DAFTAR PUSTAKA

Abdi, F. *et al.* (2015) 'Hepatitis B and pregnancy: An update review article', 4(1). doi: 10.5317/wjog.v4.i1.1.

Avagliano, L. *et al.* (2016) 'SM Gr up Histology of Human Placenta', pp. 1–15.

Baergen, R. (2004) *Manual of Benirschke and Kaufmann's Pathology of the Human Placenta*. San Diego, CA.

Baergen, R. N. (2011) *Manual of Pathology of the Human Placenta*. doi: 10.1007/978-1-4419-7494-5.

Bhat, P. and Anderson, D. A. (2007) 'Hepatitis B Virus Translocates across a Trophoblastic Barrier □', 81(13), pp. 7200–7207. doi: 10.1128/JVI.02371-06.

Borgia, G. *et al.* (2012) 'Hepatitis B in pregnancy', *World Journal of Gastroenterology*, 18(34), pp. 4677–4683. doi: 10.3748/wjg.v18.i34.4677.

CDC (2017) 'Summary of the Twenty-Sixth Meeting of the International Task Force for Disease Eradication', *Centers for Disease Control and Prevention (CDC) Gottfried Hirnschall, World Health Organization; Dr. Olufunmilayo Lesi*, pp. 1–15. Available at: https://www.cartercenter.org/resources/pdfs/news/health_publications/itfde/itfde-summary-062017.pdf.

Centre, V., William, S. and Road, L. (2011) 'Micropathology Ltd', 44(0), pp. 1–3.

07) 'Hepatitis B virus infection', *Seminars in Fetal and Neonatal Medicine*, 7. doi: 10.1016/j.siny.2007.01.013.

) 'Placental function in development and disease', *Reproduction, Fertility and*

Development, 18(1–2), pp. 71–76. doi: 10.1071/RD05121.

Delorme-Axford, E., Sadovsky, Y. and Coyne, C. B. (2014) 'The Placenta as a Barrier to Viral Infections', *Annual Review of Virology*, 1(1), pp. 133–146. doi: 10.1146/annurev-virology-031413-085524.

Donnelly, L. and Campling, G. (2016) 'Functions of the placenta', *Anaesthesia and Intensive Care Medicine*. Elsevier Ltd, 17(7), pp. 349–353. doi: 10.1016/j.mpaic.2016.04.004.

Dunk, C., Huppertz, B. and Kingdom, J. (2018) *Development of the placenta and its circulation*. Second Edi, *Fetal Medicine*. Second Edi. Elsevier Ltd. Available at: http://dx.doi.org/.

EPI Team(WHO) (2006) 'Preventing Mother-to-Child Transmission of Hepatitis B', pp. 1–53.

Faye, O. M. (2006) *Handbook of placental pathology*.

Gentile, I. and Borgia, G. (2014) 'Vertical transmission of hepatitis B virus: Challenges and solutions', *International Journal of Women's Health*, 6(1), pp. 605–611. doi: 10.2147/IJWH.S51138.

Harris, R. L., van den Berg, C. W. and Bowen, D. J. (2012) '*ASGR1* and *ASGR2* , the Genes that Encode the Asialoglycoprotein Receptor (Ashwell Receptor), Are Expressed in Peripheral Blood Monocytes and Show Interindividual Differences in Transcript Profile', *Molecular Biology International*, 2012, pp. 1–10. doi: 10.1155/2012/283974.

Hoda, S. A. (1996) *Pathology of the Human Placenta*, *The American Journal of Surgical*

).1097/00000478-199604000-00026.

ıd Gu, F. (2005) 'Epidemiology and Prevention of Hepatitis B Virus Infection',

), pp. 50–57.

Johansson, A. K. (2007) ‘Linking Structure and Function of the Asialoglycoprotein Receptor H1-CRD using Site-Directed Mutagenesis and Isotope Labeling’.

Lee, L. Y. *et al.* (2019) ‘Maternal HBeAg positivity and viremia associated with umbilical cord blood hepatitis B viremia’, *Pediatrics and Neonatology*. Elsevier Taiwan LLC, (xxxx), pp. 1–6. doi: 10.1016/j.pedneo.2019.01.002.

Li, M. *et al.* (2016) ‘Ligand-based targeted therapy: A novel strategy for hepatocellular carcinoma’, *International Journal of Nanomedicine*, 11, pp. 5645–5669. doi: 10.2147/IJN.S115727.

Li, Z., Hou, X. and Cao, G. (2015) ‘Is mother-to-infant transmission the most important factor for persistent HBV infection?’, *Emerging Microbes and Infections*, 4(5). doi: 10.1038/emi.2015.30.

Liang, T. J. (2010) ‘Hepatitis B: The virus and Disease’, *Hepatology*, 49, pp. 1–17. doi: 10.1002/hep.22881.Hepatitis.

M. Friedlander Michael Mueckler (1992) *Molecular Biology of Receptors and Transporters: Receptors*.

Maltepe, E. and Penn, A. A. (2017) *Development, Function, and Pathology of the Placenta*. Tenth Edit, *Avery’s Diseases of the Newborn: Tenth Edition*. Tenth Edit. Elsevier Inc. doi: 10.1016/B978-0-323-40139-5.00005-X.

Manuscript, A. (2014) ‘positive pregnant women’, 20(5), pp. 317–321. doi: 2.Risk.

ıd Jiang, X. (1999) ‘Copper and zinc ions differentially block

asialoglycoprotein receptor-mediated endocytosis in isolated rat hepatocytes.', *The Journal of biological chemistry*, 274(21), pp. 14750–8. doi: 10.1074/jbc.274.21.14750.

Moseley, R. H. (2013) 'Hepatobiliary Transport in Health and Disease', *Gastroenterology*. Elsevier Inc., 144(4), p. 855. doi: 10.1053/j.gastro.2013.02.023.

Muljono, D. H. (2017) 'Epidemiology of Hepatitis b and c in republic of indonesia', *Euroasian J Hepato-Gastroenterol*, 7(1), pp. 55–59. doi: https://dx.doi.org/10.5005/jp-journals-l0018-1212.

Navabakhsh, B. *et al.* (2011) 'Hepatitis B Virus Infection during Pregnancy: Transmission and Prevention.', *Middle East journal of digestive diseases*, 3(2), pp. 92–102. Available at: http://www.ncbi.nlm.nih.gov/pubmed/25197539%0Ahttp://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC4154922.

Ngui, S. L. *et al.* (1998) 'Failed postnatal immunoprophylaxis for hepatitis B: characteristics of maternal hepatitis B virus as risk factors', *Clin Infect Dis*, 27(1), pp. 100–106. doi: 10.1086/514610.

Patlak, M. (2000) 'The hepatitis B story', *Beyond Discovery: the Path from Research to Human Benefit*, pp. 1–8. Available at: http://www.nasonline.org/publications/beyond-discovery/hepatitis-b-story.pdf.

Patrick, R. (2001) 'Determination of the Upper Size Limit for Uptake and Processing of Ligands by the Asialoglycoprotein Receptor on Hepatocytes', *JBC Papers in Press*.

Pereira, L. (2018) 'Congenital Viral Infection: Traversing the Uterine-Placental Interface', *Virology*, 5(1), pp. 273–299. doi: 10.1146/annurev-virology-092917-043236.

)12) 'Realdo Colombo's de Re Anatomica: The renaissance origin of the term

"placenta" and its historical background', *Placenta*. Elsevier Ltd, 33(8), pp. 655–657. doi: 10.1016/j.placenta.2012.03.004.

Qiu, L. *et al.* (2010) 'Hepatitis B and Breastfeeding in Hangzhou, Zhejiang Province, People's Republic of China', *Breastfeeding Medicine*, 5(3), pp. 109–112. doi: 10.1089/bfm.2009.0093.

Ralph A. Bradshaw, E. A. D. (2010) 'Handbook of Cell Signaling', in *Handbook of Cell Signaling*. Second Edi. Elsevier, pp. xxi–xlii. doi: 10.1016/B978-0-12-374145-5.00413-7.

robert (2016) 'Hepatitis B Life Cycle'. Available at: http://www.hepatitisbviruspage.com/hbvcycle.htm.

Shepard, C. W. *et al.* (2006) 'Hepatitis B virus infection: Epidemiology and vaccination', *Epidemiologic Reviews*, 28(1), pp. 112–125. doi: 10.1093/epirev/mxj009.

Thedja, M. D. (2012) 'Genetic Diversity of Hepatitis B Virus in Indonesia : Epidemiological and Clinical Significance'.

Tran, T. T. (2011) 'Immune tolerant hepatitis B: A clinical dilemma', *Gastroenterology and Hepatology*, 7(8), pp. 511–516.

Treichel, U. *et al.* (1994) 'The asialoglycoprotein receptor mediates hepatic binding and uptake of natural hepatitis B virus particles derived from viraemic carriers', *Journal of General Virology*, 75(11), pp. 3021–3029. doi: 10.1099/0022-1317-75-11-3021.

Tu, T., Patel, K. and Shackel, N. A. (2017) *Viral Hepatitis, Genomic and Precision Medicine*.

3-0-12-800685-6.00017-5.

(2018) 'Placental expression of asialoglycoprotein receptor associated with

ransmission from mother to child', (April). doi: 10.1111/liv.13871.

Watashi, K. *et al.* (2014) 'NTCP and beyond: Opening the door to unveil hepatitis B virus entry', *International Journal of Molecular Sciences*, 15(2), pp. 2892–2905. doi: 10.3390/ijms15022892.

Witkin, J. W. (2008) 'Formation and role of placenta', *Placenta*, 12(1), pp. 1–12. Available at: http://www.columbia.edu/itc/hs/medical/humandev/2004/Chapt17-Placenta.pdf.pdf.

World Health Organization (2016) 'Global health sector strategy on viral hepatitis 2016-2021.', *Global Hepatitis Programme Department of HIV/AIDS*, (June), p. 56. doi: WHO/HIV/2016.06.

World Health Organization (2017) *Global Hepatitis Report, 2017*, *Who*. doi: ISBN 978-92-4-156545-5.

Yano, Y. *et al.* (2015) 'Hepatitis B virus infection in Indonesia', *World Journal of Gastroenterology*, 21(38), pp. 10714–10720. doi: 10.3748/wjg.v21.i38.10714.

Yi, P. *et al.* (2016) 'Management of mother-to-child transmission of hepatitis B virus : Propositions and challenges', *Journal of Clinical Virology*. Elsevier B.V., 77, pp. 32–39. doi: 10.1016/j.jcv.2016.02.003.

Yu, Y. *et al.* (2017) 'Hepatitis B Virus e antigen activates the suppressor of cytokine signaling 2 to repress interferon action', *Scientific Reports*, 7(1), pp. 1–15. doi: 10.1038/s41598-017-01773-6.

Zakowski, M. I. and Herman, N. L. (2004) 'The Placenta: Anatomy, Physiology, and Transfer of Drugs', *Obstetric anesthesia: principles and practice*, pp. 55–72. doi: 10.1016/B978-1-4557-4866-2.00004-3

KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI
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REKOMENDASI PERSETUJUAN ETIK

Nomor : 457/UN4.6.4.5.31/ PP36/ 2019

Tanggal: 25 Juni 2019

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

No Protokol	UH19060373	No Sponsor Protokol	
Peneliti Utama	**dr. Agus Priyo Wibowo**	Sponsor	
Judul Peneliti	Ekspresia Asialoglycoprotein Receptor Pada Plasenta Ibu Hamil HBeAg Positif Dan HBeAg Negatif		
No Versi Protokol	**1**	Tanggal Versi	**24 Juni 2019**
No Versi PSP		Tanggal Versi	
Tempat Penelitian	**Laboratorium Patologi Anatomi FKUH Makassar**		
Jenis Review	[x] Exempted [ ] Expedited [ ] Fullboard Tanggal	Masa Berlaku **25 Juni 2019** sampai **25 Juni 2020**	Frekuensi review lanjutan
Wakil Ketua Komisi Etik Penelitian	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 Lapor 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

DAFTAR SAMPEL PENELITIAN

No	No Sampel	HBsAg	HBeAg	HBV DNA Serum Ibu	HBV DNA Plasenta	HBV DNA Cord Blood	Ekspersi ASGPR Plasenta
1	458	1	0	0	+	0	1
2	480	1	0	0	-	0	1
3	501	1	0	0	-	0	1
4	485	1	0	0	+	0	4
5	486	1	0	0	-	0	1
6	587	1	0	0	+	0	1
7	609	1	1	1	-	0	1
8	641	1	0	0	-	0	1
9	668	1	0	1	-	0	1
10	673	1	1	1	+	0	1
11	674	1	0	0	-	0	1
12	701	1	0	0	-	0	1
13	703	1	1	1	-	0	1
14	705	1	0	0	-	0	1
15	718	1	0	0	-	0	1
16	758	1	0	0	+	0	1
17	848	1	0	0	+	0	1
18	853	1	0	0	-	0	1
19	458	1	0	0	-	0	4
20	480	1	0	0	-	0	1
21	501	1	0	0	-	0	4
22	485	1	1	1	+	1	1
23	486	1	0	0	-	0	1
24	587	1	0	0	-	0	3
25	609	1	0	0	-	0	1
26	641	1	0	0	-	0	1
27	668	1	0	0	-	0	1
28	673	1	1	1	-	1	1
29	674	1	0	0	-	0	2
30	701	1	1	1	+	0	4
31	703	1	0	1	-	0	1
32	705	1	0	0	+	0	1
33	718	1	0	0	-	0	1
34	758	1	0	0	+	0	4
35	848	1	1	1	+	0	1
[illegible]	[illegible]	1	0	0	+	0	1
[illegible]	[illegible]	1	0	0	-	0	1
[illegible]	[illegible]	1	0	0	-	0	1
[illegible]	[illegible]	1	0	0	-	0	1
[illegible]	[illegible]	1	0	0	-	0	4
[illegible]	[illegible]	1	0	0	-	0	1

42	587	1	0	0	+	0	1
43	609	1	0	0	-	1	4
44	641	1	1	0	+	0	4
45	668	1	0	0	-	0	1
46	673	1	1	0	+	0	1
47	674	1	1	1	+	0	4
48	701	1	1	0	+	1	4
49	703	1	0	0	+	0	4
50	705	1	0	0	-	0	4
51	718	1	0	0	-	0	1
52	758	1	0	0	-	0	1
53	848	1	0	0	-	0	4
54	853	1	0	0	-	0	3
55	458	1	1	0	-	0	3
56	480	1	0	0	-	0	4
57	501	1	0	0	-	0	3
58	485	1	1	1	-	0	4
59	486	1	1	0	-	0	3
60	587	1	0	0	-	0	2
61	609	1	1	0	-	0	1
62	641	1	0	0	-	0	4
63	668	1	1	0	-	0	2
64	673	1	0	0	-	0	2
65	674	1	0	0	-	0	3
66	701	1	0	0	-	0	1

ANALISA STATISTIK

Analisis Hubungan HBeAg dengan HBV DNA serum ibu

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
HBeAg * HBV_DNA_Serum_Ibu	66	100.0%	0	0.0%	66	100.0%

HBeAg * HBV_DNA_Serum_Ibu Crosstabulation

Count

		HBV_DNA_Serum_Ibu		
		Negative	Positive	Total
HBeAg	Negative	48	2	50
	Positive	7	9	16
Total		55	11	66

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	23.826[a]	1	.000		
Continuity Correction[b]	20.213	1	.000		
Likelihood Ratio	20.750	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	23.465	1	.000		
N of Valid Cases	66				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.67.

b. Computed only for a 2x2 table

Risk Estimate

	Value	95% Confidence Interval	
		Lower	Upper
Odds Ratio for HbeAg (positif / negatif)	30.857	5.497	173.224
For cohort HBV DNA = positif	14.063	3.382	58.470
For cohort HBV DNA = negatif	.456	.261	.797
N of Valid Cases	66		

Analisis Perbandingan HBeAg dengan ekspresi Asialoglycoprotein Receptor

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
HBeAg * IHC	66	100.0%	0	0.0%	66	100.0%

HBeAg * IHC Crosstabulation

Count

		IHC				Total
		1.00	2.00	3.00	4.00	
HBeAg	Negative	32	3	4	11	50
	Positive	8	1	2	5	16
Total		40	4	6	16	66

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.091[a]	3	.779
Likelihood Ratio	1.065	3	.785
ociation	.981	1	.322
	66		

ve expected count less than 5. The minimum

.

Analisis Perbandingan HBV DNA Serum Ibu dengan ekspresi Asialoglycoprotein Receptor Plasenta

HBV_DNA_Serum_Ibu * IHC Crosstabulation

Count

		IHC				
		1.00	2.00	3.00	4.00	Total
HBV_DNA_Serum_Ibu	Negative	32	4	6	13	55
	Positive	8	0	0	3	11
Total		40	4	6	16	66

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.370[a]	3	.499
Likelihood Ratio	3.999	3	.262
Linear-by-Linear Association	.179	1	.672
N of Valid Cases	66		

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is .67.

Analisis Hubungan Antara ekspresi Asialoglycoprotein Receptor Plasenta dengan HBV Cord Blood Bayi

IHC * HBV_DNA_Cord_Blood Crosstabulation

Count

		HBV_DNA_Cord_Blood		
		Negative	Positive	Total
IHC	1.00	38	2	40
	2.00	4	0	4
	3.00	6	0	6
	4.00	14	2	16
Total		62	4	66

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.890[a]	3	.596
Likelihood Ratio	2.242	3	.524
Linear-by-Linear Association	.708	1	.400
N of Valid Cases	66		

a. 5 cells (62.5%) have expected count less than 5. The minimum expected count is .24.