DAFTAR PUSTAKA

Aït Moussa, L., El Bouazzi, O., Serragui, S., Soussi Tanani, D., Soulaymani, A., & Soulaymani, R. 2016, Rifampicin and isoniazid plasma concentrations in relation to adverse reactions in tuberculosis patients: A retrospective analysis. *Therapeutic Advances in Drug Safety*, *7*(6), 239–247. https://doi.org/10.1177/2042098616667704

Badrinath, M., & John, S. 2020, Isoniazid Toxicity. In *StatPearls [Internet]*. StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK531488/

Ben Mahmoud, L., Ghozzi, H., Kamoun, A., Hakim, A., Hachicha, H., Hammami, S., Sahnoun, Z., Zalila, N., Makni, H., & Zeghal, K. 2012, Polymorphism of the N-acetyltransferase 2 gene as a susceptibility risk factor for antituberculosis drug-induced hepatotoxicity in Tunisian patients with tuberculosis. *Pathologie Biologie*, *60*(5), 324–330. https://doi.org/10.1016/j.patbio.2011.07.001

Bhandari, R. 2012, A Sensitive HPLC Method for Determination of Isoniazid in Rat Plasma, Brain, Liver and Kidney. *Journal of Chromatography & Separation Techniques*, *03*(03). https://doi.org/10.4172/2157-7064.1000128

Bhargava, A., Chatterjee, M., Jain, Y., Chatterjee, B., Kataria, A., Bhargava, M., Kataria, R., D'Souza, R., Jain, R., Benedetti, A., Pai, M., & Menzies, D. 2013, Nutritional Status of Adult Patients with Pulmonary Tuberculosis in Rural Central India and Its Association with Mortality. *PLoS ONE*, *8*(10), e77979. https://doi.org/10.1371/journal.pone.0077979

Bondalapati, S., V, D. R., Rampure, D., & S, R. R. 2014, Isoniazid Induced Cutaneous Leukocytoclastic Vasculitis in Extra Pulmonary Tuberculosis (Pott's Spine): A Case Report. *Journal of Clinical and Diagnostic Research : JCDR*, *8*(8), MD03–MD05. https://doi.org/10.7860/JCDR/2014/9000.4688

Boukouvala, S., Price, N., Plant, K., & Sim, E. 2003, Structure and transcriptional regulation of the Nat2 gene encoding for the drug-metabolizing enzyme arylamine N-acetyltransferase type 2 in mice. *Biochem. J*, *375*, 593–602.

Bravo, 2008, Genotype and phenotype of NAT2 and the occurrence of adverse drug reactions in Mexican individuals to an isoniazid-based prophylactic chemotherapy for tuberculosis. *Molecular Medicine Reports*. https://doi.org/10.3892/mmr_00000044

Breen, R. A. M., Miller, R. F., Gorsuch, T., Smith, C. J., Schwenk, A., Holmes, W., Ballinger, J., Swaden, L., Johnson, M. A., Cropley, I., & Lipman, M. C. I. ,2006, Adverse events and treatment interruption in tuberculosis patients with and without HIV co-infection. *Thorax*, *61*(9), 791–794. https://doi.org/10.1136/thx.2006.058867

Budianto, A. ,2015, USIA DAN PENDIDIKAN BERHUBUNGAN DENGAN PERILAKU KEPATUHAN MINUM OBAT PADA PENDERITA TB PARU. *Jurnal Ilmiah Kesehatan*, *4*(8). https://doi.org/10.35952/jik.v4i8.19

Burhan, E., Ruesen, C., Ruslami, R., Ginanjar, A., Mangunnegoro, H., Ascobat, P., Donders, R., van Crevel, R., & Aarnoutse, R. 2013, Isoniazid, Rifampin,

and Pyrazinamide Plasma Concentrations in Relation to Treatment Response in Indonesian Pulmonary Tuberculosis Patients. *Antimicrobial Agents and Chemotherapy*, *57*(8), 3614–3619. https://doi.org/10.1128/AAC.02468-12

Cai, Y., Yi, J., Zhou, C., & Shen, X. 2012, Pharmacogenetic Study of Drug-Metabolising Enzyme Polymorphisms on the Risk of Anti-Tuberculosis Drug-Induced Liver Injury: A Meta-Analysis. *PLoS ONE*, *7*(10), e47769. https://doi.org/10.1371/journal.pone.0047769

Chan, S. L., Chua, A. P. G., Aminkeng, F., Chee, C. B. E., Jin, S., Loh, M., Gan, S. H., Wang, Y. T., & Brunham, L. R.,2017, Association and clinical utility of NAT2 in the prediction of isoniazid-induced liver injury in Singaporean patients. *PLOS ONE*, *12*(10), e0186200. https://doi.org/10.1371/journal.pone.0186200

Chen, B., Cai, W., Li, J., & Cao, X., 2009, Estimating N-acetyltransferase metabolic activity and pharmacokinetic parameters of isoniazid from genotypes in Chinese subjects. *Clinica Chimica Acta*, *405*(1–2), 23–29. https://doi.org/10.1016/j.cca.2009.03.045

Cho, H.-J., Koh, W.-J., Ryu, Y.-J., Ki, C.-S., Nam, M.-H., Kim, J.-W., & Lee, S.-Y. 2007, Genetic polymorphisms of NAT2 and CYP2E1 associated with antituberculosis drug-induced hepatotoxicity in Korean patients with pulmonary tuberculosis. *Tuberculosis*, *87*(6), 551–556. https://doi.org/10.1016/j.tube.2007.05.012

Corpechot C, Ping C, Wendum D, Matsuda F, Barbu V, Poupon R, Identi cation of a novel 974C-->G nonsense mutation of the MRP2/ABCC2 gene in a patient with Dubin-Johnson syndrome and analysis of the e ects of rifampicin and ursodeoxycholic acid on serum bilirubin and bile acids. *Am J Gastroenterol* 2006; 101: 2427-32. PubMed Citation cit. LiverTox: Clinical and Research Information on DrugInduced Liver Injury [Internet]. Bethesda (MD): National Institute of Diabetes and Digestive and Kidney Diseases; 2012-. Rifampin, (Updated 2018 Jun 10) Bookshelf URL: https://www.ncbi.nlm.nih.gov/books/

Denholm, J., McBryde, E., Eisen, D., Chen, C., Penington, J., & Street, A, 2014, Adverse effects of isoniazid preventative therapy for latent tuberculosis infection: A prospective cohort study. *Drug, Healthcare and Patient Safety*, 145. https://doi.org/10.2147/DHPS.S68837

Denti, P., Jeremiah, K., Chigutsa, E., Faurholt-Jepsen, D., PrayGod, G., Range, N., Castel, S., Wiesner, L., Hagen, C. M., Christiansen, M., Changalucha, J., McIlleron, H., Friis, H., & Andersen, A. B. 2015, Pharmacokinetics of Isoniazid, Pyrazinamide, and Ethambutol in Newly Diagnosed Pulmonary TB Patients in Tanzania. *PLOS ONE*, *10*(10), e0141002. https://doi.org/10.1371/journal.pone.0141002

Depkes RI, 2005, Pharmaceutical Care untuk Farmasis pada Penyakit Tuberkulosis

Depkes RI, T. 2013, *Pedoman Nasional Pengendalian Tuberkulosis, hal* 110.

Dompreh, A., Tang, X., Zhou, J., Yang, H., Topletz, A., Adu Ahwireng, E., Antwi, S., Enimil, A., Langaee, T., Peloquin, C. A., Court, M. H., & Kwara, A. 2017, Effect of Genetic Variation of *NAT2* on Isoniazid and *SLCO1B1* and

CES2 on Rifampin Pharmacokinetics in Ghanaian Children with Tuberculosis. *Antimicrobial Agents and Chemotherapy*, *62*(3), e02099-17, /aac/62/3/e02099-17.atom. https://doi.org/10.1128/AAC.02099-17

Drug-induced Liver Injury (DILI) Study Group, Chinese Society of Hepatology (CSH), Chinese Medical Association (CMA), Yu, Y., Mao, Y., Chen, C., Chen, J., Chen, J., Cong, W., Ding, Y., Duan, Z., Fu, Q., Guo, X., Hu, P., Hu, X., Jia, J., Lai, R., Li, D., Liu, Y., … Zhuang, H. 2017., CSH guidelines for the diagnosis and treatment of drug-induced liver injury. *Hepatology International*, *11*(3), 221–241. https://doi.org/10.1007/s12072-017-9793-2

Farazi, A., Sofian, M., Jabbariasl, M., & Keshavarz, S. 2014., Adverse Reactions to Antituberculosis Drugs in Iranian Tuberculosis Patients. *Tuberculosis Research and Treatment*, *2014*, 1–6. https://doi.org/10.1155/2014/412893

Fukino,K.,Sasaki,Y.,Hirai,S.,Nakamura,T.,Hashimoto,M.,Yamagishi,F.,Ueno,K., 2008, Effect of N-acetyltransferase,CYP2E1, and Glutation-S-transferase (GST) Genotypes on the serum concentrations of isoniazid and metabolites in tuberculosis pastients, *The Journal of Toxicological Sciences (J.Toxicol.Sci), vol 33,no 2,187-195*

Garg, Y., Gore, R., Jain, S., & Kumar, A. 2015, A rare case of isoniazid-induced erythroderma. *Indian Journal of Pharmacology*, *47*(6), 682–684. https://doi.org/10.4103/0253-7613.169575

Gumbo, T., Louie, A., Liu, W., Brown, D., Ambrose, P. G., Bhavnani, S. M., & Drusano, G. L. 2007, Isoniazid Bactericidal Activity and Resistance Emergence: Integrating Pharmacodynamics and Pharmacogenomics To Predict Efficacy in Different Ethnic Populations. *Antimicrobial Agents and Chemotherapy*, *51*(7), 2329–2336. https://doi.org/10.1128/AAC.00185-07

Hidayat, S. H., & Suseno, R.,2004, Penggunaan Teknik PCR dan RFLP untuk deteksi dan Analisis Keragaman Virus Gemini Pada Tanaman Obat YANG Berasal dari Berbagai Daerah di Jawa Barat dan Lampung, *Jurnal Hama dan Penyakit Tumbuhan Tropik*, vol.4, no 2:89-93

Higuchi, N., Tahara, N., Yanagihara, K., Fukushima, K., Suyama, N., Inoue, Y., Miyazaki, Y., Kobayashi, T., Yoshiura, K., Niikawa, N., Wen, C.-Y., Isomoto, H., Shikuwa, S., Omagari, K., Mizuta, Y., Kohno, S., & Tsukamoto, K.,2007, NAT2*6A a Haplotype of the N -acetyltransferase 2 Gene is an Important Biomarker for Risk of Anti-Tuberculosis Drug-Induced Hepatotoxicity in Japanese Patients With Tuberculosis, *World J Gastroenterol* 13(45): 6003-6008 ISSN 1007-9327

Hiratsuka, M., Kishikawa, Y., Takekuma, Y., Matsuura, M., Narahara, K., Inoue, T., Hamdy, S. I., Endo, N., Goto, J., & Mizugaki, M., 2002, Genotyping of the N-acetyltransferase2 Polymorphism in the Prediction of Adverse Drug Reactions to Isoniazid in Japanese Patients. *Drug Metabolism and Pharmacokinetics*, *17*(4), 357–362. https://doi.org/10.2133/dmpk.17.357

Huang, Y.-S. 2014, Recent progress in genetic variation and risk of antituberculosis drug-induced liver injury. *Journal of the Chinese Medical Association*, *77*(4), 169–173. https://doi.org/10.1016/j.jcma.2014.01.010

Hunter, R. L. 2018, The Pathogenesis of Tuberculosis: The Early Infiltrate of Post-primary (Adult Pulmonary) Tuberculosis: A Distinct Disease Entity. *Frontiers in Immunology*, *9*, 2108. https://doi.org/10.3389/fimmu.2018.02108

Husain, A., Zhang, X., Doll, M. A., Barker, D. F., Hein, D. W., & others. 2007, Identification of N-acetyltransferase 2 (NAT2) transcription start sites and quantitation of NAT2-specific mRNA in human tissues. *Drug Metabolism and Disposition*, *35*(5), 721–727.

Kementrian Kesehatan RI, 2018 Infodatin-tuberkulosis

Kementrian Kesehatan RI, 2013, Pedoman Nasional Pelayanan Kedokteran Tatalaksana Tuberkulosis.

Kinzig-Schippers, M., Tomalik-Scharte, D., Jetter, A., Scheidel, B., Jakob, V., Rodamer, M., Cascorbi, I., Doroshyenko, O., Sorgel, F., & Fuhr, U. 2005, Should We Use N-Acetyltransferase Type 2 Genotyping To Personalize Isoniazid Doses? *Antimicrobial Agents and Chemotherapy*, *49*(5), 1733–1738. https://doi.org/10.1128/AAC.49.5.1733-1738.2005

Kiser, J. J., Zhu, R., D'Argenio, D. Z., Cotton, M. F., Bobat, R., McSherry, G. D., Madhi, S. A., Carey, V. J., Seifart, H. I., Werely, C. J., & Fletcher, C. V. 2012, Isoniazid Pharmacokinetics, Pharmacodynamics, and Dosing in South African Infants: *Therapeutic Drug Monitoring*, *34*(4), 446–451. https://doi.org/10.1097/FTD.0b013e31825c4bc3

Laurieri, N., Kawamura, A., Westwood, I. M., Varney, A., Morris, E., Russell, A. J., Stanley, L. A., & Sim, E. 2014, Differences between murine arylamine N-acetyltransferase type 1 and human arylamine N-acetyltransferase type 2 defined by substrate specificity and inhibitor binding, *BMC Pharmacology and Toxicology*, *15*(1), 68.

Lee, S. W., Chung, L., Huang, H. H., Chuang, T. Y., Liou, Y. H., & Wu, L. 2010, NAT2 and CYP2E1 polymorphisms and susceptibility to first-line anti-tuberculosis drug-induced hepatitis, *The International Journal of Tuberculosis and Lung Disease*, *14*(5), 622–626.

Leise, M. D., Poterucha, J. J., & Talwalkar, J. A. 2014, Drug-Induced Liver Injury, *Mayo Clinic Proceedings*, *89*(1), 95–106. https://doi.org/10.1016/j.mayocp.2013.09.016

Marra, F., Marra, C. A., Bruchet, N., Richardson, K., Moadebi, S., Elwood, R. K., & FitzGerald, J. M. 2007 Adverse drug reactions associated with first-line anti-tuberculosis drug regimens, *Int J Tuberc Lung Dis* 11(8) 868-875

McDonagh, E. M., Boukouvala, S., Aklillu, E., Hein, D. W., Altman, R. B., & Klein, T. E. 2014, PharmGKB summary: Very important pharmacogene information for N-acetyltransferase 2, *Pharmacogenetics and Genomics*, 1. https://doi.org/10.1097/FPC.0000000000000062

Moonan, P. K., Quitugua, T. N., Pogoda, J. M., Woo, G., Drewyer, G., Sahbazian, B., Dunbar, D., Jost, K. C., Wallace, C., & Weis, S. E. 2011, Does directly observed therapy (DOT) reduce drug resistant tuberculosis? *BMC Public Health*, *11*(1), 19.

Neelam, C., & Harish, P. 2014, Variants of NAT2 polymorphisms: Intra and inter-ethnic differences, *African Journal of Biotechnology*, *13*(51), 4639–4646. https://doi.org/10.5897/AJB2013.13226

Ng, C.-S., Hasnat, A., Al Maruf, A., Ahmed, M. U., Pirmohamed, M., Day, C. P., Aithal, G. P., & Daly, A. K. 2014, N-acetyltransferase 2 (NAT2) genotype as a risk factor for development of drug-induced liver injury relating to antituberculosis drug treatment in a mixed-ethnicity patient group, *European Journal of Clinical Pharmacology*, *70*(9), 1079–1086. https://doi.org/10.1007/s00228-014-1703-0

Nisar, M., Watkin, S. W., Bucknall, R. C., & Agnew, R. A. 1990, Exacerbation of isoniazid induced peripheral neuropathy by pyridoxine, *Thorax*, *45*(5), 419–420. https://doi.org/10.1136/thx.45.5.419

Oktarlina, R. Z.,Sutarto. 2018, Kerasionalan Pengobatan Tuberkulosis dan Konversi Sputum BTA terhadap Kesembuhan Tuberkulosis di Puskesmas Segala Mider Bandar Lampung, *JK Unila* vol 2 no 2 hal 114-117

Organisation mondiale de la santé. 2019, Global tuberculosis report 2019, hal 206

Pameswari, P., Halim, A., & Yustika, L. 2016, Tingkat Kepatuhan Penggunaan Obat pada Pasien Tuberkulosis di Rumah Sakit Mayjen H. A Thalib Kabupaten Kerinci. *Jurnal Sains Farmasi & Klinis*, *2*(2), 116. https://doi.org/10.29208/jsfk.2016.2.2.60

Park, J. S., Lee, J.-Y., Lee, Y. J., Kim, S. J., Cho, Y.-J., Yoon, H. I., Lee, C.-T., Song, J., & Lee, J. H. 2016, Serum Levels of Antituberculosis Drugs and Their Effect on Tuberculosis Treatment Outcome. *Antimicrobial Agents and Chemotherapy*, *60*(1), 92–98. https://doi.org/10.1128/AAC.00693-15

Perwitasari, D. A. Malinda Noverliyanti, Endang Darmawan, Ully Adhi Mulyani, Jarir Atthobari, Bob Wilffert. 2016, Genotype Polymorphisms of NAT2 and CYP2E1 Genes Associated With Drug Induced Liver Injury (DILI) in Indonesian Tuberculosis Patients, Indonesian Journal of Pharmacy *27*(1), 22. https://doi.org/10.14499/indonesianjpharm27iss1pp22

Perwitasari, D., Darmawan, E., Mulyani, U., Vlies, P. D., Alffenaar, J.-W., Atthobar, J., & Wilffert, B. 2018, Polymorphisms of NAT2, CYP2E1, GST, and HLA related to drug-induced liver injury in indonesian tuberculosis patients. *International Journal of Mycobacteriology*, *7*(4), 380. https://doi.org/10.4103/ijmy.ijmy_143_18

Pharmacogenetics-based tuberculosis therapy research group, Azuma, J., Ohno, M., Kubota, R., Yokota, S., Nagai, T., Tsuyuguchi, K., Okuda, Y., Takashima, T., Kamimura, S., Fujio, Y., & Kawase, I. 2013, NAT2 genotype guided regimen reduces isoniazid-induced liver injury and early treatment failure in the 6-month four-drug standard treatment of tuberculosis: A randomized controlled trial for pharmacogenetics-based therapy. *European Journal of Clinical Pharmacology*, *69*(5), 1091–1101. https://doi.org/10.1007/s00228-012-1429-9

Pramono, A., Penggoam, S., Sahiratmadja, E., Utami, N., Achmad, T., & Panigoro, R. 2017, Status Asetilator Gen NAT2 pada Pasien Tuberkulosis dan

Tuberkulosis dengan Diabetes Melitus di Kupang, Nusa Tenggara Timur. *Majalah Kedokteran Bandung*, *49*, 61–66. https://doi.org/10.15395/mkb.v49n1.989

Regev, A., Seeff, L. B., Merz, M., Ormarsdottir, S., Aithal, G. P., Gallivan, J., & Watkins, P. B. 2014, Causality Assessment for Suspected DILI During Clinical Phases of Drug Development. *Drug Safety*, *37*(S1), 47–56. https://doi.org/10.1007/s40264-014-0185-4

Rifai, A., Herlianto, B., Mustika, S., Pratomo, B., & Supriono, S. 2015, Insiden dan Gambaran Klinis Hepatitis Akibat Obat Anti Tuberkulosis di Rumah Sakit Umum Daerah Dr. Saiful Anwar Malang, *Jurnal Kedokteran Brawijaya*, *28*(3), 238–241. https://doi.org/10.21776/ub.jkb.2015.028.03.14

Rokhmah, D. 2013, Gender dan Penyakit Tuberkulosis: Implikasinya Terhadap Akses Layanan Kesehatan Masyarakat Miskin yang Rendah. *Kesmas: National Public Health Journal*, *7*(10), 447. https://doi.org/10.21109/kesmas.v7i10.3

Ruiz, J. D., Martínez, C., Anderson, K., Gross, M., Lang, N. P., García-Martín, E., & Agúndez, J. A. G. 2012, The Differential Effect of NAT2 Variant Alleles Permits Refinement in Phenotype Inference and Identifies a Very Slow Acetylation Genotype. *PLoS ONE*, *7*(9), e44629. https://doi.org/10.1371/journal.pone.0044629

Sabaté, E., & World Health Organization . 2003, *Adherence to long-term therapies: Evidence for action*. World Health Organization.

Schaberg, T., Rebhan, K., & Lode, H. 1996a, Risk factors for side-effects of isoniazid, rifampin and pyrazinamide in patients hospitalized for pulmonary tuberculosis, *European Respiratory Journal*, *9*(10), 2026–2030. https://doi.org/10.1183/09031936.96.09102026

Schaberg, T., Rebhan, K., & Lode, H. 1996b, Risk factors for side-effects of isoniazid, rifampin and pyrazinamide in patients hospitalized for pulmonary tuberculosis, *European Respiratory Journal*, *9*(10), 2026–2030. https://doi.org/10.1183/09031936.96.09102026

Srikartika, V. M., Cahya, A. D., & Hardiati, R. S. W. 2016, Analisis Faktor yang Mempengaruhi Kepatuhan Penggunaan Obat Pasien Diabetes Mellitus tipe 2*, Jurnal Manajemen dan Pelayanan Farmasi, hal 205-222*

Stettner, M., Steinberger, D., Hartmann, C. J., Pabst, T., Konta, L., Hartung, H. P., & Kieseier, B. C. 2015a, Isoniazid-induced Polyneuropathy in a Tuberculosis Patient—Implication for individual risk stratification with genotyping? *Brain and Behavior*, *5*(8), n/a-n/a. https://doi.org/10.1002/brb3.326

Swaminathan, S., & Ramachandran, G. 2012, Role of Pharmacogenomics in the Treatment of Tuberculosis: A review. *Pharmacogenomics and Personalized Medicine*, 89. https://doi.org/10.2147/PGPM.S15454

Tajiri, K., & Shimizu, Y. 2008, Practical Guidelines for diagnosis and Early Management of Drug-Induced Liver Injury. *World Journal of Gastroenterology*, *14*(44), 6774. https://doi.org/10.3748/wjg.14.6774

Tama, T. D., Adisasmita, A. C., & Burhan, E. 2016, Indeks Massa Tubuh dan Waktu Terjadinya Konversi Sputum pada Pasien Tuberkulosis Paru BTA

Positif di RSUP Persahabatan Tahun 2012, *Jurnal Epidemiologi Kesehatan Indonesia*, *1*(1). https://doi.org/10.7454/epidkes.v1i1.1309

Teixeira, R. L. de F., Morato, R. G., Cabello, P. H., Muniz, L. M. K., Moreira, A. da S. R., Kritski, A. L., Mello, F. C. Q., Suffys, P. N., Miranda, A. B. de, & Santos, A. R. 2011, Genetic Polymorphisms of NAT2, CYP2E1 and GST Enzymes and the Occurrence of Antituberculosis Drug-Induced Hepatitis in Brazilian TB patients. *Memórias Do Instituto Oswaldo Cruz*, *106*(6), 716–724. https://doi.org/10.1590/S0074-02762011000600011

Vatsis, K. P., Martell, K. J., & Weber, W. W. 1991, Diverse Point Mutations in the Human Gene for Polymorphic N-acetyltransferase. *Proceedings of the National Academy of Sciences*, *88*(14), 6333–6337.

Wahyono, T. Y. M. 2016, Kejadian Efek Samping Obat Anti Tuberkulosis pada Pasien Tuberkulosis, *36*(4), *J Respir Indo Vol. 36 No. 4 Oktober 2016*

Walraven, J., Zang, Y., Trent, J., & Hein, D. 2008, Structure/Function Evaluations of Single Nucleotide Polymorphisms in Human N-Acetyltransferase 2. *Current Drug Metabolism*, *9*(6), 471–486. https://doi.org/10.2174/138920008784892065

Weinshilboum, R. M., & Wang, L. 2017, Pharmacogenomics: Precision Medicine and Drug Response, *Mayo Clinic Proceedings*, *92*(11), 1711–1722. https://doi.org/10.1016/j.mayocp.2017.09.001

Widiyanto, A. 2017, Hubungan Kepatuhan Minum Obat Dengan Kesembuhan Pasien Tuberkulosis Paru BTA Positif Di Puskesmas Delanggu Kabupaten Klaten. *Interest : Jurnal Ilmu Kesehatan*, *6*(1). https://doi.org/10.37341/interest.v6i1.71

World Health Organization. 2019, WHO guidelines on tuberculosis infection prevention and control: 2019 update. http://www.ncbi.nlm.nih.gov/books/NBK539297/

Wulandari,D, H. 2015, Analisis Faktor-Faktor yang Berhubungan dengan Kepatuhan Pasien Tuberkulosis Paru Tahap Lanjutan Untuk Minum Obat di RS Rumah Sehat Terpadu *, Jurnal Administrasi Rumah Sakit* vol 2 no 1: 17-18

Wulandari, N., Andrajati,R.,Supardi,S. 2015, Faktor Risiko Umur Lansia terhadap Kejadian Reaksi Obat yang Tidak Dikehendaki pada Pasien Hipertensi, Diabetes, Dislipidemia di Tiga Puskesmas di Kota Depok *Jurnal Kefarmasian Indonesia,* vol 6 no 1:60-67

Xu, M., Markström, U., Lyu, J., & Xu, L. 2017, Detection of Low Adherence in Rural Tuberculosis Patients in China: Application of Morisky Medication Adherence Scale, *International Journal of Environmental Research and Public Health*, *14*(3), 248. https://doi.org/10.3390/ijerph14030248

Yu, Y.-Y., Tsao, S.-M., Yang, W.-T., Huang, W.-C., Lin, C.-H., Chen, W.-W., Yang, S.-F., Chiou, H.-L., & Huang, Y.-W. 2019, Association of Drug Metabolic Enzyme Genetic Polymorphisms and Adverse Drug Reactions in Patients Receiving Rifapentine and Isoniazid Therapy for Latent Tuberculosis, *International Journal of Environmental Research and Public Health*, *17*(1), 210. https://doi.org/10.3390/ijerph17010210

Yuliwulandari, R., Sachrowardi, Q., Nishida, N., Takasu, M., Batubara, L., Susmiarsih, T. P., Rochani, J. T., Wikaningrum, R., Miyashita, R., Miyagawa, T., Sofro, A. S. M., & Tokunaga, K. 2008a, Polymorphisms of Promoter and Coding Regions of the Arylamine N-acetyltransferase 2 (NAT2) gene in the Indonesian Population: Proposal for a new nomenclature, *Journal of Human Genetics*, *53*(3), 201–209. https://doi.org/10.1007/s10038-007-0237-z

Yuliwulandari, R., Sachrowardi, Q., Nishida, N., Takasu, M., Batubara, L., Susmiarsih, T. P., Rochani, J. T., Wikaningrum, R., Miyashita, R., Miyagawa, T., Sofro, A. S. M., & Tokunaga, K. 2008b, Polymorphisms of Promoter and Coding Regions of the Arylamine N-acetyltransferase 2 (NAT2) Gene in the Indonesian Population: Proposal for a new nomenclature, *Journal of Human Genetics*, *53*(3), 201–209. https://doi.org/10.1007/s10038-007-0237-z

Zabost, A., Brzezińska, S., Kozińska, M., Błachnio, M., Jagodziński, J., Zwolska, Z., & Augustynowicz-Kopeć, E. 2013, Correlation of N-Acetyltransferase 2 Genotype with Isoniazid Acetylation in Polish Tuberculosis Patients. *BioMed Research International*, 1–5. https://doi.org/10.1155/2013/853602

Zaoui, A., Abdelghani, A., Ben Salem, H., Ouanes, W., Hayouni, A., Khachnaoui, F., Rejeb, N., & Benzarti, M. 2012, Early-Onset Severe Isoniazid-Induced Motordominant Neuropathy: A case report. *Eastern Mediterranean Health Journal*, *18*(3), 298–299. https://doi.org/10.26719/2012.18.3.298

Zhang, M., Wang, S., Wilffert, B., Tong, R., van Soolingen, D., van den Hof, S., & Alffenaar, J.-W. 2018, The Association Between the *NAT2* Genetic Polymorphisms and Risk of DILI during Anti-TB treatment: A systematic review and meta-analysis: Slow *NAT2* Genotype is a Risk factor for AT-DILI. *British Journal of Clinical Pharmacology*, *84*(12), 2747–2760. https://doi.org/10.1111/bcp.13722

Zhang, S.-N., He, Q.-X., Yang, N.-B., Ni, S.-L., & Lu, M.-Q. 2015, Isoniazid-induced Drug Rash with Eosinophilia and Systemic Symptoms (DRESS) Syndrome Presenting as Acute Eosinophilic Myocarditis, *Internal Medicine*, *54*(10), 1227–1230. https://doi.org/10.2169/internalmedicine.54.3511

Zheng, C. J., Han, L. Y., Xie, B., Liew, C. Y., Ong, S., Cui, J., Zhang, H. L., Tang, Z. Q., Gan, S. H., Jiang, L., & Chen, Y. Z. 2007, PharmGED: Pharmacogenetic Effect Database, *Nucleic Acids Research*, *35*(Database), D794–D799. https://doi.org/10.1093/nar/gkl853

Zhou, X., Ma, Z., Dong, D., & Wu, B. 2013, Arylamine N-acetyltransferases: A Structural Perspective: Understanding of NATs with their 3D structures. *British Journal of Pharmacology*, *169*(4), 748–760. https://doi.org/10.1111/bph.12182