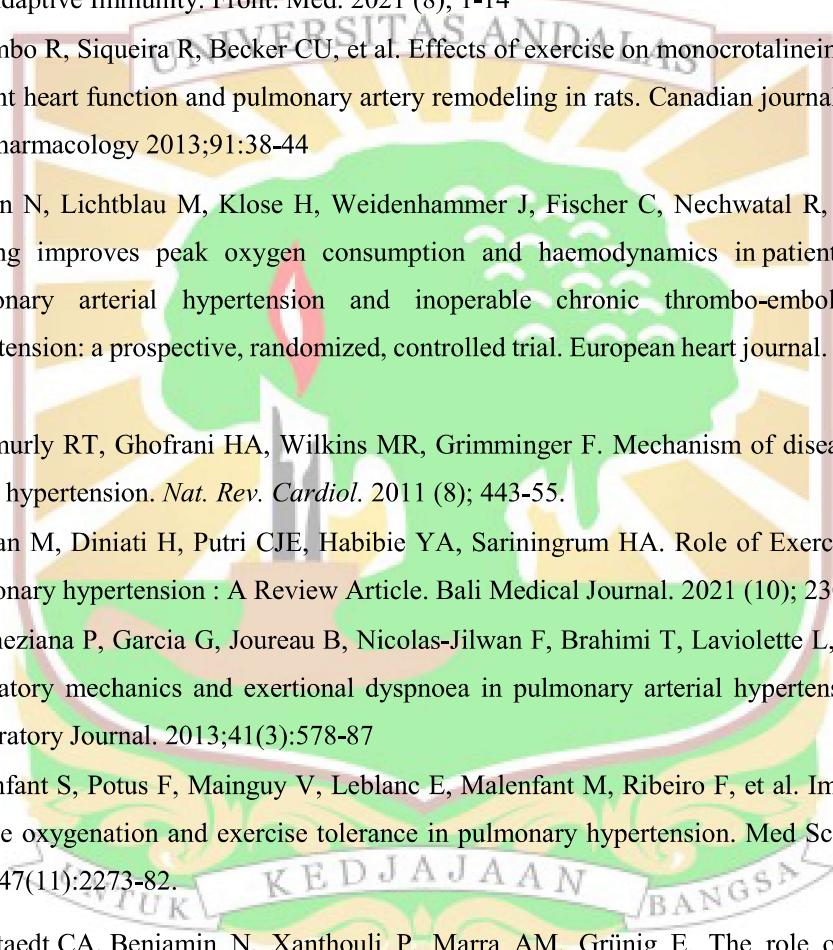


## DAFTAR PUSTAKA

1. Emmons-Bell S, Johnson C, Boon-Dooley A, Corris PA, Leary PJ, Rich S, et al. Prevalence, incidence, and survival of pulmonary arterial hypertension: A systematic review for the global burden of disease 2020 study. *Pulmonary Circulation*. 2022; (12): 1-15.
2. Humbert M, Kovacs G, Hoeper MM, Badagliacca R, Berger RM, Brida M, et al. 2022 ESC/ERS Guidelines for the diagnosis and treatment of pulmonary hypertension: Developed by the task force for the diagnosis and treatment of pulmonary hypertension of the European Society of Cardiology (ESC) and the European Respiratory Society (ERS). Endorsed by the International Society for Heart and Lung Transplantation (ISHLT) and the European Reference Network on rare respiratory diseases (ERN-LUNG). *European Heart Journal*. 2022;43(38):3618-731.
3. Zeng X, Chen H, Ruan H, Ye X, Li J, Hong C. Effectiveness and safety of exercisetraining and rehabilitation in pulmonary hypertension: a systematic review and meta-analysis. *Journal of Thoracic Disease*. 2020; 12(5): 2691-705.
4. Dinarti LK, Hartopo BA, Kusuma AD, Satwiko MG, Hadwiono MR, Pradana AD, et al. The Congenital HeART Disease in adult and Pulmonary Hypertension (COHARD-PH) registry: a descriptive study from single-center hospital registry of adult congenital heart disease and pulmonary hypertension in Indonesia. *BMC Cardiovascular Disorders*. 2020; 20: 1-11.
5. Raihani MU, Yanni M, Asri E, et al. Gambaran Karakteristik Pasien Hipertensi Arteri Pulmonal di RSUP Dr. M. Djamil Padang Tahun 2017-2021. Universitas Andalas, 2022.
6. Vecchia LA, Busotti M. Exercise Training in Pulmonary Arterial Hypertension. *Journal of Thoracic Disease*. 2018; 10(1): 508-21.
7. Bourgeois A, Omura J, Habbout K, Bonnet S, Boucherat O. Pulmonary arterial hypertension: new pathophysiological insights and emerging therapeutic targets. *The international journal of biochemistry & cell biology*. 2018; 104: 9-13.
8. Wright BS, Dwyer N, Celermajer D, Kritharides L, Marwick T. Follow-Up of Pulmonary Hypertension With Echocardiography. *JACC*. 2016 ; 733-46.
9. Miotti C, Papa S, Manzi G, Scoccia G, Luongo F, Toto F, et al. The Growing Role of Echocardiography in Pulmonary Arterial Hypertension Risk Stratification : TheMissing Piece. *J. Clin. Med.* 2021(10); 1-9.
10. Naing P, Kuppusamy H, Scalia G, Hillis GS, Playford D. Non-Invasive Assessmentof Pulmonary Vascular Resistance in Pulmonary Hypertension: Current Knowledge and Future Direction. *Heart, Lung, and Circulation*. 2017 (26); 323-30.
11. Hayama H, Moroi M, Akahane A, Uejima t, Hara H, Hiroi Y. A Novel Non-InvasiveMethod for Estimating Elevated Pulmonary Vascular Resistance Based on Echocardiographic Assessment of Pulmonary Artery Wave Reflection. *CirculationJournal*. 2022; 86: 947-55.

- 
12. Panda AL, Nasution AN, Soesanto AM, Lubis AC, Hartopo AB, Saboe A, et al. Pedoman Diagnosis dan Tatalaksana Hipertensi Pulmonal. Perhimpunan Dokter Spesialis Kardiovaskular Indonesia. 2021; 1-60.
  13. Dong C, Li Y. Exercise Rehabilitation Training in Patients With Pulmonaryhypertension : A Review. *Heart, Lung, and Circulation*. 2022 (21); 1341-8.
  14. Tobal R, Potjewijd J, Van Empel VPM, Yserman R, Schurgers LJ, Reutelingsperger CP, et al. Vascular Remodeling in Pulmonary Arterial Hypertension: The Potential Involvement of Innate and Adaptive Immunity. *Front. Med.* 2021 (8); 1-14
  15. Colombo R, Siqueira R, Becker CU, et al. Effects of exercise on monocrotalineinduced changes in right heart function and pulmonary artery remodeling in rats. *Canadian journal of physiology and pharmacology* 2013;91:38-44
  16. Ehlken N, Lichtblau M, Klose H, Weidenhammer J, Fischer C, Nechwatal R, et al. Exercise training improves peak oxygen consumption and haemodynamics in patients with severe pulmonary arterial hypertension and inoperable chronic thrombo-embolic pulmonary hypertension: a prospective, randomized, controlled trial. *European heart journal*. 2016;37(1):35-44.
  17. Schemurly RT, Ghofrani HA, Wilkins MR, Grimminger F. Mechanism of disease: pulmonary artery hypertension. *Nat. Rev. Cardiol.* 2011 (8); 443-55.
  18. Ridwan M, Diniati H, Putri CJ, Habibie YA, Sariningrum HA. Role of Exercise Training in Pulmonary hypertension : A Review Article. *Bali Medical Journal*. 2021 (10); 2302-14.
  19. Laveneziana P, Garcia G, Joureau B, Nicolas-Jilwan F, Brahimi T, Laviolette L, et al. Dynamic respiratory mechanics and exertional dyspnoea in pulmonary arterial hypertension. *European Respiratory Journal*. 2013;41(3):578-87
  20. Malenfant S, Potus F, Mainguy V, Leblanc E, Malenfant M, Ribeiro F, et al. Impaired skeletal muscle oxygenation and exercise tolerance in pulmonary hypertension. *Med Sci Sports Exerc.* 2015;47(11):2273-82.
  21. Eichstaedt CA, Benjamin N, Xanthouli P, Marra AM, Grünig E. The role of rehabilitation in patients with pulmonary arterial hypertension. *Current Opinion in Pulmonary Medicine*. 2019;25(5):398-404.
  22. Weissmann N, Peters DM, Klopping C, Kruger K, Pilat C, Katta, S, et al. Structural and functional prevention of hypoxia-induced pulmonary hypertension by individualized exercise in mice. *Am. J. Physiol Lung Cell Mol Physiol*. 2014; L986-5.
  23. Ley S, Fink C, Risso F, Ehlken N, Fischer C, ley J, et al. Magnetic resonance imaging to assess the effect of exercise training on pulmonary perfusion and blood flow in patients with pulmonary hypertension. *European Society of Radiology*. 2013; 324-31.

24. Mereles D, Ehlken N, Kreuscher S, et al. Exercise and Respiratory Training Improve Exercise Capacity and Quality of Life in Patients With Severe Chronic Pulmonary Hypertension. *Circulation* 2006; 114: 1482–1489.
25. Zhang X, Xu D. Effect of exercise rehabilitaton training on patients with pulmonary hypertension. *Pulmonary Circulation*. 2020; 10 (3): 1-8.
26. Handoko ML, de Man F.S, Happe CM, Schalij I, Musters RJP, Westerhof N. Opposite Effects of Training in Rats With Stable and Progressive Pulmonary Hypertension. *Circulation*. 2009; 42-9.
27. Deng J. Clinical application of pulmonary vascular resistance in patients with pulmonary arterial hypertension. *J Cardiothorac Surg*. 2021;311.
28. Corte TJ, Wort SJ, Gatzoulis MA, Macdonald P, Hansell DM, Wells AU. Pulmonary vascular resistance predicts early mortality in patients with diffuse fibrotic lung disease and suspected pulmonary hypertension.
29. Abbas AE, Fortuin FD, Schiller NB, Appleton CP, Moreno CA, Lester SJ. A Simple Method for Noninvasive Estimation of Pulmonary Vascular Resistance. *Journal of American College of Cardiology*. 2003; 1021-6.
30. Sumimoto K, Tanaka H, Mukai J, Yamashita K, Yanaka Y, Shono A, et al. Optimal Cut-Off Tricuspid Regurgitation Velocity According to the New Definition of Pulmonary Hypertension. *Circulation Report*. 2020; 1-5.
31. Marra AM, Naeije R, Ferrara F, Vriz O, Stanziola AA, D'Alto M, et al. Reference Ranges and Determinants of Tricuspid Regurgitation Velocity in healthy Adults Assessed by Two-Dimensional Doppler Echocardiography. *Respiration*. 2018; 425-33
32. Miot HA. Sample size in clinical and experimental trials. *Jornal Vascular Brasileiro*. 2011;10:275-8.
33. PERKI. *Panduan Rehabilitasi Kardiovaskular*. 1st ed. Jakarta: PERHIMPUNAN DOKTER SPESIALIS KARDIOVASKULAR INDONESIA, 2019.
34. Cheron C, McBride SA, Antigny F, Girerd B, Chouchana M, Chaumanis MC, et al. Sex and gender in pulmonary arterial hypertension. *Eur Respir Rev*. 2021;1-20.
35. Martin YN, Pabelick CM. Sex differences in the pulmonary circulation: implications for pulmonary hypertension. *Am J Physiol Heart Cir*. 2014; h1255-60.
36. White K,, Dempise Y, Nilsen M, Wrigt AF, Loughlin L, Maclean MR. The serotonin transporter, gender, and 17 $\beta$  oestradiol in the development of pulmonary arterial hypertension. *Cardiovasc Resp*. 2011; (90)2: 373-82.
37. Dai-Do D, Espinosa E, Liu G, Rabelink TJ, Julmy F, Yang Z, et al. 17 beta-estradiol inhibits proliferation and migration of human vascular smooth muscle cells: similar effect in cells from postmenopausal females and in males. *Cardiovasc Res*. 1996; 32(5): 980-5.
38. Hoeper MM, Gibbs JSR. The changing landscape of pulmonary arterial hypertension and

implications for patient care. European Respiratory Review. 2014; 450-7.

39. Londoño A, Conde R, Pacheco M, Velasquez CJ, Gomez-Palau R, Tiga D, et al. Underweight/overweight syndrome in patients with pulmonary hypertension in Colombia: a prevalence study. *European Respiratory Journal* 2022; 60 (suppl 66) 869.
40. Kwant CT, Van der Horst FA, Bogaard HJ, De Man FS, Noordegraaf AV. Nutritional status in pulmonary arterial hypertension. *Pulmonary Circulation*. 2022; e12173.
41. D'Alto M, Mahadevan VS. Pulmonary arterial hypertension associated with congenital heart disease. *Eur Respir Rev*. 2-12; 21: 328-37
42. Kiss T, Kovacs K, Komocsi A, Tomyos A, Zalan P, Sumegi B, et al. Novel mechaniss of Sildenafil in Pulmonary Hypertension Involving Cytokines/Chemokines, MAP Kinase and Akt. *PLOS ONE*. 2014; e104890.
43. Shi Q, Wang Z, Yang N, Ma Y, chen Y, Wei H, et al. Sildenafil for adult Asian pastients with pulmonary arterial hypertension: a systematic review and meta-analysis. *Annals of Palliative Medicine*. 2022; 339-49.
44. Bersohn MM, Turner MP, Traiger GL, et al. Systemic BP and heart rate asprognostic indicators in pulmonary arterial hypertension. *Chest* 2013; 144: 959– 965.
45. Van der Feen DE, Bartelds B, de Boer RA, Berger RM. Assessment of reversibility in pulmonary arterial hypertension and congenital heart disease. *Heart*. 2018; 1-7.
46. Baumgartner H, De Backer J, Babu-Narayan SV, Budts W, Chessa M, Diller GH, et al. 2020 ESC Guidelines for management of adult congenital heart disease. 2021: 563-654.