

## DAFTAR PUSTAKA

Abbas AK, Litchman AH, Pober JS, editors. Immunity to tumours. Cellular and molecular immunology 3rd.Ed. Philadelphia:Saunders;1997.p.382-405.

Adegoke O, Kulasingam S, Virnig B. Cervical Cancer Trends in the United States:A 35-Year Population-Based Analysis. *J Womens Health (Larchmt)*. 2012 ;21(10):1031-1037.

Adjorlolo-Johnson G, Unger ER, Boni-Ouattara E, et al. Assessing the relationship between HIV infection and cervical cancer in Côte d'Ivoire: A case-control study. *BMC Infectious Diseases* 2010;10:242.

Altekruse SF, Lacey JV, Jr., Brinton LA, et al. Comparison of human papillomavirus genotypes, sexual, and reproductive risk factors of cervical adenocarcinoma and squamous cell carcinoma: Northeastern United States. *Am J Obstet Gynecol* 2003;188:657–63.

American College of Obstetricians and Gynecologists. ACOG practice bulletin. Diagnosis and treatment of cervical carcinomas. Number 35, May 2002. American College of Obstetricians and Gynecologists. *Int J Gynaecol Obstet*. 2002;78(1):79–91.

Andersson S, Rylander E, Larsson B, et al. The role of human papillomavirus in cervical adenocarcinoma carcinogenesis. *Eur J Cancer*. 2001;37:246-250.

Apel K, Hirt H. Reactive oxygen species: metabolism, oxidative stress, and signal transduction. *Annu Rev Plant Biol*. 2004;55:373–99.

Benedet JL, Pecorelli S. Staging classifications and clinical practice guidelines for gynaecological cancers. A collaboration between FIGO and IGCS.3rd.Ed.Elsevier; 2006:37-52.

Benedetti S, Nuvoli B, Catalani S, Galati R. Reactive oxygen species a double-edged sword for mesothelioma. *Oncotarget*. 2015;6(19):16848–16865.

Bhatla N, Aoki D, Sharma DN, Sankaranarayanan R. Cancer of the cervix uteri. *Int J Gynaecol Obstet*. 2018;143 Suppl 2:22-36.

Brozovic A, Ambriović-Ristov A, Osmak M. The relationship between cisplatin-induced reactive oxygen species, glutathione, and BCL-2 and resistance to cisplatin. *Crit Rev Toxicol*. 2010;40(4):347–359.

Bosch FX, de Sanjosé S. Chapter 1: Human papillomavirus and cervical cancer-burden and assessment of causality. *J Natl Cancer Inst Monogr* 2003;31:3-13.

Bray F, Loos AH, McCarron P, et al. Trends in Cervical Squamous Cell Carcinoma Incidence in 13 European Countries: Changing Risk and the Effects of Screening. *Cancer Epidemiol Biomarkers Prev.* 2005;14(3):677-86.

Bruni L, Diaz M, Castellsague X, et al. Cervical human papillomavirus prevalence in 5 continents: meta-analysis of 1 million women with normal cytological findings. *J Infect Dis* 2010;202:1789-99.

Cairns RA, Harris IS, Mak TW. Regulation of cancer cell metabolism. *Nat Rev Cancer.* 2011;11(2):85–95.

Castle PE, Kinney WK, Cheung LC, et al. Why does cervical cancer occur in a state-of-the-art screening program? *Gynecol Oncol.* 2017;146(3):546-553.

Castle PE, Schiffman M, Wheeler CM, et al. Human Papillomavirus Genotypes in Cervical Intraepithelial Neoplasia Grade 3. *Cancer Epidemiol Biomarkers Prev* 2010;19(7):1675–81.

Chauhan R, Verma N, Sharma SP, Bhargava R, Singh P. Role of apoptotic index, mitotic index and MIB-1 antibody expression as biomarkers in preneoplastic and neoplastic lesions of uterine cervix. *Int J Res Med Sci.* 2016;4(6):2093-100.

Chen W, Sun H, Molijn A, et al. The variable characteristics of human papillomavirus in squamous cell carcinoma and adenocarcinoma of cervix in China. *J Low Genit Tract Dis.* 2018;22:355–361.

Chou WC, Jie C, Kenedy AA, et al. Role of NADPH oxidase in arsenic-induced reactive oxygen species formation and cytotoxicity in myeloid leukemia cells. *Proc Natl Acad Sci U S A.* 2004;101:4578–83.

Cooke MS, Loft S, Olinski R. Measurement and meaning of oxidatively modified DNA lesions in urine. *CEBP* 2008;17:3–14.

De Boer MA, Vet JN, Aziz MF, et al. Human papillomavirus type 18 and other risk factors for cervical cancer in Jakarta, Indonesia. *Int J Gynecol Cancer.* 2006;16:1809-14.

de Sanjose S, Wheeler CM, Quint WGV, et al. on behalf of the Retrospective International Survey and HPV Time Trends Study Group. Age-specific occurrence of HPV16- and HPV18-related cervical cancer. *Cancer Epidemiol Biomarkers Prev.* 2013;22(7):1313–8.

de Villiers EM, Fauquet C, Broker TR, et al. Classification of papillomaviruses. *Virology* 2004;324:17–27.

Diakowska D, Lewandowski A, Kopec W, et al. Oxidative DNA damage and total antioxidant status in serum of patients with esophageal squamous cell carcinoma. *Hepatogastroenterology* 2007;54:1701–4.

Ding L, Liu C, Zhou Q, et al. Association of estradiol and HPV/HPV16 infection with the occurrence of cervical squamous cell carcinoma. *Oncol Lett.* 2019;17(3):3548-3554.

Dixon SJ, Lemberg KM, Lamprecht MR, et al. Ferroptosis: an iron-dependent form of nonapoptotic cell death. *Cell.* 2012;149:1060–72.

Elson DA, Riley RR, Lacey A, et al. Sensitivity of the cervical transformation zone to estrogen induced squamous carcinogenesis. *Cancer Research* 2000;60:1267-75.

Ferlay J, Shin HR, Bray F, et al. GLOBOCAN 2008: Cancer incidence and mortality worldwide: IARC Cancer Base No. 10. Lyon, France: International Agency for Research on Cancer; 2010.

Filippova M, Filippov V, Williams VM, et al. Cellular levels of oxidative stress affect the response of cervical cancer cells to chemotherapeutic agents. *Biomed Res Int.* 2014;2014:574659.

Forman D, de Martel C, Lacey CJ, et al. Global burden of human papillomavirus and related diseases. *Vaccine* 2012;30:F12-F23.

Gao CM, Takezaki T, Wu JZ, et al. Polymorphisms in thymidylate synthase and methylenetetrahydrofolate reductase genes and the susceptibility to esophageal and stomach cancer with smoking. *Asian Pac J Cancer Prev.* 2004;5(2):133-8.

Green J, Berrington DG, Sweetland S, et al. Risk factors for adenocarcinoma and squamous cell carcinoma of the cervix in women aged 20-44 years: the UK National Case-Control Study of Cervical Cancer. *Br J Cancer* 2003;89:2078–86.

Hata I, Kaji M, Hirano S, et al. Urinary oxidative stress markers in young patients with type 1 diabetes. *Pediatr Int* 2006;48:58–61.

Hengartner MO. Apoptosis: corralling the corpses. *Cell* 2000, 104:325-328.

Herrero R, Castle PE, Schiffman M, et al. Epidemiologic profile of type-specific human papillomavirus infection and cervical neoplasia in Guanacaste, Costa Rica. *J Infect Dis* 2005;191:1796-807.

Huh WK, Ault KA, Chelmow D, et al. Use of primary high-risk human papillomavirus testing for cervical cancer screening: interim clinical guidance. *Gynecol Oncol* 2015;136:178-182.

Hwang ES, Bowen PE. DNA damage, a biomarker of carcinogenesis: Its measurement and modulation by diet and environment. *Crit Rev Food Sci Nutr* 2007;47:27–50.

Irie M, Tamae K, Iwamoto-Tanaka N, Kasai H. Occupational and lifestyle factors and urinary 8-hydroxydeoxyguanosine. *Cancer Sci.* 2005;96:600–606.

Islami F, Fedewa SA, Jemal A. Trends in cervical cancer incidence rates by age, race/ethnicity, histological subtype, and stage at diagnosis in the United States. *Prev Med.* 2019;123:316-323.

Jelić M, Mandić A, Kladar N, et al. Lipid peroxidation, antioxidative defense and level of 8-hydroxy-2-deoxyguanosine in cervical cancer patients. *J Med Biochem.* 2018;37(3):336-345.

Jensen KE, Schmiedel S, Norrild B, et al. Parity as a cofactor for high-grade cervical disease among women with persistent human papillomavirus infection: a 13-year follow-up. *Br J Cancer.* 2013;108(1):234-9.

Katki HA, Kinney WK, Fetterman B, et al. Cervical cancer risk for women undergoing concurrent testing for human papillomavirus and cervical cytology: a population-based study in routine clinical practice. *Lancet Oncol.* 2011;12(7):663-72.

Klaunig JE, Kamendulis LM. The role of oxidative stress in carcinogenesis. *Annu Rev Pharmacol Toxicol* 2004;44:29–67.

Kolanjiappan K, Manoharan S, Kayalvizhi M. Measurement of erythrocyte lipids, lipid peroxidation, antioxidants and osmotic fragility in cervical cancer patients. *Clin Chim Acta.* 2002;326(1-2):143-9.

Kroemer G, El-Deiry WS, Golstein P, Peter ME, Vaux D, et al. Classification of cell death: recommendations of the Nomenclature Committee on Cell Death. *Cell Death Differ* 2005;12:1463-7.

Lacey JV, Jr., Brinton LA, Abbas F, et al. Oral contraceptives as risk factors for cervical adenocarcinomas and squamous cell carcinomas. *Cancer Epidemiol Biomarkers Prev* 1999;8:1079 – 85.

Lacey JV, Jr., Brinton LA, Barnes WA, et al. Use of hormone replacement therapy and adenocarcinomas and squamous cell carcinomas of the uterine cervix. *Gynecol Oncol* 2000 Apr;77:149–154.

Leone A, Roca MS, Ciardiello C, et al. Oxidative stress gene expression profile correlates with cancer patient poor prognosis: identification of crucial pathways might select novel therapeutic approaches. *Oxidative Med Cell Longev.* 2017;2017:2597581.

- Liu J, Wang Z. Increased oxidative stress as a selective anticancer therapy. *Oxidative Med Cell Longev*. 2015;2015:294303.
- Looi ML, Mohd Dali AZ, Md Ali SA, Wan Ngah WZ, Mohd Yusof YA. Oxidative damage and antioxidant status in patients with cervical intraepithelial neoplasia and carcinoma of the cervix. *Eur J Cancer Prev*. 2008;17(6):555-560.
- Lovell MA, Gabbita P, Markesbery WR. Increased DNA oxidation and decreased levels of repair products in Alzheimer's disease ventricular CSF. *J Neurochem* 1999;72:771–776.
- Maiti AK. Gene network analysis of oxidative stress-mediated drug sensitivity in resistant ovarian carcinoma cells. *Pharmacogenomics J*. 2010;10:94–104.
- Manjo G, Joris I. Apoptosis, oncosis, and necrosis. An overview of cell death. *Am J Pathol* 1995;146:3-15.
- Mizutani H, Tada-Oikawa S, Hiraku Y, Kojima M, Kawanishi S. Mechanism of apoptosis induced by doxorubicin through the generation of hydrogen peroxide. *Life Sci*. 2005;76:1439–53.
- Miyake H, Hara I, Kamidono S, Eto H. Oxidative DNA damage in patients with prostate cancer and its response to treatment. *J Urol*. 2004;171:1533–36.
- Müller-Schiffmann A, Beckmann J, Steger J. The E6 protein of the cutaneous human papillomavirus type 8 can stimulate the viral early and late promoters by distinct mechanism. *J Virol* 2006;80:8718-28.
- Muñoz N, Castellsagué X, de González AB, Gissman L. Chapter 1: HPV in etiology of human cancer. *Vaccine* 2006;24:S3/1–S3/10.
- Muñoz N, Franceschi S, Bosetti C, et al. Role of parity and human papillomavirus in cervical cancer: the IARC multicentric case-control study. *Lancet*. 2002;359(9312):1093-101.
- Ock CY, Kim EH, Choi DJ, et al. 8-Hydroxydeoxyguanosine: not mere biomarker for oxidative *stres*, but remedy for oxidative *stres*-implicated gastrointestinal diseases. *World J Gastroenterol*. 2012;18(4):302-308.
- Paramita S, Soewarto S, Widodo MA, Sumitro SB. High parity and hormonal contraception use as risk factors for cervical cancer in East Kalimantan. *Med J Indones* 2010;19:268-2 72.
- Postovit L, Widmann C, Huang P, Gibson SB. Harnessing oxidative stress as an innovative target for Cancer therapy. *Oxidative Med Cell Longev*. 2018;2018:6135739.

Plummer M, Herrero R, Franceschi S, et al. Smoking and cervical cancer: pooled analysis of the IARC multi-centric case-control study. *Cancer Causes Control* 2003 Dec;14:805–814.

Pylväs-Eerola M, Karihtala P, Puistola U. Preoperative serum 8-hydroxydeoxyguanosine is associated with chemoresistance and is a powerful prognostic factor in endometrioid-type epithelial ovarian cancer. *BMC Cancer*. 2015;15:493.

Pylväs-Eerola M, Puistola U, Kauppila S, Karihtala P. Oxidative stress-induced antioxidant enzyme expression is an early phenomenon in ovarian carcinogenesis. *Eur J Cancer*. 2010;46:1661–7.

Raudenska M, Balvan J, Fojtu M, et al. Unexpected therapeutic effects of cisplatin. *Metallomics*. 2019;11(7):1182–1199.

Reuter S, Gupta SC, M.M. Chaturvedi, B.B. Aggarwal, Oxidative stress, inflammation, and cancer: how are they linked? *Free Radic. Biol. Med*. 2010;49:1603–1616.

Rojas V, Hirshfield KM, Ganesan S, Rodriguez-Rodriguez L. Molecular characterization of epithelial ovarian cancer: implications for diagnosis and treatment, *Int. J. Mol. Sci*. 2016:17.

Rodic S, Vincent DM, Reactive oxygen species (ROS) are key determinant of cancer's metabolic phenotype, *IJC*. 2018 :440-448.

Romano R, A Sgambato A, Mancini R, et al., 8-hydroxy-2'-deoxyguanosine in Cervical Cells: Correlation With Grade of Dysplasia and Human Papillomavirus Infection. *Carcinogenesis* 2000;21(6):1143-1147.

Roos WP, Thomas AD, Kaina B. DNA damage and the balance between survival and death in cancer biology, *Nat. Rev. Cancer* 2016;16:20–33.

Saraste A, Pulkki K. Morphologic and biochemical hallmarks of apoptosis. *Cardiovascular Res* 2000;45:528-537.

Sallmyr A, Fan J, Datta K, et al. Internal tandem duplication of FLT3 (FLT3/ITD) induces increased ROS production, DNA damage, and misrepair: implications for poor prognosis in AML. *Blood*. 2008;111:3173–82.

Sgambato A, Zannoni GF, Faraglia B, et al. Decreased expression of the CDK inhibitor p27Kip1 and increased oxidative DNA damage in the multistep process of cervical carcinogenesis. *Gynecol Oncol* 2004;92(3):776–83.

Schmidt HH, Stocker R, Vollbracht C, et al. Antioxidants in translational medicine. *Antioxid Redox Signal*. 2015 Nov 10;23(14):1130-43.

Shi H, Shi X, Liu KJ. Oxidative mechanism of arsenic toxicity and carcinogenesis. *Mol Cell Biochem.* 2004;255:67–78.

Smith JS, Green J, Berrington DG, et al. Cervical cancer and use of hormonal contraceptives: a systematic review. *Lancet* 2003;361:1159–67.

Smyth MJ, Godfrey DI, Trapani JA. A fresh look at tumor immunosurveillance and immunotherapy. *Nat Immunol* 2001;2:293–9.

Sreedevi A, Javed R, Dinesh A. The common histological type found in the ectocervix is squamous cell carcinoma and that in the endocervix is adenocarcinoma. *Int J Womens Health.* 2015 Apr 16;7:405-414.

Tanaka H, Fujita N, Sugimoto R, et al. Hepatic oxidative DNA damage is associated with increased risk for hepatocellular carcinoma in chronic hepatitis C. *Br J Cancer* 2008;98:580–586.

Tiggelaar SM, Lin MJ, Viscidi RP, et al. Age-specific Human Papillomavirus antibody and DNA prevalence : a global review. *J Adolesc Health* 2012;50(2):110–131.

Torre LA, Bray F, Siegel L, et al. Global Cancer Statistics 2012. *Ca Cancer J Clin* 2015;65:87–108.

Urban M, Banks E, Egger S, et al. Injectable and oral contraceptive use and cancers of the breast, cervix, ovary, and endometrium in Black South African Women: case–control study. *PLoS Med* 2012;9(3):e1001182.

Vaccarella S, Lortet-Tieulent J, Plummer M, et al. Worldwide trends in cervical cancer incidence: impact of screening against changes in disease risk factors. *Eur J Cancer* 2013;49:3262-73.

Valavanidis A, Vlachogianni T, Fiotakis C. 8-hydroxy-2'-deoxyguanosine (8-OHdG): A critical biomarker of oxidative stress and carcinogenesis. *J Environ Sci Health C Environ Carcinog Ecotoxicol Rev.* 2009;27(2):120–139.

Wang J, Lin D, Peng H, et al. Cancer-derived immunoglobulin G promotes LPS-induced proinflammatory cytokine production via binding to TLR4 in cervical cancer cells. *Oncotarget* 2014;5(20):9727–43.

Wang H, Li X, Chen T, et al. Mechanisms of verapamil-enhanced chemosensitivity of gallbladder cancer cells to platinum drugs: glutathione reduction and MRP1 downregulation. *Oncol Rep.* 2013;29:676–84.

Wang J, Yi J, Cancer cell killing via ROS: to increase or decrease, that is the question, *Cancer Biol. Ther.* 2008;7:1875–84.

Wang SS, Sherman ME, Hildesheim A, et al. Cervical adenocarcinoma and squamous cell carcinoma incidence trends among white women and black women in the United States for 1976–2000. *Cancer*. 2004;100(5):1035-1044.

Waris G, Ahsan H, Reactive oxygen species: role in the development of cancer and various chronic conditions, *J. Carcinog*. 2006;5:14.

Weiss JM, Goode EL, Ladiges WC, Ulrich CM. Polymorphic variation in hOGG1 and risk of cancer: A review of the functional and epidemiologic literature. *Mol Carcinog* 2005;42:127–141.

Westermarck J, V.M. Kahari, Regulation of matrix metalloproteinase expression in tumor invasion, *FASEB J*.1999;13:781–92.

Wheeler JA, Stephens LC, Tornos C, et al. Astro research fellowship: apoptosis as a predictor of tumor response to radiation in stage IB cervical carcinoma. *Int J Radiat Oncol Biol Phys* 1995;32:1487–95.

Whitley E, Ball J. Statistics review 4: sample size calculations. *Crit Care*. 2002;6(4):335-41.

Wong RH, Kuo CY, Hsu ML, et al. Increased levels of 8-hydroxy-20-deoxyguanosine attributable to carcinogenic metal exposure among school children. *Environ Health Perspect* 2005;113:1386–1390.

Wong RSY. Apoptosis in cancer: from pathogenesis to treatment. *Journal of Experimental & Clinical Cancer Research* 2011;30:87.

Woodman CBJ, Collins SI, Young LS: The natural history of cervical HPV infection: unresolved issues. *Nat Rev Cancer* 2007;7:11-22.

Wu LL, Chiou CC, Chang PY, Wu JT. Urinary 8-OHdG: a marker of oxidative stress to DNA and a risk factor for cancer, atherosclerosis and diabetics. *Clin Chim Acta*. 2004;339(1-2):1–9.

Yang D, Dalton JE. A unified approach to measuring the effect size between two groups using SAS®. *SAS Global Forum* 2012, paper 335-2012.

Zha J, Harada H, Yang E, Jockel J, Korsmeyer SJ. Serine phosphorylation of death agonist BAD in response to survival factor results in binding to 14-3-3 not BCL-X(L). *Cell* 1996;87:619–28.

Zhou R, Wei C, Liu J, et al. The prognostic value of p53 expression for patients with cervical cancer: a meta-analysis. *Eur J Obstet Gynecol Reprod Biol*. 2015 Dec;195:210-3.



Ziegler U, Groscurth P: Morphological features of cell death. *News Physiol Sci* 2004, 19:124-128.

zur Hausen H. Papillomaviruses in the causation of human cancers – a brief historical account. *Virology* 2009;384:260-5.

## Lampiran 1

### **NASKAH PENJELASAN UNTUK RESPONDEN (SUBYEK)**

Selamat pagi ibu, saya dr. Sardina yang akan melakukan penelitian tentang :

#### **KADAR STRES OKSIDATIF PADA KANKER SERVIKS STADIUM LANJUT SEBELUM DAN SETELAH KEMOTERAPI**

Perlu ibu ketahui bahwa ibu menderita lesi pre kanker/ kanker serviks. Kanker serviks merupakan salah satu jenis kanker yang memiliki perjalanan penyakit yang cukup lama. Pada tahap awal, penyakit ini belum bergejala, sedangkan gejala nanti muncul jika penyakit ini telah menjalar ke alat/organ tubuh yang lain (metastasis). Pengobatan kanker serviks sampai saat ini belum memberikan hasil yang memuaskan. Meskipun beberapa penderita dapat sembuh dari kanker serviks; akan tetapi, beberapa di antaranya mengalami resistensi. Oleh karena itu, saya akan melakukan pemeriksaan kadar *stres* oksidatif dan tingkat apoptosis pada jaringan serviks dan urin dari ibu. Saya berharap akan memperoleh hasil yang bermanfaat untuk pengobatan kanker serviks sehingga pengobatan penyakit ini ini dapat lebih efektif.

Kalau ibu setuju untuk berpartisipasi dalam penelitian ini, maka kami akan meminta ibu untuk mengisi kuesioner dan menerima arahan penggunaan alat baru serta dilakukan pemeriksaan oleh tenaga kesehatan terlatih. Jika memenuhi syarat untuk berpatisipasi dalam penelitian ini, maka ibu menerima hasil pemeriksaan laboratorium yang telah ibu jalani.

Keikutsertaan ibu dalam penelitian ini memberikan sumbangan yang besar bagi kemajuan ilmu dan upaya pencegahan dan pengobatan kanker serviks. Karena itu kami sangat mengharapkan ibu bersedia untuk ikut dalam penelitian ini secara sukarela dan mengizinkan kami menggunakan data ibu dalam laporan kami baik laporan tertulis maupun laporan secara lisan. Bila ibu bersedia, kami mengharapkan ibu memberikan persetujuan secara tertulis. Keikutsertaan ibu dalam penelitian ini bersifat sukarela tanpa paksaan, oleh karena itu ibu berhak untuk menolak atau mengundurkan diri dari penelitian ini.

Kami menjamin keamanan dan kerahasiaan semua data pada penelitian ini. Data akan disimpan dengan baik dan aman, sehingga hanya bisa dilihat oleh yang berkepentingan saja. Data pribadi disamarkan pada semua catatan dan pada pelaporan baik lisan ataupun tertulistidak akan menggunakan data pribadi. Data penelitian akan disajikan pada forum ilmiah Program Pasca Sarjana (S2) dan Program Pendidikan Dokter Spesialis Obgin FK Universitas Hasanuddin.

Bila ibu merasa masih ada hal yang belum jelas atau belum dimengerti dengan baik, maka ibu dapat menanyakan atau minta penjelasan pada saya : dr. Sardina (telepon 081245021810). Jika ibu setuju untuk berpartisipasi, diharapkan menandatangani surat persetujuan mengikuti penelitian. Atas kesediaan dan kerjasamanya kami ucapkan banyak terimakasih.

Identitas Peneliti :

Nama : dr. Sardina  
Alamat : SMF/PPDS Obgin Fak. Kedokteran UNHAS  
Telepon : 081245021810

**DISETUJUI OLEH  
KOMISI ETIK PENELITIAN KESEHATAN  
FAK. KEDOKTERAN UNHAS  
Tgl. 30 November 2018**

## Lampiran 2

### FORMULIR PERSETUJUAN MENGIKUTI PENELITIAN SETELAH MENDAPAT PENJELASAN

Saya yang bertanda tangan dibawah ini :

Nama : .....

Umur : .....

Alamat : .....

Pekerjaan : .....

No Telepon : .....

Dengan sesungguhnya saya menyatakan bahwa setelah mendapat penjelasan dan menyadari manfaat penelitian yang berjudul **“KADAR STRES OKSIDATIF PADA KANKER SERVIKS STADIUM LANJUT SEBELUM DAN SETELAH KEMOTERAPI”** maka saya setuju untuk diikutsertakan dalam penelitian ini dan bersedia berperan serta dengan mematuhi ketentuan yang berlaku dalam penelitian ini dan memberikan keterangan yang sebenarnya.

Saya tahu bahwa keikutsertaan saya ini bersifat sukarela tanpa paksaan sehingga saya bisa menolak ikut dan mengundurkan diri dari penelitian ini tanpa kehilangan hak saya untuk mendapat pelayanan kesehatan. Juga saya berhak bertanya atau meminta penjelasan pada peneliti bila masih ada hal yang belum jelas atau masih ada hal yang ingin saya ketahui tentang penelitian ini.

Saya juga mengerti bahwa semua biaya yang dikeluarkan sehubungan dengan penelitian ini, akan ditanggung oleh peneliti, demikian juga biaya perawatan dan pengobatan bila terjadi hal-hal yang tidak diinginkan akibat penelitian ini, akan dibiayai oleh peneliti.

Demikian pernyataan ini saya buat dengan penuh kesadaran untuk dipergunakan sebagaimana mestinya.

<b>NAMA</b>	<b>TANDA TANGAN</b>	<b>TGL/BLN/THN</b>
Klien .....	.....	.....
Saksi 1 .....	.....	.....
Saksi 2 .....	.....	.....

**Penanggung Jawab Penelitian :**

Nama : dr. Sardina  
Alamat : PPDS Obgin Fak. Kedokteran UNHAS  
Telepon : 081245021810

**Penanggung Jawab Medik:**

1. Nama : Prof. Dr. dr. Syahrul Rauf, SpOG(K)  
Telepon : -
2. Nama : Dr. dr. Rina Previana Amiruddin, SpOG(K)  
Telepon : -

**DISETUJUI OLEH  
KOMISI ETIK PENELITIAN KESEHATAN  
FAK. KEDOKTERAN UNHAS  
Tgl. 30 November 2018**

**Lampiran 3****FORMULIR PENELITIAN****KADAR STRES OKSIDATIF PADA KANKER SERVIKS STADIUM LANJUT  
SEBELUM DAN SETELAH KEMOTERAPI**

Nomor sampel penelitian :

Tanggal pemeriksaan :

Pemeriksa :

Rumah Sakit :

Nomor Register :

**I. Identitas**

Nama :

Usia :

Pekerjaan :

Suku :

Alamat :

a. Di Makassar :

b. Di Tempat Lain :

c. Telepon rumah/HP:

d. Kontak person :

**II. Cara Masuk Rumah Sakit**

- Datang sendiri
- Rujukan Dokter praktek swasta
- Rujukan Rumah Sakit/ Puskesmas

**III. Data Umum**1. Status Perkawinan :  Tidak  Kawin  Janda

2. Lama Perkawinan : .....
3. GPA : .....
4. Berat badan : .....kg
5. Tinggi Badan : .....cm
6. Tekanan darah : .....mmHg

#### IV. Data Klinis

1. Keadaan umum :  Baik  Sedang  Lemah
2. Haid terakhir : .....
3. Nafsu makan :  Berkurang  Tetap  Bertambah
4. Riwayat abortus : .....
5. Riwayat operasi : .....

#### V. Pemeriksaan Laboratorium

1. Hasil histopatologi : .....
2. Stadium kanker serviks : .....
3. Hasil pemeriksaan kadar 8-OhdG :
  - Sebelum kemoterapi = .....ng/ml
  - Setelah kemoterapi = = .....ng/ml



KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI  
UNIVERSITAS HASANUDDIN  
FAKULTAS KEDOKTERAN  
RSPTN UNIVERSITAS HASANUDDIN  
RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR  
KOMITE ETIK PENELITIAN KESEHATAN



Sekretariat : Lantai 3 Gedung Laboratorium Terpadu  
JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245.  
Contact Person: dr. Agussalim Bukhari, MMed, PhD, SpGK TELP. 081225704670 e-mail : agussalimbukhari@yahoo.com

**REKOMENDASI PERSETUJUAN ETIK**

Nomor : 1027 / H4.8.4.5.31 / PP36-KOMETIK / 2018

Tanggal: 30 Nopember 2018

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH18100665		No Sponsor	
Peneliti Utama	dr. Sardina		Protokol	
Judul Peneliti	Hubungan Antara Kadar Stress Oksidatif dan Indeks Apoptosis Terhadap Stadium Penderita Kanker Serviks		Sponsor	
No Versi Protokol	2	Tanggal Versi	22 Nopember 2018	
No Versi PSP	2	Tanggal Versi	22 Nopember 2018	
Tempat Penelitian	RSUP dr. Wahidin Sudirohusodo dan RS Jejaring Makassar			
Jenis Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard Tanggal		Masa Berlaku	Frekuensi review lanjutan
			30 Nopember 2018 sampai 30 Nopember 2019	
Wakil Komisi Etik Penelitian	Ketua Etik	Nama Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)	Tanda tangan	
Sekretaris Komisi Etik Penelitian		Nama dr. Agussalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)	Tanda tangan	

Kewajiban Peneliti Utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Laporan SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
- Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
- Menyerahkan laporan akhir setelah Penelitian berakhir
- Melaporkan penyimpangan dari prokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan





KEMENTERIAN RISET TEKNOLOGI DAN PENDIDIKAN TINGGI  
UNIVERSITAS HASANUDDIN  
RUMAH SAKIT UNIVERSITAS HASANUDDIN

Jl. Perintis Kemerdekaan Km. 10 Tamalanrea, Makassar 90245

Website: [www.rs.unhas.ac.id](http://www.rs.unhas.ac.id) Email: [info@rs.unhas.ac.id](mailto:info@rs.unhas.ac.id) Telp: (0411) 591331 Fax: (0411) 591332

Nomor : 465/UN4.26.1.2/PT.01.05/2020 17 Januari 2020  
Hal : Surat Keterangan Selesai Penelitian

Dengan ini menerangkan bahwa mahasiswa yang beridentitas :

Nama : dr. Sardina  
NIM : C105215107  
Institusi : FK UNHAS  
Kode : 190408\_8  
penelitian

Telah menyelesaikan penelitian di Rumah Sakit Unhas  
Terhitung : 08 April 2019 s/d 29 November 2019  
Sampel : Data Primer

Untuk memperoleh data dalam rangka penyusunan Tesis yang berjudul:

**"HUBUNGAN ANTARA KADAR STRES OKSIDATIF DAN INDEKS APOPTOSIS TERHADAP  
STADIUM PENDERITA KANKER SERVIKS"**

Demikian surat keterangan ini dibuat dan diberikan kepada yang bersangkutan untuk  
dipergunakan seperlunya.

  
Kepala Bidang Penelitian dan  
Inovasi  
dr. Muh. Firdaus Kasim, M.Sc  
NIP: 198412012018073001