

DAFTAR PUSTAKA

1. Zulfa F, Windarti I, Carolia N. Profil Kanker Kulit Melanoma dan Non-Melanoma berdasarkan Hasil Histopatologi Profile of Melanoma and Non-Melanoma Skin Cancer based on Histopathology Results. *Medula*. 2024;14(9):49–55.
2. Fitzsimmons REB, Mazurek MS, Soos A, Simmons CA. Mesenchymal stromal/stem cells in regenerative medicine and tissue engineering. *Stem Cells Int*. 2018;1–16.
3. Bobis S, Jarocha D, Majka M. Mesenchymal stem cells: Characteristics and clinical applications. *World J Stem Cells*. 2010;2(4):67–80.
4. Puspita RE. Formulasi Emulsi Ganda Mengandung Sekretom Sel Punca Mesenkimial Sebagai Tabir Surya. Universitas Andalas; 2024.
5. Gozali C, Tjampakasari CR. Pembentukan Biofilm Bakteri *Pseudomonas Aeruginosa* Dan Sifat Resistensinya Terhadap Antibiotik Beta-Laktam. *Damianus J Med*. 2023;22(2):62–72.
6. uhbacher A, Burger-Kentischer A, Rupp S. Interaction of candida species with the skin. *Microorganisms*. 2017;5(32):1–12.
7. Assyifa D. Uji Aktivitas Antibakteri Sekretome *Mesenchymal Stem Cell* (MSC) terhadap Bakteri *Pseudomonas aeruginosa* yang Diisolasi dari Pasien Ulkus Diabetikum. Universitas Andalas; 2023.
8. Maguire G. The safe and efficacious use of secretome from fibroblasts and adiposederived (but not Bone Marrowderived) mesenchymal stem cells for skin therapeutics. *J Clin Aesthet Dermatol*. 2019;12(8):57–69.
9. Arini IZ. Uji Aktivitas Antioksidan Sediaan Tabir Surya yang Mengandung Sekretom *Mesenchymal Stem Cell* (MSC). Universitas Andalas; 2021.
10. Pratama WA, Zulkarnain AK. Uji SPF In Vitro Dan Sifat Fisik Beberapa Produk Tabir Surya Yang Beredar Di Pasaran. *Maj Farm*. 2015;11(1):75–83.
11. Rachmawati P, Sagala RJ, Kambira PF. Tinjauan Pustaka Bentuk Sediaan Tabir Surya Bahan Alam, Keamanan dan Efektivitas Tabir Surya. *J Farm Indones*. 2021;13(1):25–39.
12. Susanti E, Lestari S. Uji Aktivitas Tabir Surya Ekstrak Etanol Tumbuhan Sembung Rambat (*Mikania micrantha Kunth*) Secara In Vitro. *J Penelit Farm Indones*. 2019;7(2):39–42.
13. Ani Haerani, Anis Yohana Cherunisa, Anas Subarnas. Artikel Tinjauan Antioksidan untuk Kulit. *Farmaka*. 2018;16(02):35–51.
14. Duarte I, Silveira JEPS, Hafner M de FS, Toyota R, Pedroso DMM. Sensitive skin: Review of an ascending concept. *An Bras Dermatol*. 2017;92(4):21–5.
15. Jurusan Kebidanan Politeknik Kesehatan Kemenkes Palangkaraya. Anatomi Fisiologi. Politeknik Kesehatan Kemenkes Palangkaraya. 2019.
16. Farhan MR, Widodo AW, Rahman MA. Ekstraksi Ciri Pada Klasifikasi Tipe Kulit Wajah Menggunakan Metode Haar Wavelet. *J Pengemb Teknol Inf dan Ilmu Komput*. 2019;3(3):3–9.
17. Del Rosso JQ, Levin J. The clinical relevance of maintaining the functional integrity of the stratum corneum in both healthy and disease-affected skin. *J Clin Aesthet Dermatol*. 2011;4(9):22–42.

18. Riska Nafiah S, Fitraneti E, Rizal Y, Primawati I, Hamama DA. Pengaruh Paparan Sinar Ultraviolet terhadap Kesehatan Kulit dan Upaya Pencegahannya. *Sci J*. 2024;3(3):88–92.
19. Bowers JM, Hamilton JG, Lobel M, Kanetsky PA, Hay JL. Sun Exposure, Tanning Behaviors, and Sunburn: Examining Activities Associated With Harmful Ultraviolet Radiation Exposures in College Students. *J Prim Prev*. 2021;42(5):25–40.
20. Minerva P, Mauliddina Putri K. Hubungan Penggunaan Tabir Surya Dengan Kejadian Melasma Pada Wanita Di Kota Muara Basung. *J Kesehat Med Saintika*. 2022;13(2):76–82.
21. Jian Low Q, Zhau Teo K, Huei Lim T, Wee Cheo S, Yee Evelyn Yap W. Knowledge, Attitude, Practice and Perception on Sunscreen and Skin Cancer Among Doctors and Pharmacists. *Med J Malaysia*. 2021;76(2):12–7.
22. Hartono B. Sel Punca : Karakteristik, Potensi dan Aplikasinya. *J Kedokt Meditek*. 2016;22(60):2–15.
23. Rantam FA, Ferdiansyah, Purwati. *STEM CELL : Mesenchymal, Hematopoetik, dan Model Aplikasi*. Airlangga University Press. 2014.
24. Djuwantono T, Wirakusumah FF, Septiani L, Kristina I, Natalia D, Halim D, et al. Uji Fungsional dan Karakteristik Sel Punca Hematopoetik Hasil Isolasi dari Darah Tali Pusat Manusia Menggunakan Metode Modifikasi. *Maj Kedokt Bandung*. 2011;43(4):1–17.
25. Shah S, Ghosh D, Otsuka T, Laurencin CT. Classes of Stem Cells: From Biology to Engineering. *Regen Eng Transl Med*. 2024;10(3):09–22.
26. Sandra F, Murti H, Aini N, Sardjono C, Setiawan B, Kedokteran F, et al. Potensi Terapi Sel Punca dalam Dunia Kedokteran dan Permasalahannya. *Jkm*. 2008;8(1):94–101.
27. Ren G, Chen X, Dong F, Li W, Ren X, Zhang Y, et al. Concise Review: Mesenchymal Stem Cells and Translational Medicine: Emerging Issues. *Stem Cells Transl Med*. 2012;1(1):1–8.
28. Rawat S, Gupta S, Mohanty S. Mesenchymal Stem Cells Modulate the Immune System in Developing Therapeutic Interventions. *Immune Response Act Immunomodulation*. 2019;1–24.
29. Damayanti RH, Rusdiana T, Wathoni N. Mesenchymal stem cell secretome for dermatology application: A review. *Clin Cosmet Investig Dermatol*. 2021;14:01–12.
30. Nurudhin A, Werdiningsih Y, Prabowo NA, Sunarso I. Potensi Terapeutik Sekretome Sel Punca Mesenkimal pada Osteoarthritis Lutut. 1st ed. Media T, editor. Jawa Tengah: Tahta Media Group; 2024.
31. Lee SC, Jeong HJ, Lee SK, Kim SJ. Lipopolysaccharide preconditioning of adipose-derived stem cells improves liver-regenerating activity of the secretome. *Stem Cell Res Ther*. 2015;6(75):1–11.
32. Pinho AG, Cibrão JR, Silva NA, Monteiro S, Salgado AJ. Cell secretome: Basic insights and therapeutic opportunities for CNS disorders. *Pharmaceuticals*. 2020;13(31):1–18.
33. Paquet J, Deschepper M, Moya A, Avramoglou DL, Vidal CB, Petite H. Oxygen Tension Regulates Human Mesenchymal Stem Cell Paracrine Functions. *Stem Cells Transl Med*. 2015;4:9–21.

34. Gao M, Gao W, Papadimitriou JM, Zhang C, Gao J, Zheng M. Exosomes the enigmatic regulators of bone homeostasis. *Bone Res.* 2018;6(36):1–13.
35. Eleuteri S, Fierabracci A. Insights into the secretome of mesenchymal stem cells and its potential applications. *Int J Mol Sci.* 2019;20:1–20.
36. Idelchika M del PS, Begleya U, Begleya TJ, Melendeza JA. Mitochondrial ROS Control of Cancer María. *Semin Cancer Biol.* 2017;47:57–66.
37. Xu G, Zhang Y, Zhang L, Ren G, Shi Y. The role of IL-6 in inhibition of lymphocyte apoptosis by mesenchymal stem cells. *Biochem Biophys Res Commun.* 2007;361(3):45–59.
38. Diggle SP, Whiteley M. Microbe profile: *Pseudomonas aeruginosa*: Opportunistic pathogen and lab rat. *Microbiol (United Kingdom).* 2020;166:3–30.
39. Sulastri E, Mappiratu M, Sari AK. Uji Aktivitas Antibakteri Krim Asam Laurat Terhadap *Staphylococcus aureus* ATCC 25923 dan *Pseudomonas aeruginosa* ATCC 27853. *J Farm Galen (Galenika J Pharmacy).* 2016;2(2):59–67.
40. Ozer EA, Allen JP, Hauser AR. Characterization of the core and accessory genomes of *Pseudomonas aeruginosa* using bioinformatic tools Spine and AGEnt. *BMC Genomics.* 2014;15:1–17.
41. Freschi L, Vincent AT, Jeukens J, Emond-Rheault JG, Kukavica-Ibrulj I, Dupont MJ, et al. The *Pseudomonas aeruginosa* Pan-Genome Provides New Insights on Its Population Structure, Horizontal Gene Transfer, and Pathogenicity. *Genome Biol Evol.* 2018;11(1):09–20.
42. Stover CK, Pham XQ, Erwin AL, Mizoguchi SD, Warren P, Hickey MJ, et al. Complete genome sequence of *Pseudomonas aeruginosa* PAO1, an opportunistic pathogen. *Nature.* 2000;406:59–74.
43. Liao C, Huang X, Wang Q, Yao D, Lu W. Virulence Factors of *Pseudomonas Aeruginosa* and Antivirulence Strategies to Combat Its Drug Resistance. *Front Cell Infect Microbiol.* 2022;12:1–17.
44. Daddaoua A, Molina-Santiago C, La Torre J De, Krell T, Ramos JL. GtrS and GltR form a two-component system: The central role of 2-ketogluconate in the expression of exotoxin A and glucose catabolic enzymes in *Pseudomonas aeruginosa*. *Nucleic Acids Res.* 2014;42(12):54–65.
45. Szabłowska-gadomska I, Humi M, Płaczkowska J. Microbiological Aspects of Pharmaceutical Manufacturing of. *Cells.* 2023;12:1–16.
46. O'callaghan R, Caballero A, Tang A, Bierdeman M. *Pseudomonas aeruginosa* keratitis: Protease iv and pasp as corneal virulence mediators. *Microorganisms.* 2019;7(281):1–17.
47. Sari NN. Identifikasi *Candida albicans* Dari Air Bak Pada Toilet Sd. Negeri Di Kecilir timur 1 Kota Palembang Dan Sumbangsihnya Pada Mata Pelajaran Biologi SMA. Universitas Islam Negeri Raden Fatah; 2018.
48. Mutiawati VK. Pemeriksaan Mikrobiologi pada *Candida albicans*. *J Kedokt Syiah Kuala.* 2016;16(1):53–63.
49. P. R. Murray, E. J. Baron, J. H. Jorgenson, M. A. Pfaller and RHY. Manual of clinical microbiology 8th edition. *Diagn Microbiol Infect Dis.* 2003;47:7–25.
50. Putri SK, Wahyuni S, Fajarna F. Penggunaan ubi kayu putih sebagai media alternatif kultur *Candida albicans*. *J SAGO Gizi dan Kesehat.* 2022;4(1):44–52.

51. Estyani ED. Uji Efektivitas Antimikroba Ekstrak daun Babadotan (*Ageratum conyzoides* L.) Terhadap Bakteri *Staphylococcus aureus* Secara In Vitro. Sekolah Tinggi Ilmu Kesehatan Insan Cendekia Medika. 2016.
52. Moser CL, Meyer BK. Comparison of compendial antimicrobial effectiveness tests: A review. *AAPS PharmSciTech*. 2011;12(1):22–6.
53. Kementerian Kesehatan Republik Indonesia. Farmakope Indonesia. VI. Jakarta; 2020.
54. Hartanto ES, Ariningsih S. Pembuatan Media Uji Mikrobiologi Siap Pakai dari Bahan Baku Lokal Indonesia untuk Pengujian Parameter Angka Lempeng Total. *War Ind Has Pertan*. 2018;35(2):68–73.
55. Badan Pengawas Obat dan Makanan Republik Indonesia. Peraturan Kepala BPOM RI No. HK.03.1.23.08.11.07331 Tentang Metode Analisa Kosmetika. In: Badan Pengawas Obat dan Makanan Republik Indonesia. 2011.
56. Putri SK, Sudarma N, Widyayanti OA, Muslim A, Habibah N, Rasyid SA, et al. Toksikologi. 1st ed. Nengcy S, editor. Hei Publishing. Padang: Hei Publishing Indonesia; 2024.
57. Muawanah, Askur, Putri NLNDD, Sholikhati A, Rasyid NQ, Susanti AD. Toksikologi Klinik. 1st ed. Widyayanti OA, editor. Tangerang: Minhaj Pustaka; 2024.
58. Irianti T, Mada UG, Nuranto S, Mada UG, Ugm S, Mada UG. Toksikologi Lingkungan. Yogyakarta: Universitas Gadjah Mada; 2017.
59. Efrini E. Uji Toksisitas Partisi Buah Pinang Merah (*Cyrtostachys renda* Blume.) dengan Metode Brine Shrimp Lethality Test (BSLT). Universitas Jambi. Universitas jambi; 2022.
60. Meyer BN, Ferrigni NR, Putnam JE, Jacobsen LB, Nichols DE, McLaughlin JL. Brine shrimp: A convenient general bioassay for active plant constituents. *J Med*. 1982;45:4–31.
61. Frizqia JS, Widi SG, Ferdinand M, Zuhrotun A, Megantara S, Raya Bandung-Sumedang JK. Uji Toksisitas Infusa *Acalypha siamensis* dengan Metode Brine Shrimp Lethality Test (BSLT). 2020;18(1):14–22.
62. Ramadani R, Puji R. Pengujian Toksisitas Lethal Concentration 50 (LC50) Terhadap Udang Windu (*Penaeus monodon*) Menggunakan Larutan Acuan Toksikan Kalium Klorida (KCl) Toxicity Testing of Lethal Concentration 50 (LC50) Towards Tiger Prawns (*Penaeus monodon*) Using Re. *Ecolab*. 2023;17(2):85–93.
63. Sumihe G, Runtuwene MRJ, Rorong JA. Analisis Fitokimia Dan Penentuan Nilai Lc50 Ekstrak Metanol Daun Liwas. *J Ilm Sains*. 2014;14(4):8–25.
64. Meizahrah H. Uji Toksisitas Ekstrak Daun Mangga bacang (*Mangifera foetida* L.) dengan Metode Brine Shrimp Lethality Test (BSLT). Universitas Andalas. Universitas Andalas; 2020.
65. Dumitrascu M. *Artemia salina*. *Balneo Res J*. 2011;2(4):9–22.
66. Patrick S (State U of G, Persoone G, O R, E, Jaspers (Universa Press, Wetter B. The use o f the brine shrimp *Artemia* in aquaculture. *Ecol Cult*. 1977;3:25–46.
67. Wijianto W, Linayati L, Mardiana TY, Madusari BD. Pengaruh Salinitas Berbeda Terhadap Daya Tetes Kista *Artemia* sp. *J Perikan*. 2023;13(4):25–40.
68. Carballo JL, Hernández-Inda ZL, Pérez P, García-Grávalos MD. A comparison

- between two brine shrimp assays to detect in vitro cytotoxicity in marine natural products. BMC Biotechnol. 2002;2(17):1–15.
69. Nisa YS, Taryono T, Indarti S, Sayekti RS, Wulandari S. Sterilisasi Peralatan dan Media Kultur Jaringan. Agrotechnology Innov. 2021;4(2):6–19.
 70. Naning Widiastutik dan Nur Hidayatul Alami. Isolasi dan Identifikasi Yeast dari Rhizosfer *Rhizophora mucronata* Wonorejo. J Sains Dan Seni Pomits. 2014;3(1):11–6.
 71. Azzahra F, Hayati M, Kes M, Periodonsia B, Baiturrahmah FKGU, Raya J, et al. Uji Aktivitas Ekstrak Daun Pegagan (*Centella asiatica* (L). Urb) Terhadap Pertumbuhan *Streptococcus mutans*. J B-Dent. 2018;5(1):9–19.
 72. Shafira LM, Ethica NS, Ernanto RA. Deteksi *Pseudomonas aeruginosa* Isolat Pus Luka Berbasis Polymerase Chain Reaction Menggunakan Gen *algD*. Pros Semin Nas UNIMUS. 2022;5:795–806.
 73. Sulviana et al, Nony Puspawati, Rizal Maarif Rukmana. Identifikasi *Pseudomonas aeruginosa* dan Uji Sensitivitas terhadap Antibiotik dari Sampel Pus Infeksi Luka Operasi di RSUD Dr. Moewardi. Biomedika. 2017;10(02):18–24.
 74. M.Baird R, A.Hodges N, P.Denyer S. Handbook of Microbiological Quality Control : Pharmaceuticals and Medical Devices. 1st ed. london: Taylor & Francis; 2000.
 75. Sharopov FS, Wink M, Setzer WN. Radical scavenging and antioxidant activities of essential oil components An experimental and computational investigation. Nat Prod Commun. 2015;10(1):3–26.
 76. Lynch JM, Barbano DM. Kjeldahl nitrogen analysis as a reference method for protein determination in dairy products. J AOAC Int. 1999;82(6):89–97.
 77. S. M. WJ, Leliqia NPE, C.I.S. A. Optimasi Komposisi Span ® 60 dan Tween ® 80 sebagai Emulgator terhadap Stabilitas Fisik dalam Formulasi *Cold Cream* Ekstrak Kulit Buah Manggis (*Garcinia mangostana* L.). J Farm Udayana. 2013;2(1):1–15.
 78. Tungadi R. Teknologi Nano Sediaan Liquida dan Semisolid. Sagung Seto. Jakarta: Sagung Seto; 2020.
 79. Suciati T, Dwiani RRS, Sudiati T. Peningkatan Penetrasi Senyawa Hidrofilik Melalui Formulasi Emulsi Ganda A1/M/A2 dengan Mikroemulsi A1/M sebagai Fasa Dalam. Acta Pharm Indones. 2011;36(1 & 2):1–5.
 80. Saputra SA, Lailiyah M, Erivina A. Formulasi Dan Uji Aktivitas Anti Bakteri Masker Gel Peel-Off Ekstrak Daun Pacar Air (*Impatiens balsamina* linn.) Dengan Kombinasi Basis PVA dan HPMC. J Ris Kefarmasian Indones. 2019;1(2):14–22.
 81. Kale SN, Deore SL. Solubility enhancement of Nebivolol by micro emulsion technique. J Young Pharm. 2016;8(4):56–67.
 82. Tania D, Marchaban, Kuswahyuning R. Water-in-Oil-in Water (W/O/W) Double Emulsion Formulations using Variation Concentration of Carboxymethyl Cellulose Sodium. J Food Pharm Sci. 2020;8(2):84–93.
 83. Fatimah R, Santoso BSA. Toksisitas Akut Dekok Daun Kersen (*Muntingia calabura*) Menggunakan Metode BSLT (Brine Shrimp Lethality Test). Pharm Med J. 2020;03(02):60–74.
 84. Geis PA. Cosmetic Microbiology A Practical Approach. 3rd ed. CRC Press;

- 2020.
85. da Silva JD, Silva FAM, Rodrigues CF. Microbial Contamination in Cosmetic Products. *Cosmetics*. 2025;12(198):1–19.
 86. Melia Sari, Leny, Ahmad Faisal Nasution, Ema Erliza. Identifikasi Cemaran Mikroba pada Kosmetik Sediaan Lip Tint dan Lip Cream dengan Metode Angka Lempeng Total (ALT). *J Indah Sains dan Klin*. 2025;6(1):16–25.
 87. Tsui C, Kong EF, Jabra-Rizk MA. Pathogenesis of *Candida albicans* biofilm. *Journals Invest Sci*. 2016;74:1–13.
 88. Bayati S Al, Ahmer SD Al, Muhsin A, Shami M. Isolation and identification of *P. aeruginosa* from clinical samples of dogs. *Biochem Cell J*. 2021;21(2):31–55.
 89. Purwaningsih D, Wulandari D. Uji Aktivitas Antibakteri Hasil Fermentasi Bakteri Endofit Umbi Talas (*Colocasia esculenta* L) terhadap Bakteri *Pseudomonas aeruginosa*. *Sains dan Kesehat*. 2021;3(5):50–79.
 90. Bharathi R. Comparison of chromogenic media with the corn meal agar for speciation of candida. *J Pure Appl Microbiol*. 2018;12(3):17–22.
 91. Noviantari A, Febrianti T. Kajian: Alternatif Pengganti Trypsin pada Kultur Sel Punca Mesenkim. Jakarta: Puslitbang Biomedis dan Teknologi Dasar Kesehatan; 2021.
 92. Phelps J, Sanati-Nezhad A, Ungrin M, Duncan NA, Sen A. Bioprocessing of mesenchymal stem cells and their derivatives: Toward cell-free therapeutics. *Stem Cells Int*. 2018;1(1):1–23.
 93. Pilgrim CR, McCahill KA, Rops JG, Dufour JM, Russell KA, Koch TG. A Review of Fetal Bovine Serum in the Culture of Mesenchymal Stromal Cells and Potential Alternatives for Veterinary Medicine. *Front Vet Sci*. 2022;9(1):1–11.
 94. Motyan J, Toth F, Tozser J. Research Applications of Proteolytic Enzymes in Molecular Biology. *Biomolecules*. 2013;3(4):23–42.
 95. Pawitan JA. Prospect of stem cell conditioned medium in regenerative medicine. *Biomed Res Int*. 2014;1–14.
 96. Lumantow VS, Jaya Edy H, Siampa P. Formulation and Determination of Sun Protection Factor (SPF) Value of Sunscreen Cream with Suanggi Lemon Peel Extract (*Citrus limon* (L.) Burm. f.) In Vitro. *Pharmacon*. 2023;12(3):38–48.
 97. Asrina R. Buku Ajar Teknologi Liquid dan Semi Solid. 1st ed. Makassar: PT Edukasi Ilmiah Indonesia; 2025.