

## LAMPIRAN

### 1. Instrumen Penelitian

#### a. Surat Perizinan Pengambilan Sampel

 Rumah Sakit Umum 'Aisyiyah  
**Siti Fatimah**  
Pimpinan Daerah 'Aisyiyah Sidoarjo

Nomor : RS'ASF/426/III.6.AU/A/VIII/2024  
Lamp. : -  
Hal : Surat Balasan

Kepada Yth. Bpk. Rektor Univ. Muhammadiyah Sidoarjo  
Cq. Fakultas Ilmu Kesehatan  
Di  
Tempat

Assalamu 'alaikum Warahmatullahi Wabarakaatuh.  
Menindaklanjuti surat dari Fakultas Ilmu Kesehatan Universitas Muhammadiyah Sidoarjo, nomor : 468/II.3.AU/09.00/B/IZN/VIII/2024 tentang permohonan Ijin Pengambilan Data Primer dan Sampel, dengan ini kami sampaikan bahwa kami menyetujui permohonan sebagaimana dimaksud bagi mahasiswa Program Studi D-IV Teknologi Laboratorium Medis Kesehatan Fakultas Ilmu Kesehatan Universitas Muhammadiyah Sidoarjo, atas nama :

Nama : FriskaFebriyanti  
NIM : 211335300026  
Judul : Perbandingan Hasil Pemeriksaan Widal dengan Pemeriksaan Loop Mediated Isothermal Amplification (LAMP) dalam Menegakkan Diagnosa Demam Tifoid di RSU. 'Aisyiyah Siti Fatimah Tulangan

Kami mohon selama melaksanakan kegiatan magang, tidak mengganggu pelayanan dan mematuhi peraturan yang berlaku di RSU. 'Aisyiyah Siti Fatimah Tulangan

Demikian surat balasan kami, atas perhatian & kerjasamanya disampaikan terima kasih.  
Nashrun Minallah Wa Fathun Qorib.  
Wassalamu 'alaikum Warahmatullahi Wabarakaatuh

Sidoarjo, 23 Shafar 1446 H  
18 Agustus 2024 M

  
Direktur  
dr. Tjatur Priambodo, M Kes  
NBM. 906581

Jl.Raya Kenong No.14 Tulangan Sidoarjo Telp.(031)8856303 (031) 8857637 (031) 72980115 Fax. (031)8851922 Email: aisyiyah.15@gmail.com

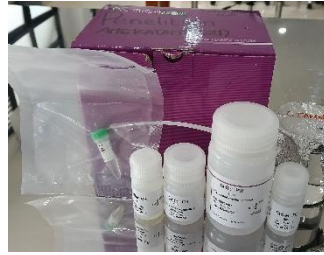
Dipindai dengan  
CamScanner

## b. Dokumentasi Penelitian

**Mikropipet**



**Tianamp Genomic DNA kit**



**Vortex**



**Centrifuge Mikro**



**Centrifuge**



**Waterbath**



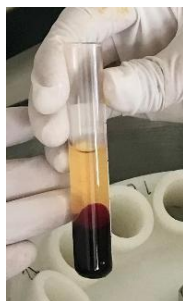
**UV Transilluminator**



**Sampel Darah EDTA**



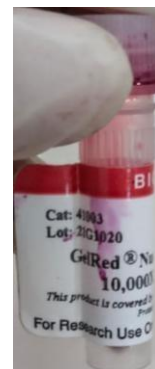
**Sampel Buffycoat Setelah dicentrifuge**



**Rak Tube Mikro dan Sampel LAMP**



**Gel red**



**ddH<sub>2</sub>O**



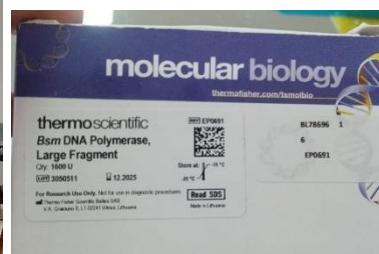
**PCR Mix**



**Peneliti**



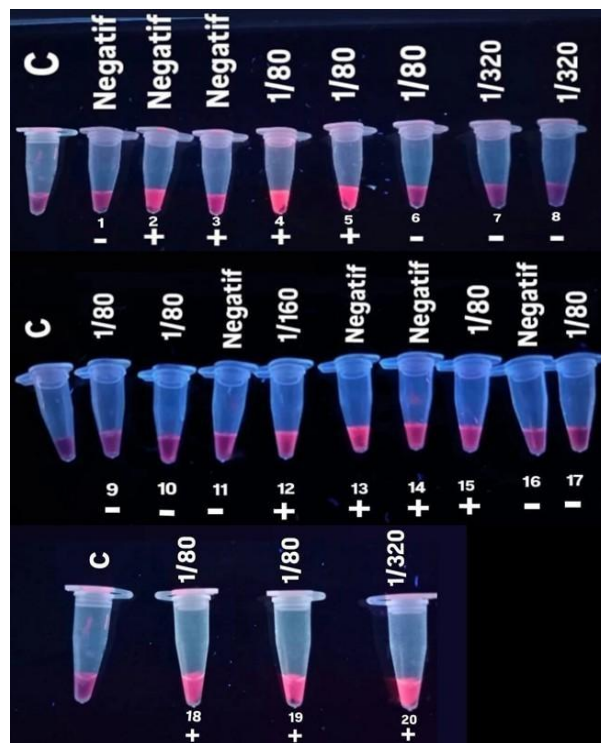
**BSM Taq**



## 2. Hasil Rekapitulasi Data Penelitian

Rekapitulasi Hasil Pemeriksaan Widal dan LAMP pada Sampel Pasien Berdasarkan Kelompok usia

Kode Sampel	Umur	Widal				LAMP
		O	H	A	B	
1	5 Tahun	Negatif	Negatif	Negatif	Negatif	Negatif
2	5 Tahun	Negatif	Negatif	Negatif	Negatif	Positif
3	10 Tahun	Negatif	Negatif	1/160	1/320	Positif
4	31 Tahun	1/320	1/320	1/80	1/80	Negatif
5	25 Tahun	1/80	1/80	1/80	neg	Negatif
6	40 Tahun	Negatif	Negatif	Negatif	1/320	Negatif
7	20 Tahun	1/80	1/80	1/80	1/80	Positif
8	5 Tahun	1/320	1/320	1/80	1/80	Negatif
9	28 Tahun	Negatif	Negatif	Negatif	Negatif	Positif
10	25 Tahun	1/80	1/80	Negatif	Negatif	Negatif
11	5 Tahun	1/320	1/320	Negatif	Negatif	Positif
12	5 Tahun	1/80	1/80	1/80	1/80	Positif
13	12 Tahun	1/80	1/80	1/80	1/80	Positif
14	10 Tahun	1/80	1/80	1/80	1/80	Negatif
15	5 Tahun	Negatif	Negatif	Negatif	Negatif	Positif
16	15 Tahun	1/160	1/160	1/80	1/80	Positif
17	20 Tahun	1/80	1/80	Negatif	Negatif	Negatif
18	12 Tahun	1/80	1/80	Negatif	Negatif	Negatif
19	5 Tahun	1/80	1/80	1/80	1/80	Positif
20	8 Tahun	Negatif	Negatif	Negatif	Negatif	Negatif



3. Hasil Uji Data Statistika SPSS Versi 23

a. Distribusi Pasien Karakteristik Uji Widal Berdasarkan Titer Antibodi O dan H Salmonella typhi Berdasarkan Kelompok Usia

- Tabel Frekuensi

**Frequencies**

**Statistics**

UMUR

N	Valid	20
	Missing	0

**UMUR**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 5-14	12	60.0	60.0	60.0
15-24	3	15.0	15.0	75.0
25-34	4	20.0	20.0	95.0
34-45	1	5.0	5.0	100.0
Total	20	100.0	100.0	

- Tabel Kontingensi

**UMUR \* ANTIGENO Crosstabulation**

			ANTIGENO				Total
			NEGATIF	1/80	1/160	1/320	
UMUR	5-14	Count	5	5	0	2	12
		Expected Count	4.2	5.4	.6	1.8	12.0
		% within UMUR	41.7%	41.7%	0.0%	16.7%	100.0%
		% within ANTIGENO	71.4%	55.6%	0.0%	66.7%	60.0%
		% of Total	25.0%	25.0%	0.0%	10.0%	60.0%
	15-24	Count	0	2	1	0	3
		Expected Count	1.1	1.4	.2	.5	3.0
		% within UMUR	0.0%	66.7%	33.3%	0.0%	100.0%
		% within ANTIGENO	0.0%	22.2%	100.0%	0.0%	15.0%
		% of Total	0.0%	10.0%	5.0%	0.0%	15.0%
	25-34	Count	1	2	0	1	4
		Expected Count	1.4	1.8	.2	.6	4.0
		% within UMUR	25.0%	50.0%	0.0%	25.0%	100.0%
		% within ANTIGENO	14.3%	22.2%	0.0%	33.3%	20.0%
		% of Total	5.0%	10.0%	0.0%	5.0%	20.0%
	35-45	Count	1	0	0	0	1
		Expected Count	.4	.5	.1	.2	1.0
		% within UMUR	100.0%	0.0%	0.0%	0.0%	100.0%
		% within ANTIGENO	14.3%	0.0%	0.0%	0.0%	5.0%
		% of Total	5.0%	0.0%	0.0%	0.0%	5.0%
	Total	Count	7	9	1	3	20
		Expected Count	7.0	9.0	1.0	3.0	20.0
		% within UMUR	35.0%	45.0%	5.0%	15.0%	100.0%
		% within ANTIGENO	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	35.0%	45.0%	5.0%	15.0%	100.0%

UMUR \* ANTIGENH Crosstabulation

			ANTIGENH				Total
			1/320	NEGATIF	1/80	1/160	
UMUR	5-14	Count	2	5	5	0	12
		Expected Count	1.8	4.2	5.4	.6	12.0
		% within UMUR	16.7%	41.7%	41.7%	0.0%	100.0%
		% within ANTIGENH	66.7%	71.4%	55.6%	0.0%	60.0%
		% of Total	10.0%	25.0%	25.0%	0.0%	60.0%
	15-24	Count	0	0	2	1	3
		Expected Count	.5	1.1	1.4	.2	3.0
		% within UMUR	0.0%	0.0%	66.7%	33.3%	100.0%
		% within ANTIGENH	0.0%	0.0%	22.2%	100.0%	15.0%
		% of Total	0.0%	0.0%	10.0%	5.0%	15.0%
	25-34	Count	1	1	2	0	4
		Expected Count	.6	1.4	1.8	.2	4.0
		% within UMUR	25.0%	25.0%	50.0%	0.0%	100.0%
		% within ANTIGENH	33.3%	14.3%	22.2%	0.0%	20.0%
		% of Total	5.0%	5.0%	10.0%	0.0%	20.0%
	35-45	Count	0	1	0	0	1
		Expected Count	.2	.4	.5	.1	1.0
		% within UMUR	0.0%	100.0%	0.0%	0.0%	100.0%
		% within ANTIGENH	0.0%	14.3%	0.0%	0.0%	5.0%
		% of Total	0.0%	5.0%	0.0%	0.0%	5.0%
	Total	Count	3	7	9	1	20
		Expected Count	3.0	7.0	9.0	1.0	20.0
		% within UMUR	15.0%	35.0%	45.0%	5.0%	100.0%
		% within ANTIGENH	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	15.0%	35.0%	45.0%	5.0%	100.0%

b. Hasil Uji Statistik Perbandingan Hasil Widal dan LAMP

- Tabel Kontingensi

WIDAL \* LAMP Crosstabulation

			LAMP		Total
			NEGATIF	POSITIF	
WIDAL	NEGATIF	Count	3	4	7
		Expected Count	3.2	3.8	7.0
		% within WIDAL	42.9%	57.1%	100.0%
		% within LAMP	33.3%	36.4%	35.0%
		% of Total	15.0%	20.0%	35.0%
	POSITIF	Count	6	7	13
		Expected Count	5.9	7.2	13.0
		% within WIDAL	46.2%	53.8%	100.0%
		% within LAMP	66.7%	63.6%	65.0%
		% of Total	30.0%	35.0%	65.0%
Total	Count	Count	9	11	20
		Expected Count	9.0	11.0	20.0
		% within WIDAL	45.0%	55.0%	100.0%
		% within LAMP	100.0%	100.0%	100.0%
		% of Total	45.0%	55.0%	100.0%

- Uji *Chi-square*

**Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	.020 <sup>a</sup>	1	.888	1.000	.630
Continuity Correction <sup>b</sup>	.000	1	1.000		
Likelihood Ratio	.020	1	.888		
Fisher's Exact Test					
Linear-by-Linear Association	.019	1	.890		
N of Valid Cases	20				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.15.

4. Sertifikat Uji Etik/ *Ethical Clearance*

	
<b>UNIVERSITAS AIRLANGGA FACULTY OF DENTAL MEDICINE HEALTH RESEARCH ETHICAL CLEARANCE COMMISSION</b>	
<b><u>ETHICAL CLEARANCE CERTIFICATE</u></b>	
Number : 0918/HRECC.FODM/VIII/2024	
Universitas Airlangga Faculty Of Dental Medicine Health Research Ethical Clearance Commission has studied the proposed research design carefully, Declared to be ethically appropriate in accordance to 7 (seven) WHO 2011, and therefore, shall herewith certify that the research entitled :	
<b>“Comparison of Widal Test Results with Loop-Mediated Isothermal Amplification (LAMP) Test Results in Diagnosing Typhoid Fever”</b>	
Principal Researcher	: <b>FRISKA FEBRIYANTI</b>
Unit/Institution/Place of Research :	- Laboratory of the Faculty of Medicine, University of Muhammadiyah Sidoarjo
<b><u>CERTIFIED TO BE ETHICALLY CLEARED</u></b>	
	
Prof. Dr. <b>TAMARA YUANITA</b> , drg., MS., Sp.KG(K) Official No. 196006251986012002	
Sidoarjo, August 29, 2024 Chairman,	