

DAFTAR PUSTAKA

- Abbasifard, M., & Khorramdelazad, H. (2020). The bio-mission of interleukin-6 in the pathogenesis of COVID-19: A brief look at potential therapeutic tactics. *Life sciences*, 257, 118097. <https://doi.org/10.1016/j.lfs.2020.118097>
- Abou-Ismaïl, M. Y., Diamond, A., Kapoor, S., Arafah, Y., & Nayak, L. (2020). The hypercoagulable state in COVID-19: Incidence, pathophysiology, and management. *Thrombosis research*, 194, 101–115. <https://doi.org/10.1016/j.thromres.2020.06.029>
- Al-Salameh, A., Lanoix, J. P., Bennis, Y., Andrejak, C., Brochot, E., Deschasse, G., Dupont, H., Goeb, V., Jaureguy, M., Lion, S., Maizel, J., Moyet, J., Vaysse, B., Desaillood, R., Ganry, O., Schmit, J. L., & Lalau, J. D. (2021). Characteristics and outcomes of COVID-19 in hospitalized patients with and without diabetes. *Diabetes/metabolism research and reviews*, 37(3), e3388. <https://doi.org/10.1002/dmrr.3388>
- Alfano, G., Ferrari, A., Fontana, F., Perrone, R., Mori, G., Ascione, E., Magistroni, R., Venturi, G., Pederzoli, S., Margiotta, G., Romeo, M., Piccinini, F., Franceschi, G., Volpi, S., Faltoni, M., Ciusa, G., Bacca, E., Tutone, M., Raimondi, A., Menozzi, M., ... Modena Covid-19 Working Group (MoCo19) (2021). Hypokalemia in Patients with COVID-19. *Clinical and experimental nephrology*, 25(4), 401–409. <https://doi.org/10.1007/s10157-020-01996-4>
- Alharthy, A., Aletreby, W., Faqihi, F., Balhamar, A., Alaklobi, F., Alanezi, K., Jaganathan, P., Tamim, H., Alqahtani, S. A., Karakitsos, D., & Memish, Z. A. (2021). Clinical Characteristics and Predictors of 28-Day Mortality in 352 Critically Ill Patients with COVID-19: A Retrospective Study. *Journal of epidemiology and global health*, 11(1), 98–104. <https://doi.org/10.2991/jegh.k.200928.001>

- Aleissa, M. M., Silverman, E. A., Paredes Acosta, L. M., Nutt, C. T., Richterman, A., & Marty, F. M. (2020). New Perspectives on Antimicrobial Agents: Remdesivir Treatment for COVID-19. *Antimicrobial agents and chemotherapy*, 65(1), e01814-20. <https://doi.org/10.1128/AAC.01814-20>
- Ali N. (2020). Elevated level of C-reactive protein may be an early marker to predict risk for severity of COVID-19. *Journal of medical virology*, 92(11), 2409–2411. <https://doi.org/10.1002/jmv.26097>
- Antinori, S., Cossu, M. V., Ridolfo, A. L., Rech, R., Bonazzetti, C., Pagani, G., Gubertini, G., Coen, M., Magni, C., Castelli, A., Borghi, B., Colombo, R., Giorgi, R., Angeli, E., Mileto, D., Milazzo, L., Vimercati, S., Pellicciotta, M., Corbellino, M., Torre, A., ... Galli, M. (2020). Compassionate remdesivir treatment of severe Covid-19 pneumonia in intensive care unit (ICU) and Non-ICU patients: Clinical outcome and differences in post-treatment hospitalisation status. *Pharmacological research*, 158, 104899. <https://doi.org/10.1016/j.phrs.2020.104899>
- Armstrong, R. A., Kane, A. D., & Cook, T. M. (2020). Outcomes from intensive care in patients with COVID-19: a systematic review and meta-analysis of observational studies. *Anaesthesia*, 75(10), 1340–1349. <https://doi.org/10.1111/anae.15201>
- Assiri, A., Iqbal, M. J., Mohammed, A., Alsaleh, A., Assiri, A., Noor, A., Nour, R., & Khobrani, M. (2021). COVID-19 related treatment and outcomes among COVID-19 ICU patients: A retrospective cohort study. *Journal of infection and public health*, 14(9), 1274–1278. <https://doi.org/10.1016/j.jiph.2021.08.030>
- Bartsch, S. M., O'Shea, K. J., Ferguson, M. C., Bottazzi, M. E., Wedlock, P. T., Strych, U., McKinnell, J. A., Siegmund, S. S., Cox, S. N., Hotez, P. J., & Lee, B. Y. (2020). Vaccine Efficacy Needed for a COVID-19 Coronavirus Vaccine to Prevent or Stop an Epidemic as the Sole Intervention. *American journal of preventive medicine*, 59(4), 493–503. <https://doi.org/10.1016/j.amepre.2020.06.011>

- Baumeister, D., Akhtar, R., Ciufolini, S., Pariante, C. M., & Mondelli, V. (2016). Childhood trauma and adulthood inflammation: a meta-analysis of peripheral C-reactive protein, interleukin-6 and tumour necrosis factor- α . *Molecular psychiatry*, 21(5), 642–649. <https://doi.org/10.1038/mp.2015.67>
- Bchetnia, M., Girard, C., Duchaine, C., & Laprise, C. (2020). The outbreak of the novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2): A review of the current global status. *Journal of infection and public health*, 13(11), 1601–1610. <https://doi.org/10.1016/j.jiph.2020.07.011>
- Bergamaschi, G., Borrelli de Andreis, F., Aronico, N., Lenti, M. V., Barteselli, C., Merli, S., Pellegrino, I., Coppola, L., Cremonte, E. M., Croce, G., Mordà, F., Lapia, F., Ferrari, S., Ballesio, A., Parodi, A., Calabretta, F., Ferrari, M. G., Fumoso, F., Gentile, A., Melazzini, F., ... Internal Medicine Covid-19 Collaborators (2021). Anemia in patients with Covid-19: pathogenesis and clinical significance. *Clinical and experimental medicine*, 21(2), 239–246. <https://doi.org/10.1007/s10238-020-00679-4>
- Bertolini, A., van de Peppel, I. P., Bodewes, F., Moshage, H., Fantin, A., Farinati, F., Fiorotto, R., Jonker, J. W., Strazzabosco, M., Verkade, H. J., & Peserico, G. (2020). Abnormal Liver Function Tests in Patients With COVID-19: Relevance and Potential Pathogenesis. *Hepatology (Baltimore, Md.)*, 72(5), 1864–1872. <https://doi.org/10.1002/hep.31480>
- Cecconi, M., Piovani, D., Brunetta, E., Aghemo, A., Greco, M., Ciccarelli, M., Angelini, C., Voza, A., Omodei, P., Vespa, E., Pugliese, N., Parigi, T. L., Folci, M., Danese, S., & Bonovas, S. (2020). Early Predictors of Clinical Deterioration in a Cohort of 239 Patients Hospitalized for Covid-19 Infection in Lombardy, Italy. *Journal of clinical medicine*, 9(5), 1548. <https://doi.org/10.3390/jcm9051548>
- Cohen J. (2020). Wuhan seafood market may not be source of novel virus spreading globally. Science. <https://www.sciencemag.org/news/2020/01/wuhan-seafood-market-may-not-be-source-novelvirus-spreading-globally>.

- COVID-19 Treatment Guidelines Panel. (2020). *Coronavirus Disease 2019 (COVID-19) Treatment Guidelines*. National Institutes of Health. Available at <https://www.covid19treatmentguidelines.nih.gov/>. Accessed [2021 Jan].
- Covino, M., Sandroni, C., Santoro, M., Sabia, L., Simeoni, B., Bocci, M. G., Ojetti, V., Candelli, M., Antonelli, M., Gasbarrini, A., & Franceschi, F. (2020). Predicting intensive care unit admission and death for COVID-19 patients in the emergency department using early warning scores. *Resuscitation*, *156*, 84–91. <https://doi.org/10.1016/j.resuscitation.2020.08.124>
- Chen, N., Zhou, M., Dong, X., Qu, J., Gong, F., Han, Y., Qiu, Y., Wang, J., Liu, Y., Wei, Y., Xia, J., Yu, T., Zhang, X., & Zhang, L. (2020). Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. *Lancet (London, England)*, *395*(10223), 507–513. [https://doi.org/10.1016/S0140-6736\(20\)30211-7](https://doi.org/10.1016/S0140-6736(20)30211-7)
- Dahdouh, E., Lázaro-Perona, F., Romero-Gómez, M. P., Mingorance, J., & García-Rodríguez, J. (2021). C_t values from SARS-CoV-2 diagnostic PCR assays should not be used as direct estimates of viral load. *The Journal of infection*, *82*(3), 414–451. <https://doi.org/10.1016/j.jinf.2020.10.017>
- Dalia, T., Lahan, S., Ranka, S., Acharya, P., Gautam, A., Goyal, A., Mastoris, I., Sauer, A., & Shah, Z. (2021). Impact of congestive heart failure and role of cardiac biomarkers in COVID-19 patients: A systematic review and meta-analysis. *Indian heart journal*, *73*(1), 91–98. <https://doi.org/10.1016/j.ihj.2020.12.002>
- Del Sole, F., Farcomeni, A., Loffredo, L., Carnevale, R., Menichelli, D., Vicario, T., Pignatelli, P., & Pastori, D. (2020). Features of severe COVID-19: A systematic review and meta-analysis. *European journal of clinical investigation*, *50*(10), e13378. <https://doi.org/10.1111/eci.13378>
- Dhama, K., Khan, S., Tiwari, R., Sircar, S., Bhat, S., Malik, Y. S., Singh, K. P., Chaicumpa, W., Bonilla-Aldana, D. K., & Rodriguez-Morales, A. J. (2020).

Coronavirus Disease 2019-COVID-19. *Clinical microbiology reviews*, 33(4), e00028-20. <https://doi.org/10.1128/CMR.00028-20>

Di Gennaro, F., Pizzol, D., Marotta, C., Antunes, M., Racalbuto, V., Veronese, N., & Smith, L. (2020). Coronavirus Diseases (COVID-19) Current Status and Future Perspectives: A Narrative Review. *International journal of environmental research and public health*, 17(8), 2690. <https://doi.org/10.3390/ijerph17082690>

Du, W., Han, S., Li, Q., & Zhang, Z. (2020). Epidemic update of COVID-19 in Hubei Province compared with other regions in China. *International journal of infectious diseases : IJID : official publication of the International Society for Infectious Diseases*, 95, 321–325. <https://doi.org/10.1016/j.ijid.2020.04.031>

Eccles R. (2005). Understanding the symptoms of the common cold and influenza. *The Lancet. Infectious diseases*, 5(11), 718–725. [https://doi.org/10.1016/S1473-3099\(05\)70270-X](https://doi.org/10.1016/S1473-3099(05)70270-X)

Ellul, M. A., Benjamin, L., Singh, B., Lant, S., Michael, B. D., Easton, A., Kneen, R., Defres, S., Sejvar, J., & Solomon, T. (2020). Neurological associations of COVID-19. *The Lancet. Neurology*, 19(9), 767–783. [https://doi.org/10.1016/S1474-4422\(20\)30221-0](https://doi.org/10.1016/S1474-4422(20)30221-0)

Esakandari, H., Nabi-Afjadi, M., Fakkari-Afjadi, J., Farahmandian, N., Miresmaeili, S. M., & Bahreini, E. (2020). A comprehensive review of COVID-19 characteristics. *Biological procedures online*, 22, 19. <https://doi.org/10.1186/s12575-020-00128-2>

Fathi, N., & Rezaei, N. (2020). Lymphopenia in COVID-19: Therapeutic opportunities. *Cell biology international*, 44(9), 1792–1797. <https://doi.org/10.1002/cbin.11403>

Flythe, J. E., Assimon, M. M., Tugman, M. J., Chang, E. H., Gupta, S., Shah, J., Sosa, M. A., Renaghan, A. D., Melamed, M. L., Wilson, F. P., Neyra, J. A., Rashidi, A., Boyle, S. M., Anand, S., Christov, M., Thomas, L. F., Edmonston, D., Leaf, D. E., & STOP-COVID Investigators (2021).

Characteristics and Outcomes of Individuals With Pre-existing Kidney Disease and COVID-19 Admitted to Intensive Care Units in the United States. *American journal of kidney diseases : the official journal of the National Kidney Foundation*, 77(2), 190–203.e1. <https://doi.org/10.1053/j.ajkd.2020.09.003>

Gagliardi, I., Patella, G., Michael, A., Serra, R., Provenzano, M., & Andreucci, M. (2020). COVID-19 and the Kidney: From Epidemiology to Clinical Practice. *Journal of clinical medicine*, 9(8), 2506. <https://doi.org/10.3390/jcm9082506>

Gallo Marin, B., Aghagoli, G., Lavine, K., Yang, L., Siff, E. J., Chiang, S. S., Salazar-Mather, T. P., Dumenco, L., Savaria, M. C., Aung, S. N., Flanigan, T., & Michelow, I. C. (2021). Predictors of COVID-19 severity: A literature review. *Reviews in medical virology*, 31(1), 1–10. <https://doi.org/10.1002/rmv.2146>

Gautret, P., Million, M., Jarrot, P. A., Camoin-Jau, L., Colson, P., Fenollar, F., Leone, M., La Scola, B., Devaux, C., Gaubert, J. Y., Mege, J. L., Vitte, J., Melenotte, C., Rolain, J. M., Parola, P., Lagier, J. C., Brouqui, P., & Raoult, D. (2020). Natural history of COVID-19 and therapeutic options. *Expert review of clinical immunology*, 16(12), 1159–1184. <https://doi.org/10.1080/1744666X.2021.1847640>

Gavriatopoulou, M., Ntanasis-Stathopoulos, I., Korompoki, E., Fotiou, D., Migkou, M., Tzanninis, I. G., Psaltopoulou, T., Kastritis, E., Terpos, E., & Dimopoulos, M. A. (2021). Emerging treatment strategies for COVID-19 infection. *Clinical and experimental medicine*, 21(2), 167–179. <https://doi.org/10.1007/s10238-020-00671-y>

Ge, H., Wang, X., Yuan, X., Xiao, G., Wang, C., Deng, T., . . . Xiao, X. (2020). The epidemiology and clinical information about COVID-19. *European Journal of Clinical Microbiology & Infectious Diseases*, 39(6), 1011-1019. doi:10.1007/s10096-020-03874-

- Ghasemnejad-Berenji, M., & Pashapour, S. (2021). Favipiravir and COVID-19: A Simplified Summary. *Drug research*, 71(3), 166–170. <https://doi.org/10.1055/a-1296-7935>
- Ghayda, R. A., Lee, J., Lee, J. Y., Kim, D. K., Lee, K. H., Hong, S. H., Han, Y. J., Kim, J. S., Yang, J. W., Kronbichler, A., Smith, L., Koyanagi, A., Jacob, L., & Shin, J. I. (2020). Correlations of Clinical and Laboratory Characteristics of COVID-19: A Systematic Review and Meta-Analysis. *International journal of environmental research and public health*, 17(14), 5026. <https://doi.org/10.3390/ijerph17145026>
- Giagulli, V. A., Guastamacchia, E., Magrone, T., Jirillo, E., Lisco, G., De Pergola, G., & Triggiani, V. (2021). Worse progression of COVID-19 in men: Is testosterone a key factor?. *Andrology*, 9(1), 53–64. <https://doi.org/10.1111/andr.12836>
- Gibson, P. G., Qin, L., & Puah, S. H. (2020). COVID-19 acute respiratory distress syndrome (ARDS): clinical features and differences from typical pre-COVID-19 ARDS. *The Medical journal of Australia*, 213(2), 54–56.e1. <https://doi.org/10.5694/mja2.50674>
- Grant, M. C., Geoghegan, L., Arbyn, M., Mohammed, Z., McGuinness, L., Clarke, E. L., & Wade, R. G. (2020). The prevalence of symptoms in 24,410 adults infected by the novel coronavirus (SARS-CoV-2; COVID-19): A systematic review and meta-analysis of 148 studies from 9 countries. *PloS one*, 15(6), e0234765. <https://doi.org/10.1371/journal.pone.0234765>
- Gavriatopoulou, M., Ntanasis-Stathopoulos, I., Korompoki, E., Fotiou, D., Migkou, M., Tzanninis, I. G., Psaltopoulou, T., Kastritis, E., Terpos, E., & Dimopoulos, M. A. (2021). Emerging treatment strategies for COVID-19 infection. *Clinical and experimental medicine*, 21(2), 167–179. <https://doi.org/10.1007/s10238-020-00671-y>
- Guo, Y. R., Cao, Q. D., Hong, Z. S., Tan, Y. Y., Chen, S. D., Jin, H. J., Tan, K. S., Wang, D. Y., & Yan, Y. (2020). The origin, transmission and clinical therapies on coronavirus disease 2019 (COVID-19) outbreak - an update on

the status. *Military Medical Research*, 7(1), 11.
<https://doi.org/10.1186/s40779-020-00240-0>

Haase, N., Plovsing, R., Christensen, S., Poulsen, L. M., Brøchner, A. C., Rasmussen, B. S., Helleberg, M., Jensen, J., Andersen, L., Siegel, H., Ibsen, M., Jørgensen, V., Winding, R., Iversen, S., Pedersen, H. P., Madsen, J., Sølling, C., Garcia, R. S., Michelsen, J., Mohr, T., ... Perner, A. (2021). Characteristics, interventions, and longer term outcomes of COVID-19 ICU patients in Denmark-A nationwide, observational study. *Acta anaesthesiologica Scandinavica*, 65(1), 68–75.
<https://doi.org/10.1111/aas.13701>

Hafeez, A., Ahmad, S., Siddqui, S. A., Ahmad, M., & Mishra, S. (2020). A review of COVID-19 (CORONAVIRUS Disease-2019) Diagnosis, treatments and Prevention. *Eurasian Journal of Medicine and Oncology*, 4(2), 116-125.
doi:10.14744/ejmo.2020.90853

Hirose, R., Ikegaya, H., Naito, Y., Watanabe, N., Yoshida, T., Bandou, R., Daidoji, T., Itoh, Y., & Nakaya, T. (2021). Survival of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and Influenza Virus on Human Skin: Importance of Hand Hygiene in Coronavirus Disease 2019 (COVID-19). *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*, 73(11), e4329–e4335.
<https://doi.org/10.1093/cid/ciaa1517>

Hu, R., Han, C., Pei, S., Yin, M., & Chen, X. (2020). Procalcitonin levels in COVID-19 patients. *International journal of antimicrobial agents*, 56(2), 106051. <https://doi.org/10.1016/j.ijantimicag.2020.106051>

Huang, I., Lim, M. A., & Pranata, R. (2020). Diabetes mellitus is associated with increased mortality and severity of disease in COVID-19 pneumonia - A systematic review, meta-analysis, and meta-regression. *Diabetes & metabolic syndrome*, 14(4), 395–403.
<https://doi.org/10.1016/j.dsx.2020.04.018>

- Huang, J., Cheng, A., Kumar, R., Fang, Y., Chen, G., Zhu, Y., & Lin, S. (2020). Hypoalbuminemia predicts the outcome of COVID-19 independent of age and co-morbidity. *Journal of medical virology*, 92(10), 2152–2158. <https://doi.org/10.1002/jmv.26003>
- Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., Zhang, L., Fan, G., Xu, J., Gu, X., Cheng, Z., Yu, T., Xia, J., Wei, Y., Wu, W., Xie, X., Yin, W., Li, H., Liu, M., Xiao, Y., ... Cao, B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet (London, England)*, 395(10223), 497–506. [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5)
- Huppert, L. A., Matthay, M. A., & Ware, L. B. (2019). Pathogenesis of Acute Respiratory Distress Syndrome. *Seminars in respiratory and critical care medicine*, 40(1), 31–39. <https://doi.org/10.1055/s-0039-1683996>
- Immovilli, P., Morelli, N., Antonucci, E., Radaelli, G., Barbera, M., & Guidetti, D. (2020). COVID-19 mortality and ICU admission: the Italian experience. *Critical care (London, England)*, 24(1), 228. <https://doi.org/10.1186/s13054-020-02957-9>
- Ito, J., Seo, R., Kawakami, D., Matsuoka, Y., Ouchi, K., Nonami, S., Miyoshi, Y., Tatebe, M., Tsuchida, T., Asaka, Y., Yanai, M., Ueta, H., Shimozono, T., Mima, H., Doi, A., Tomii, K., & Ariyoshi, K. (2021). Clinical characteristics and outcomes of critically ill patients with COVID-19 in Kobe, Japan: a single-center, retrospective, observational study. *Journal of anesthesia*, 35(2), 213–221. <https://doi.org/10.1007/s00540-021-02897-w>
- Izcovich, A., Ragusa, M. A., Tortosa, F., Lavena Marzio, M. A., Agnoletti, C., Bengolea, A., Ceirano, A., Espinosa, F., Saavedra, E., Sanguine, V., Tassara, A., Cid, C., Catalano, H. N., Agarwal, A., Foroutan, F., & Rada, G. (2020). Prognostic factors for severity and mortality in patients infected with COVID-19: A systematic review. *PloS one*, 15(11), e0241955. <https://doi.org/10.1371/journal.pone.0241955>

- Jin, Y., Yang, H., Ji, W., Wu, W., Chen, S., Zhang, W., & Duan, G. (2020). Virology, Epidemiology, Pathogenesis, and Control of COVID-19. *Viruses*, *12*(4), 372. <https://doi.org/10.3390/v12040372>
- Jothimani, D., Venugopal, R., Abedin, M. F., Kaliamoorthy, I., & Rela, M. (2020). COVID-19 and the liver. *Journal of hepatology*, *73*(5), 1231–1240. <https://doi.org/10.1016/j.jhep.2020.06.006>
- Kant, S., Menez, S. P., Hanounch, M., Fine, D. M., Crews, D. C., Brennan, D. C., Sperati, C. J., & Jaar, B. G. (2020). The COVID-19 nephrology compendium: AKI, CKD, ESKD and transplantation. *BMC nephrology*, *21*(1), 449. <https://doi.org/10.1186/s12882-020-02112-0>
- Karahasan Yagci, A., Sarinoglu, R. C., Bilgin, H., Yanilmaz, Ö., Sayın, E., Deniz, G., Guncu, M. M., Doyuk, Z., Baris, C., Kuzan, B. N., Aslan, B., Korten, V., & Cimsit, C. (2020). Relationship of the cycle threshold values of SARS-CoV-2 polymerase chain reaction and total severity score of computerized tomography in patients with COVID 19. *International journal of infectious diseases : IJID : official publication of the International Society for Infectious Diseases*, *101*, 160–166. <https://doi.org/10.1016/j.ijid.2020.09.1449>
- Karampela, I., & Dalamaga, M. (2020). Could Respiratory Fluoroquinolones, Levofloxacin and Moxifloxacin, Prove to be Beneficial as an Adjunct Treatment in COVID-19?. *Archives of medical research*, *51*(7), 741–742. <https://doi.org/10.1016/j.arcmed.2020.06.004>
- Kemenkes. (2020). *Keputusan Menteri Kesehatan Republik Indonesia Nomor HK.01.01/MENKES/413/2020 039 tentang Pedoman Pencegahan dan Pengendalian Coronavirus Disease 2019 (Covid-19)*
- Kim, L., Garg, S., O'Halloran, A., Whitaker, M., Pham, H., Anderson, E. J., Armistead, I., Bennett, N. M., Billing, L., Como-Sabeti, K., Hill, M., Kim, S., Monroe, M. L., Muse, A., Reingold, A. L., Schaffner, W., Sutton, M., Talbot, H. K., Torres, S. M., Yousey-Hindes, K., ... Langley, G. E. (2021). Risk Factors for Intensive Care Unit Admission and In-hospital Mortality

- Among Hospitalized Adults Identified through the US Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET). *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*, 72(9), e206–e214. <https://doi.org/10.1093/cid/ciaa1012>
- Kolhe, N. V., Fluck, R. J., Selby, N. M., & Taal, M. W. (2020). Acute kidney injury associated with COVID-19: A retrospective cohort study. *PLoS medicine*, 17(10), e1003406. <https://doi.org/10.1371/journal.pmed.1003406>
- Kumar, A., Arora, A., Sharma, P., Anikhindi, S. A., Bansal, N., Singla, V., Khare, S., & Srivastava, A. (2020). Is diabetes mellitus associated with mortality and severity of COVID-19? A meta-analysis. *Diabetes & metabolic syndrome*, 14(4), 535–545. <https://doi.org/10.1016/j.dsx.2020.04.044>
- Kunutsor, S. K., & Laukkanen, J. A. (2020). Renal complications in COVID-19: a systematic review and meta-analysis. *Annals of medicine*, 52(7), 345–353. <https://doi.org/10.1080/07853890.2020.1790643>
- Li, B., Yang, J., Zhao, F., Zhi, L., Wang, X., Liu, L., Bi, Z., & Zhao, Y. (2020). Prevalence and impact of cardiovascular metabolic diseases on COVID-19 in China. *Clinical research in cardiology : official journal of the German Cardiac Society*, 109(5), 531–538. <https://doi.org/10.1007/s00392-020-01626-9>
- Li, L. Q., Huang, T., Wang, Y. Q., Wang, Z. P., Liang, Y., Huang, T. B., Zhang, H. Y., Sun, W., & Wang, Y. (2020). COVID-19 patients' clinical characteristics, discharge rate, and fatality rate of meta-analysis. *Journal of medical virology*, 92(6), 577–583. <https://doi.org/10.1002/jmv.25757>
- Li, K., Wu, J., Wu, F., Guo, D., Chen, L., Fang, Z., & Li, C. (2020). The Clinical and Chest CT Features Associated With Severe and Critical COVID-19 Pneumonia. *Investigative radiology*, 55(6), 327–331. <https://doi.org/10.1097/RLI.0000000000000672>
- Li, Q., Guan, X., Wu, P., Wang, X., Zhou, L., Tong, Y., Ren, R., Leung, K., Lau, E., Wong, J. Y., Xing, X., Xiang, N., Wu, Y., Li, C., Chen, Q., Li, D., Liu,

- T., Zhao, J., Liu, M., Tu, W., ... Feng, Z. (2020). Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus-Infected Pneumonia. *The New England journal of medicine*, 382(13), 1199–1207. <https://doi.org/10.1056/NEJMoa2001316>
- Lima-Martínez, M. M., Carrera Boada, C., Madera-Silva, M. D., Marín, W., & Contreras, M. (2021). COVID-19 and diabetes: A bidirectional relationship. COVID-19 y diabetes mellitus: una relación bidireccional. *Clinica e investigacion en arteriosclerosis : publicacion oficial de la Sociedad Espanola de Arteriosclerosis*, 33(3), 151–157. <https://doi.org/10.1016/j.arteri.2020.10.001>
- Lippi, G., Plebani, M., & Henry, B. M. (2020). Thrombocytopenia is associated with severe coronavirus disease 2019 (COVID-19) infections: A meta-analysis. *Clinica chimica acta; international journal of clinical chemistry*, 506, 145–148. <https://doi.org/10.1016/j.cca.2020.03.022>
- Long, C., Xu, H., Shen, Q., Zhang, X., Fan, B., Wang, C., Zeng, B., Li, Z., Li, X., & Li, H. (2020). Diagnosis of the Coronavirus disease (COVID-19): rRT-PCR or CT?. *European journal of radiology*, 126, 108961. <https://doi.org/10.1016/j.ejrad.2020.108961>
- López-Collazo, E., Avendaño-Ortiz, J., Martín-Quirós, A., & Aguirre, L. A. (2020). Immune Response and COVID-19: A mirror image of Sepsis. *International journal of biological sciences*, 16(14), 2479–2489. <https://doi.org/10.7150/ijbs.48400>
- Lu, R., Zhao, X., Li, J., Niu, P., Yang, B., Wu, H., Wang, W., Song, H., Huang, B., Zhu, N., Bi, Y., Ma, X., Zhan, F., Wang, L., Hu, T., Zhou, H., Hu, Z., Zhou, W., Zhao, L., Chen, J., ... Tan, W. (2020). Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding. *Lancet (London, England)*, 395(10224), 565–574. [https://doi.org/10.1016/S0140-6736\(20\)30251-8](https://doi.org/10.1016/S0140-6736(20)30251-8)

- Luo, X., Zhou, W., Yan, X., Guo, T., Wang, B., Xia, H., Ye, L., Xiong, J., Jiang, Z., Liu, Y., Zhang, B., & Yang, W. (2020). Prognostic Value of C-Reactive Protein in Patients With Coronavirus 2019. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*, 71(16), 2174–2179. <https://doi.org/10.1093/cid/ciaa641>
- Marchioni, E., & Minoli, L. (2010). Headache attributed to infections nosography and differential diagnosis. *Handbook of clinical neurology*, 97, 601–626. [https://doi.org/10.1016/S0072-9752\(10\)97052-8](https://doi.org/10.1016/S0072-9752(10)97052-8)
- Martinot, M., Eyriey, M., Gravier, S., Bonijoly, T., Kayser, D., Ion, C., Mohseni-Zadeh, M., Camara, S., Dubois, J., Haerrel, E., Drouaine, J., Kaiser, J., Ongagna, J. C., Schieber-Pachart, A., Kempf, C., & Centre Alsace COVID-19 Study Group (2021). Predictors of mortality, ICU hospitalization, and extrapulmonary complications in COVID-19 patients. *Infectious diseases now*, 51(6), 518–525. <https://doi.org/10.1016/j.idnow.2021.07.002>
- Mehta, P., McAuley, D. F., Brown, M., Sanchez, E., Tattersall, R. S., Manson, J. J., & HLH Across Speciality Collaboration, UK (2020). COVID-19: consider cytokine storm syndromes and immunosuppression. *Lancet (London, England)*, 395(10229), 1033–1034. [https://doi.org/10.1016/S0140-6736\(20\)30628-0](https://doi.org/10.1016/S0140-6736(20)30628-0)
- Mjaess, G., Karam, A., Aoun, F., Albisinni, S., & Roumeguère, T. (2020). COVID-19 and the male susceptibility: the role of ACE2, TMPRSS2 and the androgen receptor. *Progres en urologie : journal de l'Association francaise d'urologie et de la Societe francaise d'urologie*, 30(10), 484–487. <https://doi.org/10.1016/j.purol.2020.05.007>
- Mo, P., Xing, Y., Xiao, Y., Deng, L., Zhao, Q., Wang, H., Xiong, Y., Cheng, Z., Gao, S., Liang, K., Luo, M., Chen, T., Song, S., Ma, Z., Chen, X., Zheng, R., Cao, Q., Wang, F., & Zhang, Y. (2020). Clinical characteristics of refractory COVID-19 pneumonia in Wuhan, China. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of*

America, ciaa270. Advance online publication.
<https://doi.org/10.1093/cid/ciaa270>

Mohamed, M. S., Moulin, T. C., & Schiöth, H. B. (2021). Sex differences in COVID-19: the role of androgens in disease severity and progression. *Endocrine*, *71*(1), 3–8. <https://doi.org/10.1007/s12020-020-02536-6>

Mustafa Hellou, M., Górska, A., Mazzaferri, F., Cremonini, E., Gentilotti, E., De Nardo, P., Poran, I., Leeflang, M. M., Tacconelli, E., & Paul, M. (2021). Nucleic acid amplification tests on respiratory samples for the diagnosis of coronavirus infections: a systematic review and meta-analysis. *Clinical microbiology and infection : the official publication of the European Society of Clinical Microbiology and Infectious Diseases*, *27*(3), 341–351. <https://doi.org/10.1016/j.cmi.2020.11.002>

Ñamendys-Silva, S. A., Alvarado-Ávila, P. E., Domínguez-Cherit, G., Rivero-Sigarroa, E., Sánchez-Hurtado, L. A., Gutiérrez-Villaseñor, A., Romero-González, J. P., Rodríguez-Bautista, H., García-Briones, A., Garnica-Camacho, C. E., Cruz-Ruiz, N. G., González-Herrera, M. O., García-Guillén, F. J., Guerrero-Gutiérrez, M. A., Salmerón-González, J. D., Romero-Gutiérrez, L., Canto-Castro, J. L., Cervantes, V. H., & Mexico COVID-19 Critical Care Collaborative Group (2021). Outcomes of patients with COVID-19 in the intensive care unit in Mexico: A multicenter observational study. *Heart & lung : the journal of critical care*, *50*(1), 28–32. <https://doi.org/10.1016/j.hrtlng.2020.10.013>

Nannoni, S., de Groot, R., Bell, S., & Markus, H. S. (2021). Stroke in COVID-19: A systematic review and meta-analysis. *International journal of stroke : official journal of the International Stroke Society*, *16*(2), 137–149. <https://doi.org/10.1177/1747493020972922>

Navas-Blanco, J. R., & Dudaryk, R. (2020). Management of Respiratory Distress Syndrome due to COVID-19 infection. *BMC anesthesiology*, *20*(1), 177. <https://doi.org/10.1186/s12871-020-01095-7>

- Nori, P., Cowman, K., Chen, V., Bartash, R., Szymczak, W., Madaline, T., Punjabi Katiyar, C., Jain, R., Aldrich, M., Weston, G., Gialanella, P., Corpuz, M., Gendlina, I., & Guo, Y. (2021). Bacterial and fungal coinfections in COVID-19 patients hospitalized during the New York City pandemic surge. *Infection control and hospital epidemiology*, 42(1), 84–88. <https://doi.org/10.1017/ice.2020.368>
- O'Driscoll, M., Ribeiro Dos Santos, G., Wang, L., Cummings, D., Azman, A. S., Paireau, J., Fontanet, A., Cauchemez, S., & Salje, H. (2021). Age-specific mortality and immunity patterns of SARS-CoV-2. *Nature*, 590(7844), 140–145. <https://doi.org/10.1038/s41586-020-2918-0>
- Parasher A. (2021). COVID-19: Current understanding of its Pathophysiology, Clinical presentation and Treatment. *Postgraduate medical journal*, 97(1147), 312–320. <https://doi.org/10.1136/postgradmedj-2020-138577>
- Pascarella, G., Strumia, A., Piliago, C., Bruno, F., Del Buono, R., Costa, F., Scarlata, S., & Agrò, F. E. (2020). COVID-19 diagnosis and management: a comprehensive review. *Journal of internal medicine*, 288(2), 192–206. <https://doi.org/10.1111/joim.13091>
- Pedersen, S. F., & Ho, Y. C. (2020). SARS-CoV-2: a storm is raging. *The Journal of clinical investigation*, 130(5), 2202–2205. <https://doi.org/10.1172/JCI137647>
- Pedoman Tatalaksana Covid-19. (2021). Edisi 3.
- Poggiali, E., Zaino, D., Immovilli, P., Rovero, L., Losi, G., Dacrema, A., Nuccetelli, M., Vadacca, G. B., Guidetti, D., Vercelli, A., Magnacavallo, A., Bernardini, S., & Terracciano, C. (2020). Lactate dehydrogenase and C-reactive protein as predictors of respiratory failure in CoVID-19 patients. *Clinica chimica acta; international journal of clinical chemistry*, 509, 135–138. <https://doi.org/10.1016/j.cca.2020.06.012>

- Pollard, C. A., Morran, M. P., & Nestor-Kalinoski, A. L. (2020). The COVID-19 pandemic: a global health crisis. *Physiological genomics*, 52(11), 549–557. <https://doi.org/10.1152/physiolgenomics.00089.2020>
- Potere, N., Batticciotto, A., Vecchié, A., Porreca, E., Cappelli, A., Abbate, A., Dentali, F., & Bonaventura, A. (2021). The role of IL-6 and IL-6 blockade in COVID-19. *Expert review of clinical immunology*, 1–17. Advance online publication. <https://doi.org/10.1080/1744666X.2021.1919086>
- Pradhan, A. D., Manson, J. E., Rifai, N., Buring, J. E., & Ridker, P. M. (2001). C-reactive protein, interleukin 6, and risk of developing type 2 diabetes mellitus. *JAMA*, 286(3), 327–334. <https://doi.org/10.1001/jama.286.3.327>
- Ranzani, O. T., Bastos, L., Gelli, J., Marchesi, J. F., Baião, F., Hamacher, S., & Bozza, F. A. (2021). Characterisation of the first 250,000 hospital admissions for COVID-19 in Brazil: a retrospective analysis of nationwide data. *The Lancet. Respiratory medicine*, 9(4), 407–418. [https://doi.org/10.1016/S2213-2600\(20\)30560-9](https://doi.org/10.1016/S2213-2600(20)30560-9)
- Rey, J. R., Caro-Codón, J., Rosillo, S. O., Iniesta, Á. M., Castrejón-Castrejón, S., Marco-Clement, I., Martín-Polo, L., Merino-Argos, C., Rodríguez-Sotelo, L., García-Veas, J. M., Martínez-Marín, L. A., Martínez-Cossiani, M., Buño, A., Gonzalez-Valle, L., Herrero, A., López-Sendón, J. L., Merino, J. L., & CARD-COVID Investigators (2020). Heart failure in COVID-19 patients: prevalence, incidence and prognostic implications. *European journal of heart failure*, 22(12), 2205–2215. <https://doi.org/10.1002/ejhf.1990>
- Rizzo, A. N., Aman, J., van Nieuw Amerongen, G. P., & Dudek, S. M. (2015). Targeting Abl kinases to regulate vascular leak during sepsis and acute respiratory distress syndrome. *Arteriosclerosis, thrombosis, and vascular biology*, 35(5), 1071–1079. <https://doi.org/10.1161/ATVBAHA.115.305085>
- Rod, J. E., Oviedo-Trespalacios, O., & Cortes-Ramirez, J. (2020). A brief-review of the risk factors for covid-19 severity. *Revista de saude publica*, 54, 60. <https://doi.org/10.11606/s1518-8787.2020054002481>

- Rodriguez-Morales, A. J., Cardona-Ospina, J. A., Gutiérrez-Ocampo, E., Villamizar-Peña, R., Holguin-Rivera, Y., Escalera-Antezana, J. P., Alvarado-Arnez, L. E., Bonilla-Aldana, D. K., Franco-Paredes, C., Henao-Martinez, A. F., Paniz-Mondolfi, A., Lagos-Grisales, G. J., Ramírez-Vallejo, E., Suárez, J. A., Zambrano, L. I., Villamil-Gómez, W. E., Balbin-Ramon, G. J., Rabaan, A. A., Harapan, H., Dhama, K., ... Latin American Network of Coronavirus Disease 2019-COVID-19 Research (LANCOVID-19). Electronic address: <https://www.lancovid.org> (2020). Clinical, laboratory and imaging features of COVID-19: A systematic review and meta-analysis. *Travel medicine and infectious disease*, 34, 101623. <https://doi.org/10.1016/j.tmaid.2020.101623>
- Runacres, A., Mackintosh, K. A., Knight, R. L., Sheeran, L., Thatcher, R., Shelley, J., & McNarry, M. A. (2021). Impact of the COVID-19 Pandemic on Sedentary Time and Behaviour in Children and Adults: A Systematic Review and Meta-Analysis. *International journal of environmental research and public health*, 18(21), 11286. <https://doi.org/10.3390/ijerph182111286>
- Sarkar, S., Khanna, P., & Singh, A. K. (2021). Impact of COVID-19 in patients with concurrent co-infections: A systematic review and meta-analyses. *Journal of medical virology*, 93(4), 2385–2395. <https://doi.org/10.1002/jmv.26740>
- Schiffrin, E. L., Flack, J. M., Ito, S., Muntner, P., & Webb, R. C. (2020). Hypertension and COVID-19. *American journal of hypertension*, 33(5), 373–374. <https://doi.org/10.1093/ajh/hpaa057>
- Seaton, R. A., Gibbons, C. L., Cooper, L., Malcolm, W., McKinney, R., Dundas, S., Griffith, D., Jeffreys, D., Hamilton, K., Choo-Kang, B., Brittain, S., Guthrie, D., & Sneddon, J. (2020). Survey of antibiotic and antifungal prescribing in patients with suspected and confirmed COVID-19 in Scottish hospitals. *The Journal of infection*, 81(6), 952–960. <https://doi.org/10.1016/j.jinf.2020.09.024>

- Shahid, Z., Kalayanamitra, R., McClafferty, B., Kepko, D., Ramgobin, D., Patel, R., Aggarwal, C. S., Vunnam, R., Sahu, N., Bhatt, D., Jones, K., Golamari, R., & Jain, R. (2020). COVID-19 and Older Adults: What We Know. *Journal of the American Geriatrics Society*, *68*(5), 926–929. <https://doi.org/10.1111/jgs.16472>
- Sjöström, A., Rysz, S., Sjöström, H., & Höybye, C. (2021). Electrolyte and acid-base imbalance in severe COVID-19. *Endocrine connections*, *10*(7), 805–814. <https://doi.org/10.1530/EC-21-0265>
- Suleyman, G., Fadel, R. A., Malette, K. M., Hammond, C., Abdulla, H., Entz, A., Demertzis, Z., Hanna, Z., Failla, A., Dagher, C., Chaudhry, Z., Vahia, A., Abreu Lanfranco, O., Ramesh, M., Zervos, M. J., Alangaden, G., Miller, J., & Brar, I. (2020). Clinical Characteristics and Morbidity Associated With Coronavirus Disease 2019 in a Series of Patients in Metropolitan Detroit. *JAMA network open*, *3*(6), e2012270. <https://doi.org/10.1001/jamanetworkopen.2020.12270>
- Sultana, J., Cutroneo, P. M., Crisafulli, S., Puglisi, G., Caramori, G., & Trifirò, G. (2020). Azithromycin in COVID-19 Patients: Pharmacological Mechanism, Clinical Evidence and Prescribing Guidelines. *Drug safety*, *43*(8), 691–698. <https://doi.org/10.1007/s40264-020-00976-7>
- Surjani, L., & Siahaan, J. M. (2020). Tinjauan Biomolekuler dan Klinis Ocular Covid-19. *Majalah Ilmiah Methoda*, *10*(2), 53-66. doi:http://ojs.lppmmethodistmedan.net/
- Tadolini, M., García-García, J. M., Blanc, F. X., Borisov, S., Goletti, D., Motta, I., Codecasa, L. R., Tiberi, S., Sotgiu, G., Migliori, G. B., & GTN TB/COVID group (2020). On tuberculosis and COVID-19 co-infection. *The European respiratory journal*, *56*(2), 2002328. <https://doi.org/10.1183/13993003.02328-2020>
- Takagi, H., Kuno, T., Yokoyama, Y., Ueyama, H., Matsushiro, T., Hari, Y., & Ando, T. (2021). Meta-regression of COVID-19 prevalence/fatality on

- socioeconomic characteristics of data from top 50 U.S. large cities. *Journal of medical virology*, 93(2), 595–598. <https://doi.org/10.1002/jmv.26335>
- Takahashi, T., Ellingson, M. K., Wong, P., Israelow, B., Lucas, C., Klein, J., Silva, J., Mao, T., Oh, J. E., Tokuyama, M., Lu, P., Venkataraman, A., Park, A., Liu, F., Meir, A., Sun, J., Wang, E. Y., Casanovas-Massana, A., Wyllie, A. L., Vogels, C., ... Iwasaki, A. (2020). Sex differences in immune responses that underlie COVID-19 disease outcomes. *Nature*, 588(7837), 315–320. <https://doi.org/10.1038/s41586-020-2700-3>
- Tan, C., Huang, Y., Shi, F., Tan, K., Ma, Q., Chen, Y., Jiang, X., & Li, X. (2020). C-reactive protein correlates with computed tomographic findings and predicts severe COVID-19 early. *Journal of medical virology*, 92(7), 856–862. <https://doi.org/10.1002/jmv.25871>
- Tan, Y. K., Goh, C., Leow, A., Tambyah, P. A., Ang, A., Yap, E. S., Tu, T. M., Sharma, V. K., Yeo, L., Chan, B., & Tan, B. (2020). COVID-19 and ischemic stroke: a systematic review and meta-summary of the literature. *Journal of thrombosis and thrombolysis*, 50(3), 587–595. <https://doi.org/10.1007/s11239-020-02228-y>
- Taneri, P. E., Gómez-Ochoa, S. A., Llanaj, E., Raguindin, P. F., Rojas, L. Z., Roa-Díaz, Z. M., Salvador, D., Jr, Groothof, D., Minder, B., Kopp-Heim, D., Hautz, W. E., Eisenga, M. F., Franco, O. H., Glisic, M., & Muka, T. (2020). Anemia and iron metabolism in COVID-19: a systematic review and meta-analysis. *European journal of epidemiology*, 35(8), 763–773. <https://doi.org/10.1007/s10654-020-00678-5>
- Tao, Z., Xu, J., Chen, W., Yang, Z., Xu, X., Liu, L., Chen, R., Xie, J., Liu, M., Wu, J., Wang, H., & Liu, J. (2021). Anemia is associated with severe illness in COVID-19: A retrospective cohort study. *Journal of medical virology*, 93(3), 1478–1488. <https://doi.org/10.1002/jmv.26444>
- Tarlovskaia, E. I., Arutyunov, A. G., Konradi, A. O., Lopatin, Y. M., Rebrov, A. P., Tereshchenko, S. N., Chesnikova, A. I., Hayrapetyan, H. G., Babin, A. P., Bakulin, I. G., Bakulina, N. V., Balykova, L. A., Blagonravova, A. S.,

- Boldina, M. V., Vaisberg, A. R., Galyavich, A. S., Gomonova, V. V., Grigorieva, N. Y., Gubareva, I. V., Demko, I. V., ... Arutyunov, G. P. (2021). Analysis of influence of background therapy for comorbidities in the period before infection on the risk of the lethal COVID outcome. Data from the international ACTIV SARS-CoV-2 registry («Analysis of chronic non-infectious diseases dynamics after COVID-19 infection in adult patients SARS-CoV-2»). *Kardiologiia*, 61(9), 20–32. <https://doi.org/10.18087/cardio.2021.9.n1680>
- Thomson, R. J., Hunter, J., Dutton, J., Schneider, J., Khosravi, M., Casement, A., Dhadwal, K., & Martin, D. (2020). Clinical characteristics and outcomes of critically ill patients with COVID-19 admitted to an intensive care unit in London: A prospective observational cohort study. *PloS one*, 15(12), e0243710. <https://doi.org/10.1371/journal.pone.0243710>
- Violetis, O. A., Chasouraki, A. M., Giannou, A. M., & Baraboutis, I. G. (2020). COVID-19 Infection and Haematological Involvement: a Review of Epidemiology, Pathophysiology and Prognosis of Full Blood Count Findings. *SN comprehensive clinical medicine*, 1–5. Advance online publication. <https://doi.org/10.1007/s42399-020-00380-3>
- Wang L. (2020). C-reactive protein levels in the early stage of COVID-19. *Medecine et maladies infectieuses*, 50(4), 332–334. <https://doi.org/10.1016/j.medmal.2020.03.007>
- Wei, W., Hu, X. W., Cheng, Q., Zhao, Y. M., & Ge, Y. Q. (2020). Identification of common and severe COVID-19: the value of CT texture analysis and correlation with clinical characteristics. *European radiology*, 30(12), 6788–6796. <https://doi.org/10.1007/s00330-020-07012-3>
- WHO. (2020). Clinical management of severe acute respiratory infection when novel coronavirus (nCoV) infection is suspected: interim guidance. [https://www.who.int/publications-detail/clinicalmanagement-of-severe-acute-respiratory-infection-when-novelcoronavirus-\(ncov\)-infection-is-suspected](https://www.who.int/publications-detail/clinicalmanagement-of-severe-acute-respiratory-infection-when-novelcoronavirus-(ncov)-infection-is-suspected).

- Writing Committee for the COMEBAC Study Group, Morin, L., Savale, L., Pham, T., Colle, R., Figueiredo, S., Harrois, A., Gasnier, M., Lecoq, A. L., Meyrignac, O., Noel, N., Baudry, E., Bellin, M. F., Beurnier, A., Choucha, W., Corruble, E., Dortet, L., Hardy-Leger, I., Radiguer, F., Sportouch, S., ... Monnet, X. (2021). Four-Month Clinical Status of a Cohort of Patients After Hospitalization for COVID-19. *JAMA*, 325(15), 1525–1534. <https://doi.org/10.1001/jama.2021.3331>
- Wu, C., Chen, X., Cai, Y., Xia, J., Zhou, X., Xu, S., Huang, H., Zhang, L., Zhou, X., Du, C., Zhang, Y., Song, J., Wang, S., Chao, Y., Yang, Z., Xu, J., Zhou, X., Chen, D., Xiong, W., Xu, L., ... Song, Y. (2020). Risk Factors Associated With Acute Respiratory Distress Syndrome and Death in Patients With Coronavirus Disease 2019 Pneumonia in Wuhan, China. *JAMA internal medicine*, 180(7), 934–943. <https://doi.org/10.1001/jamainternmed.2020.0994>
- Wu, Y., Xu, X., Chen, Z., Duan, J., Hashimoto, K., Yang, L., Liu, C., & Yang, C. (2020). Nervous system involvement after infection with COVID-19 and other coronaviruses. *Brain, behavior, and immunity*, 87, 18–22. <https://doi.org/10.1016/j.bbi.2020.03.031>
- Xu, Z., Shi, L., Wang, Y., Zhang, J., Huang, L., Zhang, C., Liu, S., Zhao, P., Liu, H., Zhu, L., Tai, Y., Bai, C., Gao, T., Song, J., Xia, P., Dong, J., Zhao, J., & Wang, F. S. (2020b). Pathological findings of COVID-19 associated with acute respiratory distress syndrome. *The Lancet. Respiratory medicine*, 8(4), 420–422. [https://doi.org/10.1016/S2213-2600\(20\)30076-X](https://doi.org/10.1016/S2213-2600(20)30076-X)
- Yang, X., Yu, Y., Xu, J., Shu, H., Xia, J., Liu, H., Wu, Y., Zhang, L., Yu, Z., Fang, M., Yu, T., Wang, Y., Pan, S., Zou, X., Yuan, S., & Shang, Y. (2020). Clinical course and outcomes of critically ill patients with SARS-CoV-2 pneumonia in Wuhan, China: a single-centered, retrospective, observational study. *The Lancet. Respiratory medicine*, 8(5), 475–481. [https://doi.org/10.1016/S2213-2600\(20\)30079-5](https://doi.org/10.1016/S2213-2600(20)30079-5)

- Yang, X., Yang, Q., Wang, Y., Wu, Y., Xu, J., Yu, Y., & Shang, Y. (2020). Thrombocytopenia and its association with mortality in patients with COVID-19. *Journal of thrombosis and haemostasis : JTH*, 18(6), 1469–1472. <https://doi.org/10.1111/jth.14848>
- Yin, T., Li, Y., Ying, Y., & Luo, Z. (2021). Prevalence of comorbidity in Chinese patients with COVID-19: systematic review and meta-analysis of risk factors. *BMC infectious diseases*, 21(1), 200. <https://doi.org/10.1186/s12879-021-05915-0>
- Zhang, Y., He, L., Chen, H., Lu, S., Xiong, Y., Liu, J., Zheng, Y., Wang, S., & Liu, L. (2020). Manifestations of blood coagulation and its relation to clinical outcomes in severe COVID-19 patients: Retrospective analysis. *International journal of laboratory hematology*, 42(6), 766–772. <https://doi.org/10.1111/ijlh.13273>
- Zhou, F., Yu, T., Du, R., Fan, G., Liu, Y., Liu, Z., Xiang, J., Wang, Y., Song, B., Gu, X., Guan, L., Wei, Y., Li, H., Wu, X., Xu, J., Tu, S., Zhang, Y., Chen, H., & Cao, B. (2020). Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. *Lancet (London, England)*, 395(10229), 1054–1062. [https://doi.org/10.1016/S0140-6736\(20\)30566-3](https://doi.org/10.1016/S0140-6736(20)30566-3)

LAMPIRAN

LAMPIRAN 1 : BIODATA PENULIS



A. Data Pribadi

Nama : Emasari Kallang
Nama Panggilan : Ema
Tempat, Tanggal Lahir : Palopo, 03
September 1999
Jenis Kelamin : Perempuan
Agama : Kristen Protestan
Alamat : Bontoramba Lr. XII
Nama Ayah : Alm. Anthonius Kallang
Nama Ibu : Helena
Pekerjaan Orang Tua : Ayah : Pensiunan PNS
Ibu : Pensiunan PNS
Alamat orang Tua : Walenrang
Anak Ke : 5 dari 5 bersaudara
No. Hp : 082293069312
Email : Emasarikallang03@gmail.com
Hobby : Menonton
Motto : Work Hard Play Hard

B. Pendidikan Formal

Tahun	Institusi	Keterangan
2004 – 2005	TK	TK Silo Harapan Bangsa
2005 - 2011	SD	SDN 256 Pabuntang
2011 – 2014	SMP	SMPN 2 Lamasi
2014 - 2017	SMA	SMAN 21 Makassar
2018 – Sekarang	UNIVERSITAS	Universitas Hasanuddin

C. Riwayat Organisasi (5 Tahun Terakhir)

Nama Organisasi	Jabatan	Tahun
PMK FK-FKG Unhas	Anggota	2018 - Sekarang
BEM FK Unhas	Anggota	2020 - 2021

LAMPIRAN 2 :

Tabel Data Hasil Covid-19 Di Rumah Sakit Universitas

Hasanuddin Di Ruang ICU.

NO	NOMOR	NAMA	JENIS KELAMIN	UMUR	KOMORBID	ASAL PASIEN	JAMA'AH/SEKOLAH	RIWAYAT RADILOGI	HB	HCT	MCV	MCH	MCHC	MCV ₂	PT ₁	LEUKOSIT	MGK%
1	16252	B	L	68 tahun	hipertensi, diabetes mellitus, pening-gatal, eritema hati	konk dgi pasien covid	13 hari	PNEUMONIA	16	45,6	93,8	29,5	84	600	8,7	35	
2	16389	A, B	L	58 tahun	ada penyakit sebelumnya	konk dgi pasien covid	15 hari	PNEUMONIA bilateral hipokal, covid-19, cardiomegaly, dilatasi aorta	13	37	0,79	29,9	84,9	260	8,4	31,1	
3	16464	A, B, M	L	78 tahun	hipertensi, dm, ards, koagulasi	telat ada nekrotik dgi pasien covid	15 hari	pneumonia bilateral, dilatasi aorta, cardiomegaly, dilatasi, elongatio et atherosclerosis aorta	14,8	43	0,17	30,1	85,4	170	27,46	35,2	
4	16584	H, S, T	L	47 tahun	pening-gatal eritema hati, koagulasi	telat ada nekrotik	10 hari	bronchopneumonia dengan proses spesifik aktif	15,2	42	0,18	28,7	83,3	193	14,99	32,9	
5	16584	H, M, M	L	68 tahun	pening-gatal, ekstremitas HT, koagulasi, hipobalbumin, edema paru	telat ada nekrotik	12 hari	pneumonia bilateral, cardiomegaly, dilatasi aorta, dilatasi et atherosclerosis aorta	12,6	32,6	0,18	30	78,9	188	14,64	38	
6	12152	P, S	L	84 tahun	Acute cor pulmonale, stasis, stress, ulcer hipotensi, ad dng dgi, vesiculae necrosis, vesiculae capae, 2 hari lalu	konk dgi nekrosis nekrosis, vesiculae capae, 2 hari lalu	3 hari	pneumonia bilateral, cardiomegaly, dilatasi aorta, dilatasi et atherosclerosis aorta	7,6	26,2	0,27	27	93,2	254	14,84	29	
7	16584	H, I	L	81 tahun	hipertensi, HHS, ARDS, stroke HT, hipobalbumin, trombolisis	ada dng dgi nekrosis nekrosis, vesiculae capae, 2 hari lalu	3 hari	cardiomegaly, elongatio aorta, dilatasi et atherosclerosis aorta	14,4	42,7	0,13	32,6	96,6	115	22,86	33,7	
8	16584	M, M	L	78 tahun	dm, hipertensi, jantung koroner, koagulasi	demam 7 hari lalu, batuk	8 hari	pneumonia bilateral, cardiomegaly, dilatasi aorta, dilatasi et atherosclerosis aorta	17,5	52,6	0,17	30,5	91,8	237	14,66	33,3	
9	16178	H, M, D	L	56 tahun	hipertensi, ards, dtd, dm, anemia, koagulasi	demam 7 hari lalu, batuk	8 hari	pneumonia bilateral, dilatasi aorta	10,8	32,1	0,24	28,2	83,8	241	7,7	33,6	
10	16102	H, H, H	L	85 tahun	hipertensi, hipobalbumin, ards	konk dgi pasien covid (jauk)	13 hari	pneumonia bilateral, suspek efusi pleura, cardiomegaly	13,1	40,8	0,12	29,6	85,5	115	3,74	34,6	
12	9398	M, S	L	66 tahun	dm, hipertensi, koagulasi, ensefalopati, sepsis	konk dgi pasien covid	6 hari	pneumonia bilateral, dilatasi aorta, cardiomegaly	13,2	37,8	0,19	30,6	87,7	199	5,83	34,9	
13	7938	M, T	L	78 tahun	hipertensi, ards	-	10 hari	pneumonia bilateral	14,6	-	-	-	-	131	6100	-	
14	16159	T, J	L	47 tahun	dm, pneumonia, ARDS	-	12 hari	pneumonia bilateral, dilatasi aorta, cardiomegaly	12,4	37,5	0,22	27,8	84,1	209	7,65	33,1	
15	16218	H, A, M, B	P	72 tahun	hipertensi, covid, pening-gatal eritema hati, AL, hipobalbumin	konk dgi pasien covid	13 hari	PNEUMONIA bilateral hipokal covid-19, cardiomegaly, dilatasi aorta	12,4	37,5	0,22	27,8	84,1	209	7,65	33,1	
16	16243	H, A, M	L	68 tahun	DM, ards, HT	telat ada nekrotik dgi pasien covid	6 hari	pneumonia bilateral	12,7	36	0,15	29,3	83,1	155	4,72	35,3	
17	16384	O	L	48 tahun	hipertensi, ensefalopati, stroke non IHR	telat ada nekrotik dgi pasien covid	6 hari	pneumonia bilateral, atherosclerosis aorta	14,3	41,9	0,19	28,8	84,5	192	6,07	34,1	
18	16385	S	P	71 tahun	hipertensi, ensefalopati, stroke non IHR	telat ada nekrotik dgi pasien covid	4 hari	pneumonia bilateral, dilatasi aorta, elongatio aorta	11,3	37	0,17	25,6	83,9	181	4,75	30,5	
19	14001	A, D, T	L	57 tahun	Chf, Jkt, hsd, hipertensi	konk dgi pasien covid (suaru)	12 hari	pneumonia pulmo bilateral, cardiomegaly	13	39,5	0,38	27,8	84,6	371	10,32	31,9	
20	16584	B, G, R	L	67 tahun	DM, ards	telat ada nekrotik dgi pasien covid	3 hari	-	12,5	38,5	0,44	30,3	93,2	119	24,55	31,5	
21	79798	B, G, R	L	64 tahun	hipertensi, jantung koroner	telat ada nekrotik dgi pasien covid	8 hari	pneumonia bilateral, dilatasi aorta, dilatasi et atherosclerosis aorta	13,5	41,8	0,26	32,1	99,3	271	14,66	31,3	
22	2395	T, I	L	64 tahun	hipertensi, jantung koroner	telat ada nekrotik dgi pasien covid	8 hari	pneumonia bilateral, dilatasi aorta, dilatasi et atherosclerosis aorta	14,4	43,9	0,27	26,4	80,4	260	9,03	31,8	
23	16698	H, M	P	47 tahun	hipertensi, dm, edem paru akut, atel fibrosis, chf	telat ada nekrotik dgi pasien covid	10 hari	pneumonia destra, lymphadenopathy hilar, destra, cardiomegaly	11,8	37,8	0,49	26,2	83,8	493	4,87	31,2	
24	16543	M	P	70 tahun	hipertensi, kanker ovarium, actis, efusi pleura	telat ada nekrotik dgi pasien covid	19 hari	efusi pleura bilateral, dilatasi aorta, elongatio aorta	14,9	44,5	0,2	30,1	89,9	202	12,57	31,5	
25	16409	H, M, R	L	63 tahun	hipertensi, ards	telat ada nekrotik dgi pasien covid	3 hari	pneumonia sinistra	13,1	40,7	0,32	26,9	83,6	318	13,16	31,2	
26	16074	D, P	P	51 tahun	hipertensi, ards, dm, hipobalbumin	ada riwayat tumor otak (jakra)	10 hari	pneumonia bilateral, dilatasi aorta	12,1	38,3	0,44	22	38,3	134	4,17	31,6	
27	15344	A, F	L	73 tahun	hipertensi, hipobalbumin, koagulasi	telat ada nekrotik dgi pasien covid	13 hari	pneumonia bilateral, dilatasi aorta	11,6	29,8	0,34	32,2	87,8	356	6,06	36,9	
28	10231	M, U	L	73 tahun	dm, hipertensi, hipobalbumin	adatomak dgi pasien covid (titi)	4 hari	pneumonia bilateral	15,1	48,3	-	29	82,5	225	8,4	35,1	
29	16107	ABD, W, M	L	67 tahun	hipertensi, ards, pneumonia, chf, hipertensi, DM, anemia, hipobalbumin	telat ada nekrotik dgi pasien covid	2 hari	pneumonia bilateral, dilatasi aorta, dilatasi et atherosclerosis aorta	13,1	40,4	0,3	26,4	81,3	312	7,81	31,4	
30	16161	H, I, D, M	P	67 tahun	hipertensi, dm, edem paru akut, atel fibrosis, chf	telat ada nekrotik dgi pasien covid	4 hari	pneumonia bilateral, tipikal viral infection, cardiomegaly, dilatasi aorta	12,3	36,3	0,21	27	79,6	199	8,81	31,9	
31	3624	D, S	L	67 tahun	hipertensi, kanker ovarium, actis, efusi pleura	telat ada nekrotik dgi pasien covid	11 hari	cardiomegaly, dilatasi aorta, dilatasi et atherosclerosis aorta	9	27,8	0,43	28,6	88,3	496	18,45	31,4	
32	16242	H, P	P	69 tahun	hipertensi, ards	telat ada nekrotik dgi pasien covid	11 hari	atelectasis pulmo sinistra, pneumonia efusi pleura minimal	12,9	36,9	0,31	29,9	85,4	333	6,64	35	
33	16338	H, P	P	66 tahun	dm, hipertensi, hipobalbumin, gangguan elektrolit	telat ada nekrotik dgi pasien covid	6 hari	pneumonia bilateral, light cardiomegaly, dilatasi aorta	12,6	37	0,23	28,8	84,5	230	11,41	34,1	
34	16212	H, A, S	P	57 tahun	ensefalopati sepsi, anemia at causa suspek penyakit kronik	telat ada nekrotik dgi pasien covid	8 hari	pneumonia bilateral, cardiomegaly, dilatasi aorta, dilatasi et atherosclerosis aorta	8,4	26,8	0,35	27,5	87,6	661	20,91	31,3	
35	16250	A, M, A, S	L	55 tahun	dm	telat ada nekrotik dgi pasien covid	3 hari	pneumonia bilateral, cor normal	14,9	41,7	0,11	31	86,7	97	4,14	35,7	
36	18258	A, M, A, S	L	66 tahun	hipertensi, anemia	ada kontak dgi pasien covid	8 hari	pneumonia bilateral sus, viral infection, cardiomegaly	9,7	31,5	0,2	21,9	170	206	4,1	30,8	
37	2428	DB, A	L	46 tahun	hipertensi, chronic kidney disease, an difisis, dm, anemia	telat ada nekrotik dgi pasien covid	10 hari	light cardiomegaly, dilatasi aorta, dilatasi et atherosclerosis aorta, pulmo normal	8,4	24,5	0,2	28,6	81,3	205	3,02	34,3	
38	13572	M, Y	L	63 tahun	hipertensi	telat ada nekrotik dgi pasien covid	2 hari	telat dilatasi tonus bronchi, pneumonia, dilatasi et atherosclerosis aorta, dilatasi et atherosclerosis aorta	13,1	39,6	0,12	29,4	88,8	109	7,37	31,3	
39	16269	S	L	62 tahun	hipertensi, ards	nekrotik dgi pasien covid (tak dikabuli)	10 hari	pneumonia destra, cardiomegaly, dilatasi aorta, elongatio et atherosclerosis aorta	13,8	40,9	0,17	27,1	80,4	184	11,41	33,7	
40	16154	H, A, N, M	P	73 tahun	hipertensi, dm, ards	nekrotik dgi pasien covid (tak dikabuli)	8 hari	pneumonia sinistra, cardiomegaly	12,4	46,7	0,16	26,7	80,9	196	10,36	33	
41	16154	H, A, N, M	P	73 tahun	hipertensi, dm, ards	telat ada nekrotik dgi pasien covid	11 hari	pneumonia bilateral, efusi pleura bilateral	12,5	46,9	0,17	30,1	91,1	186	5,9	32,9	
42	16154	H, A, N, M	P	73 tahun	hipertensi, dm, ards	telat ada nekrotik dgi pasien covid (tak dikabuli)	10 hari	pneumonia bilateral, cardiomegaly, dilatasi aorta, dilatasi et atherosclerosis aorta	12,5	46,9	0,17	30,1	91,1	186	5,9	32,9	
43	16154	H, A, N, M	P	73 tahun	hipertensi, dm, ards	telat ada nekrotik dgi pasien covid (tak dikabuli)	10 hari	pneumonia bilateral, dilatasi aorta, dilatasi et atherosclerosis aorta	12,5	46,9	0,17	30,1	91,1	186	5,9	32,9	
44	16154	H, A, N, M	P	73 tahun	hipertensi, dm, ards	telat ada nekrotik dgi pasien covid (tak dikabuli)	10 hari	pneumonia bilateral, dilatasi aorta, dilatasi et atherosclerosis aorta	12,5	46,9	0,17	30,1	91,1	186	5,9	32,9	
45	16154	H, A, N, M	P	73 tahun	hipertensi, dm, ards	telat ada nekrotik dgi pasien covid (tak dikabuli)	10 hari	pneumonia bilateral, dilatasi aorta, dilatasi et atherosclerosis aorta	12,5	46,9	0,17	30,1	91,1	186	5,9	32,9	
46	16154	H, A, N, M	P	73 tahun	hipertensi, dm, ards	telat ada nekrotik dgi pasien covid (tak dikabuli)	10 hari	pneumonia bilateral, dilatasi aorta, dilatasi et atherosclerosis aorta	12,5	46,9	0,17	30,1	91,1	186	5,9	32,9	
47	16154	H, A, N, M	P	73 tahun	hipertensi, dm, ards	telat ada nekrotik dgi pasien covid (tak dikabuli)	10 hari	pneumonia bilateral, dilatasi aorta, dilatasi et atherosclerosis aorta	12,5	46,9	0,17	30,1	91,1	186	5,9	32,9	
48	14728	H	L	67 tahun	DM, koagulasi, dm, pening-gatal eritema hati	nekrotik dgi pasien covid (tak dikabuli)	2 hari	pneumonia bilateral	10,5	32,5	0,13	30,6	94,8	107	4,62	32,3	
49	16158	H	L	67 tahun	DM, koagulasi, dm, pening-gatal eritema hati	nekrotik dgi pasien covid (tak dikabuli)	2 hari	pneumonia bilateral	13,5	38,9	0,22	28,2	81,2	258	8,5	34,7	
50	15874	H	L	67 tahun	DM, koagulasi, dm, pening-gatal eritema hati	nekrotik dgi pasien covid (tak dikabuli)	2 hari	pneumonia bilateral	12,6	37,2	0,11	28,1	82,9	106	3,96	33,9	
51	56763	M	L	58 tahun	hipertensi, dm, all/feid	telat ada nekrotik dgi pasien covid	10 hari	pneumonia bilateral	14,9	43,2	0,22	28,9	83,9	258	5,66	34,5	
52	44845	M	L	58 tahun	hipertensi, dm, pasien on hd 3x seminggu, ards, adhf, chd, chf, dm, ards	telat ada nekrotik dgi pasien covid	4 hari	cardiomegaly, dilatasi aorta, dilatasi et atherosclerosis aorta, efusi pleura bilateral	8,7	26,5	0,25	32,2	98,1	267	2,55	30,8	
53	16106	R	P	65 tahun	ARDS, koagulasi	nekrotik dgi pasien covid (tak dikabuli)	10 hari	pneumonia bilateral	11,4	35,1	0,38	28,6	88,2	340	16,14	31,5	

RBC	IL6	PT	APTT	ALBUMIN	D-DIMER	CRP	RW. VAKSIN	RIWAYAT	antibiotik	antivirus
5,43	18,4	14,5	14,2	2,9	1,66	positif 16	tdk ada	✓	meropenem	remdesivir
4,36	427	-	-	3	58,1	-	-	rmnggl	meropenem, moxifloxacin,	remdesivir
4,92	17,5	-	-	2,9	1260	negatif	-	rmnggl	moxifloxacin, azithromycin,	remdesivir
5,29	-	12,2	22,6	3,6	870	-	-	✓	levofloxacin, azithromycin	remdesivir
4,13	19,6	15,2	14,2	2,7	4230	-	-	✓	Levofloxacin, azithromycin, meropenem	remdesivir
2,81	-	-	-	-	-	-	-	rmnggl	-	remdesivir
4,42	19,6	-	-	2,3	-	-	-	rmnggl	Levofloxacin,	remdesivir
5,73	-	-	-	-	6,52	-	-	rmnggl	azithromycin	favipiravir, remdesivir,
4,61	-	-	-	2,7	2840	-	-	✓	meropenem, levofloxacin,	remdesivir
3,83	-	13	14,11	43,9	-	-	-	✓	meropenem, moxifloxacin, azithromycin	remdesivir
4,11	7,42	-	-	3,2	597	positif 12	-	✓	Levofloxacin, azithromycin, meropenem	remdesivir, favipiravir
4,77	16	-	-	2,6	1120	-	-	rmnggl	Levofloxacin, azithromycin, meropenem	remdesivir,
4,31	2,66	-	-	3	1,46	kuantitatif 171,1	-	✓	Levofloxacin,	favipiravir, remdesivir,
-	-	-	-	-	87	-	tdk ada	rmnggl	moxifloxacin, azithromycin, meropenem	remdesivir
4,46	8,26	15	14,28	35,4	0,59	positif 32	tdk ada	rmnggl	meropenem, levofloxacin,	remdesivir
4,42	131	-	-	3,1	1,41	-	-	✓	Levofloxacin, azithromycin,	remdesivir
4,33	-	12,1	14,09	29,6	-	-	-	rmnggl	azithromycin	favipiravir,
4,96	-	-	-	2,7	1,19	semikuantitatif 48	-	rmnggl	Levofloxacin, azithromycin,	remdesivir
4,41	83,4	-	-	3,4	435	142,5	-	✓	azithromycin	remdesivir
4,67	-	15,5	14,3	24,5	1320	semikuantitatif 24	-	✓	meropenem	remdesivir
4,13	-	-	-	-	242	-	-	rmnggl	Levofloxacin, azithromycin,	remdesivir
4,21	-	-	-	3,4	631	negatif	-	✓	Levofloxacin, azithromycin,	remdesivir
5,46	-	17,2	14,4	29	4,2	negatif	tdk ada	✓	Levofloxacin,	remdesivir
-	-	-	-	3,2	3500	-	-	rmnggl	-	remdesivir
4,95	-	-	-	-	6,24	-	-	✓	meropenem, levofloxacin,	remdesivir
4,87	22,3	13,2	14,0	22,3	362	negatif	-	✓	meropenem, levofloxacin,	remdesivir
5,5	-	13,8	14,1	33,1	2,8	>5000	-	rmnggl	Levofloxacin,	remdesivir
3,6	-	-	-	2,8	2240	-	ada (1)	rmnggl	Levofloxacin, azithromycin,	remdesivir
-	-	-	-	3,3	1,05	positif 1/8(48mg)	-	dirujuk krna	Levofloxacin,	remdesivir
4,97	-	-	-	-	8	-	-	✓	moxifloxacin	remdesivir
3,15	-	15	14,25	26,8	3380	-	tdk ada	✓	kotrimoksazol	remdesivir
4,56	-	-	-	2,7	738	-	-	rmnggl	moxifloxacin, azithromycin,	remdesivir,
4,32	-	-	-	2,4	4,99	positif 1/16(128)	-	rmnggl	levofloxacin, meropenem, azithromycin	remdesivir
4,38	788	15	14,34	46,1	11214,52	-	-	rmnggl	levofloxacin, azithromycin	remdesivir
3,06	-	-	-	2,2	11,5	-	-	rmnggl	ceftriaxone, metrodiazol,	remdesivir
4,81	-	-	-	-	-	-	-	rmnggl	-	-
4,42	-	-	-	2,6	3,9	-	-	MNGGL	azithromycin, levofloxacin,	remdesivir
2,94	-	-	-	-	-	-	-	rmnggl	azithromycin, ceftriaxone	oseltamivir, remdesivir
4,46	-	-	-	-	4110	-	-	rmnggl	moxifloxacin,	remdesivir
5,09	-	15,7	14,3	28,8	2	3,74	-	rmnggl	levofloxacin	remdesivir
5,77	-	-	-	2,5	-	-	-	rmnggl	meropenem, levofloxacin,	remdesivir
5,15	27,6	10,5	14,17	39	345	negatif	-	✓	levofloxacin	remdesivir
4,72	-	14,9	14,2	35,2	912	-	-	rmnggl	meropenem, levofloxacin,	remdesivir
3,82	-	-	-	-	1,36	-	-	rmnggl	levofloxacin	remdesivir
5,54	-	-	-	-	-	-	-	rmnggl	meropenem, levofloxacin,	remdesivir
4,23	-	13,1	14,0	39,5	993	positif	vaksin lengkap	rmnggl	Levofloxacin	remdesivir
3,43	-	-	-	3,1	920	-	-	✓	Levofloxacin	remdesivir
4,79	-	-	-	-	-	-	-	rmnggl	azithromycin, moxifloxacin, meropenem	remdesivir
4,49	-	13	14,04	35,3	1220	-	tdk ada	rmnggl	-	remdesivir
5,15	-	-	-	3,6	1,17	-	-	rmnggl	Levofloxacin, meropenem,	remdesivir
2,7	103	-	-	2,1	1760	-	-	rmnggl	azithromycin, levofloxacin,	remdesivir
3,14	-	20,1	14,8	33,1	2870	-	-	✓	-	remdesivir
3,98	2,04	19,4	14,17	28,2	9,7	-	tdk ada	✓	Levofloxacin, azithromycin	remdesivir

LAMPIRAN 3 :

Surat Permohonan Izin Penelitian



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,
RISET, DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN
FAKULTAS KEDOKTERAN
PROGRAM STUDI SARJANA KEDOKTERAN

Jl. Perintis Kemerdekaan Km. 10 Tamalanrea, Makassar 90245, Telp. (0411) 587436, Fax. (0411) 586297

Nomor : 20520/UN4.6.8/PT.01.04/2021
Lamp : ---
Hal : Permohonan Izin Penelitian

27 September 2021

Kepada Yth. :
Direktur RSP Universitas Hasanuddin
Di-
Makassar

Dengan hormat, disampaikan bahwa mahasiswa Program Studi Pendidikan Dokter Fakultas Kedokteran Universitas Hasanuddin di bawah ini :

N a m a : Emasari Kallang
N i m : C011181366

bermaksud melakukan penelitian di RSP Universitas Hasanuddin dengan judul penelitian **“Gambaran Kasus Covid-19 Dengan Perawatan ICU Di Rumah Sakit Universitas Hasanuddin Periode Januari-Desember 2020”**

Sehubungan hal tersebut kiranya yang bersangkutan dapat diberi izin untuk melakukan Penelitian dalam rangka penyelesaian studinya.

Demikian permohonan kami, atas bantuan dan kerjasamanya disampaikan terima kasih.

Ketua,
Program Studi Sarjana Kedokteran
Fakultas Kedokteran Unhas



Tembusan Yth :
1. Arsip

LAMPIRAN 4 :
Rekomendasi Persetujuan Etik



REKOMENDASI PERSETUJUAN ETIK
Nomor : 633/UN4.6.4.5.31/ PP36/ 2021

Tanggal: 29 September 2021

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH21090605		No Sponsor Protokol	
Peneliti Utama	Emasari Kallang		Sponsor	
Judul Peneliti	Gambaran kasus Covid-19 dengan perawatan ICU di rumah sakit Universitas Hasanuddin periode Januari-Desember 2020			
No Versi Protokol	1	Tanggal Versi	1 Oktober 2021	
No Versi PSP		Tanggal Versi		
Tempat Penelitian	RS Universitas Hasanuddin Makassar			
Jenis Review	<input checked="" type="checkbox"/> Exempted <input type="checkbox"/> Expedited <input type="checkbox"/> Fullboard Tanggal	Masa Berlaku	29 September 2021 sampai 29 September 2022 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:

- 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 5 :

Surat Keterangan Selesai Penelitian



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,
RISET, DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN
RUMAH SAKIT UNHAS

Jl. Perintis Kemerdekaan Km. 10 Tamalanrea, Makassar 90245

Website www.rs.unhas.ac.id Email info@rs.unhas.ac.id Telp: (0411) 591331 Fax: (0411) 591332

Nomor : 4402/UN4.24.1.2/PT.01.05/2022
Hal : Surat Keterangan Selesai Penelitian

24 Mei 2022

Dengan ini menerangkan bahwa mahasiswa yang beridentitas :

Nama : Emasari Kallang
NIM : C011181366
Institusi : Universitas Hasanuddin Makassar
Kode Penelitian : 211012_1

Telah menyelesaikan penelitian di Rumah Sakit Unhas.

: 30 Desember 2021

Terhitung pada tanggal

: Data Sekunder: Data RM Pasien Covid-19 dengan perawatan

Dengan Sampel

ICU

Dalam rangka penyusunan Skripsi yang berjudul:

**"GAMBARAN KASUS COVID-19 DENGAN PERAWATAN ICU DI RUMAH SAKIT
UNIVERSITAS HASANUDDIN PERIODE JANUARI-DESEMBER 2020"**

Demikian surat keterangan ini dibuat dan diberikan kepada yang bersangkutan untuk dipergunakan seperlunya.

Kepala Bidang Penelitian dan Inovasi



dr. Asim Taslim, Sp.Onk.Rad, M.Kes
NIP. 198304252012121003