

DAFTAR PUSTAKA

- Abramowicz JS. Benefits and risks of ultrasound in pregnancy. *Semin Perinatol.* 2013;37(5):295–300.
- Afshani N, Moustaqim-Barrette A, Biccard BM, Rodseth RN, Dyer RA. Utility of B-type natriuretic peptides in preeclampsia: a systematic review. *Int J Obstet Anesth.* 2013;22(2):96–103.
- Akaike H. Breakthroughs in Statistics. Springer Ser Statistics. 1992;610–24.
- Akolekar R, Syngelaki A, Poon L, Wright D, Nicolaides KH. Competing Risks Model in Early Screening for Preeclampsia by Biophysical and Biochemical Markers. *Fetal Diagn Ther.* 2013;33(1):8–15.
- Akolekar R, Syngelaki A, Sarquis R, Zvanca M, Nicolaides KH. Prediction of early, intermediate and late pre-eclampsia from maternal factors, biophysical and biochemical markers at 11–13 weeks. *Prenatal Diag.* 2011;31(1):66–74.
- Akolekar R, Zaragoza E, Poon LCY, Pepes S, Nicolaides KH. Maternal serum placental growth factor at 11 + 0 to 13 + 6 weeks of gestation in the prediction of pre-eclampsia. *Ultrasound Obst Gyn.* 2008;32(6):732–9.
- Al-Rubaie Z, Askie L, Ray J, Hudson H, Lord S. The performance of risk prediction models for pre-eclampsia using routinely collected maternal characteristics and comparison with models that include specialised tests and with clinical guideline decision rules: a systematic review. *Bjog Int J Obstetrics Gynaecol.* 2016;123(9):1441–52.
- Al-Rubaie ZTA, Hudson HM, Jenkins G, Mahmoud I, Ray JG, Askie LM, et al. Prediction of pre-eclampsia in nulliparous women using routinely collected maternal characteristics: a model development and validation study. *Bmc Pregnancy Childb.* 2020;20(1):23.
- Alves JAG, Sousa PCP de, Moura SBM e H, Kane SC, Costa F da S. First-trimester maternal ophthalmic artery Doppler analysis for prediction of pre-eclampsia. *Ultrasound Obst Gyn.* 2014a;44(4):411–8.
- Alves JAG, Yang B, Sousa PCP, Moura SBM e H, Kane S, Costa FS. Reference values of maternal ophthalmic artery doppler variables in the first trimester of normal pregnancy. *J Clin Ultrasound.* 2014b;42(4):199–204.
- Amoakoh-Coleman M, Borgstein ABJ, Sondaal SF, Grobbee DE, Miltenburg AS, Verwijs M, et al. Effectiveness of mHealth Interventions Targeting Health Care Workers to Improve Pregnancy Outcomes in Low- and Middle-Income Countries: A Systematic Review. *J Med Internet Res.* 2016;18(8):e226.

- Ananth CV, Duzyj CM, Yadava S, Schwebel M, Tita ATN, Joseph KS. Changes in the Prevalence of Chronic Hypertension in Pregnancy, United States, 1970 to 2010. *Hypertens Dallas Tex* 1979. 2019;74(5):1089–95.
- Ananth CV, Keyes KM, Wapner RJ. Pre-eclampsia rates in the United States, 1980-2010: age-period-cohort analysis. *Bmj*. 2013;347(nov07 15):f6564.
- Antwi E, Amoakoh-Coleman M, Vieira DL, Madhavaram S, Koram KA, Grobbee DE, et al. Systematic review of prediction models for gestational hypertension and preeclampsia. *Plos One*. 2020a;15(4):e0230955.
- Antwi E, Amoakoh-Coleman M, Vieira DL, Madhavaram S, Koram KA, Grobbee DE, et al. Systematic review of prediction models for gestational hypertension and preeclampsia. *Plos One*. 2020b;15(4):e0230955.
- Arakaki T, Hasegawa J, Nakamura M, Hamada S, Muramoto M, Takita H, et al. Prediction of early- and late-onset pregnancy-induced hypertension using placental volume on three-dimensional ultrasound and uterine artery Doppler. *Ultrasound Obst Gyn*. 2015;45(5):539–43.
- Arbour MW, Stec MA. Mobile Applications for Women's Health and Midwifery Care: A Pocket Reference for the 21st Century. *J Midwifery Women's Heal*. 2018;63(3):330–4.
- ARNGRIMSSON R, BJÖRNSSON S, GEIRSSON RT, BJÖRNSSON H, WALKER JJ, SNAEDAL G. Genetic and familial predisposition to eclampsia and pre-eclampsia in a defined population. *Bjog Int J Obstetrics Gynaecol*. 1990;97(9):762–9.
- Askie LM, Duley L, Henderson-Smart DJ, Stewart LA, Group on behalf of the PC. Antiplatelet agents for prevention of pre-eclampsia: a meta-analysis of individual patient data. *Lancet*. 2007;369(9575):1791–8.
- Auger N, Luo ZC, Nuyt AM, Kaufman JS, Naimi AI, Platt RW, et al. Secular Trends in Preeclampsia Incidence and Outcomes in a Large Canada Database: A Longitudinal Study Over 24 Years. *Can J Cardiol*. 2016;32(8):987.e15-987.e23.
- Austdal M, Tangerås LH, Skråstad RB, Salvesen KÅ, Austgulen R, Iversen AC, et al. First Trimester Urine and Serum Metabolomics for Prediction of Preeclampsia and Gestational Hypertension: A Prospective Screening Study. *Int J Mol Sci*. 2015;16(9):21520–38.
- Babyak MA. What You See May Not Be What You Get: A Brief, Nontechnical Introduction to Overfitting in Regression-Type Models. *Psychosom Med*. 2004;66(3):411–21.

- BAHADO-SINGH RO, JODICKE C. Uterine Artery Doppler in First-trimester Pregnancy Screening. *Clin Obstet Gynecol.* 2010;53(4):879–87.
- Barnett SB, Maulik D, Society IPD. Guidelines and recommendations for safe use of Doppler ultrasound in perinatal applications. *J Maternal-fetal Neonatal Medicine.* 2001;10(2):75–84.
- Bartsch E, Medcalf KE, Park AL, Ray JG, Group HR of P eclampsia I. Clinical risk factors for pre-eclampsia determined in early pregnancy: systematic review and meta-analysis of large cohort studies. *Bmj.* 2016;353:i1753.
- Baschat AA, Magder LS, Doyle LE, Atlas RO, Jenkins CB, Blitzer MG. Prediction of preeclampsia utilizing the first trimester screening examination. *Am J Obstet Gynecol.* 2014;211(5):514.e1-514.e7.
- Bateman BT, Bansil P, Hernandez-Diaz S, Mhyre JM, Callaghan WM, Kuklina EV. Prevalence, trends, and outcomes of chronic hypertension: a nationwide sample of delivery admissions. *Am J Obstet Gynecol.* 2012;206(2):134.e1-134.e8.
- Belfort MA. Doppler assessment of retinal blood flow velocity during parenteral magnesium treatment in patients with preeclampsia. *Magnesium Res.* 1993;6(3):239–46.
- Belfort MA, Saade GR, Snabes M, Dunn R, Moise KJ, Cruz A, et al. Hormonal status affects the reactivity of the cerebral vasculature. *Am J Obstet Gynecol.* 1995;172(4):1273–8.
- Bellamy L, Casas JP, Hingorani AD, Williams DJ. Pre-eclampsia and risk of cardiovascular disease and cancer in later life: systematic review and meta-analysis. *Bmj.* 2007;335(7627):974.
- Bhide A, Acharya G, Bilardo CM, Brezinka C, Cafici D, Hernandez-Andrade E, et al. ISUOG Practice Guidelines: use of Doppler ultrasonography in obstetrics. *Ultrasound Obst Gyn.* 2013;41(2):233–9.
- Bian Z, Shixia C, Duan T. First-Trimester Maternal Serum Levels of sFLT1, PGF and ADMA Predict Preeclampsia. *Plos One.* 2015;10(4):e0124684.
- Bilano VL, Ota E, Ganchimeg T, Mori R, Souza JP. Risk Factors of Pre-Eclampsia/Eclampsia and Its Adverse Outcomes in Low- and Middle-Income Countries: A WHO Secondary Analysis. *Plos One.* 2014;9(3):e91198.
- Bleeker SE, Moll HA, Steyerberg EW, Donders ART, Derksen-Lubsen G, Grobbee DE, et al. External validation is necessary in prediction research: A clinical example. *J Clin Epidemiol.* 2003;56(9):826–32.

- Bower S, Kingdom J, Campbell S. Objective and subjective assessment of abnormal uterine artery Doppler flow velocity waveforms. *Ultrasound Obst Gyn.* 1998;12(4):260–4.
- Bramham K, Seed PT, Lightstone L, Nelson-Piercy C, Gill C, Webster P, et al. Diagnostic and predictive biomarkers for pre-eclampsia in patients with established hypertension and chronic kidney disease. *Kidney Int.* 2016;89(4):874–85.
- Brodzki J, Länne T, Laurini R, Strevens H, Wide-Swensson D, Marsál K. Vascular mechanical properties and endothelial function in pre-eclampsia with special reference to bilateral uterine artery notch. *Acta Obstet Gyn Scan.* 2008;87(2):154–62.
- Brosens I, Pijnenborg R, Vercruysse L, Romero R. The “Great Obstetrical Syndromes” are associated with disorders of deep placentation. *Am J Obstet Gynecol.* 2011;204(3):193–201.
- Brown MA, Magee LA, Kenny LC, Karumanchi SA, McCarthy FP, Saito S, et al. Hypertensive Disorders of Pregnancy: ISSHP Classification, Diagnosis, and Management Recommendations for International Practice. *Hypertension.* 2018a;72(1):24–43.
- Brown MA, Magee LA, Kenny LC, Karumanchi SA, McCarthy FP, Saito S, et al. The hypertensive disorders of pregnancy: ISSHP classification, diagnosis & management recommendations for international practice. *Pregnancy Hypertens.* 2018b;13:291–310.
- Brown MC, Best KE, Pearce MS, Waugh J, Robson SC, Bell R. Cardiovascular disease risk in women with pre-eclampsia: systematic review and meta-analysis. *Eur J Epidemiol.* 2013;28(1):1–19.
- Bujold E, Roberge S, Lacasse Y, Bureau M, Audibert F, Marcoux S, et al. Prevention of Preeclampsia and Intrauterine Growth Restriction With Aspirin Started in Early Pregnancy: A Meta-Analysis. *Obstetrics Gynecol.* 2010;116(2):402–14.
- Burt VL, Whelton P, Roccella EJ, Brown C, Cutler JA, Higgins M, et al. Prevalence of hypertension in the US adult population. Results from the Third National Health and Nutrition Examination Survey, 1988-1991. *Hypertens Dallas Tex* 1979. 1995;25(3):305–13.
- Burton GJ, Redman CW, Roberts JM, Moffett A. Pre-eclampsia: pathophysiology and clinical implications. *Bmj.* 2019;366:l2381.

- Burton PR, Clayton DG, Cardon LR, Craddock N, Deloukas P, Duncanson A, et al. Genome-wide association study of 14,000 cases of seven common diseases and 3,000 shared controls. *Nature*. 2007;447(7145):661–78.
- Bush J, Barlow DE, Echols J, Wilkerson J, Bellevin K. Impact of a Mobile Health Application on User Engagement and Pregnancy Outcomes Among Wyoming Medicaid Members. *Telemed J E-health*. 2017;23(11):891–8.
- Canning CR, Restori M. Doppler ultrasound studies of the ophthalmic artery. *Eye*. 1988;2(1):92–5.
- Cantwell R, Clutton-Brock T, Cooper G, Dawson A, Drife J, Garrod D, et al. Saving Mothers' Lives: Reviewing maternal deaths to make motherhood safer: 2006–2008. *BJOG Int J Obstetrics Gynaecol*. 2011;118(s1):1–203.
- Caradeux J, Serra R, Nien J, Pérez-Sepulveda A, Schepeler M, Guerra F, et al. First trimester prediction of early onset preeclampsia using demographic, clinical, and sonographic data: a cohort study. *Prenatal Diag*. 2013;33(8):732–6.
- Carneiro RS, Sass N, Diniz AL, Souza EV, Torloni MR, Moron AF. Ophthalmic artery Doppler velocimetry in healthy pregnancy. *Int J Gynecol Amp Obstetrics*. 2008;100(3):211–5.
- Carr DB, Newton KM, Utzschneider KM, Tong J, Gerchman F, ChB SEK, et al. Preeclampsia and Risk of Developing Subsequent Diabetes. *Hypertens Pregnancy*. 2009;28(4):435–47.
- Carter J, Sandall J, Shennan AH, Tribe RM. Mobile phone apps for clinical decision support in pregnancy: a scoping review. *Bmc Med Inform Decis*. 2019;19(1):219.
- Carty DM, Delles C, Dominiczak AF. Preeclampsia and future maternal health. *J Hypertens*. 2010;28(7):1349–55.
- Catalano PM. Obesity, insulin resistance, and pregnancy outcome. *Reproduction*. 2010;140(3):365–71.
- Caughey AB, Stotland NE, Washington AE, Escobar GJ. Maternal Ethnicity, Paternal Ethnicity, and Parental Ethnic Discordance: Predictors of Preeclampsia. *Obstetrics Gynecol*. 2005;106(1):156–61.
- Cetin I, Huppertz B, Burton G, Cuckle H, Gonen R, Lapaire O, et al. Pregenesys pre-eclampsia markers consensus meeting: What do we require from markers, risk assessment and model systems to tailor preventive strategies? *Placenta*. 2011;32:S4–16.

- Chaemsaitong P, Pooh RK, Zheng M, Ma R, Chaiyasit N, Tokunaka M, et al. Prospective evaluation of screening performance of first trimester prediction models for preterm preeclampsia in Asian population. *Am J Obstet Gynecol.* 2019;221(6):650.e1-650.e16.
- Chaemsaitong P, Sahota D, Poon LC. First trimester preeclampsia screening and prediction. *Am J Obstet Gynecol.* 2020;226(2):S1071-S1097.e2.
- Chaiworapongsa T, Chaemsaitong P, Yeo L, Romero R. Pre-eclampsia part 1: current understanding of its pathophysiology. *Nat Rev Nephrol.* 2014;10(8):466–80.
- Chaveeva P, Carbone IF, Syngelaki A, Akolekar R, Nicolaides KH. Contribution of Method of Conception on Pregnancy Outcome after the 11–13 Weeks Scan. *Fetal Diagn Ther.* 2011;30(1):9–22.
- Chen H, Chai Y, Dong L, Niu W, Zhang P. Effectiveness and Appropriateness of mHealth Interventions for Maternal and Child Health: Systematic Review. *Jmir Mhealth Uhealth.* 2018;6(1):e7.
- Chesley LC, Anitto JE, Cosgrove RA. The remote prognosis of eclamptic women Sixth periodic report. *Am J Obstet Gynecol.* 1976;124(5):446–59.
- CHESLEY LC, COOPER DW. Genetics of hypertension in pregnancy: possible single gene control of pre-eclampsia and eclampsia in the descendants of eclamptic women. *Bjog Int J Obstetrics Gynaecol.* 1986;93(9):898–908.
- Cincotta RB, Brennecke SP. Family history of pre-eclampsia as a predictor for pre-eclampsia in primigravidas. *Int J Gynecol Obstet.* 1998;60(1):23–7.
- Çintesun E, Çintesun F, Ezveci H, Akyürek F, Çelik Ç. Systemic inflammatory response markers in preeclampsia. *J Laboratory Physicians.* 2018;10(03):316–9.
- Cnattingius S, Bergström R, Lipworth L, Kramer MS. Prepregnancy Weight and the Risk of Adverse Pregnancy Outcomes. *New Engl J Medicine.* 1998;338(3):147–52.
- Cohen JL, Smilen KE, Bianco AT, Moshier EL, Ferrara LA, Stone JL. Predictive value of combined serum biomarkers for adverse pregnancy outcomes. *Eur J Obstet Gyn R B.* 2014;181:89–94.
- Collaborators G 2015 CM, Wang H, Bhutta ZA, Coates MM, Coggeshall M, Dandona L, et al. Global, regional, national, and selected subnational levels of stillbirths, neonatal, infant, and under-5 mortality, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet.* 2016;388(10053):1725–74.

- Committee Opinion No. 723: Guidelines for Diagnostic Imaging During Pregnancy and Lactation. *Obstet Gynecol.* 2017;130(4):e210–6.
- Conde-Agudelo A, Villar J, Lindheimer M. World Health Organization Systematic Review of Screening Tests for Preeclampsia. *Obstetrics Gynecol.* 2004;104(6):1367–91.
- consultation W expert. Appropriate body-mass index for Asian populations and its implications for policy and intervention strategies. *Lancet.* 2004;363(9403):157–63.
- Corrêa-Silva EP, Surita FG, Barbieri C, Morais SS, Cecatti JG. Reference values for Doppler velocimetry of the ophthalmic and central retinal arteries in low-risk pregnancy. *Int J Gynaecol Obstetrics Official Organ Int Fed Gynaecol Obstetrics.* 2012;117(3):251–6.
- Costa F da S, Murthi P, Keogh R, Woodrow N. Early screening for preeclampsia. *Revista Brasileira De Ginecologia E Obstetrícia.* 2011;33(11):367–75.
- Cowans NJ, Alftan H, Stenman UH, Spencer K. Stability of first trimester placental growth factor in serum and whole blood. *Prenatal Diag.* 2011;31(12):1193–7.
- Craici I, Wagner S, Garovic VD. Preeclampsia and future cardiovascular risk: formal risk factor or failed stress test? *Ther Adv Cardiovasc Dis.* 2008;2(4):249–59.
- Crispi F, Llurba E, Domínguez C, Martín-Gallán P, Cabero L, Gratacós E. Predictive value of angiogenic factors and uterine artery Doppler for early-versus late-onset pre-eclampsia and intrauterine growth restriction. *Ultrasound Obst Gyn.* 2008;31(3):303–9.
- Cuckle HS. Screening for Pre-eclampsia—Lessons from Aneuploidy Screening. *Placenta.* 2011;32:S42–8.
- Danso KA, Opare-Addo HS. Challenges associated with hypertensive disease during pregnancy in low-income countries. *Int J Gynecol Amp Obstetrics.* 2010;110(1):78–81.
- Dekker G, Sibai B. Primary, secondary, and tertiary prevention of pre-eclampsia. *Lancet.* 2001;357(9251):209–15.
- Diniz ALD, Moron AF, Santos MC dos, Sass N, Pires CR, Debs CL. Ophthalmic artery Doppler as a measure of severe pre-eclampsia. *Int J Gynecol Amp Obstetrics.* 2008;100(3):216–20.
- Duckitt K, Harrington D. Risk factors for pre-eclampsia at antenatal booking: systematic review of controlled studies. *Bmj.* 2005;330(7491):565.

- Eastwood KA, Patterson C, Hunter AJ, McCance DR, Young IS, Holmes VA. Evaluation of the predictive value of placental vascularisation indices derived from 3-Dimensional power Doppler whole placental volume scanning for prediction of pre-eclampsia: A systematic review and meta-analysis. *Placenta*. 2017;51:89–97.
- Eldh AC, Almost J, DeCorby-Watson K, Gifford W, Harvey G, Hasson H, et al. Clinical interventions, implementation interventions, and the potential greyness in between -a discussion paper. *Bmc Health Serv Res*. 2017;17(1):16.
- Erez O, Romero R, Espinoza J, Fu W, Todem D, Kusanovic JP, et al. The change in concentrations of angiogenic and anti-angiogenic factors in maternal plasma between the first and second trimesters in risk assessment for the subsequent development of preeclampsia and small-for-gestational age. *J Maternal-fetal Neonatal Medicine*. 2009;21(5):279–87.
- Erickson SJ, Hendrix LE, Massaro BM, Harris GJ, Lewandowski MF, Foley WD, et al. Color Doppler flow imaging of the normal and abnormal orbit. *Radiology*. 1989;173(2):511–6.
- Evans RM, Barish GD, Wang YX. PPARs and the complex journey to obesity. *Nat Med*. 2004;10(4):355–61.
- F K aghdam, F A, S H. Prevalence of pre-eclampsia and eclampsia risk factors among pregnant women, 2011-2013. *Int J Adv Medicine*. 2017;2(2):128–32.
- Falco ML, Sivanathan J, Laoreti A, Thilaganathan B, Khalil A. Placental histopathology associated with pre-eclampsia: systematic review and meta-analysis: Placental histopathology and pre-eclampsia. *Ultrasound Obst Gyn*. 2017;50(3):295–301.
- Fisher KA, Luger A, Spargo BH, Lindheimer MD. Hypertension in pregnancy: clinical-pathological correlations and remote prognosis. *Medicine*. 1981;60(4):267–76.
- Fitzpatrick E, Johnson MP, Dyer TD, Forrest S, Elliott K, Blangero J, et al. Genetic association of the activin A receptor gene (ACVR2A) and pre-eclampsia. *Mhr Basic Sci Reproductive Medicine*. 2009;15(3):195–204.
- Flack JM, Calhoun D, Schiffrin EL. The New ACC/AHA Hypertension Guidelines for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults. *Am J Hypertens*. 2017;31(2):133–5.
- Foo FL, McEniery CM, Lees C, Khalil A, Hemodynamics IWG on M. Assessment of arterial function in pregnancy: recommendations of the

International Working Group on Maternal Hemodynamics. Ultrasound Obst Gyn. 2017;50(3):324–31.

Force UPST, Davidson KW, Barry MJ, Mangione CM, Cabana M, Caughey AB, et al. Aspirin Use to Prevent Preeclampsia and Related Morbidity and Mortality: US Preventive Services Task Force Recommendation Statement. *Jama*. 2021;326(12):1186.

FRANZ MB, FRANZ MB, ANDREAS M, SCHIESSL B, ZEISLER H, NEUBAUER A, et al. NT-proBNP is increased in healthy pregnancies compared to non-pregnant controls. *Acta Obstet Gyn Scan*. 2009;88(2):234–7.

Freitas MAR de, Costa AV da, Medeiros LA de, Filho M da SG, Diniz ALD, Penha-Silva N. Are There Differences in the Anthropometric, Hemodynamic, Hematologic, and Biochemical Profiles between Late- and Early-Onset Preeclampsia? *Obstetrics Gynecol Int*. 2018;2018:9628726.

Gana N, Sarno M, Vieira N, Wright A, Charakida M, Nicolaides KH. Ophthalmic artery Doppler at 11–13 weeks' gestation in prediction of pre-eclampsia. *Ultrasound Obst Gyn*. 2022;59(6):731–6.

Garovic VD, Hayman SR. Hypertension in pregnancy: an emerging risk factor for cardiovascular disease. *Nat Clin Pract Nephrol*. 2007;3(11):613–22.

Gati S, Papadakis M, Papamichael ND, Zaidi A, Sheikh N, Reed M, et al. Reversible de novo left ventricular trabeculations in pregnant women: implications for the diagnosis of left ventricular noncompaction in low-risk populations. *Circulation*. 2014;130(6):475–83.

Genest DS, Falcao S, Michel C, Kajla S, Germano MF, Lacasse AA, et al. Novel Role of the Renin–Angiotensin System in Preeclampsia Superimposed on Chronic Hypertension and the Effects of Exercise in a Mouse Model. *Hypertension*. 2018;62(6):1055–61.

Gestational Hypertension and Preeclampsia: ACOG Practice Bulletin, Number 222. *Obstetrics Gynecol*. 2020;135(6):e237–60.

Ghosh G, Grewal J, Männistö T, Mendola P, Chen Z, Xie Y, et al. Racial/ethnic differences in pregnancy-related hypertensive disease in nulliparous women. *Ethnic Dis*. 2014;24(3):283–9.

Global, Regional, and National Levels of Maternal Mortality, 1990–2015: A Systematic Analysis for the Global Burden of Disease Study 2015. *Obstet Gynecol Surv*. 2017;72(1):11–3.

Goetzinger KR, Singla A, Gerkowicz S, Dicke JM, Gray DL, Odibo AO. Predicting the risk of pre-eclampsia between 11 and 13 weeks' gestation

by combining maternal characteristics and serum analytes, PAPP-A and free β -hCG. *Prenatal Diag.* 2010;30(12-13):1138-42.

Gómez O, Martínez JM, Figueras F, Río MD, Borobio V, Puerto B, et al. Uterine artery Doppler at 11-14 weeks of gestation to screen for hypertensive disorders and associated complications in an unselected population. *Ultrasound Obst Gyn.* 2005;26(5):490-4.

Gonser M. Hemodynamic relationship between ophthalmic artery and uterine artery in pre-eclampsia: pulse wave reflection and transmission might provide the missing link. *Ultrasound Obst Gyn.* 2019;53(1):135-6.

Gonser M, Vonzun L, Ochsenbein-Kölble N. Ophthalmic artery Doppler in prediction of pre-eclampsia: insights from hemodynamic considerations. *Ultrasound Obst Gyn.* 2021;58(1):145-7.

Gray KJ, Kovacheva VP, Mirzakhani H, Bjorndal AC, Almoguera B, DeWan AT, et al. Gene-Centric Analysis of Preeclampsia Identifies Maternal Association at PLEKHG1. *Hypertension.* 2018;72(2):408-16.

Gregor MF, Hotamisligil GS. Inflammatory Mechanisms in Obesity. *Annu Rev Immunol.* 2011;29(1):415-45.

Gurrici S, Hartiyanti Y, Hautvast J, Deurenberg P. Relationship between body fat and body mass index: differences between Indonesians and Dutch Caucasians. *Eur J Clin Nutr.* 1998;52(11):779-83.

Harrell FE. *Regression Modeling Strategies.* Springer Ser Statistics. 2001;389-412.

Harrington K, Goldfrad C, Carpenter RG, Campbell S. Transvaginal uterine and umbilical artery Doppler examination of 12-16 weeks and the subsequent development of pre-eclampsia and intrauterine growth retardation. *Ultrasound Obst Gyn.* 1997;9(2):94-100.

Hata T, Senoh D, Hata K, Kitao M. Ophthalmic artery velocimetry in pregnant women. *Lancet.* 1992;340(8812):182-3.

Hata T, Senoh D, Hata K, Kitao M. Ophthalmic Artery Velocimetry in Preeclampsia. *Gynecol Obstet Inves.* 1995;40(1):32-5.

Hausvater A, Giannone T, Sandoval YHG, Doonan RJ, Antonopoulos CN, Matsoukis IL, et al. The association between preeclampsia and arterial stiffness. *J Hypertens.* 2012;30(1):17-33.

Hawkins DM. The problem of overfitting. *J Chem Inf Comp Sci.* 2004;44(1):1-12.

- Hendriksen JMT, Geersing GJ, Moons KGM, Groot JAH. Diagnostic and prognostic prediction models. *J Thromb Haemost*. 2013;11(s1):129–41.
- Hernández-Díaz S, Toh S, Cnattingius S. Risk of pre-eclampsia in first and subsequent pregnancies: prospective cohort study. *Bmj*. 2009;338(jun18 1):b2255.
- Herraiz I, Arbués J, Camaño I, Gómez-Montes E, Grañeras A, Galindo A. Application of a first-trimester prediction model for pre-eclampsia based on uterine arteries and maternal history in high-risk pregnancies. *Prenatal Diag*. 2009;29(12):1123–9.
- Hofmeyr G, Duley L, Atallah A. Dietary calcium supplementation for prevention of pre-eclampsia and related problems: a systematic review and commentary. *Bjog Int J Obstetrics Gynaecol*. 2007;114(8):933–43.
- Hruby A, Hu FB. The Epidemiology of Obesity: A Big Picture. *Pharmacoeconomics*. 2015;33(7):673–89.
- Hurrell A, Webster L, Chappell LC, Shennan AH. The assessment of blood pressure in pregnant women: pitfalls and novel approaches. *Am J Obstet Gynecol*. 2021;226(2S):S804–18.
- Hutley L, Prins JB. Fat as an Endocrine Organ: Relationship to the Metabolic Syndrome. *Am J Medical Sci*. 2005;330(6):280–9.
- Idogun ES, Imarengiaye CO, Momoh SM. Extracellular calcium and magnesium in preeclampsia and eclampsia. *Afr J Reprod Health*. 2007;11(2):89–94.
- Imudia AN, Awonuga AO, Doyle JO, Kaimal AJ, Wright DL, Toth TL, et al. Peak serum estradiol level during controlled ovarian hyperstimulation is associated with increased risk of small for gestational age and preeclampsia in singleton pregnancies after in vitro fertilization. *Fertil Steril*. 2012;97(6):1374–9.
- Jackson RA, Gibson KA, Wu YW, Croughan MS. Perinatal Outcomes in Singletons Following In Vitro Fertilization: A Meta-Analysis. *Obstetrics Gynecol*. 2004;103(3):551–63.
- James WPT, Chunming C, Inoue S. Appropriate Asian body mass indices? *Obes Rev*. 2002;3(3):139–139.
- Johnson MP, Brennecke SP, East CE, Göring HHH, Kent JW, Dyer TD, et al. Genome-Wide Association Scan Identifies a Risk Locus for Preeclampsia on 2q14, Near the Inhibin, Beta B Gene. *Plos One*. 2012;7(3):e33666.
- Justice AC, Covinsky KE, Berlin JA. Assessing the generalizability of prognostic information. *Ann Intern Med*. 1999;130(6):515–24.

- Kaaja R. Insulin Resistance Syndrome in Preeclampsia. *Semin Reprod Endocr.* 1998;16(01):41–6.
- Kalafat E, Laoreti A, Khalil A, Costa FDS, Thilaganathan B. Ophthalmic artery Doppler for prediction of pre-eclampsia: systematic review and meta-analysis: Ophthalmic artery Doppler and pre-eclampsia. *Ultrasound Obst Gyn.* 2018;51(6):731–7.
- Kane SC, Costa FDS, Brennecke SP. New directions in the prediction of pre-eclampsia. *Australian New Zealand J Obstetrics Gynaecol.* 2014;54(2):101–7.
- Kappen TH, Klei WA van, Wolfswinkel L van, Kalkman CJ, Vergouwe Y, Moons KGM. Evaluating the impact of prediction models: lessons learned, challenges, and recommendations. *Diagnostic Prognostic Res.* 2018;2(1):11.
- Keiseb J, Moodley J, Connolly CA. COMPARISON OF THE EFFICACY OF CONTINUOUS FUROSEMIDE AND LOW-DOSE DOPAMINE INFUSION IN PREECLAMPSIA/ECLAMPSIA-RELATED OLIGURIA IN THE IMMEDIATE POSTPARTUM PERIOD. *Hypertens Pregnancy.* 2009;21(3):225–34.
- Kestenbaum B, Seliger SL, Easterling TR, Gillen DL, Critchlow CW, Stehman-Breen CO, et al. Cardiovascular and thromboembolic events following hypertensive pregnancy. *Am J Kidney Dis.* 2003;42(5):982–9.
- Khalil A, Garcia-Mandujano R, Maiz N, Elkhoul M, Nicolaides KH. Longitudinal changes in maternal hemodynamics in a population at risk for pre-eclampsia. *Ultrasound Obst Gyn.* 2014;44(2):197–204.
- Khalil A, Nicolaides KH. How to record uterine artery Doppler in the first trimester. *Ultrasound Obst Gyn.* 2013;42(4):478–9.
- Khalil A, Rezende J, Akolekar R, Syngelaki A, Nicolaides KH. Maternal racial origin and adverse pregnancy outcome: a cohort study. *Ultrasound Obst Gyn.* 2013;41(3):278–85.
- Kho EM, McCowan LME, North RA, Roberts CT, Chan E, Black MA, et al. Duration of sexual relationship and its effect on preeclampsia and small for gestational age perinatal outcome. *J Reprod Immunol.* 2009;82(1):66–73.
- Knuist M, Bonsel GJ, Zondervan HA, Treffers PE. Risk factors for preeclampsia in nulliparous women in distinct ethnic groups: a prospective cohort study. *Obstetrics Gynecol.* 1998;92(2):174–8.

- Krauss T, Pauer H, Augustin HG. Prospective Analysis of Placenta Growth Factor (PIGF) Concentrations in the Plasma of Women with Normal Pregnancy and Pregnancies Complicated by Preeclampsia. *Hypertens Pregnancy*. 2009;23(1):101–11.
- Kuijk SM van, Delahaije DH, Dirksen CD, Scheepers HC, Spaanderman ME, Ganzevoort W, et al. External validation of a model for periconceptional prediction of recurrent early-onset preeclampsia. *Hypertens Pregnancy*. 2014;33(3):265–76.
- Law LW, Sahota DS, Chan LW, Chen M, Lau TK, Leung TY. Effect of long-term storage on placental growth factor and fms-like tyrosine kinase 1 measurements in samples from pregnant women. *J Maternal-fetal Neonatal Medicine*. 2010;23(12):1475–80.
- Leslie K, Thilaganathan B, Papageorgiou A. Early prediction and prevention of pre-eclampsia. *Best Pract Res Cl Ob*. 2011;25(3):343–54.
- Leung T, Leung T, Sahota D, Chan O, Chan L, Fung T, et al. Trends in maternal obesity and associated risks of adverse pregnancy outcomes in a population of Chinese women. *Bjog Int J Obstetrics Gynaecol*. 2008;115(12):1529–37.
- Levine RJ, Maynard SE, Qian C, Lim KH, England LJ, Yu KF, et al. Circulating Angiogenic Factors and the Risk of Preeclampsia. *New Engl J Medicine*. 2004;350(7):672–83.
- Liu L, Hong Z, Zhang L. Associations of prepregnancy body mass index and gestational weight gain with pregnancy outcomes in nulliparous women delivering single live babies. *Sci Rep-uk*. 2015;5(1):12863.
- Lupton D, Pedersen S. An Australian survey of women's use of pregnancy and parenting apps. *Women Birth*. 2016;29(4):368–75.
- Magee LA, Pels A, Helewa M, Rey E, Dadelszen P von, Group O behalf of the CHD of P (HDP) W. Diagnosis, evaluation, and management of the hypertensive disorders of pregnancy. *Pregnancy Hypertens Int J Women's Cardiovasc Heal*. 2014;4(2):105–45.
- Manolio TA, Collins FS, Cox NJ, Goldstein DB, Hindorff LA, Hunter DJ, et al. Finding the missing heritability of complex diseases. *Nature*. 2009;461(7265):747–53.
- Martillotti G, Ditisheim A, Burnier M, Wagner G, Boulvain M, Irion O, et al. Increased Salt Sensitivity of Ambulatory Blood Pressure in Women With a History of Severe Preeclampsia. *Hypertension*. 2018;62(4):802–8.

- Martin AM, Bindra R, Curcio P, Cicero S, Nicolaides KH. Screening for pre-eclampsia and fetal growth restriction by uterine artery Doppler at 11–14 weeks of gestation. *Ultrasound Obst Gyn.* 2001a;18(6):583–6.
- Martin AM, Bindra R, Curcio P, Cicero S, Nicolaides KH. Screening for pre-eclampsia and fetal growth restriction by uterine artery Doppler at 11–14 weeks of gestation. *Ultrasound Obst Gyn.* 2001b;18(6):583–6.
- Martin AS, Monsour M, Kawwass JF, Boulet SL, Kissin DM, Jamieson DJ. Risk of Preeclampsia in Pregnancies After Assisted Reproductive Technology and Ovarian Stimulation. *Matern Child Health J.* 2016;20(10):2050–6.
- Matias DS, Costa RF, Matias BS, Correia LCL. Doppler velocimetry of the orbital vessels in pregnancies complicated by preeclampsia. *J Clin Ultrasound.* 2012;40(9):576–85.
- Maulik D. Hemodynamic interpretation of the arterial Doppler waveform: The arterial Doppler waveform. *Ultrasound Obstetrics Gynecol.* 1993;3(3):219–27.
- McDonald SD, Han Z, Walsh MW, Gerstein HC, Devereaux PJ. Kidney Disease After Preeclampsia: A Systematic Review and Meta-analysis. *Am J Kidney Dis.* 2010;55(6):1026–39.
- McDonald SD, Malinowski A, Zhou Q, Yusuf S, Devereaux PJ. Cardiovascular sequelae of preeclampsia/eclampsia: A systematic review and meta-analyses. *Am Heart J.* 2008;156(5):918–30.
- Mcmaister-Fay RA, Hyett JA. Uterine artery Doppler studies in the early second trimester to predict abnormal pregnancy outcome in nulliparous women. *Am J Obstet Gynecol.* 2018;219(4):418.
- Melchiorre K, Leslie K, Prefumo F, Bhide A, Thilaganathan B. First-trimester uterine artery Doppler indices in the prediction of small-for-gestational age pregnancy and intrauterine growth restriction. *Ultrasound Obst Gyn.* 2009;33(5):524–9.
- Melchiorre K, Sharma R, Khalil A, Thilaganathan B. Maternal Cardiovascular Function in Normal Pregnancy: Evidence of Maladaptation to Chronic Volume Overload. *Hypertension.* 2016;67(4):754–62.
- Melchiorre K, Sharma R, Thilaganathan B. Cardiac structure and function in normal pregnancy. *Curr Opin Obstetrics Gynecol.* 2012;24(6):413–21.
- Melchiorre K, Sharma R, Thilaganathan B. Cardiovascular Implications in Preeclampsia: An Overview. *Circulation.* 2014;130(8):703–14.

- Melchiorre K, Sutherland G, Sharma R, Nanni M, Thilaganathan B. Mid-gestational maternal cardiovascular profile in preterm and term pre-eclampsia: a prospective study. *Bjog Int J Obstetrics Gynaecol.* 2013;120(4):496–504.
- Melchiorre K, Sutherland GR, Baltabaeva A, Liberati M, Thilaganathan B. Maternal Cardiac Dysfunction and Remodeling in Women With Preeclampsia at Term. *Hypertension.* 2011a;57(1):85–93.
- Melchiorre K, Sutherland GR, Liberati M, Thilaganathan B. Preeclampsia Is Associated With Persistent Postpartum Cardiovascular Impairment. *Hypertension.* 2011b;58(4):709–15.
- Melchiorre K, Thilaganathan B. Maternal cardiac function in preeclampsia. *Curr Opin Obstetrics Gynecol.* 2011;23(6):440–7.
- Mires GJ, Williams FLR, Leslie J, Howie PW. Assessment of uterine arterial notching as a screening test for adverse pregnancy outcome. *Am J Obstet Gynecol.* 1998;179(5):1317–23.
- Mitchell GF. Effects of central arterial aging on the structure and function of the peripheral vasculature: implications for end-organ damage. *J Appl Physiol.* 2008;105(5):1652–60.
- Mittendorf R, Lain KY, Williams MA, Walker CK. Preeclampsia. A nested, case-control study of risk factors and their interactions. *J Reproductive Medicine.* 1996;41(7):491–6.
- Mol BWJ, Roberts CT, Thangaratnam S, Magee LA, Groot CJM de, Hofmeyr GJ. Pre-eclampsia. *Lancet.* 2016;387(10022):999–1011.
- Moons KGM, Kengne AP, Woodward M, Royston P, Vergouwe Y, Altman DG, et al. Risk prediction models: I. Development, internal validation, and assessing the incremental value of a new (bio)marker. *Heart.* 2012;98(9):683.
- Mostello D, Catlin TK, Roman L, Holcomb WL, Leet T. Preeclampsia in the parous woman: Who is at risk? *Am J Obstet Gynecol.* 2002;187(2):425–9.
- Mrema D, Lie RT, Østbye T, Mahande MJ, Daltveit AK. The association between pre pregnancy body mass index and risk of preeclampsia: a registry based study from Tanzania. *Bmc Pregnancy Childb.* 2018;18(1):56.
- Myatt L, Clifton RG, Roberts JM, Spong CY, Hauth JC, Varner MW, et al. First-Trimester Prediction of Preeclampsia in Nulliparous Women at Low Risk. *Obstetrics Gynecol.* 2012;119(6):1234–42.

- Mynard JP, Kowalski R, Cheung MMH, Smolich JJ. Beyond the aorta: partial transmission of reflected waves from aortic coarctation into supra-aortic branches modulates cerebral hemodynamics and left ventricular load. *Biomech Model Mechan.* 2017;16(2):635–50.
- Nakatsuka M, Takata M, Tada K, Kudo T. Effect of a Nitric Oxide Donor on the Ophthalmic Artery Flow Velocity Waveform in Preeclamptic Women. *J Ultras Med.* 2002;21(3):309–13.
- Nakhai-Pour HR, Rey E, Bérard A. Discontinuation of antihypertensive drug use during the first trimester of pregnancy and the risk of preeclampsia and eclampsia among women with chronic hypertension. *Am J Obstet Gynecol.* 2009;201(2):180.e1-180.e8.
- Napolitano R, Rajakulasingam R, Memmo A, Bhide A, Thilaganathan B. Uterine artery Doppler screening for pre-eclampsia: comparison of the lower, mean and higher first-trimester pulsatility indices. *Ultrasound Obst Gyn.* 2011;37(5):534–7.
- Ness RB, Roberts JM. Heterogeneous causes constituting the single syndrome of preeclampsia: A hypothesis and its implications. *Am J Obstet Gynecol.* 1996;175(5):1365–70.
- Nicolaides KH. Turning the Pyramid of Prenatal Care. *Fetal Diagn Ther.* 2011;29(3):183–96.
- North RA, McCowan LME, Dekker GA, Poston L, Chan EHY, Stewart AW, et al. Clinical risk prediction for pre-eclampsia in nulliparous women: development of model in international prospective cohort. *Bmj.* 2011;342(apr07 4):d1875.
- O’Gorman N, Wright D, Poon LC, Rolnik DL, Syngelaki A, Alvarado M de, et al. Multicenter screening for pre-eclampsia by maternal factors and biomarkers at 11–13 weeks’ gestation: comparison with NICE guidelines and ACOG recommendations. *Ultrasound Obstetrics Amp Gynecol.* 2017;49(6):756–60.
- O’Gorman N, Wright D, Syngelaki A, Akolekar R, Wright A, Poon LC, et al. Competing risks model in screening for preeclampsia by maternal factors and biomarkers at 11-13 weeks gestation. *Am J Obstet Gynecol.* 2016;214(1):103.e1-103.e12.
- Ogunyemi D, Benae JL, Ukatu C. Is Eclampsia Preventable? A Case Control Review of Consecutive Cases from an Urban Underserved Region. *Southern Med J.* 2004;97(5):440–5.

- Oliveira CA de, Sá RAM de, Velarde LGC, Marchiori E, Netto HC, Ville Y. Doppler velocimetry of the ophthalmic artery in normal pregnancy: reference values. *J Ultrasound Medicine Official J Am Inst Ultrasound Medicine*. 2009;28(5):563–9.
- Oliveira CA de, Sá RAM de, Velarde LGC, Silva FC da, Vale FA do, Netto HC. Changes in Ophthalmic Artery Doppler Indices in Hypertensive Disorders During Pregnancy. *J Ultras Med*. 2013;32(4):609–19.
- Oliveira N, Doyle LE, Atlas RO, Jenkins CB, Blitzer MG, Baschat AA. External validity of first-trimester algorithms in the prediction of pre-eclampsia disease severity: First-trimester prediction of severity of pre-eclampsia. *Ultrasound Obst Gyn*. 2014;44(3):286–92.
- Orabona R, Donzelli CM, Falchetti M, Santoro A, Valcamonico A, Frusca T. Placental histological patterns and uterine artery Doppler velocimetry in pregnancies complicated by early or late pre-eclampsia. *Ultrasound Obst Gyn*. 2016;47(5):580–5.
- Paco CD, Kametas N, Rencoret G, Strobl I, Nicolaides KH. Maternal Cardiac Output Between 11 and 13 Weeks of Gestation in the Prediction of Preeclampsia and Small for Gestational Age. *Obstetrics Gynecol*. 2008;111(2, Part 1):292–300.
- Pandey S, Shetty A, Hamilton M, Bhattacharya S, Maheshwari A. Obstetric and perinatal outcomes in singleton pregnancies resulting from IVF/ICSI: a systematic review and meta-analysis. *Hum Reprod Update*. 2012;18(5):485–503.
- Pandya P, Wright D, Syngelaki A, Akolekar R, Nicolaides KH. Maternal Serum Placental Growth Factor in Prospective Screening for Aneuploidies at 8–13 Weeks' Gestation. *Fetal Diagn Ther*. 2012;31(2):87–93.
- Papageorgiou AT, Yu CK, Bindra R, Pandis G, Nicolaides KH, Group FMFSTS. Multicenter screening for pre-eclampsia and fetal growth restriction by transvaginal uterine artery Doppler at 23 weeks of gestation. *Ultrasound Obst Gyn*. 2001;18(5):441–9.
- Park FJ, Leung CHY, Poon LCY, Williams PF, Rothwell SJ, Hyett JA. Clinical evaluation of a first trimester algorithm predicting the risk of hypertensive disease of pregnancy. *Australian New Zealand J Obstetrics Gynaecol*. 2013;53(6):532–9.
- Parra-Cordero M, Rodrigo R, Barja P, Bosco C, Rencoret G, Sepúlveda-Martínez A, et al. Prediction of early and late pre-eclampsia from maternal characteristics, uterine artery Doppler and markers of vasculogenesis

during first trimester of pregnancy. *Ultrasound Obst Gyn.* 2013;41(5):538–44.

Perry R, Burns R, Simon-Freeman R. A Survey of Mobile App Use Among California Obstetrics and Gynecology Residents [8I]. *Obstetrics Gynecol.* 2017;129(1):95S-95S.

Petersen TG, Liew Z, Andersen AMN, Andersen GL, Andersen PK, Martinussen T, et al. Use of paracetamol, ibuprofen or aspirin in pregnancy and risk of cerebral palsy in the child. *Int J Epidemiol.* 2017;47(1):121–30.

Philips Z, Ginnelly L, Sculpher M, Claxton K, Golder S, Riemsma R, et al. Review of guidelines for good practice in decision-analytic modelling in health technology assessment. *Health Technol Asses.* 2004;8(36):iii–iv, ix–xi, 1–158.

Plasencia W, Maiz N, Bonino S, Kaihura C, Nicolaides KH. Uterine artery Doppler at 11 + 0 to 13 + 6 weeks in the prediction of pre-eclampsia. *Ultrasound Obst Gyn.* 2007;30(5):742–9.

Polliotti BM, Fry AG, Saller DN, Mooney RA, Cox C, Miller RK. Second-Trimester Maternal Serum Placental Growth Factor and Vascular Endothelial Growth Factor for Predicting Severe, Early-Onset Preeclampsia. *Obstetrics Gynecol.* 2003;101(6):1266–74.

Poon LC, Nicolaides KH. Early Prediction of Preeclampsia. *Obstetrics Gynecol Int.* 2014;2014:297397.

Poon LCY, Akolekar R, Lachmann R, Beta J, Nicolaides KH. Hypertensive disorders in pregnancy: screening by biophysical and biochemical markers at 11–13 weeks. *Ultrasound Obst Gyn.* 2010a;35(6):662–70.

Poon LCY, Kametas NA, Chelemen T, Leal A, Nicolaides KH. Maternal risk factors for hypertensive disorders in pregnancy: a multivariate approach. *J Hum Hypertens.* 2010b;24(2):104–10.

Poon LCY, Kametas NA, Maiz N, Akolekar R, Nicolaides KH. First-Trimester Prediction of Hypertensive Disorders in Pregnancy. *Hypertension.* 2009;53(5):812–8.

Poon LCY, Kametas NA, Pandeva I, Valencia C, Nicolaides KH. Mean Arterial Pressure at 11+0 to 13+6 Weeks in the Prediction of Preeclampsia. *Hypertension.* 2008;51(4):1027–33.

Poon LCY, Zymeri NA, Zamprakou A, Syngelaki A, Nicolaides KH. Protocol for Measurement of Mean Arterial Pressure at 11-13 Weeks' Gestation. *Fetal Diagn Ther.* 2012;31(1):42–8.

- Quan L, Xu Q, Zhang G, Wu L, Xu H. An analysis of the risk factors of preeclampsia and prediction based on combined biochemical indexes. *Kaohsiung J Medical Sci.* 2018;34(2):109–12.
- Redinger RN. The pathophysiology of obesity and its clinical manifestations. *Gastroenterology Hepatology.* 2007;3(11):856–63.
- Redman CW. Current topic: pre-eclampsia and the placenta. *Placenta.* 1991;12(4):301–8.
- Redman CW, Sargent IL, Staff AC. IFPA Senior Award Lecture: Making sense of pre-eclampsia – Two placental causes of preeclampsia? *Placenta.* 2014;35:S20–5.
- Richter AN, Khoshgoftaar TM. A review of statistical and machine learning methods for modeling cancer risk using structured clinical data. *Artif Intell Med.* 2018;90:1–14.
- Riley RD, Hayden JA, Steyerberg EW, Moons KGM, Abrams K, Kyzas PA, et al. Prognosis Research Strategy (PROGRESS) 2: Prognostic Factor Research. *Plos Med.* 2013;10(2):e1001380.
- Roberge S, Bujold E, Nicolaides KH. Aspirin for the prevention of preterm and term preeclampsia: systematic review and metaanalysis. *Am J Obstet Gynecol.* 2018;218(3):287-293.e1.
- Roberts JM, Bell MJ. If we know so much about preeclampsia, why haven't we cured the disease? *J Reprod Immunol.* 2013;99(1–2):1–9.
- Roberts L, Chaemsathong P, Sahota DS, Nicolaides KH, Poon LCY. Protocol for measurement of mean arterial pressure at 10–40weeks' gestation. *Pregnancy Hypertens.* 2017;10:155–60.
- Robertson WB, Brosens I, Dixon HG. The pathological response of the vessels of the placental bed to hypertensive pregnancy. *J Pathology Bacteriol.* 1967;93(2):581–92.
- Robillard PY, Dekker G, Chaouat G, Scioscia M, Iacobelli S, Hulsey TC. Historical evolution of ideas on eclampsia/preeclampsia: A proposed optimistic view of preeclampsia. *J Reprod Immunol.* 2017;123:72–7.
- Robinson HP, Fleming JEE. A CRITICAL EVALUATION OF SONAR “CROWN-RUMP LENGTH” MEASUREMENTS. *Bjog Int J Obstetrics Gynaecol.* 1975;82(9):702–10.
- Robinson M, Whitehouse AJO, Jacoby P, Mattes E, Sawyer MG, Keelan JA, et al. Umbilical Cord Blood Testosterone and Childhood Internalizing and

Externalizing Behavior: A Prospective Study. Plos One. 2013;8(4):e59991.

Rolnik DL, Wright D, Poon LC, O’Gorman N, Syngelaki A, Matallana C de P, et al. Aspirin versus Placebo in Pregnancies at High Risk for Preterm Preeclampsia. *New Engl J Medicine*. 2017;377(7):613–22.

Rönnback M, Lampinen K, Groop PH, Kaaja R. Pulse Wave Reflection in Currently and Previously Preeclamptic Women. *Hypertens Pregnancy*. 2009;24(2):171–80.

Rose JJ, Voora D, Cyr DD, Lucas JE, Zaas AK, Woods CW, et al. Gene Expression Profiles Link Respiratory Viral Infection, Platelet Response to Aspirin, and Acute Myocardial Infarction. *Plos One*. 2015;10(7):e0132259.

Rowland K. JNC VIII guidelines. *Evidence-based Pract*. 2014;17(9):6.

Saccone G, Saccone I, Berghella V. Omega-3 long-chain polyunsaturated fatty acids and fish oil supplementation during pregnancy: which evidence? *J Maternal-fetal Neonatal Medicine*. 2015;29(15):1–9.

Sadlecki P, Grabiec M, Walentowicz-Sadlecka M. Prenatal Clinical Assessment of NT-proBNP as a Diagnostic Tool for Preeclampsia, Gestational Hypertension and Gestational Diabetes Mellitus. *Plos One*. 2016;11(9):e0162957.

Saito S, Sakai M, Sasaki Y, Nakashima A, Shiozaki A. Inadequate tolerance induction may induce pre-eclampsia. *J Reprod Immunol*. 2007;76(1–2):30–9.

Samuelson G. Physical Status: The Use and Interpretation of Anthropometry. WHO Technical Report Series. *Acta Paediatr*. 1997;86(3):280–280.

Sapantoglou I, Wright A, Arozena MG, Campos RV, Charakida M, Nicolaides KH. Ophthalmic artery Doppler in combination with other biomarkers in prediction of pre-eclampsia at 19–23 weeks’ gestation. *Ultrasound Obst Gyn*. 2021;57(1):75–83.

Sarno M, Wright A, Vieira N, Sapantoglou I, Charakida M, Nicolaides KH. Ophthalmic artery Doppler in combination with other biomarkers in prediction of pre-eclampsia at 35–37 weeks’ gestation. *Ultrasound Obst Gyn*. 2021;57(4):600–6.

Schneuer FJ, Nassar N, Guilbert C, Tasevski V, Ashton AW, Morris JM, et al. First trimester screening of serum soluble fms-like tyrosine kinase-1 and placental growth factor predicting hypertensive disorders of pregnancy. *Pregnancy Hypertens Int J Women’s Cardiovasc Heal*. 2013;3(4):215–21.

- Schoenaker DA, Soedamah-Muthu SS, Mishra GD. The association between dietary factors and gestational hypertension and pre-eclampsia: a systematic review and meta-analysis of observational studies. *Bmc Med*. 2014;12(1):157.
- Shen JJ, Tymkow C, MacMullen N. Disparities in maternal outcomes among four ethnic populations. *Ethnic Dis*. 2005;15(3):492–7.
- Shipe ME, Deppen SA, Farjah F, Grogan EL. Developing prediction models for clinical use using logistic regression: an overview. *J Thorac Dis*. 2019;11(4):S574–84.
- Sibai BM, Barton JR, Akl S, Sarinoglu C, Mercer BM. A randomized prospective comparison of nifedipine and bed rest versus bed rest alone in the management of preeclampsia remote from term. *Am J Obstet Gynecol*. 1992;167(4 Pt 1):879–84.
- Simon E, Caille A, Perrotin F, Giraudeau B. Mixing Nulliparous and Multiparous Women in Randomised Controlled Trials of Preeclampsia Prevention Is Debatable: Evidence from a Systematic Review. *Plos One*. 2013;8(6):e66677.
- Sitepu M, Rachmadsyah J. Prediction of Maternal and Fetal Syndrome of Preeclampsia. 2019;
- Society P by the SG of the BMU. Guidelines for the safe use of diagnostic ultrasound equipment. *Ultrasound*. 2010;18(2):52–9.
- Sohlberg S, Stephansson O, Cnattingius S, Wikström AK. Maternal Body Mass Index, Height, and Risks of Preeclampsia. *Am J Hypertens*. 2012;25(1):120–5.
- Sondaal SFV, Browne JL, Amoakoh-Coleman M, Borgstein A, Miltenburg AS, Verwijs M, et al. Assessing the Effect of mHealth Interventions in Improving Maternal and Neonatal Care in Low- and Middle-Income Countries: A Systematic Review. *Plos One*. 2016;11(5):e0154664.
- Sotiriadis A, Hernandez-Andrade E, Costa F da S, Ghi T, Glanc P, Khalil A, et al. ISUOG Practice Guidelines: role of ultrasound in screening for and follow-up of pre-eclampsia. *Ultrasound Obst Gyn*. 2019;53(1):7–22.
- Souders CA, Maynard SE, Yan J, Wang Y, Boatright NK, Sedan J, et al. Circulating Levels of sFlt1 Splice Variants as Predictive Markers for the Development of Preeclampsia. *Int J Mol Sci*. 2015;16(6):12436–53.
- Spradley FT, Palei AC, Granger JP. Immune Mechanisms Linking Obesity and Preeclampsia. *Biomol*. 2015;5(4):3142–76.

- Staff AC, Benton SJ, Dadelszen P von, Roberts JM, Taylor RN, Powers RW, et al. Redefining Preeclampsia Using Placenta-Derived Biomarkers. *Hypertension*. 2018;61(5):932–42.
- Stalmans I, Vandewalle E, Anderson DR, Costa VP, Frenkel REP, Garhofer G, et al. Use of colour Doppler imaging in ocular blood flow research. *Acta Ophthalmol*. 2011;89(8):e609–30.
- Stepan H, Hund M, Andrzejczak T. Combining Biomarkers to Predict Pregnancy Complications and Redefine Preeclampsia. *Hypertension*. 2020;75(4):918–26.
- Stepan H, Unversucht A, Wessel N, Faber R. Predictive Value of Maternal Angiogenic Factors in Second Trimester Pregnancies With Abnormal Uterine Perfusion. *Hypertension*. 2007;49(4):818–24.
- Steyerberg EW. Clinical Prediction Models. *Statistics Biology Heal*. 2019;59–93.
- Steyerberg EW, Vickers AJ, Cook NR, Gerds T, Gonen M, Obuchowski N, et al. Assessing the performance of prediction models: a framework for traditional and novel measures. *Epidemiology Camb Mass*. 2009;21(1):128–38.
- SU YN, LEE CN, CHENG WF, SHAU WY, CHOW SN, HSIEH FJ. Decreased Maternal Serum Placenta Growth Factor in Early Second Trimester and Preeclampsia. *Obstetrics Gynecol*. 2001;97(6):898–904.
- Syngelaki A, Bredaki FE, Vaikousi E, Maiz N, Nicolaides KH. Body Mass Index at 11–13 Weeks’ Gestation and Pregnancy Complications. *Fetal Diagn Ther*. 2011;30(4):250–65.
- Takata M, Nakatsuka M, Kudo T. Differential Blood Flow in Uterine, Ophthalmic, and Brachial Arteries of Preeclamptic Women. *Obstetrics Gynecol*. 2002;100(5, Part 1):931–9.
- Tan MY, Poon LC, Rolnik DL, Syngelaki A, Matallana C de P, Akolekar R, et al. Prediction and prevention of small-for-gestational-age neonates: evidence from SPREE and ASPRE. *Ultrasound Obst Gyn*. 2018a;52(1):52–9.
- Tan MY, Syngelaki A, Poon LC, Rolnik DL, O’Gorman N, Delgado JL, et al. Screening for pre-eclampsia by maternal factors and biomarkers at 11–13 weeks’ gestation. *Ultrasound Obst Gyn*. 2018b;52(2):186–95.
- Tan MY, Wright D, Syngelaki A, Akolekar R, Cicero S, Janga D, et al. Comparison of diagnostic accuracy of early screening for pre-eclampsia by NICE guidelines and a method combining maternal factors and biomarkers: results of SPREE: First-trimester screening for pre-eclampsia. *Ultrasound Obst Gyn*. 2018c;51(6):743–50.

- Thadhani R, Mutter WP, Wolf M, Levine RJ, Taylor RN, Sukhatme VP, et al. First Trimester Placental Growth Factor and Soluble Fms-Like Tyrosine Kinase 1 and Risk for Preeclampsia. *J Clin Endocrinol Metabolism*. 2004;89(2):770–5.
- Thangaratinam S, Langenveld J, Mol BW, Khan KS. Prediction and primary prevention of pre-eclampsia. *Best Pract Res Cl Ob*. 2011;25(4):419–33.
- The hypertensive disorders of pregnancy. Report of a WHO study group. World Heal Organization Technical Rep Ser. 1987;758:1–114.
- Thilaganathan B. Cardiovascular origins of Preeclampsia. *Pregnancy Hypertens Int J Women’s Cardiovasc Heal*. 2017;7:62–3.
- Thomopoulos C, Tsioufis C, Michalopoulou H, Makris T, Papademetriou V, Stefanadis C. Assisted reproductive technology and pregnancy-related hypertensive complications: a systematic review. *J Hum Hypertens*. 2013;27(3):148–57.
- Tidwell SC, Ho HN, Chiu WH, Torry RJ, Torry DS. Low maternal serum levels of placenta growth factor as an antecedent of clinical preeclampsia. *Am J Obstet Gynecol*. 2001;184(6):1267–72.
- Tjoa ML, Vugt JMG van, Mulders MAM, Schutgens RBH, Oudejans CBM, Wijk IJ van. Plasma Placenta Growth Factor Levels in Midtrimester Pregnancies. *Obstetrics Gynecol*. 2001;98(4):600–7.
- Tomimatsu T, Mimura K, Endo M, Kumasawa K, Kimura T. Pathophysiology of preeclampsia: an angiogenic imbalance and long-lasting systemic vascular dysfunction. *Hypertens Res*. 2017;40(4):305–10.
- Townsend R, Khalil A, Premakumar Y, Allotey J, Snell KIE, Chan C, et al. Prediction of pre-eclampsia: review of reviews. *Ultrasound Obst Gyn*. 2019;54(1):16–27.
- Trevethan R. Sensitivity, Specificity, and Predictive Values: Foundations, Pliabilities, and Pitfalls in Research and Practice. *Frontiers Public Heal*. 2017;5:307.
- Trogstad L, Magnus P, Moffett A, Stoltenberg C. The effect of recurrent miscarriage and infertility on the risk of pre-eclampsia. *Bjog Int J Obstetrics Gynaecol*. 2009;116(1):108–13.
- Tsiakkas A, Duvdevani N, Wright A, Wright D, Nicolaides KH. Serum placental growth factor in the three trimesters of pregnancy: effects of maternal characteristics and medical history. *Ultrasound Obst Gyn*. 2015;45(5):591–8.

- Uddin MN, Horvat D, Jones RO, Beeram MR, Zawieja DC, Perger L, et al. Suppression of aldosterone and progesterone in preeclampsia. *J Maternal-fetal Neonatal Medicine*. 2014;28(11):1296–301.
- Ukah UV, Silva DAD, Payne B, Magee LA, Hutcheon JA, Brown H, et al. Prediction of adverse maternal outcomes from pre-eclampsia and other hypertensive disorders of pregnancy: A systematic review. *Pregnancy Hypertens*. 2018;11:115–23.
- Vadillo-Ortega F, Perichart-Perera O, Espino S, Avila-Vergara MA, Ibarra I, Ahued R, et al. Effect of supplementation during pregnancy with L-arginine and antioxidant vitamins in medical food on pre-eclampsia in high risk population: randomised controlled trial. *Bmj*. 2011;342(may19 1):d2901.
- Velauthar L, Plana MN, Kalidindi M, Zamora J, Thilaganathan B, Illanes SE, et al. First-trimester uterine artery Doppler and adverse pregnancy outcome: a meta-analysis involving 55 974 women. *Ultrasound Obst Gyn*. 2014;43(5):500–7.
- Verwoerd GR, Hall DR, Grové D, Maritz JS, Odendaal HJ. Primipaternity and duration of exposure to sperm antigens as risk factors for pre-eclampsia. *Int J Gynecol Obstet*. 2002;78(2):121–6.
- Vikse BE, Irgens LM, Leivestad T, Skjærven R, Iversen BM. Preeclampsia and the Risk of End-Stage Renal Disease. *New Engl J Medicine*. 2008;359(8):800–9.
- Vousden N, Lawley E, Seed PT, Gidiri MF, Goudar S, Sandall J, et al. Incidence of eclampsia and related complications across 10 low- and middle-resource geographical regions: Secondary analysis of a cluster randomised controlled trial. *Plos Med*. 2019;16(3):e1002775.
- Wahabi HA, Fayed AA, Alzeidan RA, Mandil AA. The independent effects of maternal obesity and gestational diabetes on the pregnancy outcomes. *Bmc Endocr Disord*. 2014;14(1):47.
- Wallis AB, Tsigas EZ, Saftlas AF, Sibai BM. Prenatal education is an opportunity for improved outcomes in hypertensive disorders of pregnancy: results from an Internet-based survey. *J Maternal-fetal Neonatal Medicine*. 2013;26(16):1565–7.
- Wang JJ, Parker KH. Wave propagation in a model of the arterial circulation. *J Biomech*. 2004;37(4):457–70.

- Wei YM, Yang HX, Zhu WW, Liu XY, Meng WY, Wang YQ, et al. Risk of adverse pregnancy outcomes stratified for pre-pregnancy body mass index. *J Maternal-fetal Neonatal Medicine*. 2015;29(13):1–5.
- Weiss G, Sundl M, Glasner A, Huppertz B, Moser G. The trophoblast plug during early pregnancy: a deeper insight. *Histochem Cell Biol*. 2016;146(6):749–56.
- Weiss JL, Malone FD, Emig D, Ball RH, Nyberg DA, Comstock CH, et al. Obesity, obstetric complications and cesarean delivery rate—a population-based screening study. *Am J Obstet Gynecol*. 2004;190(4):1091–7.
- WFUMB Policy and Statements on Safety of Ultrasound. *Ultrasound Medicine Biology*. 2013;39(5):926–9.
- Willcox JC, Pligt P van der, Ball K, Wilkinson SA, Lappas M, McCarthy EA, et al. Views of Women and Health Professionals on mHealth Lifestyle Interventions in Pregnancy: A Qualitative Investigation. *Jmir Mhealth Uhealth*. 2015;3(4):e99.
- Williams PJ, Pipkin FB. The genetics of pre-eclampsia and other hypertensive disorders of pregnancy. *Best Pract Res Clin Obstetrics Gynaecol*. 2011;25(4–4):405–17.
- Wilson JM, Jungner YG. [Principles and practice of mass screening for disease]. *Boletín De La Oficina Sanit Panam Pan Am Sanit Bureau*. 1968;65(4):281–393.
- Wright D, Akolekar R, Syngelaki A, Poon LCY, Nicolaides KH. A Competing Risks Model in Early Screening for Preeclampsia. *Fetal Diagn Ther*. 2012;32(3):171–8.
- Xiong X, Demianczuk NN, Saunders LD, Wang FL, Fraser WD. Impact of Preeclampsia and Gestational Hypertension on Birth Weight by Gestational Age. *Am J Epidemiol*. 2002;155(3):203–9.
- Yang J, Pearl M, DeLorenze GN, Romero R, Dong Z, Jelliffe-Pawlowski L, et al. Racial-ethnic differences in midtrimester maternal serum levels of angiogenic and antiangiogenic factors. *Am J Obstet Gynecol*. 2016;215(3):359.e1–359.e9.
- Yu CKH, Smith GCS, Papageorgiou AT, Cacho AM, Nicolaides KH, Group F the FMFSTS. An integrated model for the prediction of pre-eclampsia using maternal factors and uterine artery Doppler velocimetry in unselected low-risk women. *Am J Obstet Gynecol*. 2006;195(1):330.
- Zhao L, Bracken MB, DeWan AT. Genome-Wide Association Study of Pre-Eclampsia Detects Novel Maternal Single Nucleotide Polymorphisms and

Copy-Number Variants in Subsets of the Hyperglycemia and Adverse Pregnancy Outcome (HAPO) Study Cohort. *Ann Hum Genet.* 2013;77(4):277–87.

Zhong Q, Xu J, Long Y, Deng Y, Hu J, Li X, et al. Interaction of body mass index and hemoglobin concentration on blood pressure among pregnant women in Guangxi, China. *Bmc Public Health.* 2014;14(1):474–474.

Zhong Y, Zhu F, Ding Y. Serum screening in first trimester to predict pre-eclampsia, small for gestational age and preterm delivery: systematic review and meta-analysis. *Bmc Pregnancy Childb.* 2015;15(1):191.

Zhou Y, McMaster M, Woo K, Janatpour M, Perry J, Karpanen T, et al. Vascular Endothelial Growth Factor Ligands and Receptors That Regulate Human Cytotrophoblast Survival Are Dysregulated in Severe Preeclampsia and Hemolysis, Elevated Liver Enzymes, and Low Platelets Syndrome. *Am J Pathology.* 2002;160(4):1405–23.

Zhu XL, Wang J, Jiang RZ, Teng YC. Pulsatility index in combination with biomarkers or mean arterial pressure for the prediction of pre-eclampsia: Systematic literature review and meta-analysis. *Ann Med.* 2015;47(5):414–22.

Ziaei S, Hantoshzadeh S, Rezasoltani P, Lamyian M. The effect of garlic tablet on plasma lipids and platelet aggregation in nulliparous pregnant at high risk of preeclampsia. *Eur J Obstet Gyn R B.* 2001;99(2):201–6.

Ziganshina MM, Yarotskaya EL, Bovin NV, Sukhikh GT. Endothelial Dysfunction - Old Concepts and New Challenges. 2018;

Zintzaras E, Kitsios G, Harrison GA, Laivuori H, Kivinen K, Kere J, et al. Heterogeneity-based genome search meta-analysis for preeclampsia. *Hum Genet.* 2006;120(3):360–70.