

## DAFTAR PUSTAKA

- Afzal, T., Butt, N., Munir, S., & Zia, N. (2021). Effect of Addition of Probiotics to Standard Treatment on Neonatal Jaundice. *Annals of PIMS-Shaheed Zulfiqar Ali Bhutto Medical University*, 17(2), 199–203. <https://doi.org/10.48036/apims.v17i2.494>
- Asaye, S., Bekele, M., Getachew, A., Fufa, D., Adugna, T., & Tadasa, E. (2023). Hyperbilirubinemia and Associated Factors Among Neonates Admitted to the Neonatal Care Unit in Jimma Medical Center. *Clinical Medicine Insights: Pediatrics*, 17. <https://doi.org/10.1177/11795565231193910>
- Athalye-Jape, G., Deshpande, G., Rao, S., & Patole, S. (2014). Benefits of probiotics on enteral nutrition in preterm neonates: A systematic review. *American Journal of Clinical Nutrition*, 100(6), 1508–1519. <https://doi.org/10.3945/ajcn.114.092551>
- Aynalem, S., Abayneh, M., Metaferia, G., Demissie, A. G., Gidi, N. W., Demtse, A. G., Berta, H., Worku, B., Nigussie, A. K., Mekasha, A., Tazu Bongor, Z., McClure, E. M., Goldenberg, R. L., & Muhe, L. M. (2020). Hyperbilirubinemia in Preterm Infants Admitted to Neonatal Intensive Care Units in Ethiopia. *Global Pediatric Health*, 7, 2333794X2098580. <https://doi.org/10.1177/2333794X20985809>
- Bermudez-Brito, M., Plaza-Díaz, J., Muñoz-Quezada, S., Gómez-Llorente, C., & Gil, A. (2012). Probiotic mechanisms of action. *Annals of Nutrition and Metabolism*, 61(2), 160–174. <https://doi.org/10.1159/000342079>
- Blanchetière, A., Dolladille, C., Goyer, I., Join-Lambert, O., & Fazilleau, L. (2023). State of the Art of Probiotic Use in Neonatal Intensive Care Units in French-Speaking European Countries. *Children*, 10(12), 1889. <https://doi.org/10.3390/children10121889>
- Chen, K., & Yuan, T. (2020). The role of microbiota in neonatal hyperbilirubinemia. *American Journal of Translational Research*, 12(11), 7459–7474.
- Dalby, M. J., & Hall, L. J. (2020). Recent advances in understanding the neonatal microbiome. *F1000Research*, 9, 422. <https://doi.org/10.12688/f1000research.22355.1>
- Demirel, G., Erdeve, O., Celik, I. H., & Dilmen, U. (2013). *Saccharomyces boulardii* for prevention of necrotizing enterocolitis in preterm infants: a randomized, controlled study. *Acta Paediatrica*, 102(12), e560–e565. <https://doi.org/10.1111/apa.12416>

- Deshmukh, J., Deshmukh, M., & Patole, S. (2019). Probiotics for the management of neonatal hyperbilirubinemia: a systematic review of randomized controlled trials. *The Journal of Maternal-Fetal & Neonatal Medicine*, 32(1), 154–163. <https://doi.org/10.1080/14767058.2017.1369520>
- Gomella, T. L. (2013). translate sudah TINJAUAN PUSTAKA. In *Intrauterine Growth Restriction (Small for Gestational Age)*. Dalam: Gomella, T.C., Cunningham, M.D., Eyal, F.G., penyunting. *Neonatology Management, Procedures, On-Call Problems, Disease, and Drugs*. Edisi ke-7. New York: Mc Graw-Hill. (pp. 558–567).
- Hill, C., Guarner, F., Reid, G., Gibson, G. R., Merenstein, D. J., Pot, B., Morelli, L., Canani, R. B., Flint, H. J., Salminen, S., Calder, P. C., & Sanders, M. E. (2014). Expert consensus document: The international scientific association for probiotics and prebiotics consensus statement on the scope and appropriate use of the term probiotic. *Nature Reviews Gastroenterology and Hepatology*, 11(8), 506–514. <https://doi.org/10.1038/nrgastro.2014.66>
- Jenabi, E., Eghbalian, F., Reisi, R., & Talesh, S. (2022). *The effect of probiotics and phototherapy combined application in comparison with phototherapy alone on bilirubin reduction in term neonates: A Randomized Controlled Trial*. <https://doi.org/10.21203/rs.3.rs-1387582/v1>
- Jiayi, C., Jinying, W., Yanhan, Y., Tianyu, L., Juanjuan, C., Feng, Z., Xiaohui, F., & Jinping, Z. (2024). Probiotics' effects on gut microbiota in jaundiced neonates: a randomized controlled trial protocol. *Frontiers in Pediatrics*, 12. <https://doi.org/10.3389/fped.2024.1296517>
- Johan Khoman, D., K, S., Evalina Rusli, R., & Azlin, E. (2020). PROBIOTICS ROLE IN LOWERING BILIRUBIN LEVEL ON HYPERBILIRUBINEMIA NEONATES PERFORMED PHOTOTHERAPY AT NEONATOLOGY WARD OF ADAM MALIK GENERAL HOSPITAL. *International Journal of Research Science and Management*, 7(5), 59–62. <https://doi.org/10.5281/zenodo.3871634>
- Kamel TR, Alfia AAA, Hablas HR, A.-S. M. (2019). Impact of probiotics on neonatus hyperbilirubinemia. *Al-Azhar J Pediatr.*, 22(46):617-28.
- Kramer, L. I. (1969). Advancement of Dermal Icterus in the Jaundiced Newborn. *American Journal of Diseases of Children*, 118(3), 454–458. <https://doi.org/10.1001/archpedi.1969.02100040456007>
- Kumbhar, S., Musale, M., & Jamsa, A. (2024). Bilirubin metabolism: delving into the cellular and molecular mechanisms to predict

- complications. *The Egyptian Journal of Internal Medicine*, 36(1), 34. <https://doi.org/10.1186/s43162-024-00298-5>
- Liu, W., Liu, H., Wang, T., & Tang, X. (2015a). Therapeutic effects of probiotics on neonatal jaundice. *Pakistan Journal of Medical Sciences*, 31(5). <https://doi.org/10.12669/pjms.315.7921>
- Liu, W., Liu, H., Wang, T., & Tang, X. (2015b). Therapeutic effects of probiotics on neonatal jaundice. *Pakistan Journal of Medical Sciences*, 31(5). <https://doi.org/10.12669/pjms.315.7921>
- Makhoul, G., Mardini, J., Ojaimi, M. Al, AbiFares, G., Hanna, P., Alameddine, A., Feghali, H., Makhoul, P., Saaybi, J., Nicolas, G., Sakka, J., & Khalife, M. C. F. (2018). Effect of Probiotic “L.Reuteri” Association on the Reduction of Serum Bilirubin in Neonatal Jaundice. *European Scientific Journal, ESJ*, 14(12), 384. <https://doi.org/10.19044/esj.2018.v14n12p384>
- Manoppo, J., Tasiringan, H., Wahani, A., Umboh, A., & Mantik, M. (2019). The role of Lactobacillus reuteri DSM 17938 for the absorption of iron preparations in children with iron deficiency anemia. *Korean Journal of Pediatrics*, 62(5), 173–178. <https://doi.org/10.3345/kjp.2018.07024>
- Millar, M., Wilks, M., & Costeloe, K. (2003). Probiotics for preterm infants? *Archives of Disease in Childhood: Fetal and Neonatal Edition*, 88(5), 354–358. <https://doi.org/10.1136/fn.88.5.f354>
- Mishra, S., Agarwal, R., Deorari, A. K., & Paul, V. K. (2008). Jaundice in the newborns. *Indian Journal of Pediatrics*, 75(2), 157–163. <https://doi.org/10.1007/s12098-008-0024-7>
- Moncrieff, G. (2018). Bilirubin in the newborn: Physiology and pathophysiology. *British Journal of Midwifery*, 26(6), 362–370. <https://doi.org/10.12968/bjom.2018.26.6.362>
- Pallin, A. (2018). *Improving the functional properties of Lactobacillus reuteri*.
- Pasha, Y., Ahmadpour-Kacho, M., Jazi, A., & Gholinia, H. (2017). *Effect of Probiotics on Serum Bilirubin Level in Term Neonates with Jaundice: A Randomized Clinical Trial*. 5. <https://doi.org/10.22038/ijp>
- Sanidad, K. Z., & Zeng, M. Y. (2020). Neonatal gut microbiome and immunity. *Current Opinion in Microbiology*, 56, 30–37. <https://doi.org/10.1016/j.mib.2020.05.011>
- Saviano, A., Brigida, M., Migneco, A., Gunawardena, G., Zanza, C., Candelli, M., Franceschi, F., & Ojetti, V. (2021). Use of probiotics in

Diarrhea and Constipation : Two Sides of the Same Coin. *Medicine*, 17938, 1–9.

Schnabl, K. L., Van Aerde, J. E., Thomson, A. B. R., & Clandinin, M. T. (2008). Necrotizing enterocolitis: A multifactorial disease with no cure. *World Journal of Gastroenterology*, 14(14), 2142–2161. <https://doi.org/10.3748/wjg.14.2142>

Serce, O., Gursoy, T., Ovali, F., & Karatekin, G. (2014a). Effects of *Saccharomyces boulardii* on Neonatal Hyperbilirubinemia: A Randomized Controlled Trial. *American Journal of Perinatology*, 30(02), 137–142. <https://doi.org/10.1055/s-0034-1376390>

Serce, O., Gursoy, T., Ovali, F., & Karatekin, G. (2014b). Effects of *Saccharomyces boulardii* on Neonatal Hyperbilirubinemia: A Randomized Controlled Trial. *American Journal of Perinatology*, 30(02), 137–142. <https://doi.org/10.1055/s-0034-1376390>

Singh A, K. T. J. I. (2024). Unconjugated Hyperbilirubinemia. *Treasure Island (FL): StatPearls* .

Soccol, C. R., Vandenberghe, L. P. de S., Spier, M. R., Medeiros, A. B. P., Yamaguishi, C. T., De Dea Lindner, J., Pandey, A., & Thomaz-Soccol, V. (2010). The potential of probiotics: A review. *Food Technology and Biotechnology*, 48(4), 413–434.

Suganthi, V. (2016). Role of *Saccharomyces boulardii* in Reduction of Neonatal Hyperbilirubinemia. *JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH*. <https://doi.org/10.7860/JCDR/2016/20115.8878>

Suganthi, V., & Gokul Das, A. (2016). Role of *Saccharomyces boulardii* in reduction of neonatal hyperbilirubinemia. *Journal of Clinical and Diagnostic Research*, 10(11), SC12–SC15. <https://doi.org/10.7860/JCDR/2016/20115.8878>

Tavakolizadeh, R., Izadi, A., Seirafi, G., Khedmat, L., & Mojtahedi, S. Y. (2018). Maternal risk factors for neonatal jaundice: a hospital-based cross-sectional study in Tehran. *European Journal of Translational Myology*, 28(3). <https://doi.org/10.4081/ejtm.2018.7618>

Teran, C., Grandy, G., & Walker-Pizarro, N. (2021). The role of probiotics in preventing neonatal hyperbilirubinemia. *Journal of Clinical Neonatology*, 10(3), 178. [https://doi.org/10.4103/jcn.jcn\\_202\\_20](https://doi.org/10.4103/jcn.jcn_202_20)

Tessema, M., Mekonnen, H., Alemu, T., Godie, Y., Teklehaimanot, W. Z., & Mengstie, L. A. (2024). Magnitude and its associated factors of

neonatal jaundice among neonates admitted to the neonatal intensive care unit of Dessie Town public hospitals, Amhara region, Ethiopia, 2020: a multicenter cross-sectional study. *Frontiers in Pediatrics*, 12. <https://doi.org/10.3389/fped.2024.1288604>

Whyte, R. (2010). *Safe discharge of the late preterm infant*. 15(10), 655–660.

## Lampiran 1



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET DAN TEKNOLOGI  
UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN  
KOMITE ETIK PENELITIAN UNIVERSITAS HASANUDDIN  
RSPTN UNIVERSITAS HASANUDDIN  
RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR  
Sekretariat : Lantai 2 Gedung Laboratorium Terpadu  
JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245.



Contact Person: dr. Agussalim Bukhari., MMed, PhD, SpGK. TELP. 081241850858, 0411 5780103, Fax : 0411-581431

### FORMULIR PERSETUJUAN SETELAH PENJELASAN (PSP) (INFORMED CONSENT)

Selamat pagi Bapak / Ibu /Saudara(i), saya dr. Nurwahyuni Rachim bermaksud untuk melakukan penelitian pengaruh pemberian probiotik *lactobacillus reuteri* terhadap kadar serum bilirubin bayi prematur

Bayi prematur merupakan salah satu masalah global yang masih perlu diperhatikan karena masih tingginya angka mortalitas dan morbiditas yang disebabkan oleh kelahiran prematur di dunia termasuk di Indonesia. Indonesia merupakan negara dengan laju kelahiran prematur ke-5 sebagai negara dengan jumlah bayi prematur terbanyak di dunia. Probiotik merupakan mikroorganisme hidup yang bila diberikan dalam jumlah yang cukup dapat memberikan manfaat. Penelitian dalam sepuluh tahun terakhir menunjukkan bahwa pemberian probiotik dapat meningkatkan kolonisasi mikroba usus dalam mencegah atau mengobati penyakit pada bayi terutama pada bayi prematur.

Diharapkan hasil penelitian ini bisa memberikan informasi secara ilmiah mengenai pengaruh probiotik *lactobacillus reuteri* terhadap kadar serum bilirubin. Selain itu, hasil penelitian ini diharapkan dapat menjadi dasar penambahan protokol dalam perawatan bayi prematur untuk mengobati dan mencegah kejadian hiperbilirubinemia

Kami akan mencatat identitas bayi bapak/ibu (nama, alamat, tanggal lahir) dan riwayat kehamilan. Selanjutnya akan dilakukan pemeriksaan meliputi pengukuran berat badan, tinggi badan, lingkar kepala dan usia gestasi.

Kemudian kami akan melakukan pengambilan serum untuk diperiksa kadar bilirubin ke laboratorium sebelum dan setelah pemberian probiotik sebanyak 5 tetes dicampur ke ASI atau susu formula, yang diberikan selama 7 hari. Semua biaya pemeriksaan akan ditanggung oleh peneliti dan penderita tidak akan diberikan kompensasi.

Efek samping pemberian probiotik sangat jarang terjadi, namun jika terjadi dapat berupa diare dan muntah. Diare ditandai dengan perubahan pola buang air besar dengan frekuensi lebih dari 3 kali dalam sehari dan encer. Sedangkan muntah jika terjadi pengeluaran ASI atau susu dari saluran cerna ke mulut secara tiba-tiba, maka saya akan segera melakukan tatalaksana medis untuk kondisi tersebut..

Keikutsertaan anak bapak/ibu dalam penelitian ini bersifat sukarela tanpa paksaan, karena itu bapak/ibu bisa menolak ikut atau berhenti ikut dalam penelitian ini. Untuk mengetahui secara mendetail mengenai penelitian ini atau ada hal-hal yang belum jelas, dapat menghubungi saya dengan nomor telepon 081342303082.

Semua data dari penelitian ini akan dicatat dan dipublikasikan tanpa membuka data pribadi anak ibu/ bapak. Data pada penelitian ini akan dikumpulkan dan disimpan dalam *file* manual maupun elektronik, diaudit dan diproses serta dipresentasikan pada:

- Forum ilmiah Departemen Ilmu Kesehatan Anak Universitas Hasanuddin
- Publikasi pada Jurnal Ilmiah dalam maupun luar negeri

Setelah membaca dan mengerti atas penjelasan yang kami berikan mengenai pentingnya mengetahui pengaruh probiotik *lactobacillus reuteri* pada bayi prematur, maka kami harapkan bapak/ibu menandatangani surat persetujuan mengikuti penelitian. Atas kesedian dan kerjasamanya, saya mengucapkan terima kasih.

#### Identitas Peneliti

Nama : dr. Nurwahyuni Rachim

Alamat : Perumahan Antara Residence, Jl. Antara Raya No.4

No Hp : 081342303082

## Lampiran 2



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET DAN TEKNOLOGI  
UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN  
KOMITE ETIK PENELITIAN UNIVERSITAS HASANUDDIN  
RSPTN UNIVERSITAS HASANUDDIN  
RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR  
Sekretariat : Lantai 2 Gedung Laboratorium Terpadu  
JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245.



Contact Person: dr. Agussalim Bukhari.,MMed,PhD, SpGK TELP. 081241850858, 0411 5780103, Fax : 0411-581431

### FORMULIR PERSETUJUAN SETELAH PENJELASAN

Saya yang bertandatangan di bawah ini :

Nama : .....  
Umur : .....  
Masa Kerja : .....  
Satuan : .....  
Alamat : .....  
.....

setelah mendengar/membaca dan mengerti penjelasan yang diberikan mengenai tujuan, manfaat, dan apa yang akan dilakukan pada penelitian ini, menyatakan setuju untuk ikut dalam penelitian ini secara sukarela tanpa paksaan.

Saya tahu bahwa keikutsertaan saya ini bersifat sukarela tanpa paksaan, sehingga saya bisa menolak ikut atau mengundurkan diri dari penelitian ini. 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. Saya percaya bahwa keamanan dan kerahasiaan data penelitian akan terjamin dan saya dengan ini menyetujui semua data saya yang dihasilkan pada penelitian ini untuk disajikan dalam bentuk lisan maupun tulisan.

Dengan membubuhkan tandatangan saya di bawah ini, saya menegaskan keikutsertaan saya secara sukarela dalam studi penelitian ini.

	<b>Nama</b>	<b>Tanda tangan</b>	<b>Tgl/Bln/Thn</b>
Responden	.....	.....	.....
/Wali			
Saksi 1	.....	.....	.....
Saksi 2	.....	.....	.....



(Tanda Tangan Saksi diperlukan hanya jika Partisipan tidak dapat memberikan consent/persetujuan sehingga menggunakan wali yang sah secara hukum, yaitu untuk partisipan berikut:

1. Berusia di bawah 18 tahun
2. Usia lanjut
3. Gangguan mental
4. Pasien tidak sadar
5. Dan lain-lain kondisi yang tidak memungkinkan memberikan persetujuan

**Penanggung Jawab Penelitian**

Nama : dr. Nurwahyuni Rachim  
Alamat : Perumahan Antara Residence,  
Jl. Antara Raya no.4  
Telepon: 081342303082

**Penanggung Jawab Medis**

Nama : Dr. dr. Ema Alasiry, SpA(K)  
Alamat : Jl. RutanNo. 38 B, Makassar  
Telepon : 085398933781

### Lampiran 3. Rekomendasi Persetujuan Etik



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN  
 UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN  
 KOMITE ETIK PENELITIAN KESEHATAN  
 RSPTN UNIVERSITAS HASANUDDIN  
 RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR  
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JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245.  
 Contact Person: dr. Agussalim Bukhari.,MMed,PhD, SpGK TELP. 081241850858, 0411 5780103, Fax : 0411-581431

Keputusan Protokol Amandemen  
 No.455/UN4.6.4.5.31/PP36/2024

Nomor Protokol : UH24020070

Judul Protokol : PENGARUH PEMBERIAN PROBIOTIK LACTOBACILLUS REUTERII TERHADAP KADAR SERUM BILIRUBIN BAYI PREMATUR						
Nama Peneliti	: dr. Nurwahyuni Rachim					
Institusi	: I. Kesehatan Anak					
Review Protokol Amandemen Ya <input checked="" type="checkbox"/> Tidak <input type="checkbox"/>	Tanggal review sebelumnya 20 Maret 2024					
Tanggal Fullboard	-					
Keputusan	<input checked="" type="checkbox"/> Disetujui <input type="checkbox"/> Disetujui dengan Modifikasi amandemen dan informed consent <input type="checkbox"/> Dihentikan, sambil menunggu informasi lanjut (3) <input type="checkbox"/> Butuh informasi lanjut, tetap berjalan dengan protokol sebelumnya (4) <input type="checkbox"/> Ditolak, bisa lanjut dengan persetujuan sebelumnya (5)					
Tempat Penelitian :	RS Universitas Hasanuddin, RSUP Dr. Wahidin Sudirohusodo dan RS Cahaya Medika Makassar					
No. Versi Protokol	2					
No. Versi Informed Consent	2					
No.	Nama Reviewer	Keputusan				
		1	2	3	4	5
1		✓				

Makassar, 20 Juni 2024  
 Sekretaris

Ketua

Prof. dr. Muh Nasrum Massi, PhD,SpMK(K)  
 NIP 196709101996031001



dr. Firdaus Hamid, PhD, SpMK  
 NIP 197712312002121002

## Lampiran 4. Surat Izin Penelitian



Kementerian Kesehatan  
RS Wahidin Sudirohusodo

Jalan Perintis Kemerdekaan KM. 11, Tamalanrea, Makassar 90245  
(0411)583333 / (0411)582888  
[www.rsupwahidin.com](http://www.rsupwahidin.com)

Nomor : DP.04.03/D.XIX.2/12358/2024  
Hal : Izin Penelitian

26 Juni 2024

Yth. Ketua Program Studi Ilmu Kesehatan Anak  
Fakultas Kedokteran Universitas Hasanuddin

Sehubungan dengan surat saudara nomor **10951/UN4.6.8/PT.01.04/2024**, tertanggal **5 Juni 2024**, hal **Permohonan Izin Penelitian**, dapat kami fasilitasi dan memberikan izin pelaksanaan penelitian kepada:

Nama : **dr. Nurwahyuni Rachim**  
NIM : **C105201003**  
Prog. Pend. : **PPDS Ilmu Kesehatan Anak**  
No. HP : **081342303082**  
Judul : **Pengaruh Pemberian Probiotik *Lactobacillus Reuterii* terhadap Kadar Serum Bilirubin Bayi Prematur**  
Jangka Waktu : **Tiga Bulan Setelah Surat ini di Keluarkan**  
Lokasi : **Perawatan NICU;**

Dengan ketentuan sebagai berikut :

1. Mengikuti seluruh peraturan dan ketentuan penelitian yang berlaku di lingkup RS Wahidin Sudirohusodo
2. Sebelum meneliti, peneliti wajib melapor kepada Pengawas Penelitian di masing-masing unit yang menjadi lokasi penelitian dan mengikuti syarat administrasi di *Clinical Research Unit* (CRU)
3. Pelaksanaan penelitian tidak mengganggu proses pelayanan, dan mendukung upaya peningkatan mutu pelayanan serta keselamatan pasien
4. Pemeriksaan penunjang, Bahan Habis Pakai (BHP) dan lain-lain yang digunakan dalam penelitian, menjadi tanggung jawab peneliti, tidak dibebankan kepada pasien ataupun RS
5. Peneliti melaporkan proses penelitian secara periodik serta hasil penelitian di akhir waktu penelitian di link <https://s.id/SisterElit>
6. Mencantumkan nama RS Wahidin Sudirohusodo sebagai afiliasi institusi dalam naskah dan publikasi penelitian
7. Surat Keterangan Selesai Penelitian menjadi salah satu syarat untuk mengikuti Seminar Hasil Penelitian
8. Bukti Penyerahan Skripsi/Thesis/Disertasi ke RS Wahidin Sudirohusodo menjadi syarat penyelesaian studi

Mohon dapat dipastikan agar ketentuan tersebut dipenuhi peneliti sebelum menyelesaikan studi di institusi saudara. Atas perhatian dan kerjasama yang baik, diucapkan terima kasih.





Dr. Nu'man As Daud, Sp.PD, K-GEH, FINASIM  
Direktur Utama  
Direktur SDM, Pendidikan dan Penelitian,

Dr. Nu'man As Daud, Sp.PD, K-GEH, FINASIM  
NIP 197112142000031004

Tembusan:

1. Kepala Instalasi Rawat Intensif
2. Kepala Sub Instalasi Pelayanan Intensif Anak (PICU dan NICU)

Kementerian Kesehatan tidak menerima suap dan/atau gratifikasi dalam bentuk apapun. Jika terdapat potensi suap atau gratifikasi silahkan laporkan melalui HALO KEMENKES 1500567 dan <https://wbs.kemkes.go.id>. Untuk verifikasi keaslian tanda tangan elektronik, silahkan unggah dokumen pada laman <https://tte.kominfo.go.id/verifyPDF>.

<b>SURAT IZIN PENELITIAN</b>			
 <b>RUMAH SAKIT PENDIDIKAN UNIVERSITAS HASANUDDIN</b>	<table border="1" style="width: 100%;"> <tr> <td style="text-align: center;"><b>Nomor:</b> 6102/UN4.24.1.1/PT.01.04/2024</td> <td style="text-align: center;"><b>Tanggal</b> 01 Juli 2024</td> </tr> </table>	<b>Nomor:</b> 6102/UN4.24.1.1/PT.01.04/2024	<b>Tanggal</b> 01 Juli 2024
<b>Nomor:</b> 6102/UN4.24.1.1/PT.01.04/2024	<b>Tanggal</b> 01 Juli 2024		
<b>FORMULIR 03  PENDIDIKAN DAN PENELITIAN</b>	Kepada Yth <b>Kepala Instalasi Perawatan Intensif Kepala Ruang NICU</b>		
<p>Dengan hormat,</p> <p>Dengan ini menerangkan bahwa peneliti/ mahasiswa berikut ini:</p> <p>Nama : dr. Nurwahyuni Rachim            NIM / NIP : C105201003            Institusi/Universitas : Ilmu Kesehatan Anak, Fakultas Kedokteran, Universitas Hasanuddin, Makassar            Kode penelitian : 240701_2</p> <p>Akan melakukan pengambilan data/ analisa bahan hayati:</p> <p>Terhitung : 09 Juli 2024 s/d 09 Oktober 2024            Jumlah Subjek/Sample : 30            Jenis Data : Data Primer : Sampel Darah</p> <p>Untuk penelitian dengan judul:  <b>"Pengaruh Pemberian Probiotik Lactobacillus Reuterii terhadap Kadar Serum Bilirubin Bayi Prematur"</b></p> <p>Harap dilakukan pembimbingan dan pendampingan seperlunya.</p> <p>Manager Pendidikan dan Penelitian,</p> <p>  <b>dr. Masriani M. Kes., Sp.An-KIC</b>  <b>NIP. 198312222010012003</b></p> <p><i>Catatan: Lembaran ini diarsipkan oleh Admin Penelitian</i></p>			



**PT CAHAYA MEDIKA SEJAHTERA**  
**RUMAH SAKIT UMUM CAHAYA MEDIKA**

Jl. Perintis Kemerdekaan Km 0 No.27, Kec. Tamalanrea, Kota Makassar No.Hp: 085100909800  
E-Mail : cahayamedikarsu@gmail.com



Nomor : 038.B/TU/RSU-CM/VI/2024  
Lamp : -  
Perihal : Izin Penelitian

Kepada.  
Yth. Ketua Program Studi Ilmu Kesehatan Anak Universitas Hasanuddin  
di  
Tempat

Dengan Hormat,

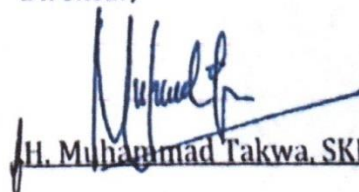
Sehubungan dengan surat yang kami terima dengan nomor B12020/UN4.6.8/PT.01.04/2024 tentang izin penelitian dengan judul "**Pengaruh Pemberian Probiotik Lactobacillus Reuterii terhadap Kadar Serum Bilirubin Bayi Prematur**", maka dengan ini menyetujui dan memberikan izin kepada :

Nama : dr. Nurwahyuni Rachim  
N I M : C105201003  
Program Studi : Dokter Spesialis Ilmu Kesehatan Anak  
Unit Kerja : Fakultas Kedokteran Universitas Hasanuddin

Untuk melakukan penelitian dirumah sakit kami dengan tetap mematuhi kebijakan dan aturan yang berlaku

Demikian surat ini kami sampaikan, sekian dan terima kasih.

Makassar, 24 Juni 2024  
RSU Cahaya Medika  
Direktur,

  
H. Muhammad Takwa, SKM, M.Kes

## Lampiran 5. Matrik Penelitian

NO	NAMA	RM	Jenis kelamin	Tanggal lahir	UG	BBL	PBL	LK	Diagnosis	Tanda Vital			
										HR	N	S	SpO2
1	By NAP	1151525	Perempuan	3/20/2024	32 minggu	2.455 gram	40	30	RDN + BKB/SMK + BBLR	150	65	36.5	97
2	By NN	1166961	Perempuan	4/29/2024	34 minggu	1.550 gram	42	29.5	RDN e.c HMD gr 1 + Hipoalbuminemia + BBLR +bkb/smk	150	64	36.5	97
3	By NF	1169154	Perempuan	5/2/2024	31 minggu	1.765 gram	34	23	RDN e.c HMD gr 2 + BKB/SMK + BBLR	130	55	36.5	97
4	By NM	1176980	Laki-laki	5/24/2024	33 minggu	2250 gram	41	27	RDN E.C PNEUMONIA	149	50	36.8	99
5	By NPT	1190603	Laki-laki	6/27/2024	33 minggu	1.240 gram	41	30	RDN e.c pneumonia+BKB/SMK + susp PJB asianotik e.c PDA	138	58	36.5	97
6	By NAP	55745	Perempuan	7/4/2024	36 minggu	1685 gram	47	30	RDN + BKB/KMK+BBLR	148	44	36.5	98
7	By NAS	1191445	Perempuan	7/5/2024	36 minggu	2055 gram	44	30.5	RDN e.c pneumonia	143	52	36.6	99
8	By NG	1191421	Laki-laki	7/5/2024	32 minggu	1.600 gr	39	29	RDN e.c HMD grade 1	142	68	36.8	98
9	By NS	55895	Laki-laki	7/9/2024	35 minggu	2360 gram	45	323	BBLR +RDN + BKB/SMK + FFEDING PROBLEM	132	44	36.8	97
10	By NJ	55953	Perempuan	7/11/2024	36 minggu	2285 gram	46	30	bblr + RDN	134	47	36.6	98
11	By NH	56088	Perempuan	7/15/2024	36 minggu	2240 gram	43	33	RDN + BKB/SMK	136	56	36.9	97
12	By NN	1198232	Laki-laki	7/17/2024	34 minggu	1945 gram	40	29	RDN e.c HMD grade 1	138	69	36.5	97
13	By NHS	56311	Laki-laki	7/24/2024	36 minggu	2265 gram	44	31	rdn+ bcb/smk	149	59	36.5	97
14	By NAI	1205525	Laki-laki	7/25/2024	34 minggu	2.690 gram	49	31	RDN e.c HMD + Susp LIPOMA + BKB/SMK	148	60	36.5	99
15	By NAW	56378	Laki-laki	7/26/2024	33 minggu	1855 gram	44	30	RDN	110	50	36.7	97
16	By NU	227934	Laki-laki	7/29/2024	36 minggu	1780 gram	42	31	BBLR + RDN	138	48	36.9	97
17	By NR	56496	Perempuan	7/30/2024	36 minggu	2185 gram	46	33	RDN + BCB/SMK	140	49	36.6	97
18	By ND	227997	Perempuan	7/30/2024	36 minggu	1890 gram	44	30	RDN e.c HMD grade 1	140	45	36.5	96
19	By NH	56521	Laki-laki	7/31/2024	34 minggu	2435 GRAM	48	34	RDN + BCB/SMK	134	45	36.7	97
20	By NL	56636	Perempuan	8/3/2024	32 minggu	1875 gram	46	32	BBLR + RDN + BKB/KMK	142	50	36.8	98
21	By NK	56642	Laki-laki	8/4/2024	29 minggu	1700 gram	43	27	RDN + feeding problem	143	50	36.9	96
22	By SY	121886	Perempuan	8/7/2024	34 minggu	1695 gram	41	29	RDN e.c hmd gr 1 + BKB/SMK + BBLR	146	44	36.5	96
23	By NF	56801	Perempuan	8/9/2024	36 minggu	2260 gram	46	34	RDN + BBLR + BKB/SMK	130	55	36.5	96
24	By SC	1216599	Perempuan	8/12/2024	34 minggu	2035 gram	49	32	RDN e.c hmd + BBLR + BKB/SMK + TOF	144	35	36.6	93
25	By IS	56922	Laki-laki	8/13/2024	30 minggu	1705 gram	43	29	BBLR/KMK + RDN	130	48	36.9	98
26	By NA	1216741	Perempuan	8/13/2024	32 minggu	1900 gram	40	31	RDN e.c HMD gr 2 + BBLR + BKB/SMK	145	66	36.5	95
27	B NI	57005	Laki-laki	8/15/2024	35 MINGGU	2215 gram	46	33	BBLR + BKB/SMK + RDN	140	49	36.9	97
28	By NS	1216956	Perempuan	8/15/2024	34 minggu	1700 gram	41	30	RDN HMD gr 1 + BBLR + BKB/SMK	130	30	36.5	98
29	By NR	57012	Laki-laki	8/16/2024	36 minggu	2200 gram	46	29	RDN + PROBLEM FEEDING	136	48	36.8	98
30	BY NE	57059	Perempuan	8/17/2024	34 minggu	2100 gram	44	29	RDN + FEEDING PROBLEM	136	47	36.6	97
31	By NH	57033	Perempuan	8/17/2024	36 minggu	2320 gram	42	33	BBLR + RDN	146	46	36.7	98
32	By NU	57108	Laki-laki	8/20/2024	36 minggu	2230 gram	45	31	RDN + BCB/KMK+BBLR	155	48	36.5	96
33	By NY	57327	Perempuan	8/27/2024	36 minggu	2295 gram	48	33	BBLR +RDN + BKB/KMK	130	48	36.9	98
34	By NP	57364	Laki-laki	8/28/2024	34 minggu	2075 gram	46	29	BBLR + BKB/KMK + RDN	146	45	36.7	98
35	By NM	57408	Perempuan	8/30/2024	32 minggu	1380 gram	48	32	RDN + BBLASR + BKB/SMK	136	42	36.5	98
36	By NT	57453	Perempuan	8/31/2024	36 minggu	2190 gram	45	33	BBLR + RDN +BKB/SMK + FFEDING PROBLEM	144	48	36.7	96
37	By NE	1230120	Perempuan	9/5/2024	36 minggu	2190 gram	45	32	RDN + BBLR + BKB/SMK	153	58	36.7	93
38	By NN	567675	Laki-laki	9/7/2024	36 minggu	2370 gram	46	33	RDN + BKB/KMK + BBLR	143	46	36.6	97
39	By NH	1230580	Perempuan	9/10/2024	34 minggu	1920 gram	43	29	RDN + BBLR + BKB/SMK	124	42	36.7	94
40	By NR	56410	Perempuan	25/07/204	36 minggu	2100 gram	43	31	RDN +feeding problem	149	59	36.5	97

NO	NAMA	Faktor Resiko Ibu	Feeding	Usia sebelum pemberian Probiotik ( jam)	Sebelum Intervensi			Usia saat Ikterus Kr.IV dan Kr.V
			ASI/SUFOR		Bil Total	Bil. Direct	Albumin	
1	By NAP	SC a/I G1P0A0 Gr 35 minggu + Fetal hidronefrosis + Susp Fetal Atresia Ani + Oligohidramnion	ASI	72	11.56	0.47	3.6	--
2	By NN	SC a.i G3P2A0 35 minggu + Placenta akreta + Post sc 2x	ASI	72	7.21	0.34	2.5	--
3	By NF	SC a/I G3P2A0 gr 31 minggu + Post SC 2x + Plasenta Akreta + spektrum disorder	ASI	72	7.5	0.64	3.5	--
4	By NM	SC a.i G3P2A0 Gr 33 minggu + superimposed preeklampsia + PJT + Fetal distress	sufor	72	6.51	0.99	3.1	--
5	By NPT	PPN G3P2A0 gr 31 minggu + PEB + Susp CHF + asites, edema anasarka	sufor	72	10.4	0.46	2.8	--
6	By NAP	sc a.i g2p0a1 gr 36 minggu + kpd + gawat janin	sufor	72	7.21	0.49	3	--
7	By NAS	PPN G1P0A0 Gr 34-35 minggu + KPD	ASI	72	7.05	0.49	3	6 hari
8	By NG	SC a/I G2P1A0 gr 28-30 minggu inpartu kala 1 fase aktif + atrial fibrillation rvr + CHF NYHA III	sufor	72	12	0.67	3.5	5 hari
9	By NS	ppn	ASI	72	7.53	0.52	3.4	--
10	By NJ	sc a.i G3P1A1 gr 34-35 minggu + KPD + Oligohidramnion	sufor	72	10.5	0.67	3.2	6 hari
11	By NH	sc a.i g3p2a0 gr 36 minggu + letak oblique	asi	72	12.31	0.5	3.6	--
12	By NN	G4P3A0 Gravid 36 minggu belum inpartu + post sc 3x	ASI	72	9.67	0.38	3.1	8 hari
13	By NHS	sc a.i g2p1a0 gr 36-37 minggu + inpartu kala 1 fase laten post sc 1x	asi	72	10.66	0.58	3.8	--
14	By NAI	SC a/I G2P0A1 GR 35 minggu + PEB berat	ASI	72	7.6	0.51	3.6	5 hari
15	By NAW	SC a.i G5P4A0 Gr 32-33 minggu + uterus kontraktif + post trauma + lilitan pusat 3 x	sufor	72	9.3	1.1	3	5 hari
16	By NU	G3P3A0 Gravid 36 minggu belum inpartu + post sc 3x	sufor	72	10.07	0.55	3	4 hari
17	By NR	SC a.i G1P0A0 gr 37-38 minggu + PJT + PEB	ASI	72	8.9	0.56	3.8	9 hari
18	By ND	sc g3p2a0 gr 35-36 minggu + letak bokong + gawat janin	ASI	72	7.21	0.52	3.5	--
19	By NH	sc a.i g2p0a1 gr 36 minggu + kpd + gawat janin	sufor	72	12.35	0.59	2.7	5 hari
20	By NL	SC a.i G2P1A0 gr 32 minggu + uterus kontraktif + susp pjt + gawat janin	sufor	72	12.8	0.65	3.7	6 hari
21	By NK	ppn	asi	72	6.83	0.46	3.5	5 hari
22	By SY	SC a/I G2P0A1 GR 34 minggu + PEB + PJT + Oligohidramnion	Sufor	72	8.1	0.3	3.8	5 hari
23	By NF	SC a.i G3P2A0 Gr 31 minggu + post sc 2x + Plasenta akreta spektrum disorder	ASI	72	12.41	0.56	3.5	--
24	By SC	SC a/I G2P1A0 GR 34 MINGGU + Plasenta previa + post sc 1 x	sufor	72	8.55	0.37	2.9	--
25	By IS	SC a.i G4P2A1 gr 30-31 minggu + perdarahan antepartum + placenta previa	sufor	72	11.44	0.61	3.3	7 hari
26	By NA	SC a/I G4P3A0 gr 32 minggu 3 hari + Placenta previa suspek placenta akreta + Post SC 3x + Akseptor kontak	sufor	72	4.52	0.52	3.4	5 hari
27	B NI	sc a.i g3p2a0 gr 35-36 minggu + letak bokong + gawat janin	asi	72	13.7	0.59	3.3	4 hari
28	By NS	SC a/I G1P0A0 gr 35 minggu + Preeklampsia + Tanda Impeding + IUGR	ASI	72	8.5	0.51	3.7	9 hari
29	By NR	ppn	sufor	72	12.57	0.54	4.2	--
30	BY NE	PPN	ASI	72	12.21	0.82	3.3	6 hari
31	By NH	sc a.i g3p2a0 gr 36-37 minggu + post sc 2x + peb + oligo hidramnion	asi	72	12.07	1.1	3.4	4 hari
32	By NU	sc a.i g3p2a0 gr 35-36 minggu + letak bokong	sufor	48	8.28	0.69	3.2	5 hari
33	By NY	SC a.i G2P1A0 gr 36-37 minggu + post sc 1x + peb	sufor	72	11.3	0.7	4	5 hari
34	By NP	SC a.i G1P0A0 gr 34-35 minggu + uterus kontraktif	sufor	72	12.1	0.8	3.3	6 hari
35	By NM	sc a.i g2p1a0 gr 36-37 minggu + inpartu kala 1 fase laten post sc 1x	ASI+sufor	72	11.9	0.9	3.8	5 hari
36	By NT	sc a.i G3P1A1 gr 34-35 minggu + KPD + Oligohidramnion	Sufor	72	8.37	0.73	3.6	--
37	By NE	SC a.i G5P3A1 Gr 36 minggu + Plasenta Previa Totalis susp PASD + Letak Lintang + post sc 2x	Asi	72	9.71	0.4	3.2	--
38	By NN	ZSC a/I G2P1A0 gr 36 minggu + gawat janin + post sc 1x	ASI + sufor	72	7.65	0.42	3.1	--
39	By NH	G4P2A1 Gravid 34 Minggu 4 Hari + Plasenta Previa Totalis + Susp PASD + Post SC 2x + Intra uterine growth restriction	Sufor	72	10.5	0.62	3.2	--
40	By NR	ppn	asi	72	10.2	0.41	3	--

NO	NAMA	Lab saat Ikterus Kr. IV dan V			Fototerapi ya/tidak	Setelah Intervensi 7 hari			BB setelah intervensi	Kebutuhan Minum	Usia setelah intervensi 7 hari	Laboratorium			Ket
		Bil. Total	Bil.Direct	Albumin		Bil. Total	Bil. Direct	Albumin				Hb	Leukosit	Platelet	
1	By NAP	-	-	-	TIDAK	8.41	0.5	2.7	2750	60 cc/kgbb	10 hari	12.3	10,000	409,000	kasus
2	By NN	-	-	-	TIDAK	4.25	1.69	4	1595	50cc/kg bb	10 hari	11.6	15,700	531,000	kontrol
3	By NF	-	-	-	TIDAK	5.12	0.46	3.5	2130	50cc/kg bb	10 hari	13.9	5,800	508,000	kontrol
4	By NM	-	-	-	TIDAK	1.4	0.68	2.9	2270	90 cc/kgbb	10 hari	17.8	8,900	155,000	kontrol
5	By NPT	-	-	-	TIDAK	9.58	1.1	3	1380	50cc/kg bb	10 hari	15.7	11,600	162,000	kontrol
6	By NAP	-	-	-	TIDAK	6.26	0.52	4.4	1650	50cc/kg bb	10 hari	13.2	7,300	380,000	kontrol
7	By NAS	11.21	0.49	3	YA	8.8	0.56	3.8	2035	50cc/kg bb	10 hari	13.2	7,100	345,000	kasus
8	By NG	12.05	0.67	3.5	YA	5.2	0.44	3.1	1750	50cc/kg bb	10 hari	12.4	5,500	385,000	kasus
9	By NS	-	-	-	TIDAK	4.7	0.41	3.5	2045	30cc/kg bb	10 hari	18	15,400	325,000	kontrol
10	By NJ	15	1	3.3	YA	6.6	0.7	3.3	2270	70 cc/kgbb	10 hari	15.4	12,100	259,000	kontrol
11	By NH	-	-	-	TIDAK	5.31	0.54	3.4	2195	75 cc/kg bb	10 hari	17.4	19,100	207,000	kasus
12	By NN	15.7	0.87	3.6	YA	5.21	0.27	3.1	1800	50 cc/kg bb	10 hari	13.3	14,100	581,000	kontrol
13	By NHS	-	-	-	TIDAK	2.1	0.31	3.6	2180	75 cc/kg bb	10 hari	15.9	14,400	272,000	kasus
14	By NAI	11.95	0.92	2.9	YA	5.75	0.51	3.3	2655	50cc/kg bb	10 hari	11.4	9,800	589,000	kontrol
15	By NAW	19.8	1.1	3	YA	4.23	0.41	3	1790	30cc/kg bb	10 hari	16.3	11,100	365,000	kasus
16	By NU	-	-	-	TIDAK	4.55	0.6	3	1810	50 cc/kg bb	10 hari	13.5	7,900	327,000	kontrol
17	By NR	20.4	1.3	3.9	YA	9.1	1	8.1	2240	90 cc/kgbb	10 hari	16.8	8,700	233,000	kasus
18	By ND	12	0.56	3.5	YA	2.31	0.35	3.5	2140	70 cc/kgbb	10 hari	16.8	8,600	264,000	kasus
19	By NH	20.3	1.3	2.6	YA	9.8	1	2.6	2400	30 cc/kgbb	10 hari	15.6	33,900	300,000	kasus
20	By NL	22	1.4	3.7	YA	10.9	1	3.7	1945	40 cc / kgbb	10 hari	18.4	15,200	296,000	kasus
21	By NK	19.6	1.2	3.2	YA	1.56	0.43	3.5	1960	90 cc/kgbb	10 hari	16.2	33,800	309,000	kasus
22	By SY	10.39	0.78	3.8	YA	6.04	0.39	3.9	1655	40 cc/g bb	10 hari	17.9	15,900	233,000	kontrol
23	By NF	-	-	-	TIDAK	5.12	0.46	3.5	2300	50cc/kg bb	10 hari	15.3	10,100	261,000	kasus
24	By SC	-	-	-	TIDAK	4.25	0.52	3	2065	45 cc/kgbb	10 hari	10.7	6,500	160,000	kasus
25	By IS	15.2	1.2	3.3	YA	9.2	0.9	3.4	1570	50 cc/kg bb	10 hari	13.1	6,900	418,000	kasus
26	By NA	13.24	0.51	3.4	YA	2.7	0.73	3.4	2030	50 cc/kg bb	10 hari	15.7	12,600	348,000	kasus
27	B NI	19.8	1.4	3.3	YA	8.6	9	3.3	2020	55 cc/kgbb	10 hari	15.4	9,800	280,000	kasus
28	By NS	10.39	0.71	3.7	YA	4.21	0.46	3.8	1850	70cc/kgbb	10 hari	16.7	12,000	212,000	kontrol
29	By NR	-	-	-	TIDAK	3.21	0.42	4.2	2055	90 cc/kgbb	10 hari	19.4	12,000	294,000	kasus
30	BY NE	18.1	1.2	3	YA	8.12	0.6	3.1	1995	90 cc/kgbb	10 hari	15.8	11,400	178,000	kasus
31	By NH	19	1.1	3.4	YA	9.7	0.9	3.4	2170	90 cc/kgbb	10 hari	16.5	9,100	206,000	kontrol
32	By NU	18.5	1.1	4.4	YA	8.4	1	3.4	1950	80 cc/kg bb	10 hari	16	27,700	368,000	kontrol
33	By NY	18.9	1.1	4	YA	9.8	1	4	2295	75 cc/kg bb	10 hari	18.5	15,000	165,000	kontrol
34	By NP	19.9	1.2	3.4	YA	9.7	0.9	3.5	2025	30 cc/kgbb	10 hari	16.8	16,200	309,000	kontrol
35	By NM	19.8	1.2	3.8	YA	9.1	0.8	3.8	2310	60cc/kg bb	10 hari	15.7	9,100	310,000	kasus
36	By NT	-	-	-	TIDAK	4.8	0.54	3.8	2150	50cc/kg bb	10 hari	14.2	10,100	282,000	kontrol
37	By NE	-	-	-	TIDAK	5.8	0.57	3	2190	50cc/kg bb	10 hari	13.7	12,900	202,000	kontrol
38	By NN	-	-	-	TIDAK	5.82	0.51	3.1	2305	50cc/kg bb	10 hari	13.6	10,900	322,000	kontrol
39	By NH	-	-	-	TIDAK	6.82	0.43	3	2020	50cc/kg bb	10 hari	14.1	20,400	245,000	kontrol
40	By NR	-	-	-	TIDAK	5.21	0.41	3.1	2220	60cc/kg bb	10 hari	17.4	13,500	280,000	Kontrol



## Lampiran 6. Olahdata SPSS

DATASET ACTIVATE DataSet1.

```
EXAMINE VARIABLES=BilPretfototerapi BilirubinPost deltapredanpostfototerapi BY Probiotik
/PLOT BOXPLOT NPLOT
/COMPARE GROUPS
/STATISTICS DESCRIPTIVES
/CINTERVAL 95
/MISSING LISTWISE
/NOTOTAL.
```

### Explore

		Notes
Output Created		20-OCT-2024 20:36:11
Comments		
Input	Data	H:\Kerjaan\hasil probiotik dan bilirubin\phototerapi.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	22
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=BilPretfototerapi BilirubinPost deltapredanpostfototerapi BY Probiotik /PLOT BOXPLOT NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /CINTERVAL 95 /MISSING LISTWISE /NOTOTAL.
Resources	Processor Time	00:00:00,44
	Elapsed Time	00:00:00,78

[DataSet1] H:\Kerjaan\hasil probiotik dan bilirubin\phototerapi.sav

### Descriptives

Probiotik		Statistic	Std. Error
BilPretfototerapi	Ya	Mean	15.5000
		95% Confidence Interval for Mean	1.13270
		Lower Bound	13.0529
		Upper Bound	17.9471
		5% Trimmed Mean	15.4228
		Median	15.4500
		Variance	17.962
		Std. Deviation	4.23819
	Minimum	10.39	

		Maximum		22.00	
		Range		11.61	
		Interquartile Range		8.06	
		Skewness		.088	.597
		Kurtosis		-1.730	1.154
	Tidak	Mean		17.9388	1.13377
		95% Confidence Interval for Mean	Lower Bound	15.2578	
			Upper Bound	20.6197	
		5% Trimmed Mean		18.1758	
		Median		19.3500	
		Variance		10.283	
		Std. Deviation		3.20678	
		Minimum		11.21	
		Maximum		20.40	
		Range		9.19	
		Interquartile Range		4.00	
		Skewness		-1.696	.752
		Kurtosis		2.236	1.481
BilirubinPost	Ya	Mean		6.3786	.81328
		95% Confidence Interval for Mean	Lower Bound	4.6216	
			Upper Bound	8.1356	
		5% Trimmed Mean		6.3951	
		Median		5.8950	
		Variance		9.260	
		Std. Deviation		3.04302	
		Minimum		1.56	
		Maximum		10.90	
		Range		9.34	
		Interquartile Range		5.49	
		Skewness		-.111	.597
		Kurtosis		-1.278	1.154
	Tidak	Mean		8.2163	.67014
		95% Confidence Interval for Mean	Lower Bound	6.6316	
			Upper Bound	9.8009	
		5% Trimmed Mean		8.3497	
		Median		8.9500	
		Variance		3.593	
		Std. Deviation		1.89544	
		Minimum		4.23	
		Maximum		9.80	
		Range		5.57	
		Interquartile Range		2.50	
		Skewness		-1.643	.752
		Kurtosis		2.320	1.481
deltapredanpostfotot erapi	Ya	Mean		9.1214	.90539
		95% Confidence Interval for Mean	Lower Bound	7.1654	
			Upper Bound	11.0774	
		5% Trimmed Mean		8.8910	

	Median		9.4950	
	Variance		11.476	
	Std. Deviation		3.38767	
	Minimum		4.35	
	Maximum		18.04	
	Range		13.69	
	Interquartile Range		4.46	
	Skewness		1.221	.597
	Kurtosis		2.811	1.154
Tidak	Mean		9.7225	1.29295
	95% Confidence Interval for Mean	Lower Bound	6.6651	
		Upper Bound	12.7799	
	5% Trimmed Mean		9.8039	
	Median		10.1500	
	Variance		13.374	
	Std. Deviation		3.65703	
	Minimum		2.41	
	Maximum		15.57	
	Range		13.16	
	Interquartile Range		2.58	
	Skewness		-.735	.752
	Kurtosis		2.842	1.481

#### Tests of Normality

	Probiotik	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
BilPretfoterapi	Ya	.221	14	.063	.884	14	.066
	Tidak	.319	8	.016	.758	8	.010
BilirubinPost	Ya	.145	14	.200*	.942	14	.448
	Tidak	.289	8	.049	.802	8	.030
deltapredanpostfoterapi	Ya	.198	14	.141	.889	14	.078
	Tidak	.234	8	.200*	.897	8	.274

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

#### NPAR TESTS

/M-W= BilPretfoterapi BilirubinPost BY Probiotik(1 2)

/MISSING ANALYSIS.

## NPar Tests

### Notes

Output Created		20-OCT-2024 20:43:14
Comments		
Input	Data	H:\Kerjaan\hasil probiotik dan bilirubin\fortoterapi.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	22
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS /M-W= BilPretfoterapi BilirubinPost BY Probiotik(1 2) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,01
	Number of Cases Allowed <sup>a</sup>	98304

a. Based on availability of workspace memory.

## Mann-Whitney Test

### Ranks

	Probiotik	N	Mean Rank	Sum of Ranks
BilPretfoterapi	Ya	14	10.14	142.00
	Tidak	8	13.88	111.00
	Total	22		
BilirubinPost	Ya	14	10.14	142.00
	Tidak	8	13.88	111.00
	Total	22		

### Test Statistics<sup>a</sup>

	BilPretfoterapi	BilirubinPost
Mann-Whitney U	37.000	37.000
Wilcoxon W	142.000	142.000
Z	-1.299	-1.298
Asymp. Sig. (2-tailed)	.194	.194
Exact Sig. [2*(1-tailed Sig.)]	.212 <sup>b</sup>	.212 <sup>b</sup>

a. Grouping Variable: Probiotik

b. Not corrected for ties.

T-TEST GROUPS=Probiotik(1 2)  
 /MISSING=ANALYSIS  
 /VARIABLES=deltapredanpostfoterapi  
 /CRITERIA=CI(.95).

## T-Test

		Notes
Output Created		20-OCT-2024 20:43:38
Comments		
Input	Data	H:\Kerjaan\hasil probiotik dan bilirubin\phototerapi.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	22
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST GROUPS=Probiotik(1 2) /MISSING=ANALYSIS  /VARIABLES=deltapredanpostfoterapi /CRITERIA=CI(.95).
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,00

### Group Statistics

	Probiotik	N	Mean	Std. Deviation	Std. Error Mean
deltapredanpostfoterapi	Ya	14	9.1214	3.38767	.90539
	Tidak	8	9.7225	3.65703	1.29295

### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
deltapredanpostfoterapi	Equal variances assumed	.023	.881	-.389	20	.701
	Equal variances not assumed			-.381	13.766	.709

### Independent Samples Test

		t-test for Equality of Means			
		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
				Lower	Upper
deltapredanpostfoterapi	Equal variances assumed	-.60107	1.54426	-3.82233	2.62019
	Equal variances not assumed	-.60107	1.57844	-3.99190	2.78975

DATASET ACTIVATE DataSet2.  
 EXAMINE VARIABLES=BilirubinPre BilirubinPost deltapredanpost BY Probiotik  
 /PLOT BOXPLOT NPLOT  
 /COMPARE GROUPS  
 /STATISTICS DESCRIPTIVES  
 /CINTERVAL 95  
 /MISSING LISTWISE  
 /NOTOTAL.

## Explore

		Notes
Output Created		20-OCT-2024 20:44:56
Comments		
Input	Data	H:\Kerjaan\hasil probiotik dan bilirubin\tanpa fototerapi.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	18
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=BilirubinPre BilirubinPost deltapredanpost BY Probiotik /PLOT BOXPLOT NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /CINTERVAL 95 /MISSING LISTWISE /NOTOTAL.
Resources	Processor Time	00:00:00,58
	Elapsed Time	00:00:00,76

[DataSet2] H:\Kerjaan\hasil probiotik dan bilirubin\tanpa fototerapi.sav

# Probiotik

## Descriptives

Probiotik			Statistic	Std. Error	
BilirubinPre	Ya	Mean	8.8817	.67278	
		95% Confidence Interval for Mean	Lower Bound	7.1522	
			Upper Bound	10.6111	
		5% Trimmed Mean	8.8257		
		Median	8.4600		
		Variance	2.716		
		Std. Deviation	1.64796		
		Minimum	7.21		
		Maximum	11.56		
		Range	4.35		
	Interquartile Range	2.99			
	Skewness	.910	.845		
	Kurtosis	-.111	1.741		
	Tidak	Mean	9.8025	.61538	
		95% Confidence Interval for Mean	Lower Bound	8.4481	
			Upper Bound	11.1569	
		5% Trimmed Mean	9.8317		
		Median	10.3000		
		Variance	4.544		
		Std. Deviation	2.13174		
Minimum		6.51			
Maximum		12.57			
Range		6.06			
Interquartile Range	4.36				
Skewness	-.218	.637			
Kurtosis	-1.305	1.232			
BilirubinPost	Ya	Mean	5.1600	.65656	
		95% Confidence Interval for Mean	Lower Bound	3.4723	
			Upper Bound	6.8477	
		5% Trimmed Mean	5.0300		
		Median	4.6250		
		Variance	2.586		
		Std. Deviation	1.60823		
	Minimum	4.25			
	Maximum	8.41			
	Range	4.16			
	Interquartile Range	1.45			
	Skewness	2.340	.845		
	Kurtosis	5.589	1.741		
	Tidak	Mean	5.1458	.62569	
95% Confidence Interval for Mean		Lower Bound	3.7687		
		Upper Bound	6.5230		
5% Trimmed Mean	5.1076				

		Median		5.2600	
		Variance		4.698	
		Std. Deviation		2.16746	
		Minimum		1.40	
		Maximum		9.58	
		Range		8.18	
		Interquartile Range		2.46	
		Skewness		.062	.637
		Kurtosis		.917	1.232
deltapredanpost	Ya	Mean		3.7217	.42006
		95% Confidence Interval for Mean	Lower Bound	2.6419	
			Upper Bound	4.8015	
		5% Trimmed Mean		3.6713	
		Median		3.3600	
		Variance		1.059	
		Std. Deviation		1.02893	
		Minimum		2.83	
		Maximum		5.52	
		Range		2.69	
		Interquartile Range		1.68	
		Skewness		1.286	.845
		Kurtosis		1.024	1.741
	Tidak	Mean		4.6567	.84047
		95% Confidence Interval for Mean	Lower Bound	2.8068	
			Upper Bound	6.5065	
		5% Trimmed Mean		4.6085	
		Median		4.4500	
		Variance		8.477	
		Std. Deviation		2.91148	
		Minimum		.82	
		Maximum		9.36	
		Range		8.54	
		Interquartile Range		5.25	
		Skewness		.228	.637
		Kurtosis		-1.189	1.232

#### Tests of Normality

	Probiotik	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
BilirubinPre	Ya	.246	6	.200*	.915	6	.474
	Tidak	.177	12	.200*	.907	12	.193
BilirubinPost	Ya	.422	6	.001	.625	6	.001
	Tidak	.245	12	.045	.932	12	.403
deltapredanpost	Ya	.225	6	.200*	.867	6	.216
	Tidak	.123	12	.200*	.945	12	.561

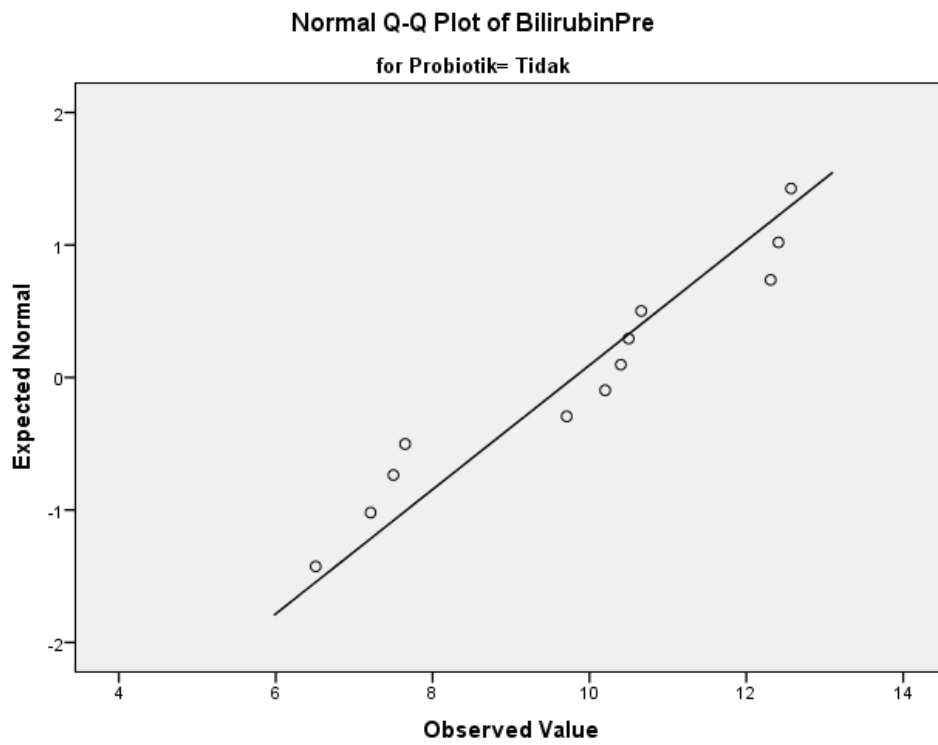
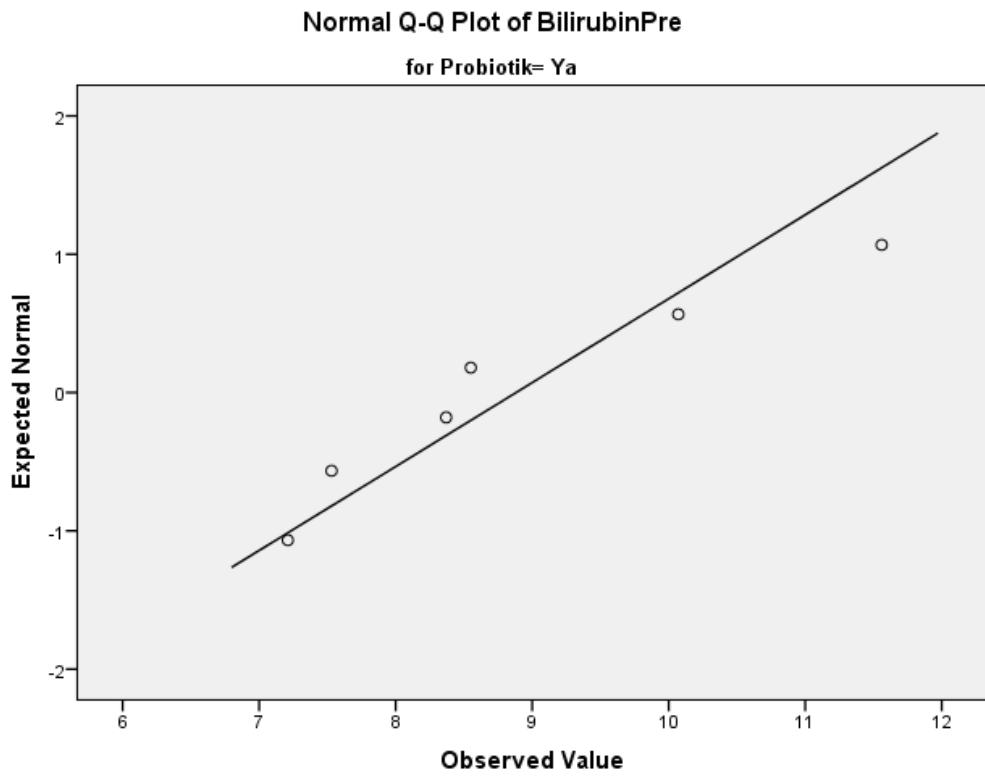
\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

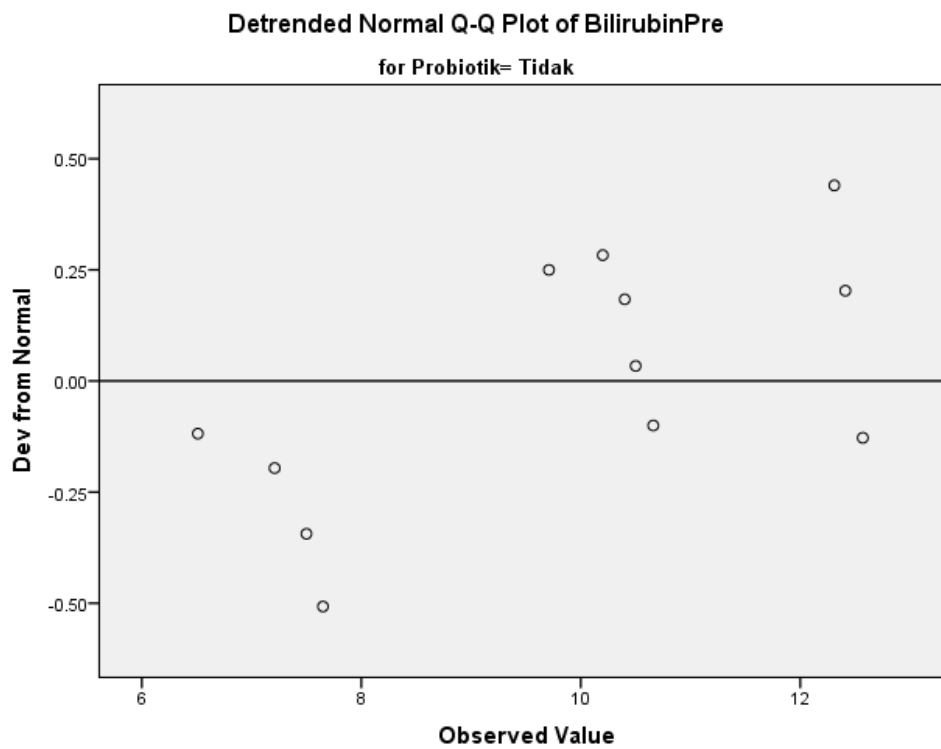
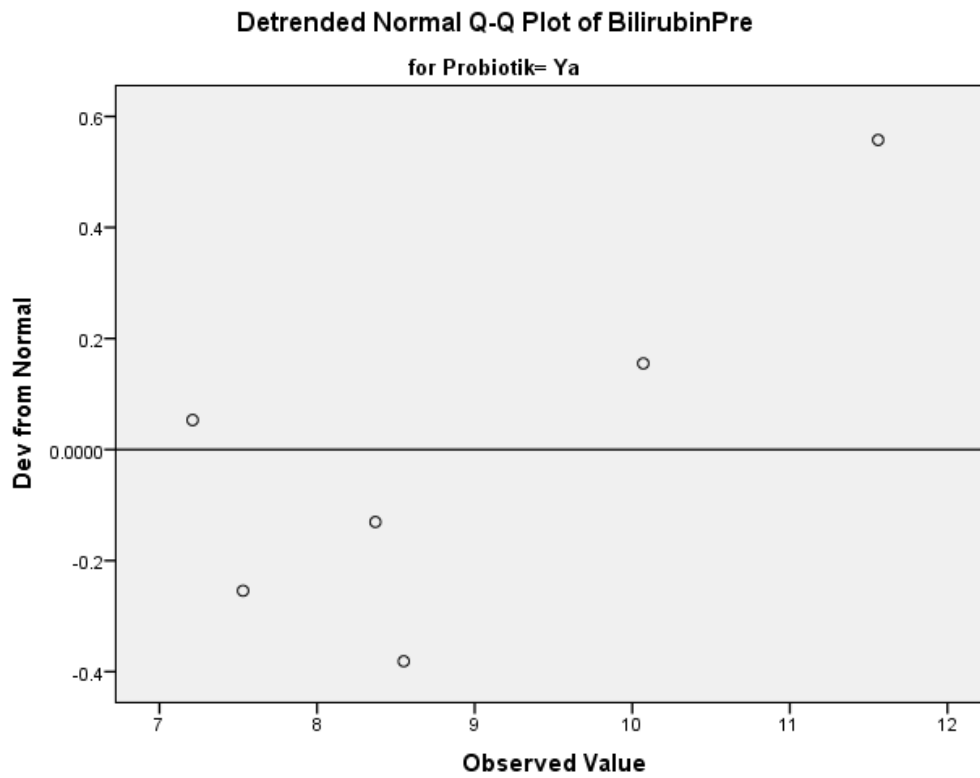


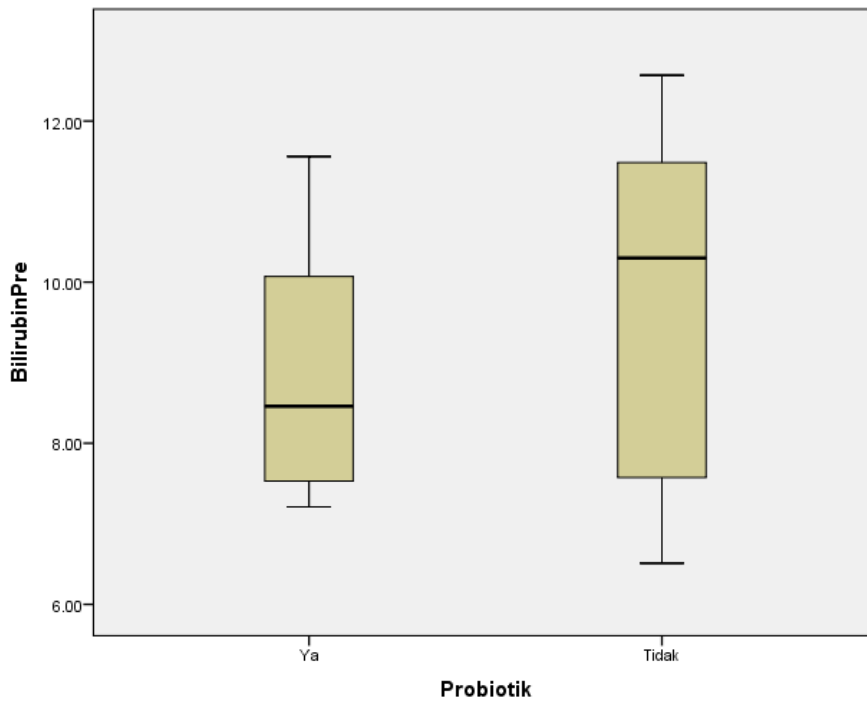
# BilirubinPre

## Normal Q-Q Plots



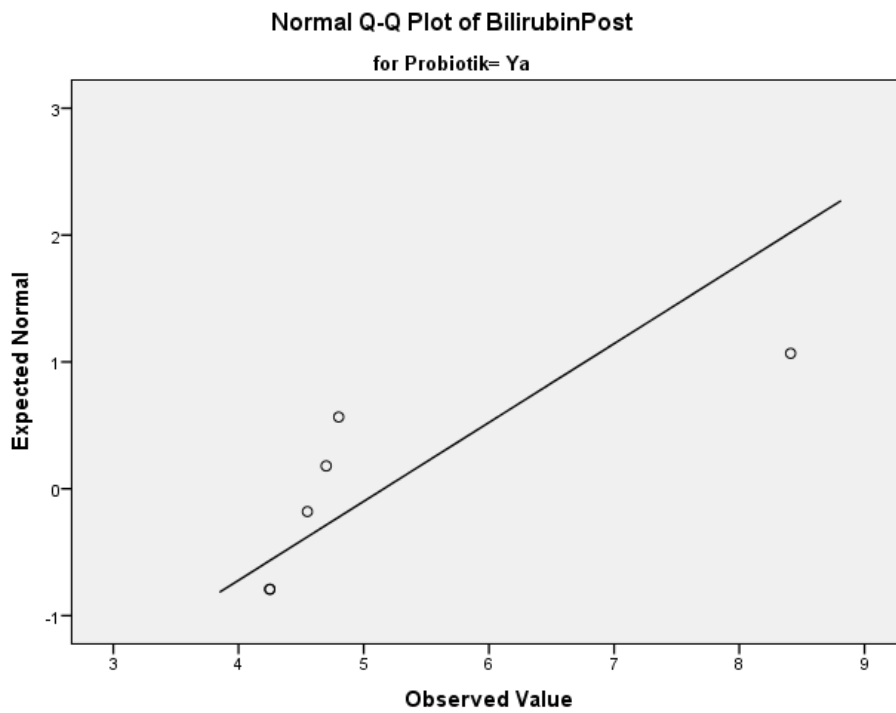
## Detrended Normal Q-Q Plots

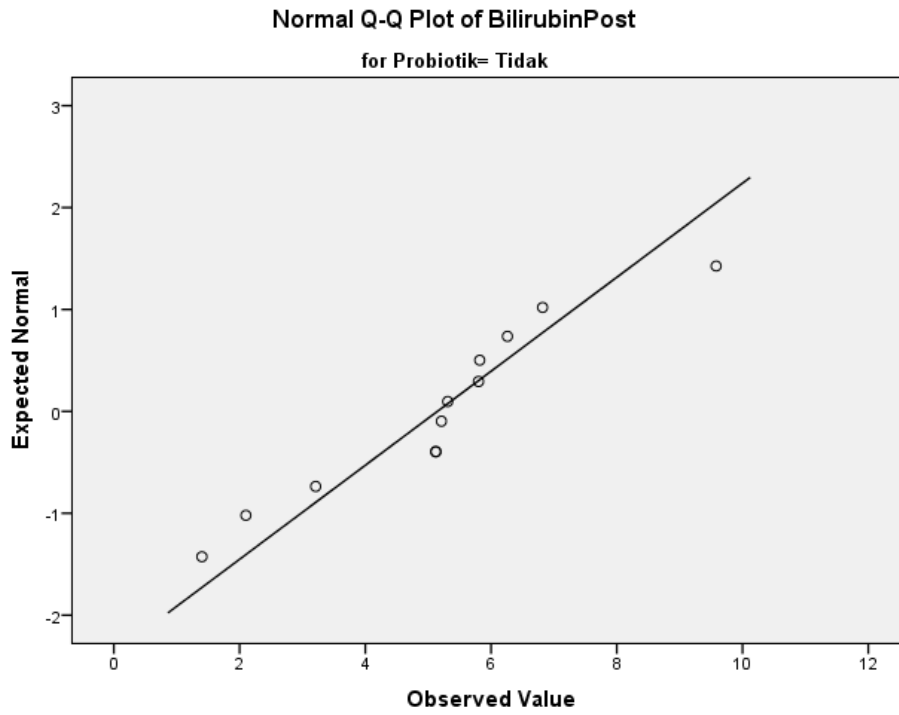




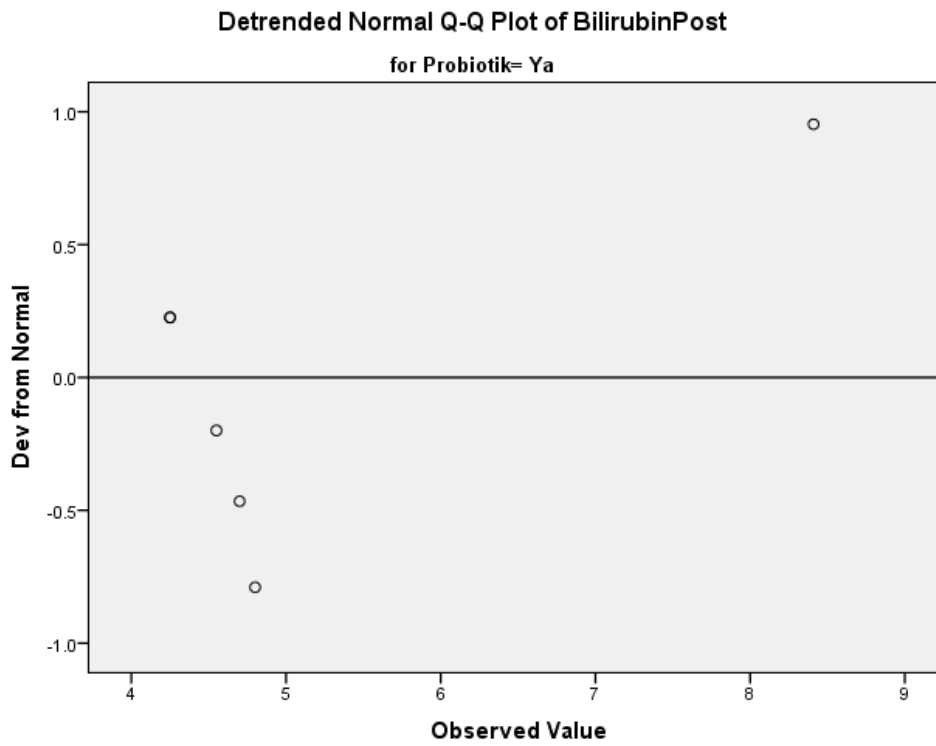
## BilirubinPost

## Normal Q-Q Plots



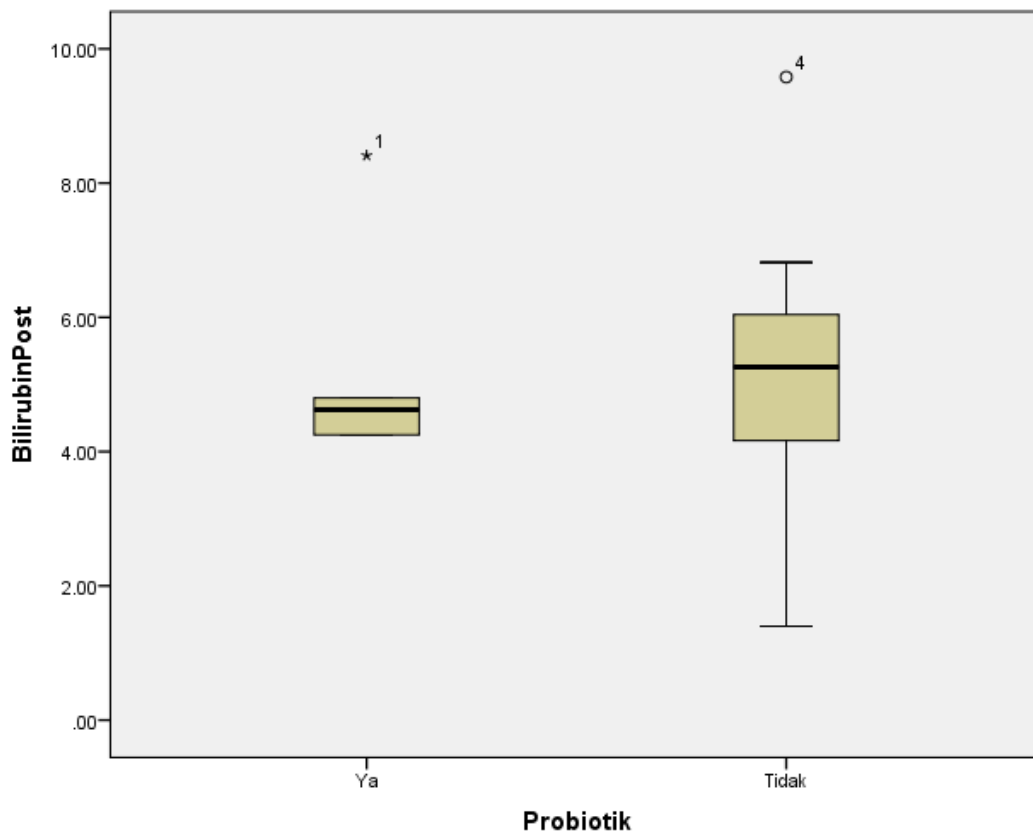
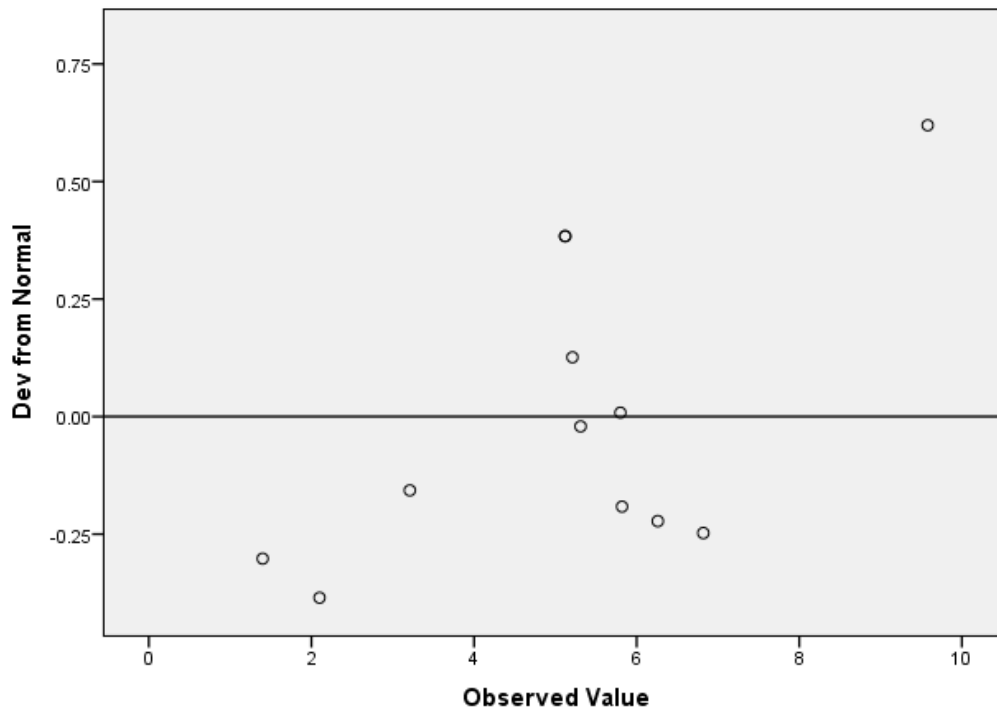


**Detrended Normal Q-Q Plots**



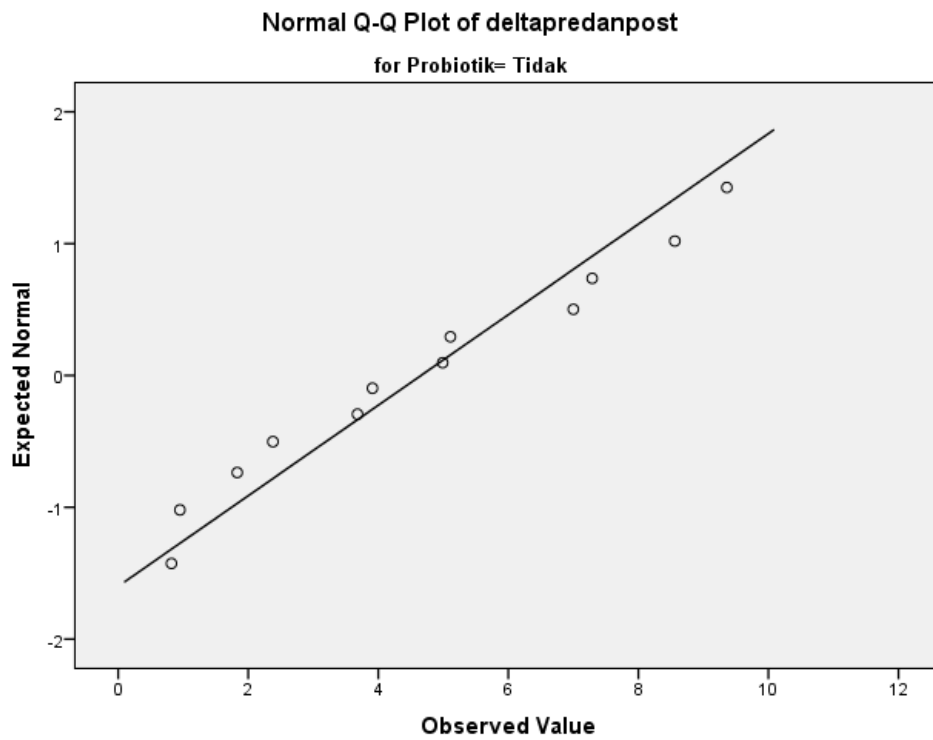
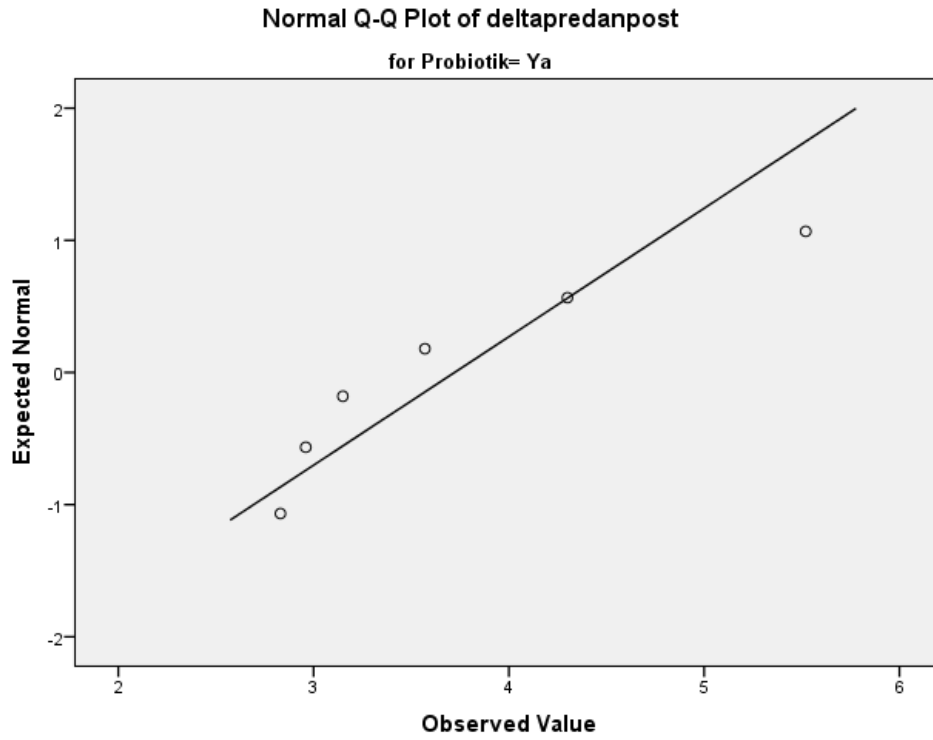
Detrended Normal Q-Q Plot of BilirubinPost

for Probiotik= Tidak

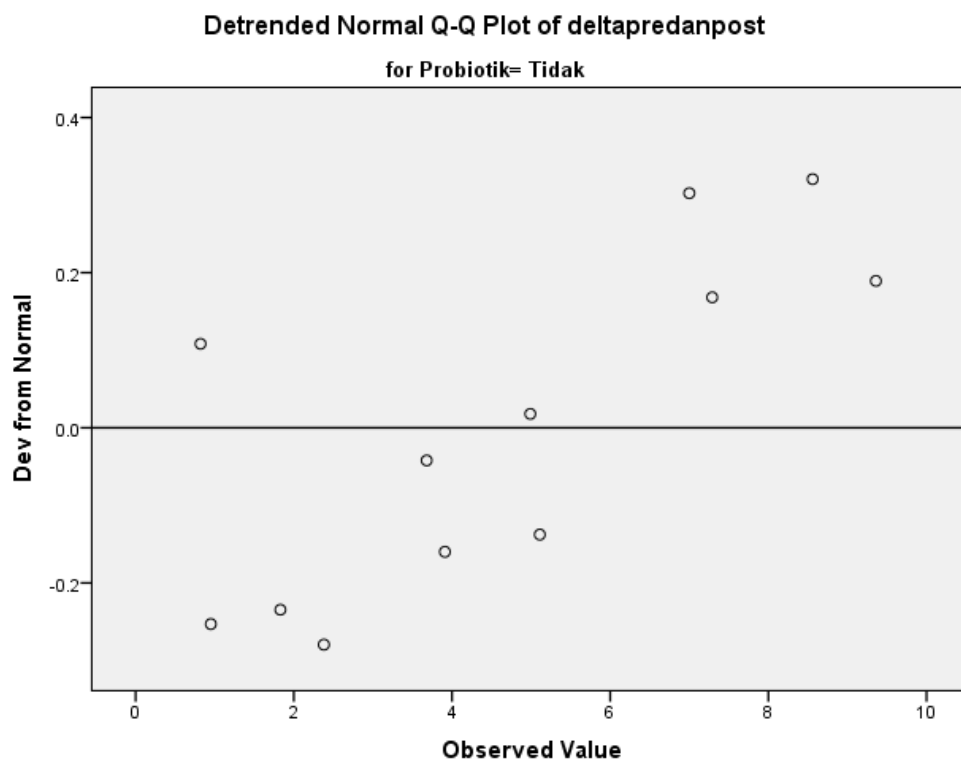
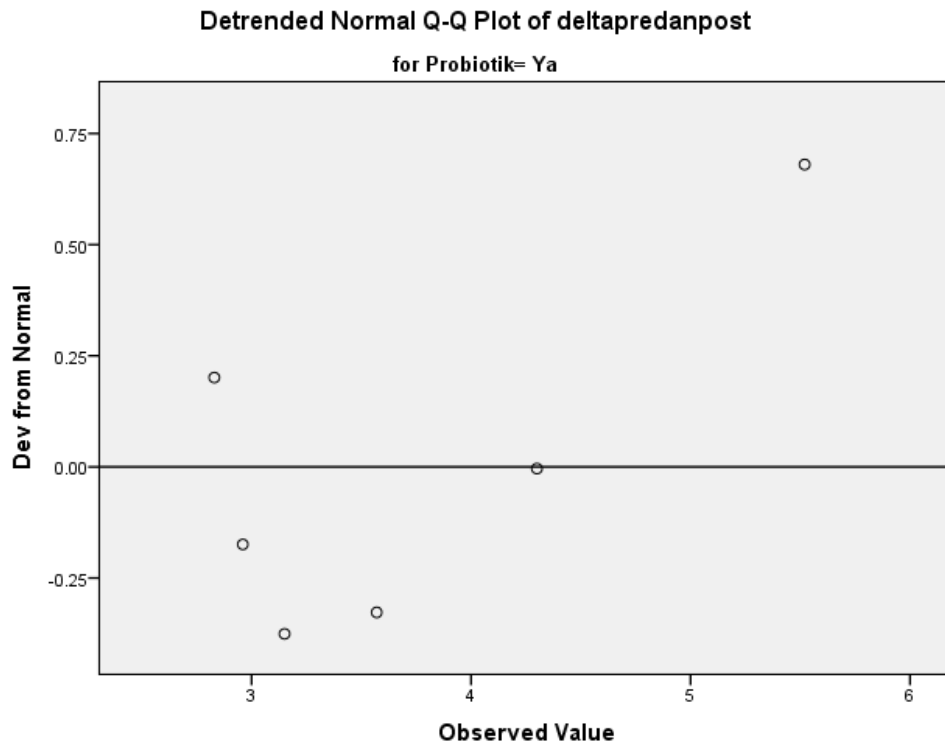


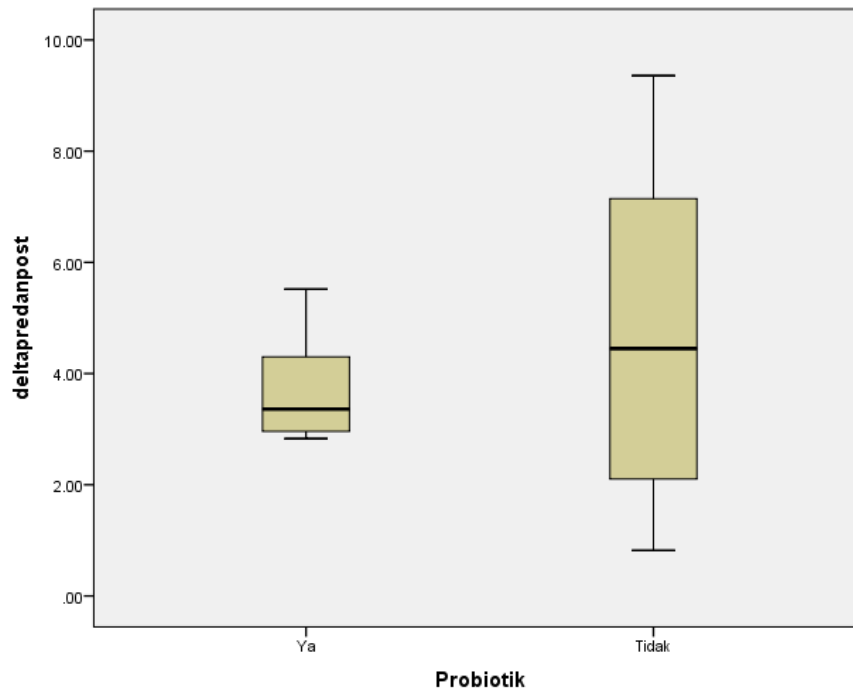
deltapredanpost

Normal Q-Q Plots



## Detrended Normal Q-Q Plots





```

DATASET CLOSE DataSet1.
T-TEST GROUPS=Probiotik(1 2)
/MISSING=ANALYSIS
/VARIABLES=BilirubinPre deltapredanpost
/CRITERIA=CI(.95).

```

## T-Test

Notes		
Output Created		20-OCT-2024 20:49:55
Comments		
Input	Data	H:\Kerjaan\hasil probiotik dan bilirubin\tanpa fototerapi.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	18
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST GROUPS=Probiotik(1 2) /MISSING=ANALYSIS /VARIABLES=BilirubinPre deltapredanpost /CRITERIA=CI(.95).
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,00



**Group Statistics**

	Probiotik	N	Mean	Std. Deviation	Std. Error Mean
BilirubinPre	Ya	6	8.8817	1.64796	.67278
	Tidak	12	9.8025	2.13174	.61538
deltapredanpost	Ya	6	3.7217	1.02893	.42006
	Tidak	12	4.6567	2.91148	.84047

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
BilirubinPre	Equal variances assumed	.748	.400	-.924	16	.369
	Equal variances not assumed			-1.010	12.795	.331
deltapredanpost	Equal variances assumed	6.338	.023	-.754	16	.462
	Equal variances not assumed			-.995	15.108	.335

**Independent Samples Test**

		t-test for Equality of Means			
		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
				Lower	Upper
BilirubinPre	Equal variances assumed	-.92083	.99661	-3.03354	1.19188
	Equal variances not assumed	-.92083	.91177	-2.89380	1.05213
deltapredanpost	Equal variances assumed	-.93500	1.24082	-3.56543	1.69543
	Equal variances not assumed	-.93500	.93960	-2.93646	1.06646

**NPAR TESTS**

/M-W= BilirubinPost BY Probiotik(1 2)  
/MISSING ANALYSIS.

**NPar Tests**

**Notes**

Output Created		20-OCT-2024 20:50:33
Comments		
Input	Data	H:\Kerjaan\hasil probiotik dan bilirubin\tanpa fototerapi.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	18
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.

Syntax	NPAR TESTS /M-W= BilirubinPost BY Probiotik(1 2) /MISSING ANALYSIS.	
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,00
	Number of Cases Allowed <sup>a</sup>	112347

a. Based on availability of workspace memory.

## Mann-Whitney Test

		N	Mean Rank	Sum of Ranks
BilirubinPost	Ya	6	7.83	47.00
	Tidak	12	10.33	124.00
	Total	18		

	BilirubinPos t
Mann-Whitney U	26.000
Wilcoxon W	47.000
Z	-.938
Asymp. Sig. (2-tailed)	.348
Exact Sig. [2*(1-tailed Sig.)]	.385 <sup>b</sup>

a. Grouping Variable: Probiotik  
b. Not corrected for ties.

DATASET ACTIVATE DataSet3.

DATASET CLOSE DataSet2.

EXAMINE VARIABLES=BilirubinPre BilirubinPost deltapredanpost BY Probiotik

/PLOT BOXPLOT NPLOT

/COMPARE GROUPS

/STATISTICS DESCRIPTIVES

/CINTERVAL 95

/MISSING LISTWISE

/NOTOTAL.

## Explore

Output Created	20-OCT-2024 20:51:12	
Comments		
Input	Data	H:\Kerjaan\hasil probiotik dan bilirubin\hasil NICU.sav
	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	40

Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		<pre> EXAMINE VARIABLES=BilirubinPre BilirubinPost deltapredanpost BY Probiotik /PLOT BOXPLOT NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /CINTERVAL 95 /MISSING LISTWISE /NOTOTAL. </pre>
Resources	Processor Time	00:00:00,48
	Elapsed Time	00:00:00,76

## Probiotik

### Case Processing Summary

	Probiotik	Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
BilirubinPre	Ya	20	100.0%	0	0.0%	20	100.0%
	Tidak	20	100.0%	0	0.0%	20	100.0%
BilirubinPost	Ya	20	100.0%	0	0.0%	20	100.0%
	Tidak	20	100.0%	0	0.0%	20	100.0%
deltapredanpost	Ya	20	100.0%	0	0.0%	20	100.0%
	Tidak	20	100.0%	0	0.0%	20	100.0%

### Descriptives

Probiotik		Statistic	Std. Error		
BilirubinPre	Ya	Mean	9.6145	.56195	
		95% Confidence Interval for Mean	Lower Bound	8.4383	
			Upper Bound	10.7907	
		5% Trimmed Mean	9.6706		
		Median	9.1100		
		Variance	6.316		
		Std. Deviation	2.51310		
	Minimum	4.52			
	Maximum	13.70			
	Range	9.18			
	Interquartile Range	4.51			
	Skewness	-.097	.512		
	Kurtosis	-.961	.992		
	Tidak	Mean	9.8480	.43924	
95% Confidence Interval for Mean		Lower Bound	8.9287		
		Upper Bound	10.7673		
5% Trimmed Mean		9.8822			
Median		10.3000			

		Variance		3.859			
		Std. Deviation		1.96434			
		Minimum		6.51			
		Maximum		12.57			
		Range		6.06			
		Interquartile Range		3.94			
		Skewness		-.228	.512		
		Kurtosis		-1.220	.992		
BilirubinPost	Ya	Mean		6.0130	.60600		
		95% Confidence Interval for Mean	Lower Bound	4.7446			
			Upper Bound	7.2814			
		5% Trimmed Mean		5.9889			
		Median		5.2050			
		Variance		7.345			
		Std. Deviation		2.71010			
		Minimum		1.56			
		Maximum		10.90			
		Range		9.34			
			Interquartile Range		4.30		
			Skewness		.275	.512	
			Kurtosis		-.990	.992	
		Tidak	Mean		6.3740	.56679	
			95% Confidence Interval for Mean	Lower Bound	5.1877		
				Upper Bound	7.5603		
			5% Trimmed Mean		6.4600		
			Median		6.0400		
			Variance		6.425		
			Std. Deviation		2.53478		
	Minimum			1.40			
	Maximum			9.80			
	Range			8.40			
		Interquartile Range		3.91			
		Skewness		-.275	.512		
		Kurtosis		-.734	.992		
deltapredanpost	Ya	Mean		3.6015	.32349		
		95% Confidence Interval for Mean	Lower Bound	2.9244			
			Upper Bound	4.2786			
		5% Trimmed Mean		3.5228			
		Median		3.3600			
		Variance		2.093			
		Std. Deviation		1.44667			
		Minimum		1.82			
		Maximum		6.80			
		Range		4.98			
				Interquartile Range		2.52	
				Skewness		.491	.512
			Kurtosis		-.637	.992	
	Tidak	Mean		3.6810	.61204		

95% Confidence Interval for Mean	Lower Bound	2.4000	
	Upper Bound	4.9620	
5% Trimmed Mean		3.5633	
Median		3.2400	
Variance		7.492	
Std. Deviation		2.73712	
Minimum		.12	
Maximum		9.36	
Range		9.24	
Interquartile Range		3.54	
Skewness		.658	.512
Kurtosis		-.459	.992

### Tests of Normality

	Probiotik	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
BilirubinPre	Ya	.166	20	.149	.941	20	.253
	Tidak	.121	20	.200 <sup>*</sup>	.934	20	.186
BilirubinPost	Ya	.166	20	.148	.939	20	.230
	Tidak	.138	20	.200 <sup>*</sup>	.938	20	.216
deltapredanpost	Ya	.123	20	.200 <sup>*</sup>	.935	20	.189
	Tidak	.130	20	.200 <sup>*</sup>	.935	20	.192

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

T-TEST GROUPS=Probiotik(1 2)

/MISSING=ANALYSIS

/VARIABLES=BilirubinPre BilirubinPost deltapredanpost

/CRITERIA=CI(.95).

## T-Test

### Notes

Output Created		20-OCT-2024 20:55:36
Comments		
Input	Data	H:\Kerjaan\hasil probiotik dan bilirubin\hasil NICU.sav
	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	40
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.

Syntax	T-TEST GROUPS=Probiotik(1 2) /MISSING=ANALYSIS /VARIABLES=BilirubinPre BilirubinPost deltapredanpost /CRITERIA=CI(.95).	
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,00

### Group Statistics

	Probiotik	N	Mean	Std. Deviation	Std. Error Mean
BilirubinPre	Ya	20	9.6145	2.51310	.56195
	Tidak	20	9.8480	1.96434	.43924
BilirubinPost	Ya	20	6.0130	2.71010	.60600
	Tidak	20	6.3740	2.53478	.56679
deltapredanpost	Ya	20	3.6015	1.44667	.32349
	Tidak	20	3.6810	2.73712	.61204

### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
BilirubinPre	Equal variances assumed	2.321	.136	-.327	38	.745
	Equal variances not assumed			-.327	35.906	.745
BilirubinPost	Equal variances assumed	.232	.633	-.435	38	.666
	Equal variances not assumed			-.435	37.831	.666
deltapredanpost	Equal variances assumed	6.629	.014	-.115	38	.909
	Equal variances not assumed			-.115	28.847	.909

### Independent Samples Test

		t-test for Equality of Means			
		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
				Lower	Upper
BilirubinPre	Equal variances assumed	-.23350	.71324	-1.67739	1.21039
	Equal variances not assumed	-.23350	.71324	-1.68016	1.21316
BilirubinPost	Equal variances assumed	-.36100	.82975	-2.04075	1.31875
	Equal variances not assumed	-.36100	.82975	-2.04099	1.31899
deltapredanpost	Equal variances assumed	-.07950	.69227	-1.48092	1.32192
	Equal variances not assumed	-.07950	.69227	-1.49567	1.33667