

DAFTAR PUSTAKA

- Abdool-Gaffar, M. S., Calligaro, G., Wong, M. L., Smith, C., Lalloo, U. G., Nicolaas Koegelenberg, C. F., Dheda, K., Allwood, B. W., Goolam-Mahomed, A., & Van Zyl-Smit, R. N. (2019). Management of chronic obstructive pulmonary disease—A position statement of the South African Thoracic Society: 2019 update. In *Journal of Thoracic Disease* (Vol. 11, Issue 11, pp. 4408–4427). AME Publishing Company. <https://doi.org/10.21037/jtd.2019.10.65>
- Abramson, M., & Sim, M. R. (2006). Theophylline for COPD. *Thorax*, 61(9), 741–742. <https://doi.org/10.1136/thx.2005.056200>
- Alaydrus, S. (2020). Analisis Biaya Pengobatan Penyakit Paru Obstruktif Kronik Pasien Rawat Inap Rumah Sakit Umum Daerah Kabupaten Sukoharjo. *Jurnal Ilmiah Farmasi Farmasyifa*, 3(1), 51–61. <https://doi.org/10.29313/jiff.v3i1.4540>
- Alexander, V. M. H. J. M. V. S. M. K. C. M. (2021). In patients with stable COPD, is a short-acting beta agonist alone as effective for controlling symptoms as a SABA plus a short-acting muscarinic antagonist? *Family Physicians Inquiries Network, Inc.*
- Almadhoun K, S. S. (2023). Bronchodilators. In *StatPearls*. StatPearls Publishing.
- Andayani, T. M. (2013). *Farmakoekonomi Prinsip dan Metodologi*. Bursa Ilmu.
- Anzueto, A., & Miravittles, M. (2018). The Role of Fixed-Dose Dual Bronchodilator Therapy in Treating COPD. In *American Journal of Medicine* (Vol. 131, Issue 6, pp. 608–622). Elsevier Inc. <https://doi.org/10.1016/j.amjmed.2017.12.018>
- Anzueto, A., & Miravittles, M. (2020). Tiotropium in chronic obstructive pulmonary disease - A review of clinical development. In *Respiratory Research* (Vol. 21, Issue 1). BioMed Central Ltd. <https://doi.org/10.1186/s12931-020-01407-y>
- Australian Institute of Health and Welfare. (2023, June 30). *Chronic respiratory conditions: COPD*. <https://www.aihw.gov.au/reports/chronic-respiratory-conditions/copd>
- Bagge, K., Sivapalan, P., Eklöf, J., Hertz, F. B., Andersen, C. Ø., Hansen, E. F., Jarlöv, J. O., & Jensen, J. U. S. (2021). Antibiotic treatment in acute exacerbation of COPD: patient outcomes with amoxicillin vs.

- amoxicillin/clavulanic acid—data from 43,636 outpatients. *Respiratory Research*, 22(1). <https://doi.org/10.1186/s12931-020-01606-7>
- Bergqvist, J., Andersson, A., Schiöler, L., Olin, A. C., Murgia, N., Bove, M., Janson, C., Abramson, M. J., Leynaert, B., Nowak, D., Franklin, K. A., Pin, I., Storaas, T., Schlünssen, V., Heinrich, J., & Hellgren, J. (2020). Non-infectious rhinitis is more strongly associated with early—rather than late—onset of COPD: data from the European Community Respiratory Health Survey (ECRHS). *European Archives of Oto-Rhino-Laryngology*, 277(5), 1353–1359. <https://doi.org/10.1007/s00405-020-05837-8>
- Cazzola, M., Rogliani, P., Calzetta, L., & Matera, M. G. (2018). Triple therapy versus single and dual long-acting bronchodilator therapy in COPD: A systematic review and meta-analysis. *European Respiratory Journal*, 52(6). <https://doi.org/10.1183/13993003.01586-2018>
- Cukic, V., Lovre, V., Dragisic, D., & Ustamujic, A. (2012). Asthma and Chronic Obstructive Pulmonary Disease (COPD) and #8211; Differences and Similarities. *Materia Socio Medica*, 24(2), 100. <https://doi.org/10.5455/msm.2012.24.100-105>
- Dipiro, J., Yee, G., Haines, S., & Nolin, T. (2020). *Pharmacotherapy a Pathophysiologic Approach* (11th ed.). Mc Graw Hill.
- Fedotov, V., Makarov, I., Mokeeva, N., & Dobrotina, I. (2016). Prevalence of Cholelithiasis among Patients with Occupational Pulmonary Pathology and Patients with Vibrational Disease. *British Journal of Medicine and Medical Research*, 12(8), 1–5. <https://doi.org/10.9734/bjmmr/2016/22303>
- Fekete, M., Csípő, T., Fazekas-Pongor, V., Fehér, Á., Szarvas, Z., Kaposvári, C., Horváth, K., Lehoczki, A., Tarantini, S., & Varga, J. T. (2023). The Effectiveness of Supplementation with Key Vitamins, Minerals, Antioxidants and Specific Nutritional Supplements in COPD—A Review. In *Nutrients* (Vol. 15, Issue 12). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/nu15122741>
- Gläser, S., Krüger, S., Merkel, M., Bramlage, P., & Herth, F. J. F. (2015). Chronic obstructive pulmonary disease and diabetes mellitus: A systematic review of the literature. In *Respiration* (Vol. 89, Issue 3, pp. 253–264). S. Karger AG. <https://doi.org/10.1159/000369863>
- Goh, P., Zhi, H., Banu, S., & Majid, N. (2022). MODELING THE LENGTH OF HOSPITAL STAY FOR COPD AND PNEUMONIA PATIENTS IN MALAYSIA FOR 2019. In *Journal of Quality Measurement and Analysis JQMA* (Vol. 18, Issue 2). <http://www.ukm.my/jqma>

- GOLD. (2023). *GLOBAL INITIATIVE FOR CHRONIC OBSTRUCTIVE LUNG DISEASE POCKET GUIDE TO COPD DIAGNOSIS, MANAGEMENT, AND PREVENTION A Guide for Health Care Professionals 2023 EDITION*. www.goldcopd.org
- Gottwalt. (2023). Methylxanthines. In *StatPearls*. StatPearls Publishing.
- Gunen, H., Hacievliyagil, S. S., Yetkin, O., Gulbas, G., Mutlu, L. C., & In, E. (2007). The role of nebulised budesonide in the treatment of exacerbations of COPD. *European Respiratory Journal*, 29(4), 660–667. <https://doi.org/10.1183/09031936.00073506>
- Hasan, H., Arusita Departemen Pulmonologi dan Ilmu Kedokteran Respirasi, R. M., Kedokteran Universitas Airlangga, F., & Soetomo, R. (2017). Perubahan Fungsi Paru Pada Usia Tua. *JURNAL RESPIRASI*, 3(2), 52–57.
- Ismail, L., & Ibrahim, K. (2017). ANALISIS FAKTOR RISIKO KEJADIAN PENYAKIT PARU OBTRUKTIF KRONIK (PPOK) DI WILAYAH KERJA PUSKESMAS LEPO-LEPO KOTA KENDARI TAHUN 2017. *JIMKESMAS*, 2(6), 1–10.
- Janjua, S., Fortescue, R., & Poole, P. (2020). Phosphodiesterase-4 inhibitors for chronic obstructive pulmonary disease. In *Cochrane Database of Systematic Reviews* (Vol. 2020, Issue 5). John Wiley and Sons Ltd. <https://doi.org/10.1002/14651858.CD002309.pub6>
- Janson, C. (2020). Treatment with inhaled corticosteroids in chronic obstructive pulmonary disease. In *Journal of Thoracic Disease* (Vol. 12, Issue 4, pp. 1561–1569). AME Publishing Company. <https://doi.org/10.21037/jtd.2020.02.51>
- Jilani TN, P. C. S. S. (2023). *Theophylline*. StatPearls Publishing LLC.
- Kemenkes RI. (2015). *PERATURAN MENTERI KESEHATAN REPUBLIK INDONESIA NOMOR 71 TAHUN 2015 TENTANG PENANGGULANGAN PENYAKIT TIDAK MENULAR*.
- Kemenkes RI. (2019). *KEPUTUSAN MENTERI KESEHATAN REPUBLIK INDONESIA NOMOR HK.01.07/MENKES/687/2019 TENTANG PEDOMAN NASIONAL PELAYANAN KEDOKTERAN TATA LAKSANA PENYAKIT PARU OBSTRUKTIF KRONIK*.
- Kemenkes RI. (2013). *Riset Kesehatan Dasar 2013*.
- Kim, S. H., Park, J. H., Lee, J. K., Heo, E. Y., Kim, D. K., & Chung, H. S. (2017). Chronic obstructive pulmonary disease is independently associated with hypertension in men. In *Medicine (United States)* (Vol. 96,

- Issue 19). Lippincott Williams and Wilkins.
<https://doi.org/10.1097/MD.00000000000006826>
- Kim, S. Y., Lee, C. H., Yoo, D. M., Min, C. Y., & Choi, H. G. (2021). Association between chronic obstructive pulmonary disease and Ménière's disease: A nested case-control study using a national health screening cohort. *International Journal of Environmental Research and Public Health*, 18(9). <https://doi.org/10.3390/ijerph18094536>
- Komite Penilaian Teknologi Kesehatan. (2017). *Buku Panduan Penilaian Teknologi Kesehatan*. Pusat Pembiayaan dan Jaminan Kesehatan Kemenkes RI.
- Labor, M., Kirui, B. K., Nyberg, F., & Vanfleteren, L. E. G. W. (2023). Regular Inhaled Corticosteroids Use May Protect Against Severe COVID-19 Outcome in COPD. *International Journal of COPD*, 18, 1701–1712. <https://doi.org/10.2147/COPD.S404913>
- Lee, A. L., Goldstein, R. S., & Brooks, D. (2017). Chronic Pain in People With Chronic Obstructive Pulmonary Disease: Prevalence, Clinical and Psychological Implications. *Chronic Obstructive Pulmonary Diseases: Journal of the COPD Foundation*, 4(3), 194–203. <https://doi.org/10.15326/jcopdf.4.3.2016.0172>
- Liu, Y., Wheaton, A. G., Murphy, L. B., Xu, F., Croft, J. B., & Greenlund, K. J. (2019). Chronic obstructive pulmonary disease and arthritis among US adults, 2016. *Preventing Chronic Disease*, 16(7). <https://doi.org/10.5888/pcd16.190035>
- Maignan, M., Chauny, J. M., Daoust, R., Duc, L., Mabilia-Makele, P., Collomb-Muret, R., Roustit, M., Maindet, C., Pépin, J. L., & Viglino, D. (2019). Pain during exacerbation of chronic obstructive pulmonary disease: A prospective cohort study. *PLoS ONE*, 14(5). <https://doi.org/10.1371/journal.pone.0217370>
- Newman, S. P., & Busse, W. W. (2002). Evolution of dry powder inhaler design, formulation, and performance. In *Respiratory Medicine* (Vol. 96, Issue 5, pp. 293–304). Elsevier. <https://doi.org/10.1053/rmed.2001.1276>
- Nurfadhillah, A. (2017). *Analisis Biaya dan Kesesuaian Biaya Riil dengan Tarif INA-CBGs pada Pasien PPOK Peserta JKN Rawat Inap di BBKPM Surakarta*. Universitas Gadjah Mada.
- Oba, Y., Keeney, E., Ghatehorde, N., & Dias, S. (2018). Dual combination therapy versus long-acting bronchodilators alone for chronic obstructive pulmonary disease (COPD): A systematic review and network meta-analysis. In *Cochrane Database of Systematic Reviews* (Vol. 2018, Issue

- 12). John Wiley and Sons Ltd.
<https://doi.org/10.1002/14651858.CD012620.pub2>
- Orozco-Levi, M., Colmenares-Mejía, C., Ruíz, J., Valencia-Barón, Y. D., Ramírez-Sarmiento, A., Quintero-Lesmes, D. C., & Serrano, N. C. (2021). Effect of Antioxidants in the Treatment of COPD Patients: Scoping Review. In *Journal of Nutrition and Metabolism* (Vol. 2021). Hindawi Limited. <https://doi.org/10.1155/2021/7463391>
- Palinoan, H. S., Agustina, R., & Rijai, L. (2015). STUDI KARAKTERISTIK PASIEN PENYAKIT PARU OBSTRUKSI KRONIK (PPOK) DI RSUD A.W SJAHRANIE SAMARINDA PERIODE JANUARI- DESEMBER 2014. *Prosiding Seminar Nasional Kefarmasian Ke-2, Samarinda, 24-25 Oktober 2015*, 24–25.
- Patel, A. R. C., & Hurst, J. R. (2011). Extrapulmonary comorbidities in chronic obstructive pulmonary disease: State of the art. In *Expert Review of Respiratory Medicine* (Vol. 5, Issue 5, pp. 647–662). Expert Reviews Ltd. <https://doi.org/10.1586/ers.11.62>
- Permenkes. (2014). *PERATURAN MENTERI KESEHATAN REPUBLIK INDONESIA NOMOR 27 TAHUN 2014 TENTANG PETUNJUK TEKNIS SISTEM INDONESIAN CASE BASE GROUPS (INA-CBGs)*.
- Permenkes. (2016). *PERUBAHAN ATAS PERATURAN MENTERI KESEHATAN NOMOR 52 TAHUN 2016 TENTANG STANDAR TARIF PELAYANAN KESEHATAN DALAM PENYELENGGARAAN PROGRAM JAMINAN KESEHATAN*
- Permenkes. (2023). *PERMENKES-NO-3-TAHUN-2023-TENTANG-STANDAR-TARIF-PELAYANAN-KESEHATAN-DALAM-PENYELENGGARAAN-JAMINAN-KESEHATAN-1-1*. In 2023.
- Polverino, E., Dimakou, K., Hurst, J., Martinez-Garcia, M. A., Miravittles, M., Paggiaro, P., Shteinberg, M., Aliberti, S., & Chalmers, J. D. (2018). The overlap between bronchiectasis and chronic airway diseases: State of the art and future directions. In *European Respiratory Journal* (Vol. 52, Issue 3). European Respiratory Society. <https://doi.org/10.1183/13993003.00328-2018>
- Poole, P., Sathananthan, K., & Fortescue, R. (2019). Mucolytic agents versus placebo for chronic bronchitis or chronic obstructive pulmonary disease. In *Cochrane Database of Systematic Reviews* (Vol. 2019, Issue 5). John Wiley and Sons Ltd. <https://doi.org/10.1002/14651858.CD001287.pub6>
- Prosen, G., Klemen, P., Strnad, M., & Grmec, Š. (2011). Combination of lung ultrasound (a comet-tail sign) and N-terminal pro-brain natriuretic peptide

- in differentiating acute heart failure from chronic obstructive pulmonary disease and asthma as cause of acute dyspnea in prehospital emergency setting. *Critical Care*, 15(2). <https://doi.org/10.1186/cc10140>
- Putcha, N., Drummond, M. B., Wise, R. A., & Hansel, N. N. (2015). Comorbidities and Chronic Obstructive Pulmonary Disease: Prevalence, Influence on Outcomes, and Management. *Seminars in Respiratory and Critical Care Medicine*, 36(4), 575–591. <https://doi.org/10.1055/s-0035-1556063>
- Quint, J. K., Ariel, A., & Barnes, P. J. (2023). Rational use of inhaled corticosteroids for the treatment of COPD. In *npj Primary Care Respiratory Medicine* (Vol. 33, Issue 1). Nature Research. <https://doi.org/10.1038/s41533-023-00347-6>
- Ray, R., Tombs, L., Naya, I., Compton, C., Lipson, D. A., & Boucot, I. (2019). Efficacy and safety of the dual bronchodilator combination umeclidinium/vilanterol in COPD by age and airflow limitation severity: A pooled post hoc analysis of seven clinical trials. *Pulmonary Pharmacology and Therapeutics*, 57. <https://doi.org/10.1016/j.pupt.2019.101802>
- Research, O., Aghili, M., Vahidi, E., Mohammadrezaei, N., Mirrajei, T., & Abedini, A. (2020). Effectiveness of Nebulized Budesonide for COPD Exacerbation Management in Emergency Department; a Randomized Clinical Trial. *Archives of Academic Emergency Medicine*, 8(1). <http://journals.sbm.ac.ir/aaem>
- Respira. (2023). *Profil Rumah Sakit Paru Respira Yogyakarta*. <https://Rsprespira.Jogjapro.Go.Id/Profile/>.
- Restrepo, M. I., Sibila, O., & Anzueto, A. (2018). Pneumonia in patients with chronic obstructive pulmonary disease. In *Tuberculosis and Respiratory Diseases* (Vol. 81, Issue 3, pp. 187–197). Korean National Tuberculosis Association. <https://doi.org/10.4046/trd.2018.0030>
- Rosyid, A. N., & Hasan, H. (2012). *Tinjauan Kepustakaan REHABILITASI PARU PADA SEQUELAE TUBERKULOSIS*.
- Salawati, L. (2016). Hubungan Merokok Dengan Derajat Penyakit Paru HUBUNGAN MEROKOK DENGAN DERAJAT PENYAKIT PARU OBSTRUKSI KRONIK. *Jurnal Kedokteran Syiah Kuala*, 16(3), 165–169. <https://garuda.kemdikbud.go.id/documents/detail/1957289>
- Sari, C. P., Hanifah, S., Rosdiana, R., & Anisa, Y. (2021a). Efektivitas Pengobatan pada Pasien Penyakit Paru Obstruksi Kronis (PPOK) di Rumah Sakit Wilayah Yogyakarta. *JURNAL MANAJEMEN DAN*

PELAYANAN FARMASI (Journal of Management and Pharmacy Practice), 11(4), 215. <https://doi.org/10.22146/jmpf.56418>

Sari, C. P., Hanifah, S., Rosdiana, R., & Anisa, Y. (2021b). Efektivitas Pengobatan pada Pasien Penyakit Paru Obstruksi Kronis (PPOK) di Rumah Sakit Wilayah Yogyakarta. *JURNAL MANAJEMEN DAN PELAYANAN FARMASI (Journal of Management and Pharmacy Practice)*, 11(4), 215. <https://doi.org/10.22146/jmpf.56418>

Schwab, P., Dhamane, A. D., Hopson, S. D., Moretz, C., Annavarapu, S., Burslem, K., Renda, A., & Kaila, S. (2017). Impact of comorbid conditions in COPD patients on health care resource utilization and costs in a predominantly medicare population. *International Journal of COPD*, 12, 735–744. <https://doi.org/10.2147/COPD.S112256>

Sela Radityatami, Irene Prameswari Edwina, O., & Ida Ayu Niluh Kartikawati. (2018). Pengaruh Cognitive Behavior Therapy terhadap Penurunan Kecemasan pada Pasien Penyakit Paru Obstruktif Kronis (PPOK) Rawat Inap di Rumah Sakit. *Humanitas (Jurnal Psikologi)*, 2(3), 243–254. <https://doi.org/https://doi.org/10.28932/hmn.v2i3.1750>

Sershen, C. L., Salim, T., & May, E. E. (2023). Investigating the comorbidity of COPD and tuberculosis, a computational study. *Frontiers in Systems Biology*, 3. <https://doi.org/10.3389/fsysb.2023.940097>

Stanford, R. H., Parker, E. D., Reinsch, T. K., Buikema, A. R., & Blauer-Peterson, C. (2019). Assessment of COPD-related outcomes in patients initiating a once daily or twice daily ICS/LABA. *Respiratory Medicine*, 150, 1–7. <https://doi.org/10.1016/j.rmed.2019.01.019>

Swarjana, I. K. (2015). *Metodologi Penelitian Kesehatan* (M. Bendatu, Ed.; Revisi). Penerbit Andi.

Tashkin, D. P., Lipworth, B., & Brattsand, R. (2019). Benefit:Risk Profile of Budesonide in Obstructive Airways Disease. *Drugs*, 79(16), 1757–1775. <https://doi.org/10.1007/s40265-019-01198-7>

Tashkin, D. P., Ohar, J. A., Koltun, A., Allan, R., & Ward, J. K. (2021a). The Role of ICS/LABA Fixed-Dose Combinations in the Treatment of Asthma and COPD: Bioequivalence of a Generic Fluticasone Propionate-Salmeterol Device. In *Pulmonary Medicine* (Vol. 2021). Hindawi Limited. <https://doi.org/10.1155/2021/8881895>

Tashkin, D. P., Ohar, J. A., Koltun, A., Allan, R., & Ward, J. K. (2021b). The Role of ICS/LABA Fixed-Dose Combinations in the Treatment of Asthma and COPD: Bioequivalence of a Generic Fluticasone Propionate-

- Salmeterol Device. In *Pulmonary Medicine* (Vol. 2021). Hindawi Limited. <https://doi.org/10.1155/2021/8881895>
- van Geffen, W. H., Carpaij, O. A., Westbroek, L. F., Seigers, D., Niemeijer, A., Vonk, J. M., & Kerstjens, H. A. M. (2020). Long-acting dual bronchodilator therapy (indacaterol/glycopyrronium) versus nebulized short-acting dual bronchodilator (salbutamol/ipratropium) in chronic obstructive pulmonary disease: A double-blind, randomized, placebo-controlled trial. *Respiratory Medicine*, 171. <https://doi.org/10.1016/j.rmed.2020.106064>
- Wang, Y., Xu, J., Meng, Y., Adcock, I. M., & Yao, X. (2018). Role of inflammatory cells in airway remodeling in COPD. In *International Journal of COPD* (Vol. 13, pp. 3341–3348). Dove Medical Press Ltd. <https://doi.org/10.2147/COPD.S176122>
- Wattanachayakul, P., Rujirachun, P., Charoenngam, N., & Ungprasert, P. (2020). Chronic obstructive pulmonary disease is associated with a higher level of serum uric acid. A systematic review and meta-analysis. *Advances in Respiratory Medicine*, 88(3), 215–222. <https://doi.org/10.5603/ARM.2020.0119>
- WHO. (2023, March 16). *Chronic obstructive pulmonary disease (COPD)*. [https://www.who.int/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-\(copd\)](https://www.who.int/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-(copd))
- WHO. 2013. *Regional Health Observatory - South East Asia*, Age Group Codelist (who.int)
- Woo, L. L., Smith, H. E., & Sullivan, S. D. (2019). The Economic Burden of Chronic Obstructive Pulmonary Disease in the Asia-Pacific Region: A Systematic Review. *Value in Health Regional Issues*, 18, 121–131. <https://doi.org/10.1016/j.vhri.2019.02.002>
- Wshah, A., Guilcher, S. J. T., Goldstein, R., & Brooks, D. (2018). Prevalence of osteoarthritis in individuals with copd: A systematic review. In *International Journal of COPD* (Vol. 13, pp. 1207–1216). Dove Medical Press Ltd. <https://doi.org/10.2147/COPD.S158614>
- Wulandari, A., & Rika Veryanti, P. (2020). *Analisis Biaya Terapi Pasien Penyakit Paru Obstruktif Kronik (PPOK) Rawat Inap di RSUP Fatmawati Periode 2018*. <https://doi.org/https://doi.org/10.37277/sfj.v13i1.517>
- Yu, C., Xia, Q., Li, Q., Wu, J., Wang, X., & Wu, J. (2023). Hospitalization costs of COPD cases and its associated factors: an observational study at two large public tertiary hospitals in Henan Province, China. *BMC Geriatrics*, 23(1). <https://doi.org/10.1186/s12877-023-04087-7>

- Yunanda, E. (2018). *Cost Of Illnss Pada Pasien Penyakit Paru Obstruktif Kronis di RSUP Dr. Sardjito Yogyakarta*. Universitas Gadjah Mada.
- Zhang, R., Zhu, J., Liu, Y., Li, Y., Liu, W., Zhang, M., Chen, B., & Zhu, S. (2020). Optimization of nebulized budesonide in the treatment of acute exacerbation of chronic obstructive pulmonary disease. *International Journal of COPD*, 15, 409–415. <https://doi.org/10.2147/COPD.S235125>