

DAFTAR PUSTAKA

- Akase, I.E., Obiako, R.O., Musa, B.O.P., Opawoye, A., Akanmu, A.S. 2019. Level of interleukin 6 and 10 and their relationship to hematological changes in HIV treatment-naïve and treatment experienced patients. *SSAJM*. 6:90-5.
- Anonim. 2015. HIV in The United States: At A Glance.
- Aska, A.I., Anazi, A.R., Subaei, S.S., Hedaithy, M.A., Barry, M.A., Somily, A.M., et al. 2011. CD4+ lymphopenia in HIV negative tuberculosis patients at King Khalid University Hospital in Riyadh, Saudi Arabia. *Eur J Med Res*. 16 : 285-288.
- Aviles, H., O' Donnell, P., Orshal, J., Fujii, H., Sun, Buxiang., Sonnenfeld, G. 2008. Active hexose correlated compound actives imune function to decreased bacterial load in a murine model of intramuscular infection. *Am J Surg*. 195: 537-545.
- Beamen, G.I. 2008. Interleukin 10 Promotor Mycobacterium tuberculosis Disease Progression in CBA/ a.Mice. *The Journal of Imunology. The American Association of Imunologikst*.
- Bekker, L.G., Wood, G. 2010. The changing natural history of Tuberkulosis and HIV coinfection in an urban area of hyperendemicity. *50 Suppl 3: S208-14*.
- Bell, L.C.K., Nousadeghi M. 2017. Pathogenesis of HIV-1 and Mycobacterium tuberculosis co-infection. *Nature*. 128: 1-11.
- Blackwell, T.S., Christman, J.W. 1997. The Role of Nuclear Factor-Kappa B in Cytokine Gene Regulation. *American Journal of Respiratory Cell and Molecular Biology*. 17:3-9.
- Borges, A.H., O' Connor, J.L., Philips, A.N., Neaton, J.D., Grund, B., Neuhaus, J., et all. 2016. Interleukin 6 is a stronger predictor of clinical events than high sensitivity C-reactive protein or D-Dimer during HIV Infection. *214:408-16*.
- British HIV Association. 2011. British HIV Association Guidelines for Treatment of TB/HIV Coinfection 2011. *HIV Medicine*. 12 (2011):517-524.

- Churchyard, G., Kim, P., Shah, S., Rustomjee R., Gandhi, N., Mathema, B., et al. 2017. What We Know About Tuberculosis Transmission: An Overview. *The Journal of Infectious Diseases*. 216: 629-35.
- Cowley, S.C., Hamilton, E., Frelinger, J.A., Su, J., Forman, J., Elkins, K.L. 2005. CD4+CD8+ T Cells Control Intracellular Bacterial Infections Both In Vitro and In Vivo. *JEM*. 202 : 309-319.
- Culbert, G.J., Crawford F.W., Murni, A., Waluyo, A., Bazazi A.R., Sahar, J., Altice, F.L. 2017. Predictors of Mortality with in Prison an After Release Among Persons Living with HIV in Indonesia. *Research and Reports in Tropical Medicine* 2017. (8): 25-35.
- Cummins, N.W., Badley, A.D. 2014. Making Sense of How HIV Kills Infected CD4+ T Cells: Implications for HIV Cure. *Molecular and Cellular Therapies*. P.2-20.
- Datta, S., Sherman, J.M., Bravard, M.A., Valencia, T., Gilman, R.H., Evans, C.A. 2015. Clinical evaluation of tuberculosis viability microscopy for assessing treatment response. *CID*.15: 1186-95.
- Departemen Kesehatan Republik Indonesia. 2007. Kebijakan Nasional Kolaborasi TB/HIV. eds 1. Jakarta. p.10-30.
- Diedrich, C.L., Flynn, J.L. 2011. HIV 1/Mycobacterium tuberculosis coinfection imunology: How does HIV 1 exacerbate Tuberculosis? *Infect. Immun*. 79 : 1407-1417.
- Dinas Kesehatan Provinsi Sulawesi-Selatan. 2020. Data Monev TB-HIV 2019.
- Diova, N., Mosam, A. 2004. Cutaneous manifestations of HIV/AIDS: part 1. *The Souththern African Journal*. 11 : 12-17.
- Feleke, B.E., Alene, G.D., Feleke, T.E., Motebaynora, Y. 2018. Clinical response of tuberculosis patients, a prospective cohort study. *Plos one J*. 13(1):e0190207.
- Fujita, M., Matsumoto, T., Hirano, R., Ishil, K., Hiromatsu, K., Uchino, J., et al. 2015. Attenuation of Pulmonary Mycobacterium Avium Disease by Active Hexose Correlated Compound (AHCC) in Mice. *J Nutr Disorders Ther*. 5:4.
- Gao, L., Zhou, F., Li, X.W., Jin, Q. 2010. HIV/TB co-infection in Mainland China: a meta-analysis. *Plos One*. 23;5(5) : 1-5.
- Gao, Y., Zhang, D., Sun, B., Fujii, H., Kosuna, K., Yin, Z. 2006. Active Hexose Correlated Compound enhances tumor surveillance through

- regulating both innate and adaptive immune responses. *Cancer Immunol Immunother.* 55: 1258-66.
- GBD. 2015. Global, Regional and National Age, Sex Specific All-Cause and Cause-Specific Mortality for 240 Causes of Death, 1990-2013: A Systematic Analysis for The Global Burden of Disease Study 2013. *The Lancet.* 385: 117-171
- Getahun, H., Gunneberg, C., Granich, R., Nunn, P. 2010. HIV infection associated Tuberculosis: the epidemiology and the response. *CID.* 50 Suppl 3:S201-7.
- Gitawati, R. 2008. Interaksi obat dan beberapa implikasinya. *Media Litbag Kesehatan.* Vol XVIII, No.4:75.
- Guermonprez, P., Valledau, J., Ztvogel, Thery, C., Amogorena, S. 2002. Antigen Presentation and T Cell Stimulation by Dendritic Cells. *Annu Rev Immunol.* 20 : 621-667.
- Guidelines for the Clinical Management of TB and HIV Co-infection in Ghana. Ghana 2007.p.1-50.
- Hangai, S., Iwase, S., Kawaguchi, T., Kogure, Y., Miyaji, T., Matsunaga, T., et al. 2013. Effect of Active Hexose Correlated Compound in Women Receiving Adjuvant Chemotherapy for Breast Cancer A Retrospective Study. *The Journal of Alternative and Complementary Medicine.*00: 1-6.
- Hanifa, Y., Fielding, K.L., Chihota, V.N., Adonis, L., Charalambous, S., Foster, N et al. 2017. A clinical scoring system to prioritise investigation for tuberculosis among adults attending HIV clinics in South Africa. *Plos One J.* 12(8): e0181519.
- Hirose, A., Sato, E., Fujii, H. 2007. The influence of active hexose correlated compound (AHCC) on cisplatin-evoked chemotherapeutic and side effects in tumor-bearing mice. *Toxicol Appl Pharmacol.* 222:152-8.
- Ho, J.L. 1996. Co infection with HIV and Mycobacterium tuberculosis: Immunologic interaction, disease progression and survival. *Mem Inst Oswaldo Cruz.* 9 : 385-387.
- Indah, M. 2018. Tuberculosis. *InfoDATIN : Pusat Data dan Informasi Kementerian Kesehatan Republik Indonesia.*

- Jeong, Y.J., Lee, K.S. 2008. Pulmonary Tuberculosis: Up to date imaging and management. *AJR*. 191 : 834-844.
- Jorstad, M.D., Dyrhol-Riise, A.M., Abmus, J., Marijani, M., Sviland, L., Mustafa, T. 2019. Evaluation of treatment response in extrapulmonary tuberculosis in a low-resource setting. *BMC Infectious disease*.19:426.
- Joshi, L., Ponnana, M., Sivangala, R., Chelluri, L.K., Nallari, P., Penmetsa, S., Valluri, V., 2015. Evaluation of TNF- α , IL-10 and IL-6 cytokine production and their correlation with genotype variants amongst tuberculosis patients and their household contacts. *Plos One J*. 10(9): 1-15.
- Kementerian Kesehatan RI. 2011. Rencana Aksi Nasional Public Private Mix Pengendalian Tuberkulosis Indonesia 2011-2014. Jakarta, Direktorat Jenderal Pengendalian Penyakit dan Penyehatan Lingkungan. Jakarta. p.1-15.
- Kelley, C.F., Kitchen, C.M., Hunt, P.W., Rodriguez, B., Hecht, F.M., Kitahata, M, et al. 2009. Incomplete peripheral CD4+ cell count restoration in HIV-infected patients receiving long term anti-retroviral treatment. *Clin Infect Dis*. 48(6):787-94.
- Kementrian Kesehatan R.I. 2011. Manajemen Pelaksanaan Kolaborasi TB-HIV di Indonesia. Direktorat Jenderal Pengendalian Penyakit dan Penyehatan Lingkungan. Jakarta
- Kementrian Kesehatan R.I. 2011. Pedoman Nasional Pelayanan Kedokteran: Tatalaksana HIV/AIDS. 1st ed. Jakarta. P.6-16
- Kementrian Kesehatan RI. 2011. Pedoman Nasional Pelayanan Kedokteran: Tatalaksana HIV/AIDS. Kementerian Kesehatan RI Konsorsium Upaya Kesehatan. 1st ed. Jakarta .p.6-16.
- Kementrian Kesehatan RI. 2014. Pedoman Nasional Pelayanan Kedokteran Tatalaksana TB. Jakarta.
- Kim, J.Y., Jeong, Y.J., Kim, K.I., Lee, I.S., Park, H.K., Kim, Y.D., et al. 2010. Miliary tuberculosis: a comparison of CT finding in HIV seropositive and HIV seronegative patients. *BJR*. 83 : 206-211.
- Kisembo, H.N., Boon, S.D., Davis, J.L., Okello, R., Worodria. W., Cattamanchi. A., et al. 2012. Chest radiographic findings of pulmonary tuberculosis in severely immunocompromised patients with the human immunodeficiency virus. *BJR*. 10 : 130-139.

- Kurashima, A., Morimoto, K., Horibe, M., Hoshino, Y., Shirashi, Y., Kudoh, S. 2013. A Method for visual scoring of pulmonary Mycobacterium avium complex disease: "NICE Scoring System". *J Mycobac Dis.*3(1):100017-1000127.
- Kurniawan, F., Djausi, S., Yuniastuti, E., Nugroho, P. 2017. Faktor predictor kegagalan virologis pada pasien HIV yang mendapat terapi ARV lini pertama dengan kepatuhan berobat baik. *JPDI.* 4(1):30-4.
- Kwan, C.K., Ernst, J.D. 2011. HIV and tuberculosis: a deadly human syndemic. *Clinical Microbiology Reviews.* 24 : 351-376.
- Lee, WW., Lee, N., Fujii, H. 2012. Active hexose correlated compound promotes T helper (Th) 17 and 1 cell responses via inducing IL-1 β production from monocytes in humans. *Cell Immunol.*275:19-23.
- Lynch, T., Pricr, A. 2007. The effect of cytochrome P450 metabolism on drug response interaction, and adverse effects. *American Family Physician.*76(3):391-6.
- Mallet, J.F., Graham, E., Ritz, B.W., Homma, K., Matar, C., 2015. Active Hexose Correlated Compound (AHCC) promotes an intestinal immune response in BALB/c mice and in primary intestinal epithelial cell culture involving toll-like receptors TLR-2 and TLR-4. *Eur J Nutr.* DOI 10.1007/s00394-015-0832-2.
- Mascaraque, C., Suarez, M.D., Zarzuelo, A., Sanchez de Medina, F., Martinez-Augustin, O. 2014. Active Hexose Correlated Compound exerts therapeutic effects in lymphocyte driven colitis. *Mol Nutr Food Res.* 58:1288-95.
- Matar, C., Graham, E. 2017. Immune Modulatory Function. *Clinician's Guide To AHCC, Evidence-Based Nutritional Immunotherapy*, Edited by Anil D.K, Philip, C and Toshinori Ito. P.54-61.
- Morey-Holton, E.R., Globus, R.K., 2002. Hindlimb unloading rodent model: technical aspects. *J of Applied Physiology.* 92: 1367-1377.
- Novak, M., Vetvicka, V., 2008. Beta-glucans, history, and the present: immunomodulatory aspects and mechanisms of action. *Journal of immunotoxicology* 5, 47-57.
- Novak, M., Vetvicka, V., 2009. Glucans as biological response modifiers. *Endocrine, metabolic & immune disorders drug targets* 9, 67-75.

- Nurjana, M.A. 2015. Faktor Risiko Terjadinya Tuberkulosis Paru Usia Produktif (15-49 Tahun) di Indonesia. *Media Penelitian dan Pengembangan Kesehatan*. 25(3): 163-170.
- Parida, D.K., Wakame, K., Nomura, T. 2011. Integrating Complimentary and Alternatif Medicine in Form of Active Hexose Correlated Compound (AHCC) in the Management of Head & Neck Cancer Patients. 2:588-592.
- Pawlowski, A., Jansson, M., Skold, M., Rottenber, M.E., Kallenius G. 2012. Tuberkulosis and HIV co-infection. *Plos Pathogens*. 8 : 1-7.
- Pefura-Yone, E.W., Balkissou, A.D., Poka-Mayap, V., Fatime-Abaicho, H.K., Enono-Edende, P.T., Kengne, A.P. 2017. development and validation of a prognostic score during tuberculosis treatment. *BMC infectious disease*. 17:251.
- Penanggulangan Tuberkulosis Terpadu. 2016. TB Indonesia. Available at:<http://www.TBindonesia.org/th-hiv/TBindonesia>. Accesed on September 4, 2019.
- Perhimpunan Dokter Paru Indonesia. Pedoman. 2011. Diagnosis dan Penatalaksanaan Tuberkulosis di Indonesia: International standar for tuberculosis care (edisi kedua). 1St ed. Jakarta. p.56-63.
- Redford, P.S., Murray, P.J., O'ga, A. 2011. The Role of IL-10 in Imune Regulationn during M. tuberkulosis Infection. *Mucosal Immunology*. Nature Publishing Group.
- Rudnicka, K., Matusiak, A., Chmiela, M. 2015. CD25 (IL-2R) expression correlates with the target cell induced cytotoxic activity and cytokine secretion in human natural killer cells. *Acta Biochim Pol*. 62:885-94.
- Schutz, C., Meintjes, G., Almajid, F., Wilkinson, R.J., Pozniak, A. 2010. Clinical management of Tuberkulosis and HIV co infection. *ERJ*. 36 : 1460-1481.
- Schorey, J.S., Lawrence, C. 2008. The Pattern Recognition receptor dectin-1: from fungi to Mycobacteria. *Curr Drug Targets*. 9(2): 123-9.
- Sharma, S.K., Mohan, A., Kahiravan, T. 2005. HIV-TB co-infection: Epidemiology, diagnosis and management. *Indian J Med Res*. 121 : 550-567.

- Shin, M.S., Park, H.J., Maeda, T., Nishioka, H., Fujii, H., Kang, I. 2019. The Effect of AHCC[®], a Standardized Extract of Cultured *Lentinula edodes* Mycelia, on Natural Killer and T Cells in Health and Disease: reviews on Human and Animal Studies. *Journal of Immunology Research*.1-7.
- Silva, R.M.D., Rosa, L.D., Lemos, R.N. 2006. Radiographic alterations in patients presenting human immunodeficiency virus/tuberculosis coinfection: correlation with CD4+ T cell counts. *J Bras Pneumol*. 32 : 228-233.
- Soedarsono. 2015. Asosiasi polimorfisme gen TLRs dengan derajat keparahan penyakit pasien TB paru MDR dan peran sekuens gen *esxA*. Disertasi tidak diterbitkan. Surabaya: Program Studi Ilmu Kedokteran Jenjang Doktor-UNAIR.
- Spierings, E.L.H., Fujii, H., Sun, B., Walshe, T. 2007. "A phase I study of the safety of the nutritional supplement, active hexose correlated compound, AHCC, in healthy volunteers." *J Nutr Sci Vitaminol*.53:536-9.
- Suknikhom, W., Lertkhachonsuk, R., Manchan, T. 2017. The Effects of active Hexose Correlated Compound (AHCC) on Levels of CD4+ and CD8+ in patients with Epithelial Ovarian Cancer or Peritoneal Cancer Receiving Platinum Based Chemotherapy. *Asian Pac J Cancer Prev*. 18(3): 633-8.
- Suknikhom, W., Lertkhachonsuk, R., Manchana, T. 2017. The Effects of Active Hexose Correlated Compound (AHCC) on Levels of CD4+ and CD8+ in Patients with Epithelial Ovarian Cancer or Peritoneal Cancer Receiving Platinum Based Chemotherapy. *Asian Pac. J. Cancer Prev*. 18 (3) : 633.
- Sun, B., Wakame, K., Sato, E., Nishioka, H., Aruoma, O.I., Fujii, H. 2009. The effect of active hexose correlated compound in modulating cytosine arabinoside-induced hair loss, and 6-mercaptopurine- and methotrexate-induced liver injury in rodents. *Cancer Epidemiol*. 33 (3-4) : 293-299.
- Swaminathan, S., Narendran, S. 2008. HIV and tuberculosis in India. *J.Biosci*. 33(4):527-37.
- Takanari, J., Sato, A., Waki, H., Miyazaki, S., Uebaba, K., Hisajima, T. 2018. Effects of AHCC on Immune and Stress Response in Healthy Individuals. *Journal of Evidence-Based Integrative medicine*. 23:1-9.


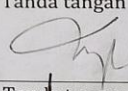
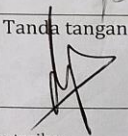
- Terakawa, N., et al. 2008. Immunological Effect of Active Hexose Correlated Compound (AHCC) in Healthy Volunteers : A Double-Blind, Placebo-Controlled Trial. *Nutr. Cancer*. 60 (5): 643-651.
- Uppal, S.S., Tewari, S.C., Verma, S., Dhot, P.S. 2004. Comparison of CD4+ and CD8+ lymphocyte counts in HIV-negative pulmonary TB patients with those in normal blood donors and the effect of antitubercular treatment: Hospital-based flow cytometric study. First published: 26 July 2004. <https://doi.org/10.1002/cyto.b.20018>.
- WHO, 2015. Accelerating Progress on HIV, Tuberculosis, Malaria, Hepatitis and Neglected Tropical Diseases: A New Agenda for 2016-2030, France.
- WHO, 2015. Global tuberculosis report; 2015. World Health Organisation, France.
- WHO, 2015. Guideline on When to Start Antiretroviral Therapy and On Pre-Exposure Prophylaxis for HIV. Switzerland.
- World Health Organization. 2011. Global tuberculosis control: The burden of disease caused by TB. World Health Organization report. Geneva. p.9-27.
- World Health Organization. 2004. TB/HIV A Clinical Manual. Geneva. p.23-59.
- World Health Organization. 2007. Management of Tuberculosis and HIV Coinfection. Clinical Protocol for the WHO European Region. Geneva. p.135-40.
- World Health Organization. 2019. Global Tuberculosis Report 2019.
- Wormser GP. 2007. AIDS and other manifestations of HIV infection. 4th ed. New York:Elsevier. p.418-31.
- Yanagimoto, H., Satoi, S., Yamamoto, T., Hirooka, S., Yamaki, S., Kotsuka, M., et al. 2016. Allevating effect of active hexose correlated compound (AHCC) on chemotherapy-related adverse events in patients with unresectable pancreatic ductal adenocarcinoma. *Nutrition And Cancer*. 0: 1-7.
- Yin, Z., Fujii, H., Walshe, T. 2010. Effects of active hexose correlated compound on frequency of CD4+ and CD8+ T cells producing

interferon-gamma and/or tumor necrosis factor-alpha in healthy adults. *Hum Immunol.* 71:1187-90.

Yoshizawa, T., Yoshizawa, A. 2016. Chronic respiratory disease, effects of alternative therapy with fungal medication at end stage of chronic respiratory disease. *Clinician's Guide to AHCC. ICNIM.* 15:277-80.

LAMPIRAN

Lampiran 1: Etik Penelitian

|  KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN KOMITE ETIK PENELITIAN KESEHATAN RSPTN UNIVERSITAS HASANUDDIN RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR Sekretariat : Lantai 2 Gedung Laboratorium Terpadu JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245. Contact Person: dr. Agussalim Bukhari..MMed,PHD, SpGK TELP. 081241850858, 0411 5780103, Fax : 0411-581431 | | | |
|---|--|--|---|
| REKOMENDASI PERSETUJUAN ETIK | | | |
| Nomor : 270/UN4.6.4.5.31/ PP36/ 2020 | | | |
| Tanggal: 13 Mei 2020 | | | |
| Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik : | | | |
| No Protokol | UH20040193 | No Sponsor Protokol | |
| Peneliti Utama | dr. Jamaluddin M, SpP | Sponsor | |
| Judul Peneliti | Efek Active Hexose Correlated Compound (AHCC) terhadap Respons Klinis dan Status Immunologi Pasien TB Paru dan TB Paru-HIV | | |
| No Versi Protokol | 1 | Tanggal Versi | 9 April 2020 |
| No Versi PSP | 1 | Tanggal Versi | 9 April 2020 |
| Tempat Penelitian | RSUD Labuang Baji Kota Makassar | | |
| Jenis Review | <input type="checkbox"/> Exempted <input type="checkbox"/> Expedited <input checked="" type="checkbox"/> Fullboard Tanggal 13 Mei 2020 | Masa Berlaku 13 Mei 2020 sampai 13 Mei 2021 | Frekuensi review lanjutan |
| Ketua Komisi Etik Penelitian Kesehatan FKUH | Nama Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K) | Tanda tangan |  |
| Sekretaris Komisi Etik Penelitian Kesehatan FKUH | Nama dr. Agussalim Bukhari, M.Med.,Ph.D.,Sp.GK (K) | Tanda tangan |  |
| Kewajiban Peneliti Utama: | | | |
| <ul style="list-style-type: none"> • Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan • Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Laporan 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 peraturan yang ditentukan | | | |

Lampiran 2: Curriculum Vitae

A. Data Pribadi

1. Nama : dr. Jamaluddin Madolangan, Sp.P(K)
2. Tempat/Tanggal Lahir : Balangloe, 16 April 1982
3. Alamat Rumah : Jl. Andi Tonro IV, A1/2 Makassar
4. Status : Menikah
 - a. Nama Istri : dr. Kresentia Anita Raniputri, SpP
 - b. Nama Anak : Al Zhafran Hakim Madolangan

B. Riwayat Pendidikan

- a. Pendidikan Formal :
 - SD Negeri 89 Kaluku, Jeneponto, 1991-1996
 - SMP N I Jeneponto, 1996-1998
 - SMA Negeri 1, Jeneponto, 1998-2000
 - Dokter Umum, Fakultas Kedokteran Universitas Hasanuddin Makassar, 2000-2006
 - Dokter Spesialis Ilmu Penyakit Paru, Fakultas Kedokteran Universitas Indonesia, Juli 2011-Desember 2015
 - Konsultan Infeksi Paru Maret 2020

C. Pekerjaan dan Riwayat Pekerjaan

- Pekerjaan : Staf Dept Pulmonologi dan Kedokteran Respirasi Fakultas Kedokteran UNHAS, PNS RSUD Labuang Baji

- Instansi : Departemen Pulmonologi dan Kedokteran Respirasi Fakultas Kedokteran Universitas Hasanuddin
- NIP : 1982 04 16 2009 02 1008
- Pangkat/Golongan : Penata Muda/IIIc

D. Karya ilmiah/artikel jurnal yang telah dipublikasi:

- The effect of active hexose correlated compound (AHCC) on levels of CD4+ and CD8+ lymphocyte in pulmonary tuberculosis patients
- The active hexose correlated compound (AHCC) effect on clinical outcome of pulmonary tuberculosis in HIV-infected patients

E. Makalah pada seminar/Konfrensi Ilmiah Nasional dan Internasional

- Penerima " Young investigator Award" di ICMI 2019 di Hokaido Jepang dengan penelitian" efek Active Hexose Correlated Compound (AHCC) terhadap respons klinis pasien TB-HIV"

Lampiran 3 : Uji Validitas dan Reliabilitas

Uji validitas

| No.Responden | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Total |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-------|
| 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 18 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 18 |
| 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 18 |
| 4 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 15 |
| 5 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 0 | 1 | 11 |
| 6 | 2 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 6 |
| 7 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 12 |
| 8 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 15 |
| 9 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 14 |
| 10 | 2 | 1 | 1 | 0 | 0 | 2 | 1 | 1 | 2 | 10 |
| Rhitung | 0,252 7207 | 0,9278 219 | 0,767 8526 | 0,765 7071 | 0,727 8603 | 0,749 8763 | 0,225 4872 | 0,769 3093 | 0,526786 58 | |
| Rtabel | 0,632 | 0,632 | 0,632 | 0,632 | 0,632 | 0,632 | 0,632 | 0,632 | 0,632 | |
| V/T | T | V | V | V | V | V | T | V | T | |

Uji reabilitas

Scale: ALL VARIABLES

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .850 | 9 |

Jika alpha antara 0,70-0,90 maka **reliabilitas tinggi (signifikansi 5%)**

Skoring yang diujikan (skoring clinical response TB)

- Perbaikan keluhan klinis (**Tidak Valid**)
 - 2= keluhan tidak ada
 - 1=keluhan hilang minimal 1 (Batuk/demam/sesak) atau lebih keluhan tambahan
 - 0= keluhan masih sama

2. Batuk (**valid**)
 - 2= tidak ada
 - 1=kadang-kadang (sudah berkurang)
 - 0= masih sama/produktif disertai atau tidak dengan darah
3. Demam (**Valid**)
 - 2= tidak ada demam
 - 1= kadang-kadang subfebris (suhu < 38oC)
 - 0= sudah $\geq 38oC$
4. Sesak napas (**Valid**)
 - 2= tidak sesak
 - 1=kadang-kadang sesak (saat aktivitas)
 - 0: sesak tanpa aktivitas (kadang butuh O2)
5. Peningkatan BB (**Valid**)
 - 2= peningkatan > 5 kg
 - 1= <5kg
 - 0= tetap atau menurun
6. Sputum BTA (**valid**)
 - 2= konversi (sputum BTA -)
 - 1= sputum BTA + tapi bacterial load menurun
 - 0= sputum BTA + masih tetap sama atau tidak diketahui sputum BTA-nya
7. Tipe Kasus (tidak valid)
 - 2= kasus baru
 - 1= kasus kambuh
 - 0= kasus kronik atau resisten atau lain-lain
8. Gambaran radiologi (**valid**)
 - 2= lesi perbaikan >75%
 - 1= lesi perbaikan 50-75%
 - 0= lesi perbaikan <50%
9. Statu HIV atau penyakit penyerta (**Tidak Valid**)
 - 2= status hiv (-) atau tidak ada penyerta
 - 1= penyerta DM, malnutrisi atau penyakit kronik lain
 - 0= status hiv (+)

Jadi dari uji validitas dan reabilitas maka skoring untuk menilai clinical response TB adalah

1. Batuk (**valid**)
 - 2= tidak ada batuk
 - 1=kadang-kadang (sudah berkurang)
 - 0= masih sama/produktif disertai atau tidak dengan darah

2. Demam (**Valid**)
 - 2= tidak ada demam
 - 1= kadang-kadang subfebris (suhu < 38 °C)
 - 0= suhu ≥ 38 °C
3. Sesak napas (**Valid**)
 - 2= tidak sesak
 - 1=kadang-kadang sesak (saat aktivitas)
 - 0: sesak tanpa aktivitas (kadang butuh O₂)
4. Peningkatan BB (**Valid**)
 - 2= peningkatan > 5 kg
 - 1= <5kg
 - 0= tetap atau menurun
5. Sputum BTA (**valid**)
 - 2= konversi (sputum BTA -)
 - 1= sputum BTA + tapi bacterial load menurun
 - 0= sputum BTA + masih tetap sama atau tidak diketahui sputum BTA-nya
6. Gambaran radiologi (**valid**)
 - 2= lesi perbaikan >75%
 - 1= lesi perbaikan 50-75%
 - 0= lesi masih sama atau lesi sedikit perbaikan <50%

Panduan penilaian:

- Jumlah pertanyaan:6
- Jumlah pilihan:3
- Skoring tertinggi : 2
- Skoring terendah: 0
- Jumlah skor terendah: skoring terendahx jumlah pertanyaan=0x6=0 (0%)
- Jumlah skor tertinggi= skoring tertinggix jumlah pertanyaan= 2x6=12 (120%)

Penentuan skoring pada kriteria objektif:

- Interval (I)= Range (R)/Kategori (K)
 - Range= skor tertinggi-skor rendah=120-0=120%
 - Kategori=3
 - Interval= 120/3=40%
 - Kriteria penilaian= skor tertinggi-interval=120-40=80%,
sehingga
- Baik jika skor 8-12**
Kurang <8

Lampiran 4: Tambahan Hasil penelitian

Tabel 1. Pengelompokan CD4+ dan CD8 Pasien TBC-HIV

| Variabel | Plasebo | | AHCC | | Nilai P |
|---------------------------|---------|------|------|-------|---------|
| | n | % | n | % | |
| TBC-HIV | | | | | |
| Baseline | | | | | |
| CD4 Absolut | | | | | |
| <200 | 19 | 63,3 | 23 | 70,0 | 0,199 |
| ≥200 | 11 | 36,7 | 7 | 30,0 | |
| CD8 Absolut | | | | | |
| <200 | 5 | 16,7 | 6 | 20 | 0,500 |
| ≥200 | 25 | 83,3 | 30 | 80 | |
| Setelah bulan ke-3 | | | | | |
| CD4 Absolut | | | | | |
| <200 | 22 | 73,3 | 23 | 76,7 | 0,500 |
| ≥200 | 8 | 26,7 | 7 | 23,3 | |
| CD8 Absolut | | | | | |
| <200 | 11 | 36,7 | 8 | 26,7 | 0,290 |
| ≥200 | 19 | 63,3 | 22 | 73,3 | |
| Setelah bulan ke-6 | | | | | |
| CD4 Absolut | | | | | |
| <200 | 15 | 50,0 | 17 | 56,7 | 0,398 |
| ≥200 | 15 | 50,0 | 13 | 43,3 | |
| CD8 Absolut | | | | | |
| <200 | 4 | 13,3 | 3 | 10,00 | 0,500 |
| ≥200 | 26 | 86,7 | 27 | 90,00 | |

Tabel 2. Pengelompokan CD4+ dan CD8 Pasien TBC Paru

| Variabel | Plasebo | | AHCC | | Nilai P |
|---------------------------|---------|------|------|-------|---------|
| | n | % | n | % | |
| TBC Paru | | | | | |
| Baseline | | | | | |
| CD4 Absolut | | | | | |
| <200 | 4 | 13,3 | 2 | 6,7 | 0,335 |
| ≥200 | 26 | 86,7 | 28 | 93,3 | |
| CD8 Absolut | | | | | |
| <200 | 8 | 26,7 | 3 | 10 | 0,090 |
| ≥200 | 22 | 73,3 | 27 | 90 | |
| Setelah bulan ke-3 | | | | | |
| CD4 Absolut | | | | | |
| <200 | 0 | 0 | 0 | 0 | NA |
| ≥200 | 30 | 100 | 30 | 100 | |
| CD8 Absolut | | | | | |
| <200 | 2 | 6,7 | 1 | 3,3 | 0,500 |
| ≥200 | 28 | 93,3 | 29 | 93,3 | |
| Setelah bulan ke-6 | | | | | |
| CD4 Absolut | | | | | |
| <200 | 1 | 3,3 | 2 | 6,7 | 0,500 |
| ≥200 | 29 | 96,7 | 28 | 93,3 | |
| CD8 Absolut | | | | | |
| <200 | 5 | 16,7 | 2 | 6,70 | 0,212 |
| ≥200 | 25 | 83,3 | 28 | 93,30 | |

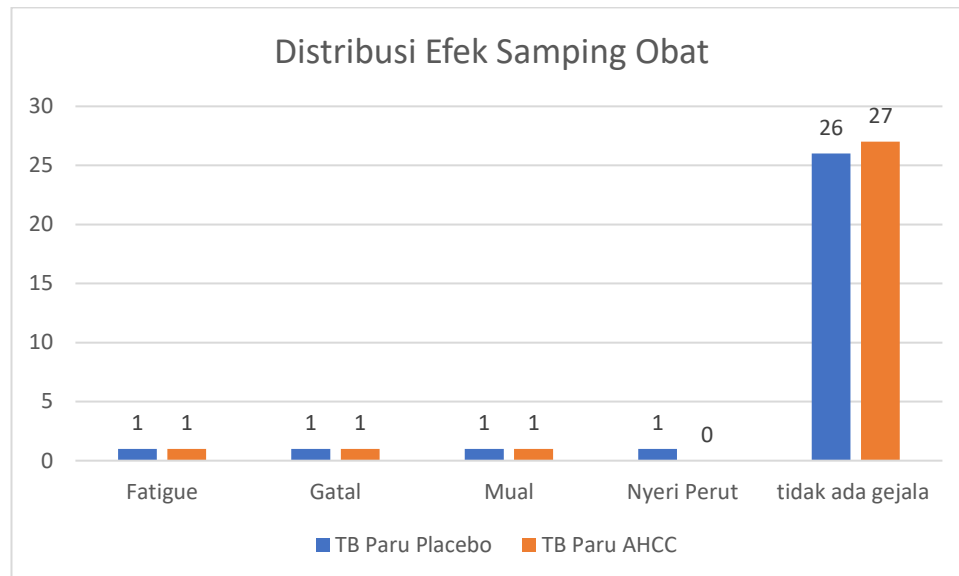
Tabel 3. Pengelompokan CD4+ dan CD8 Pasien TBC Paru sebelum dan setelah perlakuan

| Variabel | Plasebo | | AHCC | | Nilai P |
|---------------------------|---------|------|------|-------|---------|
| | n | % | n | % | |
| TBC Paru | | | | | |
| Baseline | | | | | |
| CD4 Absolut | | | | | |
| <200 | 4 | 13,3 | 2 | 6,7 | 0,335 |
| ≥200 | 26 | 86,7 | 28 | 93,3 | |
| CD8 Absolut | | | | | |
| <200 | 8 | 26,7 | 3 | 10 | 0,090 |
| ≥200 | 22 | 73,3 | 27 | 90 | |
| Setelah bulan ke-3 | | | | | |
| CD4 Absolut | | | | | |
| <200 | 0 | 0 | 0 | 0 | NA |
| ≥200 | 30 | 100 | 30 | 100 | |
| CD8 Absolut | | | | | |
| <200 | 2 | 6,7 | 1 | 3,3 | 0,500 |
| ≥200 | 28 | 93,3 | 29 | 93,3 | |
| Setelah bulan ke-6 | | | | | |
| CD4 Absolut | | | | | |
| <200 | 1 | 3,3 | 2 | 6,7 | 0,500 |
| ≥200 | 29 | 96,7 | 28 | 93,3 | |
| CD8 Absolut | | | | | |
| <200 | 5 | 16,7 | 2 | 6,70 | 0,212 |
| ≥200 | 25 | 83,3 | 28 | 93,30 | |

Tabel 4. Jumlah pasien TB Paru dan TB-HIV yang mengalami kenaikan IL-6

| Variabel | TB-HIV, AHCC | | TB Paru-AHCC | | P-value |
|--|--------------|-------|--------------|-------|--------------|
| | N (30) | % | N (30) | % | |
| Jumlah yg mengalami kenaikan IL6 dari baseline ke bulan ke-3 | 4 | 13,3 | 8 | 26,70 | 0,167 |
| Jumlah yg mengalami kenaikan IL6 dari bulan ke-3 ke bulan ke-6 | 7 | 23,3 | 15 | 50 | 0,067 |
| Jumlah yg mengalami kenaikan IL6 dari baseline ke bulan ke-6 | 3 | 10,00 | 12 | 40 | 0,008 |

Lampiran 4: Efek Samping Obat



Gambar 1. Grafik Distribusi Efek Samping Obat Pasesin TBC Paru Selama Perlakuan

Analisis pemberian suplemen dengan ESO yang terjadi

Chi-Square Tests

| | Value | Df | Asymp. Sig. (2-sided) |
|--------------------|--------------------|----|-----------------------|
| Pearson Chi-Square | 1.019 ^a | 4 | .907 |
| Likelihood Ratio | 1.405 | 4 | .843 |
| N of Valid Cases | 60 | | |

a. 8 cells (80.0%) have expected count less than 5. The minimum expected count is .50.

Tidak ditemukan Perbedaan yang signifikan penggunaan suplemen dengan efek samping obat yang terjadi

Jarak Minum Obat

Pasien TBC Paru

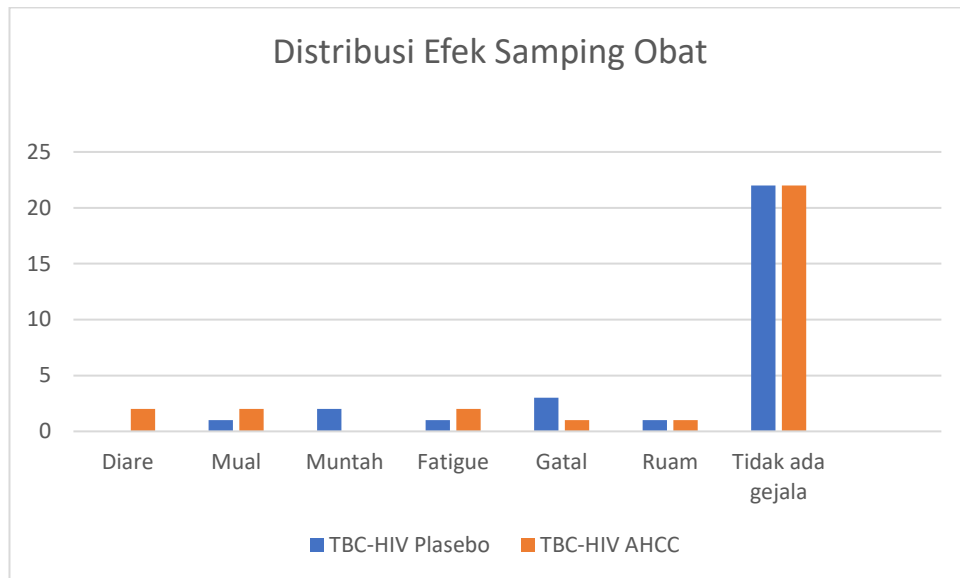
Kategori * Kelompok Crosstabulation

| | | Kelompok | | Total |
|------------------|-------------------|--------------------|--------------|--------|
| | | TB Paru Placebo | TB Paru AHCC | |
| Kategori > 1 jam | Count | 30 | 30 | 60 |
| | % within Kelompok | 100.0% | 100.0% | 100.0% |
| Total | Count | 30 | 30 | 60 |
| | % within Kelompok | 100.0% | 100.0% | 100.0% |

Tidak ada yang < 1 jam

-Kepatuhan pasien terdiri dari minum obat sesuai dosis, tidak pernah lupa, tepat waktu dan tidak pernah putus (pasien TB-HIV hanya 1 pasien yang pernah lupa sementara pasien TB-Paru 100% patuh).

ESO TB-HIV



Gambar 2. Grafik ESO TB-HIV

Kelompok Plasebo TBC-HIV

| | | Waktu_ESO | | | |
|-------|------------|------------------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Bulan ke-2 | 4 | 13.3 | 13.3 | 13.3 |
| | Bulan ke-3 | 1 | 3.3 | 3.3 | 16.7 |
| | Minggu-2 | 1 | 3.3 | 3.3 | 20.0 |
| | Minggu-3 | 1 | 3.3 | 3.3 | 23.3 |
| | Minggu-4 | 1 | 3.3 | 3.3 | 26.7 |
| | Tidak | 22 | 73.3 | 73.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Waktu_ESOAHCC

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------|-----------|---------|---------------|--------------------|
| Valid | Bulan ke-2 | 2 | 6.7 | 6.7 | 6.7 |
| | Bulan ke-3 | 1 | 3.3 | 3.3 | 10.0 |
| | Minggu ke-3 | 1 | 3.3 | 3.3 | 13.3 |
| | Minggu-2 | 1 | 3.3 | 3.3 | 16.7 |
| | Minggu-3 | 2 | 6.7 | 6.7 | 23.3 |
| | Minggu-4 | 1 | 3.3 | 3.3 | 26.7 |
| | Tidak | 22 | 73.3 | 73.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Jarak_MinumObat

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | >1 jam | 30 | 100.0 | 100.0 | 100.0 |

