001) 'Antigenic Determinants of Bovine Serum Albumin', *International Archives of Allergy and Immunology*, 126(3), pp. 188–195. Available at: <https://doi.org/10.1159/000049513>.
- Bi, H., Xue, J., Jiang, H., Gao, S., Yang, D., Fang, Y. and Shi, K. (2019) 'Current developments in drug delivery with thermosensitive liposomes', *Asian Journal of Pharmaceutical Sciences*, 14(4), p. 365. Available at: <https://doi.org/10.1016/J.AJPS.2018.07.006>.
- Brito, L.A., Malyala, P. and O'Hagan, D.T. (2013) 'Vaccine adjuvant formulations: A pharmaceutical perspective', *Seminars in Immunology*, 25(2), pp. 130–145. Available at: <https://doi.org/10.1016/j.smim.2013.05.007>.
- Cappellano, G., Abreu, H., Casale, C., Dianzani, U. and Chiocchetti, A. (2021) 'Nano-microparticle platforms in developing next-generation vaccines', *Vaccines*, 9(6). Available at: <https://doi.org/10.3390/vaccines9060606>.
- Chatzikleanthous, D., O'Hagan, D.T. and Adamo, R. (2021) 'Lipid-Based Nanoparticles for Delivery of Vaccine Adjuvants and Antigens: Toward Multicomponent Vaccines', *Molecular Pharmaceutics*, 18(8), pp. 2867–2888. Available at: <https://doi.org/10.1021/acs.molpharmaceut.1c00447>.
- Cooper, G.M. (2000) 'Structure of the Plasma Membrane'. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK9898/> (Accessed: 13 June 2023).
- Croda (2023a) *16:0 PC (DPPC)*. Available at: <https://avantilipids.com/product/850355> (Accessed: 13 June 2023).
- Croda (2023b) *Cholesterol (plant)*. Available at: <https://avantilipids.com/product/700100> (Accessed: 13 June 2023).

- Croda (2023c) *DSPE-PEG(2000) Carboxylic Acid*. Available at: <https://avantilipids.com/product/880135> (Accessed: 13 June 2023).
- Danaei, M., Dehghankhold, M., Ataei, S., Hasanzadeh Davarani, F., Javanmard, R., Dokhani, A., Khorasani, S. and Mozafari, M.R. (2018) 'Impact of Particle Size and Polydispersity Index on the Clinical Applications of Lipidic Nanocarrier Systems', *Pharmaceutics*, 10(2). Available at: <https://doi.org/10.3390/PHARMACEUTICS10020057>.
- Ghasemi, M., Turnbull, T., Sebastian, S. and Kempson, I. (2021) 'The MTT Assay: Utility, Limitations, Pitfalls, and Interpretation in Bulk and Single-Cell Analysis', *International Journal of Molecular Sciences*, 22(23), p. 12827. Available at: <https://doi.org/10.3390/ijms222312827>.
- Haryono, A., Salsabila, K., Restu, W.K., Harmami, S.B. and Safari, D. (2017) 'Effect of Chitosan and Liposome Nanoparticles as Adjuvant Codelivery on the Immunoglobulin G Subclass Distribution in a Mouse Model', *Journal of Immunology Research*, 2017. Available at: <https://doi.org/10.1155/2017/9125048>.
- Hermanson, G.T. (2013) 'Vaccines and Immunogen Conjugates', *Bioconjugate Techniques*, pp. 839–865. Available at: <https://doi.org/10.1016/B978-0-12-382239-0.00019-4>.
- Hoang, N.H., Thanh, T. Le, Sangpueak, R., Treekoon, J., Saengchan, C., Thepbandit, W., Papatthi, N.K., Kamkaew, A. and Buensanteai, N. (2022) 'Chitosan Nanoparticles-Based Ionic Gelation Method: A Promising Candidate for Plant Disease Management', *Polymers*, 14(4). Available at: <https://doi.org/10.3390/POLYM14040662>.
- Jaafar-Maalej, C., Diab, R., Andrieu, V., Elaissari, A. and Fessi, H. (2010) 'Ethanol injection method for hydrophilic and lipophilic drug-loaded liposome preparation', *Journal of Liposome Research*, 20(3), pp. 228–243. Available at: <https://doi.org/10.3109/08982100903347923>.
- Kanášová, M. and Nesměrák, K. (2017) 'Systematic review of liposomes' characterization methods', *Monatshefte für Chemie*, 148(9), pp. 1581–1593. Available at: <https://doi.org/10.1007/s00706-017-1994-9>.
- Kang, B.R., Park, J.S., Ryu, G.R., Jung, W.J., Choi, J.S. and Shin, H.M. (2022)

- ‘Effect of Chitosan Coating for Efficient Encapsulation and Improved Stability under Loading Preparation and Storage Conditions of Bacillus Lipopeptides’, *Nanomaterials*, 12(23). Available at: <https://doi.org/10.3390/nano12234189>.
- Kowalska, M., Broniatowski, M., Mach, M., Płachta, Ł. and Wydro, P. (2021) ‘The effect of the polyethylene glycol chain length of a lipopolymer (DSPE-PEG<sub>n</sub>) on the properties of DPPC monolayers and bilayers’, *Journal of Molecular Liquids*, 335, p. 116529. Available at: <https://doi.org/10.1016/J.MOLLIQ.2021.116529>.
- Kurniawan, D.W., Jajoriya, A.K., Dhawan, G., Mishra, D., Argemi, J., Bataller, R., Storm, G., Mishra, D.P., Prakash, J. and Bansal, R. (2018) ‘Therapeutic inhibition of spleen tyrosine kinase in inflammatory macrophages using PLGA nanoparticles for the treatment of non-alcoholic steatohepatitis’, *Journal of Controlled Release*, 288, pp. 227–238. Available at: <https://doi.org/10.1016/J.JCONREL.2018.09.004>.
- Lozano, A. and Rieth, M.D. (2019) ‘Investigation of DPPC liposomes reveals their capability to entrap Aroclor 1260, an emerging environmental pollutant’, *bioRxiv*, p. 829218. Available at: <https://doi.org/10.1101/829218>.
- Mady, M.M. and Darwish, M.M. (2010) ‘Effect of chitosan coating on the characteristics of DPPC liposomes’, *Journal of Advanced Research*, 1(3), pp. 187–191. Available at: <https://doi.org/10.1016/J.JARE.2010.05.008>.
- Mao, H.H. and Chao, S. (2020) ‘Advances in Vaccines’, *Advances in Biochemical Engineering/Biotechnology*, 171(August 2019), pp. 155–188. Available at: [https://doi.org/10.1007/10\\_2019\\_107](https://doi.org/10.1007/10_2019_107).
- Miatmoko, A., Asmoro, F.H., Azhari, A.A., Rosita, N. and Huang, C.S. (2023) ‘The effect of 1,2-dioleoyl-3-trimethylammonium propane (DOTAP) Addition on the physical characteristics of  $\beta$ -ionone liposomes’, *Scientific Reports*, 13(1). Available at: <https://doi.org/10.1038/S41598-023-31560-5>.
- Nakhaei, P., Margiana, R., Bokov, D.O., Abdelbasset, W.K., Jadidi Kouhbanani, M.A., Varma, R.S., Marofi, F., Jarahian, M. and Beheshtkhoo, N. (2021) ‘Liposomes: Structure, Biomedical Applications, and Stability Parameters With Emphasis on Cholesterol’, *Frontiers in Bioengineering and*

- Biotechnology*, 9, p. 748. Available at: <https://doi.org/10.3389/fbioe.2021.705886>.
- Nsairat, H., Khater, D., Sayed, U., Odeh, F., Al Bawab, A. and Alshaer, W. (2022) 'Liposomes: structure, composition, types, and clinical applications', *Heliyon*, 8(5). Available at: <https://doi.org/10.1016/J.HELIYON.2022.E09394>.
- Paolino, D., Accolla, M.L., Cilurzo, F., Cristiano, M.C., Cosco, D., Castelli, F., Sarpietro, M.G., Fresta, M. and Celia, C. (2017) 'Interaction between PEG lipid and DSPE/DSPC phospholipids: An insight of PEGylation degree and kinetics of de-PEGylation', *Colloids and Surfaces B: Biointerfaces*, 155, pp. 266–275. Available at: <https://doi.org/10.1016/J.COLSURFB.2017.04.018>.
- Pasarin, D., Ghizdareanu, A.I., Enascuta, C.E., Matei, C.B., Bilbie, C., Paraschiv-Palada, L. and Veres, P.A. (2023) 'Coating Materials to Increase the Stability of Liposomes', *Polymers*, 15(3). Available at: <https://doi.org/10.3390/POLYM15030782>.
- Pollard, A.J. and Bijker, E.M. (2021) 'A guide to vaccinology: from basic principles to new developments', *Nature Reviews Immunology*, 21(2), pp. 83–100. Available at: <https://doi.org/10.1038/s41577-020-00479-7>.
- Pulendran, B., S. Arunachalam, P. and O'Hagan, D.T. (2021) 'Emerging concepts in the science of vaccine adjuvants', *Nature Reviews Drug Discovery* 20:6, 20(6), pp. 454–475. Available at: <https://doi.org/10.1038/s41573-021-00163-y>.
- Raghuwanshi, V.S., Yu, B., Browne, C. and Garnier, G. (2020) 'Reversible pH Responsive Bovine Serum Albumin Hydrogel Sponge Nanolayer', *Frontiers in Bioengineering and Biotechnology*, 8, p. 521797. Available at: <https://doi.org/10.3389/fbioe.2020.00573>.
- Roy, B., Guha, P., Bhattarai, R., Nahak, P., Karmakar, G., Chettri, P. and Kumar Panda, A. (2016) 'Influence of Lipid Composition, pH, and Temperature on Physicochemical Properties of Liposomes with Curcumin as Model Drug', *J. Oleo Sci*, 65(5), pp. 399–411. Available at: <https://doi.org/10.5650/jos.ess15229>.
- Roy, B., Guha, P., Nahak, P., Karmakar, G., Maiti, S., Mandal, A.K., Bykov, A.G.,

- Akentieva, A. V., Noskov, B.A., Tsuchiya, K., *et al.* (2018) 'Biophysical Correlates on the Composition, Functionality, and Structure of Dendrimer-Liposome Aggregates', *ACS Omega*, 3(9), pp. 12235–12245. Available at: <https://doi.org/10.1021/acsomega.8b01187>.
- Sáenz, L., Neira-Carrillo, A., Paredes, R., Cortés, M., Bucarey, S. and Arias, J.L. (2009) 'Chitosan formulations improve the immunogenicity of a GnRH-I peptide-based vaccine', *International Journal of Pharmaceutics*, 369(1–2), pp. 64–71. Available at: <https://doi.org/10.1016/J.IJPHARM.2008.10.033>.
- Schmidt, S.T., Foged, C., Korsholm, K.S., Rades, T. and Christensen, D. (2016) 'Liposome-based adjuvants for subunit vaccines: Formulation strategies for subunit antigens and immunostimulators', *Pharmaceutics*, 8(1), pp. 1–22. Available at: <https://doi.org/10.3390/pharmaceutics8010007>.
- Sebaaly, C., Trifan, A., Sieniawska, E. and Greige-Gerges, H. (2021) 'Chitosan-Coating Effect on the Characteristics of Liposomes: A Focus on Bioactive Compounds and Essential Oils: A Review', *Processes*, 9(3), p. 445. Available at: <https://doi.org/10.3390/PR9030445>.
- Shreshtha, S., Sharma, P., Kumar, P., Sharma, R. and Singh, S.P. (2018) 'Nitric oxide: It's role in immunity', *Journal of Clinical and Diagnostic Research*, 12(7), pp. BE01–BE05. Available at: <https://doi.org/10.7860/JCDR/2018/31817.11764>.
- Sogias, I.A., Khutoryanskiy, V. V. and Williams, A.C. (2010) 'Exploring the Factors Affecting the Solubility of Chitosan in Water', *Macromolecular Chemistry and Physics*, 211(4), pp. 426–433. Available at: <https://doi.org/10.1002/MACP.200900385>.
- Taciak, B., Białasek, M., Braniewska, A., Sas, Z., Sawicka, P., Kiraga, Ł., Rygiel, T. and Król, M. (2018) 'Evaluation of phenotypic and functional stability of RAW 264.7 cell line through serial passages', *PLoS ONE*, 13(6). Available at: <https://doi.org/10.1371/JOURNAL.PONE.0198943>.
- Teixeira-Costa, B.E. and Andrade, C.T. (2021) 'Chitosan as a Valuable Biomolecule from Seafood Industry Waste in the Design of Green Food Packaging', *Biomolecules 2021, Vol. 11, Page 1599*, 11(11), p. 1599. Available at: <https://doi.org/10.3390/BIOM11111599>.

- Wang, N., Chen, M. and Wang, T. (2019) 'Liposomes used as a vaccine adjuvant-delivery system: From basics to clinical immunization', *Journal of Controlled Release*, 303, p. 130. Available at: <https://doi.org/10.1016/J.JCONREL.2019.04.025>.
- Wang, N., Wu, T. and Wang, T. (2017) 'Liposomes Used as a Vaccine Adjuvant-Delivery System', *Liposomes* [Preprint]. Available at: <https://doi.org/10.5772/INTECHOPEN.68521>.
- Wen, Z.S., Xu, Y.L., Zou, X.T. and Xu, Z.R. (2011) 'Chitosan Nanoparticles Act as an Adjuvant to Promote both Th1 and Th2 Immune Responses Induced by Ovalbumin in Mice', *Marine Drugs* 2011, Vol. 9, Pages 1038-1055, 9(6), pp. 1038–1055. Available at: <https://doi.org/10.3390/MD9061038>.
- Yadav, P. and Yadav, A.B. (2021) 'Preparation and characterization of BSA as a model protein loaded chitosan nanoparticles for the development of protein-peptide-based drug delivery system', *Future Journal of Pharmaceutical Sciences*, 7(1), pp. 1–9. Available at: <https://doi.org/10.1186/s43094-021-00345-w>.
- Zhang, W., Wang, L., Liu, Y., Chen, X., Liu, Q., Jia, J., Yang, T., Qiu, S. and Ma, G. (2014) 'Immune responses to vaccines involving a combined antigen-nanoparticle mixture and nanoparticle-encapsulated antigen formulation', *Biomaterials*, 35(23), pp. 6086–6097. Available at: <https://doi.org/10.1016/j.biomaterials.2014.04.022>.
- Zou, P., Stern, S.T. and Sun, D. (2014) 'PLGA/liposome hybrid nanoparticles for short-chain ceramide delivery', *Pharmaceutical research*, 31(3), p. 684. Available at: <https://doi.org/10.1007/S11095-013-1190-5>.