

## DAFTAR PUSTAKA

1. Badan Penelitian dan Pengembangan Kementerian Kesehatan RI. Riset kesehatan dasar [Internet]. Jakarta; 2018. Available from: [http://www.depkes.go.id/resources/download/info-terkini/materi\\_rakorpop\\_2018/HasilRiskses-das 2018.pdf](http://www.depkes.go.id/resources/download/info-terkini/materi_rakorpop_2018/HasilRiskses-das 2018.pdf)
2. Marx RE. Platelet-rich plasma: evidence to support its use. *Journal of Maxillofacial surgery*. 2004; 62: 489-96.
3. Maitham. The effect of the concentration and the activation of platelet-rich plasma (PRP) or the proliferation and the differentiation of primary human alveolar bone osteoblasts culture. Proquest Information and Learning Co. 2006:9.
4. Suthar, MSG, Bukhari V. Ponemone. treatment of chronic non-healing ulcers using autologous platelet rich plasma: a case series. *J Biomed Sci*. 2017; 24 (16): 1–10.
5. Restu SH, Indra K, Yurika S. the effect of platele-rich plasma prp on proliteration viability of human dermal fibroblast (hdf) at high glucose concentration). *Jurnal Biologi Indonesia*. 2019; 15(2): 213-217.
6. Georgakopoulos I, Tsantis S, Korfiatis P, Fanti E, Martelli M, Costaridou L, Petsas T, Panayiotakis G, Martelli SV. The impact of platelet rich plasma (PRP) in osseointegration of oral implants in dental panoramic radiography: texture-based evaluation. *Clin Cases Mineral Bone Metab*. 2014; 11(1): 59-66.
7. Machmud E. Chlorella Vulgaris. 1st ed. Makassar: Masagena Press; 2019.
8. Steenblock. Chlorella Makanan Sehat Dan Alami. Jakarta: Gramedia; 2000.
9. Ferdi. Persembuhan Luka yang Ditetesi Ekstrak Chlorella (Chlorella vulgaris) pada Mencit. Institut Pertanian Bogor; 2006; p.1–48.
10. Indrianti MD, Tana S, Mardiaty SM. Hematolofi kelinci (lepus sp.) setelah perlakuan implantasi material stainless stell aisi 316l selama 2,5 bulan. *Buletin Anatomi dan Fisiologi*. 2015; vol. 23 (2): 80-81.
11. Warreth A, Najia I, O'Leary RB, Cremonese M, Abdulrahim M. Dental implants: an overview. *Dent Update*. 2017; 44: 596-620.
12. Zupnik J, Kim S-W, Ravens D, Karimbux N, Guze K. Factors associated with dental implant survival: a 4-year retrospective analysis. *J Periodontol*. 2011; 82: 1390–1395.
13. Babbush CA. *Dental implant principle and practice*; 1<sup>st</sup> ed. WB Saunders Company. United States of America; 1991.
14. E Misch. *Dental implant prosthetics*. 2<sup>nd</sup> ed. Missori: Elsevier, Mosby; 2015.
15. Albrektsson T., Johansson C. Osteoinduction, osteoconduction and osseointegration. *Eur Spine J*.2001; 10 : 96–101.
16. Daliry S, Hallajisani A, Roshand JM, Nouri H, Golzary A. Investigation of Optimal Condition for Chlorella vulgaris Microalgae Growth. *Review paper GJESM*. 2017;218.
17. Renvert S, Giovannoli JL. *Peri-implantitis*. Paris, France: Quintessence International; 2012.
18. Sykaras N, Iacopino AM, Marker VA, Triplett RG, Woody RD. Implant materials, designs, and surface topographies: their effect on osseointegration. A literature review. *Int J Oral Maxillofac Implants* 2000; 15: 675–690.
19. Sela J, Gross UM, Kohavi D, Shani J, Dean DD, Boyan BD, Schwartz Z. Primary mineralization at the surfaces of implants. *Crit Rev Oral Biol Med* 2000; 1(4): 423- 436.
20. Kresnoadi U. *Rekayasa Jaringan dibidang prosthetic dentistry*. Airlangga University Press; 2016.
21. Bernhardt R, Kuhlisch E, Schulz Mc, Eckelt U, Stadlinger B. Comparison Of Bone1Implant Contact And Bone-Implant Volume Between 2d-Histological Sections

- And 3D-Sr M Ct Slices. 2012;237–48.
22. Karasutisna T. Implan gigi untuk dokter gigi umum (diagnosis dan implantasi). Makalah Universitas Padjadjaran Fakultas Kedokteran Gigi. Bandung. 2004: 3-7.
  23. Raghavendra SVD . Osseointegration. J Pharm Bioallied Sci. 2015; 7(1): 226–229.
  - 37.Branemark PI. The Osseointegration Book – From Calvarium to Calcaneus. Quintessence Books; 2005.
  24. Vaidya P, Mahale S, Kale S, Patil A. Osseointegration– a review. IOSR-JDMS. 2017;16 (1):45-8.
  25. Daliry S, Hallajisani A, Roshandeh JM, Nouri H, Golzary A. Investigation of optimal Condition for Chlorella Vulgaris Microalgae Growth Review paper GJESM. 2017; 218.
  26. Javed F, Ahmed HB, Crespi R, Romanos GE. Role of primary stability for successful osseointegration of dental implants: Factors of influence and evaluation. Interv Med Appl Sci. 2013; 5(4): 162–7.
  27. Ramazanoglu M, Oshida Y. Osseointegration and bioscience of implant surface- current concepts at bone-implant interface. Implant Dentistry - A Rapidly Evolving Practice. 2011.
  28. F. Ganong, Fisiologi Kedokteran, Jakarta: Buku Kedokteran EGC, 1990: hal. 456.
  29. Crane D, Evert PAM. platelet rich plasma (PRP) matrix graft. Practical Pain Management. 2008
  30. Kathleen M, Alan D. Platelet-Rich Plasma: Support for its use in wound healing. Yale J Biology and Medicine 2010; 83: 1-9
  31. Malik S, Sood M, Bindal D Platelet- Rich Plasma: a recent innovation in dentistry. J Innovation Dent 2011. 1(3).
  32. Mappangara S, Burhanuddin DP, Djais AI. Hubungan kualitas darah dengan konsentrasi TGF-  $\beta$ 1 pada PRP : Dentofasial. 2014 juni 13(2) : 80-5
  33. Moshiri A, Oryan A. Role of platelet rich plasma in soft and hard connective tissue healing: an evidence based review from basic to clinical application. Hard Tissue 2013; 2(1): 6.
  34. Rodella L F, Bonazza V. Platelet preparation in dentistry: How? Why? When?Where?. World J Stomatol 2015; 4(2): 39-55
  35. Kaur P, Puneet DV.Platelet rich plasma: A Novel Bioengineering Concept: Trends Biomater. Artif. Organs. 2011;25(2): 86-90
  36. Greene, RM, Johnson B, O'Grady K, Toriumi DM. Blood Products in wound healing. in: Friedman CD, Gosain AK, Hom DB, Hebda PA. (editors). Essential tissue healing of the face and neck. Shelton, Connecticut: BC Decker Inc. 2009: 379-87
  37. Machmud E, Thalib B, Dharmautama M, Mude AH, Dammar I, Ikbal M. Platelet-rich plasma improves initial bone remodeling. Journal of Dentomaxillofacial Science. 2020 Dec 1;5(3):158-61.
  38. Rosahdi TD, Susanti Y, Suhendar D. Uji Aktivitas Daya Antioksidan Biopigmen Pada Fraksi Aseton Dari Mikroalga Chlorella vulgaris. 2015;IX(1):1-16.
  39. Zebib B, Merah O. Morphology, composition, production, processing and applications of Chlorella vulgaris: A review. Elsevier. 2014;35:265-78. <http://dx.doi.org/10.1016/j.rser.2014.04.007>
  40. Purnama H, Sriwidodo SR. Review sistematik: Proses Penyembuhan Dan Perawatan Luka. Farmaka. 2017;15(2):251–8. <https://doi.org/10.24198/jf.v15i2.13366.g6184>
  41. Guiy M. Chlorella vulgaris In Algae Base. World-wide Electron Publ Natl Univ Ireland, Galway; 2016.
  42. Blinova L, Bartosova A, Gerulova K. Cultivation Of Microalgae (Chlorella Vulgaris) For Biodiesel Production. Fac Mater Sci Technol TRNAVA. 2015;23(36):87-95. <http://10.1515/rput-2015-0010>

43. Helly DF, Limantara BP. Karotenoid dari makroalga dan mikroalga: potensi kesehatan aplikasi dan bioteknologi. *J Teknol dan Industri Pangan*. 2012;XXIII(2):221-8. <http://10.6066/jtip.2012.23.2.221>
44. Nur'aenah N, Setyaningsih ID, Desniar. Pengaruh metode ekstraksi senyawa bioaktif intraseluler Chlorella sp terhadap pertumbuhan Lactobacillus bulgaricus. Prosiding Pertemuan Ilmiah dan Seminar Nasional MPHPI. Pros Pertem Ilm dan Semin Nas MPHPI Politek Negeri Pontianak – IPB; 2011.
45. Machmud E, Ikbal M, Dammar I. The Use of Marine Biota in Bone Tissue Regeneration: A Systematic Review. *Systematic Reviews in Pharmacy*. 2020 Dec 1;11(12).
46. Harawati A, Famir Y, Aztriana, Mursyid AM. Formulasi dan evaluasi salep ekstrak daun gulma siam dengan variasi basis salep. *Jurnal Farmasi*. 2019; 11(10) : 55-56.
47. Yanhendri, Yenny, Satya Widya. Berbagai bentuk sediaan topical dalam dermatologi. 2012; 39 (6).
48. Kurniati N, Firman RN. CBCT sebagai penunjang diagnosis kista dentigerous gigi supernumerary anterior rahang atas CBCT as a supporting tool for diagnosis determination of maxillary anterior supernumerary dentigerous cysts. *Jurnal Kedokteran Gigi Universitas Padjadjaran*. 2018 Aug 31;30(2):120-4
49. Riza DM, Ayu Mahanani M, Wati R, Rad ST. Peranan Cone Beam Computed Tomography (Cbct) Dalam Menegakkan Diagnosis Pada Kasus Rinosinusitis Literatur Review (Doctoral dissertation, Universitas ‘Aisyiyah Yogyakarta).
50. Sanchez F. Morphology Of The Dental Arcade In Adult Pigs ( *Sus scrofa domesticus*). *Clinical Veterineria Rio Duero*; 2018.
51. Ansell DM, Holden KA, Hardman MJ. Animal models of wound repair: Are they cutting it?. *Exp Dermatol*. 2012;21(8):581–5. <http://10.1111/j.1600-0625.2012.01540.x>
52. Zuo Y, Yu X, Lu S. Dermal Fibroblasts from Different Layers of Pig Skin Exhibit Different Profibrotic and Morphological Characteristics. *Anat Rec (Hoboken)*. 2016;6(59):1-7. <https://doi.org/10.1002/ar.23458>
53. Sánchez F, Velasco C. Morphology Of The Dental Arcade In Adult Pigs ( *Sus scrofa domesticus*). *Clinical Veterineria Rio Duero*.
54. Eberhardt C, Habermann B, Tiemann S, Bauss F, Kurth AA. Improvement of osseointegration of cementless metal implant under ibandronate is dosedependent. *Bone*. 2006; 38: p. 42-64.
55. Gabet Y, Muller R, Levy J, Dimarchi R, Chorev M, Bab I, Kohavi D. Parathyroid hormone 1-34 enhances titanium implant anchorage in low- density trabecular bone: a correlative micro-computed tomographic and biomechanical analysis. *Bone*. 2006; 39:276-82.
56. Pietrzak WS, Eppley BL .Platelet rich plasma: biology and new technology. *Journal of Craniofacial Surgery*. 2005;16(6):1043–54.
57. Kanthan S.R., G.Kavitha,S. et al. Platelet-rich plasma (PRP) enhances bone healing in non-united critical-sized defects: A preliminary study involving rabbit models. *Elsevier Injury, Int. J.* 2011; 1 ; 8-1
58. Garg A. The use of platelet rich plasma to enhance the success of bone grafts around dental implants, dental implantology. 2000; 11(3); 9-1
59. Hafizsha NL, Gunanti G, Noviana D, Widhyari SD. Konsentrasi IL-6 Serum terhadap Penyembuhan Luka Pasca Pemasangan Implan Paduan Logam pada Babi (*Sus scrofa*). *Acta VETERINARIA Indonesiana*. 2021 Mar 29;9(1):21-9.
60. Han JM, Hong G, Lin H, Shimizu Y, Wu Y, Zheng G, Zhang H, Sasaki K. Biomechanical and histological evaluation of the osseointegration capacity of two types of zirconia implant. *International journal of nanomedicine*. 2016 Dec 7:6507-16.

61. Machmud E, Habar ID, Utama MD, Thalib B, Kristanti CA, Susaniawaty Y, Tetelepta R, Ardiansyah M, Hasminar H, Achmad MH. Energy Dispersive Spectroscopy (EDS) Analysis of Calcium and Phosphorus Minerals Elements on Bone After Insertion Immediate Implant on Socket Filled with Extract Aloe vera. Pesquisa Brasileira em Odontopediatria e Clinica Integrada. 2018 Aug 29;18(1):4101.
62. Ballo AM, Akca EA, Ozen T, Lassila L, Vallittu PK, Narhi TO. Bone tissue responses to glass fiber-reinforced composite implants-a histomorphometric study. Clin Oral Implants Res. 2009;20:608–15. [PubMed]
63. Bernhardt R, Kuhlisch E, Schulz MC, Eckelt U, Stadlinger B. Comparison of bone-implant contact and bone-implant volume between 2D-histological sections and 3D-SR $\mu$ CT slices. European Cells and Materials. 2012;23:237-47.
64. Jubhari EH, Dammar I, Launardo V, Goan Y. Implant Coating Materials to Increase Osseointegration of Dental Implant: A Systematic Review. Systematic Reviews in Pharmacy. 2020 Dec 1;11(12).

# **LAMPIRAN**



### REKOMENDASI PERSETUJUAN ETIK

Nomor: 0112/PL.09/KEPK FKG-RSGM UNHAS/2023

Tanggal: 23 Juni 2023

Dengan ini menyatakan bahwa protokol dan dokumen yang berhubungan dengan protokol berikut ini telah mendapatkan persetujuan etik:

No. Protokol	UH 17120851	No Protokol Sponsor	
Peneliti Utama	drg. Muhammad Iswanto Sabirin	Sponsor	Pribadi
Judul Peneliti	Pengaruh Felapisan <i>Platelet Rich Plasma (PRP)</i> Dan <i>Chlorella Vulgaris</i> Salep 5% Terhadap Remodeling Tulang Pasca Pemasangan Implan Gigi		
No. Versi Protokol	1	Tanggal Versi	19 Juni 2023
No. Versi Protokol		Tanggal Versi	
Tempat Penelitian	Laboratorium Farmasetika Dan Teknologi Farmasi (Sekolah Tinggi Ilmu Farmasi Makassar), Doc Pet Clinic, Intalasi Radiologi RS Wahidin Sudirohusodo		
Dokumen Lain			
Jenis Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard	Masa Berlaku 23 Juni 2023-23 Juni 2024	Frekuensi Review Lanjutan
Ketua Komisi Etik Penelitian	Nama: Dr. drg. Marhamah, M.Kes	Tanda Tangan 	Tanggal
Sekretaris Komisi Etik Penelitian	Nama: drg. Muhammad Ikbah, Sp.Pros	Tanda Tangan 	Tanggal

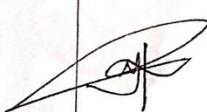
Kewajiban peneliti utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum diimplementasikan
- Menyerahkan laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan lapor SUSAR dalam 72 jam setelah peneliti utama menerima laporan.
- Menyerahkan laporan kemajuan (*progress report*) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah.
- Menyerahkan laporan akhir setelah penelitian berakhir.
- Melaporkan penyimpangan dari protokol yang disetujui (*protocol deviation/violation*)
- Mematuhi semua aturan yang berlaku.

**LEMBAR PERBAIKAN**  
**KARYA TULIS AKHIR (KTA) / TESIS**  
**PROGRAM PENDIDIKAN DOKTER GIGI SPESIALIS (PPDGS)**  
**PROSTODONSIAS**

Nama Mahasiswa : **Muhammad Iswanto Sabirin**

Stambuk : J015202006

No.	Tim Penguji	Catatan Perbaikan/ Saran	Halaman	Tanda Tangan
1.	drg. Irfan Dammar, Sp.Pros., Subsp.MFP(K)	<ul style="list-style-type: none"> <li>1. Harusnya menggunakan implant titanium yang murni tidak berlapis tanpa coating seperti IDI</li> <li>2. Perbedaan Bone Implant Contact dan Bone Implant Volume</li> <li>3. Gambar dimarker mana daerah yang dizoom</li> <li>4. Nilai BIC di tabel 5.5 dijelaskan factor yang menyebabkan mendapatkan nilai yang tidak signifikan</li> <li>5. Masukkan keterbatasan-keterbatasan yang dihadapi selama penelitian</li> </ul>		
2.	Prof. Dr. Bahruddin Thalib, drg., M.Kes., Sp.Pros., Subsp.PKIKG(K)			

3.	drg. Rifaat Nurrahma, Sp.Pros., Subsp.MFP(K)	1. Kriteria sampel berdasarkan apa 2. Pembuatan bahan penelitian dimasukkan kedalam naskah 3. Etik dilampirkan 4. Rujukan protocol penelitian secara ilmiah 5. Metode perhitungan BIC dan sampel tidak disitisasi 6. Peneliti yang harusnya membuat <i>protocol procedural</i>	42 48 59	
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Makassar, 11 November 2023

Mengetahui,

Pembimbing I

Pembimbing II

  
Prof. Dr. drg. Edy Machmud, Sp.Pros.,  
Subsp. OGST (K)

  
drg. Eri Hendra Juhari, M.Kes, Sp.Pros.,  
Subsp. PKIKG(K)