

DAFTAR PUSTAKA

- Aflah, B., Pradian, E., Kestriani, N.D., 2023. Therapeutic Outcome of High Flow Nasal Cannula (HFNC) for Severe COVID-19 Patients in Isolation Intensive Care Unit. *Majalah Kedokteran Bandung* 55. <https://doi.org/10.15395/mkb.v55n2.2875>
- Agency for Clinical Innovation (N.S.W.), 2023. Non-invasive ventilation for patients with acute respiratory failure : clinical practice guide.
- Agmy, G., Adam, M., Hsanen, E.H.M., Mahmoud, M.A., 2022. High-flow nasal cannula versus noninvasive ventilation in the prevention of escalation to invasive mechanical ventilation in patients with acute hypoxemic respiratory failure. *Egypt. J. Chest Dis. Tuberc.* 71, 81–87. https://doi.org/10.4103/ecdt.ecdt_12_20
- Ali, A.A.E.R., EL-Helbawy, R.H., Kharasawi, A.A. El, Eid, H.A., 2023a. Comparative study between high flow nasal cannula, high velocity nasal insufflation and noninvasive ventilation in management of acute respiratory failure. *Int. J. Health Sci. (Qassim)*. 7, 2058–2073. <https://doi.org/10.53730/ijhs.v7ns1.14457>
- Ali, A.A.E.R., EL-Helbawy, R.H., Kharasawi, A.A. El, Eid, H.A., 2023b. Comparative study between high flow nasal cannula, high velocity nasal insufflation and noninvasive ventilation in management of acute respiratory failure. *Int. J. Health Sci. (Qassim)*. 7, 2058–2073. <https://doi.org/10.53730/ijhs.v7ns1.14457>
- Angkoontassaneeyarat, C., Charoenphon, P., Sanguanwit, P., Yuksen, C., Seesuklom, S., 2025. Comparison of high-flow nasal oxygen therapy and noninvasive ventilation in suspected sepsis patients with acute respiratory distress in the emergency department: a retrospective cohort study. *Int. J. Emerg. Med.* 18. <https://doi.org/10.1186/s12245-025-00842-2>
- Arofah, R.N., Sudaryanto, A., 2020. LITERATURE REVIEW PENGGUNAAN HIGH FLOW NASAL CANNULA (HFNC) PADA PASIEN GAGAL NAFAS AKUT DI UNIT GAWAT DARURAT LITERATURE REVIEW OF THE USE OF HIGH FLOW CANNULA (HFNC) ON PATIENTS OF ACUTE NAFAS PATIENTS IN EMERGENCY UNIT 1*. Seminar Nasional Keperawatan “Pemenuhan Kebutuhan Dasar dalam Perawatan Paliatif pada Era Normal Baru” Tahun 2020.
- Azoulay, E., Mokart, D., Kouatchet, A., Demoule, A., Lemiale, V., 2019. Acute respiratory failure in immunocompromised adults. *Lancet Respir. Med.* 7, 173–186. [https://doi.org/10.1016/S2213-2600\(18\)30345-X](https://doi.org/10.1016/S2213-2600(18)30345-X)
- Belda, F.J., Soro, M., Ferrando, C., 2013. Pathophysiology of respiratory failure. *Trends in Anaesthesia and Critical Care* 3, 265–269. <https://doi.org/10.1016/j.tacc.2013.05.003>
- Bianquis, C., De Leo, G., Morana, G., Duarte-Silva, M., Nolasco, S., Vilde, R., Tripipitsirawat, A., Viegas, P., Purenkovs, Martins Duiverman, M., 2023. Highlights from the Respiratory Failure and Mechanical Ventilation 2022 Conference. *ERJ Open Res.* 9. <https://doi.org/10.1183/23120541.00467-2022>
- Bourke, S.C., Piraino, T., Pisani, L., Brochard, L., Elliott, M.W., 2018. Beyond the guidelines for non-invasive ventilation in acute respiratory failure: implications for practice. *Lancet Respir. Med.* 6, 935–947. [https://doi.org/10.1016/S2213-2600\(18\)30388-6](https://doi.org/10.1016/S2213-2600(18)30388-6)
- Carratalá, J.M., Diaz-Lobato, S., Brouzet, B., Más-Serrano, P., Rocamora, J.L.S., Castro, A.G., Varela, A.G., Alises, S.M., 2024. Efficacy and safety of high-flow nasal cannula therapy in elderly patients with acute respiratory failure. *Pulmonology* 30, 437–444. <https://doi.org/10.1016/j.pulmoe.2023.01.004>
- Carteaux, G., Haudebourg, A.F., 2025. Noninvasive ventilation in acute hypoxemic respiratory failure: What is the future? *Journal of Intensive Medicine* 1–9. <https://doi.org/10.1016/j.jointm.2025.01.001>
- Castillo, R.L., 2022. Hypoxemia and Respiratory Failure: Clinical Conditions and Pathophysiological Approaches. *Open Respir. Med. J.* 15, 59–60. <https://doi.org/10.2174/1874306402115010059>
- Chawla, R., Chaudhry, D., Kansal, S., Khilnani, G.C., Mani, R.K., Nasa, P., Prayag, S., Ramakrishnan, N., Sharma, R., Sidhu, U.S., Suri, J.C., 2013. Guidelines for noninvasive

- ventilation in acute respiratory failure. *Indian Journal of Critical Care Medicine* 17, 42–70. <https://doi.org/10.5005/IJCCM-17-S1-42>
- Chawla, R., Dixit, S.B., Zirpe, K.G., Chaudhry, D., Khilnani, G.C., Mehta, Y., Khatib, K.I., Jagiasi, B.G., Chanchalani, G., Mishra, R.C., Samavedam, S., Govil, D., Gupta, S., Prayag, S., Ramasubban, S., Dobariya, J., Marwah, V., Sehgal, I., Jog, S.A., Kulkarni, A.P., 2020. ISCCM guidelines for the use of non-invasive ventilation in acute respiratory failure in adult ICUS. *Indian Journal of Critical Care Medicine* 24, 61–81. <https://doi.org/10.5005/jp-journals-10071-G23186>
- Claudett, K.H.B., Rodriguez, A.E., Briones Claudett, M.H., Tejada, M.P., del Pilar Cabrera Baños, M., Daher, J.N., Bermeo, B., Grunauer, M., 2021. Non-invasive mechanical ventilation with average volume-assured pressure support. Results according to the aetiology of acute respiratory failure. *Anaesthesiol. Intensive Ther.* 53, 403–410. <https://doi.org/10.5114/ait.2021.111527>
- Colaïanni-Alfonso, N., Toledo, A., Montiel, G., Deana, C., Vetrugno, L., Castro-Sayat, M., 2025. High-flow nasal cannula versus non-invasive ventilation for acute exacerbations of chronic obstructive pulmonary disease with acute-moderate hypercapnic respiratory failure: a retrospective study. *Front. Med. (Lausanne)*. 12. <https://doi.org/10.3389/fmed.2025.1582749>
- Ding, M., Han, X., Bai, L., Huang, S., Duan, J., 2021. Impact of HACOR Score on Noninvasive Ventilation Failure in Non-COPD Patients with Acute-on-Chronic Respiratory Failure. *Canadian Respiratory Journal* 2021.
- Du, Y., Zhang, H., Ma, Z., Liu, J., Wang, Z., Lin, M., Ni, F., Li, X., Tan, H., Tan, S., Chai, Y., Zhong, X., 2023. High-Flow Nasal Oxygen versus Noninvasive Ventilation in Acute Exacerbation of Chronic Obstructive Pulmonary Disease Patients: A Meta-Analysis of Randomized Controlled Trials. *Can. Respir. J.* 2023. <https://doi.org/10.1155/2023/7707010>
- Duan, J., Han, X., Bai, L., Zhou, L., Huang, S., 2017. Assessment of heart rate , acidosis , consciousness , oxygenation , and respiratory rate to predict noninvasive ventilation failure in hypoxemic patients. *Intensive Care Med* 43, 192–199. <https://doi.org/10.1007/s00134-016-4601-3>
- Elagamy, A.E., Taha, S.S., Elfawy, D.M., 2021. High flow nasal cannula versus non- invasive ventilation in prevention of intubation in immunocompromised patient with acute hypoxemic respiratory failure. *Egypt. J. Anaesth.* 37, 432–439. <https://doi.org/10.1080/11101849.2021.1978744>
- Elshazly, M., 2025. Navigating the haze: current controversies and emerging trends in non-invasive ventilation management. *Egyptian Journal of Bronchology*. <https://doi.org/10.1186/s43168-025-00457-4>
- Ernest, V., 2020. Respiratory failure: Classification, Epidemiology and Etiology Review. *Journal La Medihealtico* 1, 15–20. <https://doi.org/10.37899/journallamedihealtico.v1i2.96>
- Firdausintika, L.R., Syafa'ah, I., Airlangga, P.S., Kriswidyatomo, P., Setiawan, H.W., Marhana, I.A., 2024. The Effect of High Flow Nasal Cannula (HFNC) on the Use of Ventilators in Severe to Critical COVID-19 Patients. *Coronaviruses* 5.
- Frat, J.P., Coudroy, R., Marjanovic, N., Thille, A.W., 2017. High-flow nasal oxygen therapy and noninvasive ventilation in the management of acute hypoxemic respiratory failure. *Ann. Transl. Med.* <https://doi.org/10.21037/atm.2017.06.52>
- Frat, J.-P., Thille, A.W., Mercat, A., Girault, C., Ragot, S., Perbet, S., Prat, G., Boulain, T., Morawiec, E., Cottureau, A., Devaquet, J., Nseir, S., Razazi, K., Mira, J.-P., Argaud, L., Chakarian, J.-C., Ricard, J.-D., Wittebole, X., Chevalier, S., Herbland, A., Fartoukh, M., Constantin, J.-M., Tonnelier, J.-M., Pierrot, M., Mathonnet, A., Béduneau, G., Delétage-Métreau, C., Richard, J.-C.M., Brochard, L., Robert, R., 2015. High-Flow Oxygen through Nasal Cannula in Acute Hypoxemic Respiratory Failure. *New England Journal of Medicine* 372, 2185–2196. <https://doi.org/10.1056/nejmoa1503326>
- Fujishima, S., 2023. Guideline-based management of acute respiratory failure and acute respiratory distress syndrome. *J. Intensive Care* 11, 1–9. <https://doi.org/10.1186/s40560-023-00658-3>

- Goligher, E.C., Slutsky, A.S., 2017. Not Just Oxygen? Mechanisms of Benefit from High-Flow Nasal Cannula in Hypoxemic Respiratory Failure. *Am. J. Respir. Crit. Care Med.* 195, 9–12.
- He, Y., Zhuang, X., Liu, H., Ma, W., 2023. Comparison of the efficacy and comfort of high-flow nasal cannula with different initial flow settings in patients with acute hypoxemic respiratory failure: a systematic review and network meta-analysis. *J. Intensive Care* 11, 1–23. <https://doi.org/10.1186/s40560-023-00667-2>
- İleri, G., Zengin, N., Bal, A., 2022. Evaluation of efficacy and failure of high flow nasal cannula therapy in paediatric emergency service and paediatric intensive care unit. *Medical Science and Discovery* 9, 243–248. <https://doi.org/10.36472/msd.v9i4.713>
- Ji, W., Zhang, X., Ji, H., Wang, C., Xu, L., 2025. Comparative study of noninvasive positive pressure ventilation and high-flow nasal cannula oxygen therapy in the treatment of patients with COPD and community-acquired pneumonia. *Medicine (United States)* 104, e41829. <https://doi.org/10.1097/MD.00000000000041829>
- Johnson, S., Shenoy, A., 2012. Noninvasive ventilation in acute respiratory failure: a study of clinical outcome and correlates for success, *Indian Journal of Respiratory Care*.
- Karamat, A., Akram, S., Batool, H., Ambreen, A., Mustafa, T., 2024. Factors affecting the outcome of non-invasive ventilation in acute respiratory failure with acidosis and mortality in a tertiary care hospital in Pakistan. <https://doi.org/10.21203/rs.3.rs-4301652/v1>
- Kay Choong See, 2022. Approach to acute respiratory failure for frontline clinicians. *Singapore Med J* 63, 740–745.
- Kim, E.S., Lee, H., Kim, S.J., Park, J., Lee, Y.J., Park, J.S., Yoon, H. II, Lee, J.H., Lee, C.T., Cho, Y.J., 2018. Effectiveness of high-flow nasal cannula oxygen therapy for acute respiratory failure with hypercapnia. *J. Thorac. Dis.* 10, 882–888. <https://doi.org/10.21037/jtd.2018.01.125>
- Kumar Mondal, M., Banik, Debabrata, Faizul Hoque, A., Hassan, M., kumar sarker, S., Yeasmeen, S., Banik, Debasish, Abdul Hannan, M., 2022. Noninvasive ventilation (NIV) Vs High-flow nasal cannula (HFNC) which one is suitable for treating COVID-19 ICU Patients in a tertiary care Hospital, Dhaka, Bangladesh. 35.
- Lagina, M., Valley, T.S., 2024. Diagnosis and Management of Acute Respiratory Failure. *Crit. Care Clin.* 40, 235–253. <https://doi.org/10.1016/j.ccc.2024.01.002>
- Lee, H.W., Choi, S.M., Lee, J., Park, Y.S., Lee, C.H., Yoo, C.G., Kim, Y.W., Han, S.K., Lee, S.M., 2019. Reduction of PaCO₂ by high-flow nasal cannula in acute hypercapnic respiratory failure patients receiving conventional oxygen therapy. *Acute and Critical Care* 34, 202–211. <https://doi.org/10.4266/acc.2019.00563>
- Lee, Y.S., Chang, S.W., Sim, J.K., Kim, S., 2021. An Integrated Model including the ROX Index to Predict the Success of High-Flow Nasal Cannula Use after Planned Extubation : A Retrospective Observational Cohort Study. *Journal of Clinical Medicine* 10.
- Li, A., Cove, M.E., Phua, J., Puah, S.H., Ng, V., Kansal, A., Tan, Q.L., Sahagun, J.T., 2022. Expanding the utility of the ROX index among patients with acute hypoxemic respiratory failure. *PLoS ONE* 185, 1–12. <https://doi.org/10.1371/journal.pone.0261234>
- Mahdy, E.W., El-hamid, A.M.A., Kotb, D.K., Ibrahim, E.F., 2025. Comparison between High Flow Nasal Cannula and Non- Invasive Mechanical Ventilation in the Management of Patients with Acute Respiratory Failure : a Meta-Analysis Abstract : Materials and Methods : *Benha Medical Journal* 42, 22–28.
- Maimaitiniyazi, Mailidan, Yisimitila, T., Maimaitiniyazi, Muyesaier, Maisuti, M., Aihaiti, A., Chenfei, Z., Nijati, Y., Nijati, M., 2025. Meta-analysis of high-flow nasal cannula oxygen therapy versus non-invasive ventilation after invasive mechanical ventilation. *Front. Med. (Lausanne)*. <https://doi.org/10.3389/fmed.2025.1594145>
- Marjanovic, N., Guénégan, J., Frat, J.P., Mimoz, O., Thille, A.W., 2020. High-flow nasal cannula oxygen therapy in acute respiratory failure at Emergency Departments: A systematic review. *American Journal of Emergency Medicine* 38, 1508–1514. <https://doi.org/10.1016/j.ajem.2020.04.091>
- Mas, A., Masip, J., 2014. Noninvasive ventilation in acute respiratory failure. *International Journal of COPD* 9, 837–852. <https://doi.org/10.2147/COPD.S42664>

- Mirabile, V.S., Shebl, E., Sankari, A., Bracken Burns., 2023. Respiratory Failure in Adults. StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing.
- Mirenayat, M.S., Ghoghghi, A., Zahiri, R., Lotfalipour, M., Fakharian, A., 2024. Comparison of High-Flow Nasal Cannula (HFNC) Oxygen Therapy and Non-Invasive Ventilation (NIV) in Patients with COVID-19: A Randomized Clinical Trial. *Journal of Iranian Medical Council* 7, 127–136. <https://doi.org/10.18502/jimc.v7i1.14220>
- Mitsuyama, Y., Nakao, S., Shimazaki, J., Ogura, H., Shimazu, T., 2022. Effectiveness of high-flow nasal cannula for tracheal intubation in the emergency department. *BMC Emerg. Med.* 22. <https://doi.org/10.1186/s12873-022-00674-w>
- Monti, G., Cabrini, L., Kotani, Y., Brusasco, C., Kadralinova, A., Giardina, G., Chalkias, A., Nakhnoukh, C., Pantazopoulos, I., Oliva, F.M., Dazzi, F., Roasio, A., Baiardo Redaelli, M., Tripodi, V.F., Cucciolini, G., Belletti, A., Vaschetto, R., Maj, G., Borghi, G., Savelli, F., Boni, S., D'Amico, F., Cavallero, S., Labanca, R., Tresoldi, M., Marmiere, M., Marzaroli, M., Moizo, E., Monaco, F., Nardelli, P., Pieri, M., Plumari, V., Scandroglio, A.M., Turi, S., Corradi, F., Konkayev, A., Landoni, G., Bellomo, R., Zangrillo, A., 2025. Early noninvasive ventilation in general wards for acute respiratory failure: an international, multicentre, open-label, randomised trial. *Br. J. Anaesth.* 134, 382–391. <https://doi.org/10.1016/j.bja.2024.11.023>
- Mukherjee, D., Mukherjee, R., 2023. High-Flow Nasal Cannula Oxygen Therapy in the Management of Respiratory Failure: A Review. *Cureus* 15, 1–13. <https://doi.org/10.7759/cureus.50738>
- Oczkowski, S., Ergun, B., Bos, L., Chatwin, M., Ferrer, M., Gregoretti, C., Heunks, L., Frat, J.P., Longhini, F., Nava, S., Navalesi, P., Ugurlu, A.O., Pisani, L., Renda, T., Thille, A.W., Winck, J.C., Windisch, W., Tonia, T., Boyd, J., Sotgiu, G., Scala, R., 2022. ERS clinical practice guidelines: high-flow nasal cannula in acute respiratory failure. *European Respiratory Journal* 59. <https://doi.org/10.1183/13993003.01574-2021>
- Ozer, P.K., 2023. Acute Respiratory Failure : Understanding the Signs and Indications. *Journal of Molecular Pathophysiology* 12, 1–2.
- Panetti, B., Bucci, I., Di Ludovico, A., Pellegrino, G.M., Di Filippo, P., Di Pillo, S., Chiarelli, F., Attanasi, M., Sferrazza Papa, G.F., 2024. Acute Respiratory Failure in Children: A Clinical Update on Diagnosis. *Children* 11, 1–18. <https://doi.org/10.3390/children11101232>
- Park, S.Y., 2021. High-flow nasal cannula for respiratory failure in adult patients. *Acute and Critical Care* 36, 275–285. <https://doi.org/10.4266/acc.2021.01571>
- Peng, Y., Dai, B., Zhao, H.W., Wang, W., Kang, J., Hou, H.J., Tan, W., 2022. Comparison between high-flow nasal cannula and noninvasive ventilation in COVID-19 patients: a systematic review and meta-analysis. *Ther. Adv. Respir. Dis.* 16. <https://doi.org/10.1177/17534666221113663>
- Pérez-Terán, P., Marin-Corral, J., Dot, I., Sans, S., Muñoz-Bermúdez, R., Bosch, R., Vila, C., Masclans, J.R., 2019. Aeration changes induced by high flow nasal cannula are more homogeneous than those generated by non-invasive ventilation in healthy subjects. *J. Crit. Care* 53, 186–192. <https://doi.org/10.1016/j.jccr.2019.06.009>
- Pintaudi, G., Cutuli, S.L., Rosà, T., Michi, T., Cardu, A., Bongiovanni, F., Antonelli, M., Grieco, D.L., 2024a. High-Flow Nasal Oxygen in Patients with Acute Hypercapnic Respiratory Failure: A Narrative Review of the Physiological Rationale and Clinical Evidence. *J. Clin. Med.* 13. <https://doi.org/10.3390/jcm13216350>
- Pintaudi, G., Cutuli, S.L., Rosà, T., Michi, T., Cardu, A., Bongiovanni, F., Antonelli, M., Grieco, D.L., 2024b. High-Flow Nasal Oxygen in Patients with Acute Hypercapnic Respiratory Failure: A Narrative Review of the Physiological Rationale and Clinical Evidence. *J. Clin. Med.* 13. <https://doi.org/10.3390/jcm13216350>
- Prasad, S., O'Neill, S., 2021. Respiratory failure. *Surgery (United Kingdom)* 39, 654–659. <https://doi.org/10.1016/j.mpsur.2021.08.007>
- Rittayamai, N., Chuariyakul, P., Promlee, N., Chailard, P., Chierakul, N., Brochard, L., 2021. High-flow nasal cannula for patients with acute respiratory failure treated in a general medical ward: A prospective cohort study. *Journal of the Medical Association of Thailand* 104, 1179–1186. <https://doi.org/10.35755/jmedassocthai.2021.07.12689>

- Roca, O., Caralt, B., Messika, J., Samper, M., Sztrymf, B., Hernández, G., García-de-Acilu, M., Frat, J.-P., Masclans, J.R., Ricard, J.-D., 2018. An index combining respiratory rate and oxygenation to predict outcome of nasal high flow therapy. *American Thoracic Society* 1–52.
- Roca, O., Li, J., Mauri, T., 2024. High-flow nasal cannula: evolving practices and novel clinical and physiological insights. *Intensive Care Med.* 50, 758–761. <https://doi.org/10.1007/s00134-024-07386-8>
- Rochwerg, B., Brochard, L., Elliott, M.W., Hess, D., Hill, N.S., Nava, S., Navalesi, P., Antonelli, M., Brozek, J., Conti, G., Ferrer, M., Garpestad, E., Girault, C., Hough, C.L., Mehta, S., Members Of The Task Force and Official ERS/ATS Clinical Practice Guidelines Committee (2017) 'Official ERS/ATS clinical practice guidelines: noninvasive ventilation for acute respiratory failure', *European Respiratory Journal*, 50(2), p. 1602426.
- Romero-Dapuerto, C., Budini, H., Cerpa, F., Caceres, D., Hidalgo, V., Gutiérrez, T., Keymer, J., Pérez, R., Molina, J., Giugliano-Jaramillo, C., 2015. Pathophysiological Basis of Acute Respiratory Failure on Non-Invasive Mechanical Ventilation. *Open Respir. Med. J.* 9, 97–103.
- Sadigov, A., Hacıyeva, F., Khoshbonyani, P., Mirzayeva, V., Sadigova, T., 2021. Clinical Characteristics and Outcomes of ICU Admitted Patients with COVID-19: Analysis of University Hospital Data. *Pulmonology and Respiratory Medicine* 6, 27–35.
- Scala, R., Heunks, L., 2018. Highlights in acute respiratory failure. *European Respiratory Review* 27, 8–11. <https://doi.org/10.1183/16000617.0008-2018>
- Schwabbauer, N., Berg, B., Blumenstock, G., Haap, M., Hetzel, J., Riessen, R., 2014. Nasal high-flow oxygen therapy in patients with hypoxic respiratory failure: Effect on functional and subjective respiratory parameters compared to conventional oxygen therapy and non-invasive ventilation (NIV). *BMC Anesthesiol.* 14. <https://doi.org/10.1186/1471-2253-14-66>
- Setiafadi, R.A., Nida, N.A., 2024. The Analysis Study of Comparison of High Flow Nasal Cannula versus Conventional Oxygen Therapy and Non Invasive Ventilation in Adults with Acute Hypoxemic Respiratory Failure : A Comprehensive Systematic Review. *African Journal of Biological Science* 6, 11701–11715. <https://doi.org/10.48047/AFJBS.6.14.2024.11701-11715>
- Summers, C., Todd, R.S., Vercruysse, G.A., Moore, F.A., 2020. Acute Respiratory Failure. *Journal GEEJ* 7.
- Sun, J., Li, Y., Ling, B., Zhu, Q., Hu, Y., Tan, D., Geng, P., Xu, J., 2019. High flow nasal cannula oxygen therapy versus non-invasive ventilation for chronic obstructive pulmonary disease with acute-moderate hypercapnic respiratory failure: An observational cohort study. *International Journal of COPD* 14, 1229–1237. <https://doi.org/10.2147/COPD.S206567>
- Tan, D., Walline, J.H., Ling, B., Xu, Y., Sun, J., Wang, B., Shan, X., Wang, Y., Cao, P., Zhu, Q., Geng, P., Xu, J., 2020. High-flow nasal cannula oxygen therapy versus non-invasive ventilation for chronic obstructive pulmonary disease patients after extubation: a multicenter, randomized controlled trial. *Crit. Care* 24, 489. <https://doi.org/10.3760/cma.j.issn.1671-0282.2023.07.012>
- Tan, D., Wang, B., Cao, P., Wang, Yunyun, Sun, J., Geng, P., Walline, J.H., Wang, Yachao, Wang, C., 2024. High flow nasal cannula oxygen therapy versus non-invasive ventilation for acute exacerbations of chronic obstructive pulmonary disease with acute-moderate hypercapnic respiratory failure: a randomized controlled non-inferiority trial. *Crit. Care* 28. <https://doi.org/10.1186/s13054-024-05040-9>
- Wang, Chen, He, H., Sun, B., Liang, L., Li, Yanming, Wang, He, Wei, L., Li, G., Guo, S., Duan, J., Li, Yuping, Zhou, Y., Chen, Y., Li, Hongru, Yang, J., Xu, X., Song, L., Chen, J., Bao, Y., Chen, F., Wang, P., Ji, L., Zhang, Y., Ding, Y., Chen, L., Wang, Y., Yang, L., Yang, T., Weng, H., Li, Hongyan, Wang, D., Tong, J., Sun, Y., Li, R., Jin, F., Li, C., He, B., Sun, L., Wang, Changzheng, Hu, M., Yang, X., Luo, Q., Zhang, J., Tan, H., Liu, B., Hong, R., Yao, X., Lu, F., Wang, Hui, Wang, L., Tian, H., Wu, Y., Huang, X., Sun, M., Liang, Z., Lin, X., Deng, W., Xu, J., Nan, Y., Shen, N., Li, M., 2019. A multicenter RCT of noninvasive ventilation in pneumonia-induced early mild acute respiratory distress syndrome. *Crit. Care* 23. <https://doi.org/10.1186/s13054-019-2575-6>

- Xu, R., Shao, Z., 2024. High flow nasal cannula versus non-invasive ventilation in the treatment of acute exacerbations of COPD with acute-moderate hypercapnic respiratory failure. *Crit. Care* 28, 313. <https://doi.org/10.1186/s13054-024-05094-9>
- Yeung, J., Couper, K., Ryan, E.G., Gates, S., Hart, N., Perkins, G.D., 2018. Non-invasive ventilation as a strategy for weaning from invasive mechanical ventilation: a systematic review and Bayesian meta-analysis. *Intensive Care Med.* <https://doi.org/10.1007/s00134-018-5434-z>
- Zhong, Z., Zhao, L., Zhao, Y., Li, R., Xia, S., 2025. Comparison of clinical outcomes between high-flow nasal cannula and non-invasive ventilation in acute exacerbation of COPD: a meta-analysis of randomized controlled trials. *BMC Pulm. Med.* 25. <https://doi.org/10.1186/s12890-025-03873-w>