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LAMPIRAN

Lampiran 1. Data Pasien DBD di RS Pendidikan Unhas

Tabel Data Pasien DBD di RS Pendidikan Unhas

NO	TROMBOSIT (y)	SUHU TUBUH (x_1)	SEL DARAH PUTIH (x_2)
1	90	36,90	1,24
2	115	37,30	1,35
3	41	30,00	1,44
4	74	38,30	1,73
5	74	38,10	1,77
6	115	38,20	1,81
7	123	37,10	2,11
8	22	37,80	2,13
9	78	37,50	2,16
10	43	37,80	2,31
11	83	38,50	2,35
12	96	38,00	2,36
13	129	36,60	2,38
14	213	36,50	2,41
15	102	39,10	2,47
16	103	37,80	2,53
17	104	30,00	2,59
18	105	37,10	2,65
19	106	37,80	2,71
20	107	37,50	2,77
⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮
151	371	37,70	12,42
152	115	36,50	13,16
153	136	38,00	14,71
154	277	36,70	15,73
155	391	36,00	21,03
156	204	37,40	24,6
157	204	37,40	24,6
158	204	38,90	24,6

Keterangan

Trombosit (y) dalam satuan $10^3 \text{ sel}/\mu\text{l}$

Suhu tubuh (x_1) dalam satuan $^{\circ}\text{C}$

Sel darah putih (x_2) dalam satuan $10^3 \text{ sel}/\mu\text{l}$

Lampiran 2. Hasil Uji Pencilan menggunakan Uji *Mahalanobis Distance*

NO	Y	X1	X2	MAH_1	J	Prob_Value	qi	Outlier
156	204.00	3740.00	2460.00	21.01	156	.98	8.29	1.00
157	204.00	3740.00	2460.00	21.01	157	.99	9.31	1.00
158	204.00	3890.00	2460.00	22.64	158	1.00	11.51	1.00
88	175.00	3630.00	685.00	.06	5	.03	.06	1.00
93	180.00	3480.00	715.00	.10	6	.03	.07	1.00
66	153.00	3570.00	553.00	.10	7	.04	.08	1.00
67	154.00	3540.00	559.00	.10	8	.05	.10	1.00
65	152.00	3600.00	547.00	.11	9	.05	.11	1.00
117	204.00	3690.00	859.00	.47	33	.21	.46	1.00
111	198.00	3390.00	823.00	.48	34	.21	.48	1.00
72	159.00	3390.00	589.00	.50	35	.22	.49	1.00
48	135.00	3710.00	445.00	.55	37	.23	.53	1.00
60	147.00	3750.00	517.00	.56	38	.24	.54	1.00
38	125.00	3660.00	385.00	.60	40	.25	.58	1.00
118	205.00	3720.00	865.00	.61	41	.26	.59	1.00
53	140.00	3750.00	475.00	.63	42	.26	.61	1.00
73	160.00	3360.00	595.00	.65	43	.27	.63	1.00
41	128.00	3710.00	403.00	.67	44	.28	.64	1.00
50	137.00	3750.00	457.00	.67	45	.28	.66	1.00
59	146.00	3780.00	511.00	.71	46	.29	.68	1.00
98	185.00	3330.00	745.00	.73	47	.29	.70	1.00
56	143.00	3780.00	493.00	.75	48	.30	.72	1.00
54	141.00	3780.00	481.00	.77	49	.31	.73	1.00
119	206.00	3750.00	871.00	.77	50	.31	.75	1.00
43	130.00	3750.00	415.00	.78	51	.32	.77	1.00
52	139.00	3780.00	469.00	.79	52	.33	.79	1.00
34	121.00	3710.00	361.00	.81	53	.33	.81	1.00
46	133.00	3780.00	433.00	.88	56	.35	.87	1.00
44	131.00	3780.00	421.00	.91	57	.36	.89	1.00
36	123.00	3750.00	373.00	.92	58	.36	.90	1.00
99	186.00	3300.00	751.00	.93	59	.37	.92	1.00

NO	Y	X1	X2	MAH_1	J	Prob_Value	qi	Outlier
155	391.00	3600.00	2103.00	12.84	155	.98	7.62	1.00
90	177.00	3570.00	697.00	.00	1	.00	.01	.00
91	178.00	3540.00	703.00	.01	2	.01	.02	.00
89	176.00	3600.00	691.00	.02	3	.02	.03	.00
92	179.00	3510.00	709.00	.04	4	.02	.04	.00
107	194.00	3510.00	799.00	.12	10	.06	.12	.00
87	174.00	3660.00	679.00	.12	11	.07	.14	.00
68	155.00	3510.00	565.00	.14	12	.07	.15	.00
113	200.00	3570.00	835.00	.16	13	.08	.16	.00
64	151.00	3630.00	541.00	.16	14	.09	.18	.00
108	195.00	3480.00	805.00	.17	15	.09	.19	.00
94	181.00	3450.00	721.00	.18	16	.10	.21	.00
69	156.00	3480.00	571.00	.19	17	.10	.22	.00
114	201.00	3600.00	841.00	.19	18	.11	.23	.00
86	173.00	3690.00	673.00	.21	19	.12	.25	.00
63	150.00	3660.00	535.00	.22	20	.12	.26	.00
109	196.00	3450.00	811.00	.25	21	.13	.28	.00
115	202.00	3630.00	847.00	.26	22	.14	.29	.00
70	157.00	3450.00	577.00	.27	23	.14	.31	.00
95	182.00	3420.00	727.00	.28	24	.15	.32	.00
112	199.00	3660.00	829.00	.30	25	.16	.34	.00
62	149.00	3690.00	529.00	.31	26	.16	.35	.00
116	203.00	3660.00	853.00	.35	27	.17	.37	.00
110	197.00	3420.00	817.00	.36	28	.17	.38	.00
71	158.00	3420.00	583.00	.37	29	.18	.40	.00
96	183.00	3390.00	733.00	.41	30	.19	.41	.00
58	145.00	3710.00	505.00	.41	31	.19	.43	.00
61	148.00	3720.00	523.00	.42	32	.20	.44	.00
51	138.00	3710.00	463.00	.50	36	.22	.51	.00
97	184.00	3360.00	739.00	.56	39	.24	.56	.00
74	161.00	3330.00	601.00	.82	54	.34	.83	.00
49	136.00	3780.00	451.00	.83	55	.34	.85	.00

NO	Y	X1	X2	MAH_1	J	Prob_Value	qi	Outlier
24	111.00	3660.00	301.00	.93	60	.38	.95	.00
42	129.00	3780.00	409.00	.94	61	.38	.97	.00
135	222.00	3360.00	967.00	.95	62	.39	.99	.00
120	207.00	3780.00	877.00	.97	63	.40	1.01	.00
27	114.00	3710.00	319.00	.97	64	.40	1.03	.00
75	162.00	3300.00	607.00	1.02	65	.41	1.05	.00
37	124.00	3780.00	379.00	1.04	66	.41	1.07	.00
29	116.00	3750.00	331.00	1.07	67	.42	1.09	.00
35	122.00	3780.00	367.00	1.08	68	.43	1.11	.00
127	214.00	3780.00	919.00	1.10	69	.43	1.14	.00
32	119.00	3780.00	349.00	1.14	70	.44	1.16	.00
100	187.00	3270.00	757.00	1.15	71	.45	1.18	.00
39	126.00	3810.00	391.00	1.16	72	.45	1.20	.00
30	117.00	3780.00	337.00	1.18	73	.46	1.23	.00
121	208.00	3810.00	883.00	1.18	74	.47	1.25	.00
55	142.00	3850.00	487.00	1.20	75	.47	1.28	.00
40	127.00	3820.00	397.00	1.21	76	.48	1.30	.00
14	213.00	3650.00	241.00	1.21	77	.48	1.32	.00
18	105.00	3710.00	265.00	1.22	78	.49	1.35	.00
28	115.00	3780.00	325.00	1.23	79	.50	1.37	.00
76	163.00	3270.00	613.00	1.24	80	.50	1.40	.00
13	129.00	3660.00	238.00	1.24	81	.51	1.42	.00
148	235.00	3330.00	1015.00	1.27	82	.52	1.45	.00
20	107.00	3750.00	277.00	1.30	83	.52	1.48	.00
45	132.00	3850.00	427.00	1.32	84	.53	1.50	.00
128	215.00	3810.00	925.00	1.33	85	.53	1.53	.00
101	188.00	3240.00	763.00	1.40	86	.54	1.56	.00
21	108.00	3780.00	283.00	1.41	87	.55	1.59	.00
122	209.00	3840.00	889.00	1.43	88	.55	1.61	.00
23	110.00	3800.00	295.00	1.46	89	.56	1.64	.00
19	106.00	3780.00	271.00	1.46	90	.57	1.67	.00

NO	Y	X1	X2	MAH_1	J	Prob_Value	qi	Outlier
25	112.00	3810.00	307.00	1.46	91	.57	1.70	.00
149	236.00	3300.00	1021.00	1.47	92	.58	1.73	.00
77	164.00	3240.00	619.00	1.48	93	.59	1.76	.00
7	123.00	3710.00	211.00	1.50	94	.59	1.79	.00
26	113.00	3820.00	313.00	1.50	95	.60	1.82	.00
16	103.00	3780.00	253.00	1.55	96	.60	1.85	.00
129	216.00	3840.00	931.00	1.58	97	.61	1.89	.00
31	118.00	3850.00	343.00	1.58	98	.62	1.92	.00
9	78.00	3750.00	216.00	1.60	99	.62	1.95	.00
10	43.00	3780.00	231.00	1.66	100	.63	1.99	.00
102	189.00	3210.00	769.00	1.67	101	.64	2.02	.00
150	237.00	3270.00	1027.00	1.69	102	.64	2.06	.00
123	210.00	3870.00	895.00	1.70	103	.65	2.09	.00
139	226.00	3240.00	961.00	1.70	104	.66	2.13	.00
12	96.00	3800.00	236.00	1.73	105	.66	2.17	.00
8	22.00	3780.00	213.00	1.75	106	.67	2.20	.00
78	165.00	3210.00	625.00	1.75	107	.67	2.24	.00
22	109.00	3850.00	289.00	1.79	108	.68	2.28	.00
130	217.00	3870.00	937.00	1.85	109	.69	2.32	.00
103	190.00	3180.00	775.00	1.96	110	.69	2.36	.00
140	227.00	3210.00	967.00	1.98	111	.70	2.40	.00
1	90.00	3690.00	124.00	1.98	112	.71	2.45	.00
124	211.00	3900.00	901.00	1.99	113	.71	2.49	.00
2	115.00	3730.00	135.00	2.01	114	.72	2.53	.00
11	83.00	3850.00	235.00	2.03	115	.72	2.58	.00
79	166.00	3180.00	631.00	2.05	116	.73	2.63	.00
5	74.00	3810.00	177.00	2.10	117	.74	2.67	.00
6	115.00	3820.00	181.00	2.13	118	.74	2.72	.00
131	218.00	3900.00	943.00	2.15	119	.75	2.77	.00
4	74.00	3830.00	173.00	2.24	120	.76	2.82	.00
141	228.00	3180.00	973.00	2.27	121	.76	2.88	.00

NO	Y	X1	X2	MAH_1	J	Prob_Value	qi	Outlier
104	191.00	3150.00	781.00	2.28	122	.77	2.93	.00
125	212.00	3930.00	907.00	2.31	123	.78	2.99	.00
80	167.00	3150.00	637.00	2.36	124	.78	3.04	.00
136	223.00	3330.00	1242.00	2.42	125	.79	3.10	.00
15	102.00	3910.00	247.00	2.42	126	.79	3.16	.00
132	219.00	3930.00	949.00	2.48	127	.80	3.23	.00
142	229.00	3150.00	979.00	2.59	128	.81	3.29	.00
105	192.00	3120.00	787.00	2.62	129	.81	3.36	.00
126	213.00	3960.00	913.00	2.65	130	.82	3.43	.00
81	168.00	3120.00	643.00	2.70	131	.83	3.50	.00
152	115.00	3650.00	1316.00	2.77	132	.83	3.57	.00
151	371.00	3770.00	1242.00	2.82	133	.84	3.65	.00
133	220.00	3960.00	955.00	2.83	134	.84	3.73	.00
143	230.00	3120.00	985.00	2.93	135	.85	3.81	.00
106	193.00	3090.00	793.00	2.98	136	.86	3.90	.00
82	169.00	3090.00	649.00	3.07	137	.86	3.99	.00
137	224.00	3300.00	1316.00	3.10	138	.87	4.08	.00
134	221.00	3990.00	961.00	3.20	139	.88	4.18	.00
144	231.00	3090.00	991.00	3.30	140	.88	4.29	.00
83	170.00	3060.00	655.00	3.45	141	.89	4.40	.00
145	232.00	3060.00	997.00	3.69	142	.90	4.52	.00
84	171.00	3030.00	661.00	3.87	143	.90	4.64	.00
146	233.00	3030.00	1003.00	4.10	144	.91	4.78	.00
85	172.00	3000.00	667.00	4.30	145	.91	4.92	.00
147	234.00	3000.00	1009.00	4.54	146	.92	5.07	.00
138	225.00	3270.00	1471.00	4.56	147	.93	5.24	.00
57	144.00	3000.00	499.00	4.72	148	.93	5.42	.00
47	134.00	3000.00	439.00	4.96	149	.94	5.62	.00
153	136.00	3800.00	1471.00	5.11	150	.95	5.85	.00
33	120.00	3000.00	355.00	5.36	151	.95	6.10	.00
154	277.00	3670.00	1573.00	5.38	152	.96	6.38	.00
17	104.00	3000.00	259.00	5.94	153	.97	6.72	.00
3	41.00	3000.00	144.00	6.77	154	.97	7.12	.00

Lampiran 3. Titik Knot dan Nilai GCV untuk *Penalized kuantil spline* Linear

1. Titik knot dan nilai GCV untuk regresi *penalized kuantil spline* linier pada $\theta = 0,25; 0,50; \text{ dan } 0,75$ untuk y dengan x_1 pada $\lambda = 0,5$

TITIK KNOT			GCV		
$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$	$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$
33,00	32,70	32,70	63,89	39,72	55,91
35,70	36,00	36,00			
36,70	36,70	36,70			
38,90	38,70	38,20			
39,30		39,10			
		39,60			

2. Titik knot dan nilai GCV untuk regresi *penalized kuantil spline* linier pada $\theta = 0,25; 0,50; \text{ dan } 0,75$ untuk y dengan x_1 pada $\lambda = 1$

TITIK KNOT			GCV		
$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$	$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$
32,70	32,70	32,70	62,19	40,08	51,95
35,70	35,70	37,10			
36,70	36,70	37,80			
38,90	37,70	39,10			
	38,90				

3. Titik knot dan nilai GCV untuk regresi *penalized kuantil spline* linier pada $\theta = 0,25; 0,50; \text{ dan } 0,75$ untuk y dengan x_1 pada $\lambda = 1,5$

TITIK KNOT			GCV		
$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$	$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$
32,70	32,70	32,70	65,96	39,48	52,62
36,70	37,10	37,10			
38,90	38,90	37,70			

4. Titik knot dan nilai GCV untuk regresi *penalized kuantil spline* linier pada $\theta = 0,25; 0,50; \text{ dan } 0,75$ untuk y dengan x_2 pada $\lambda = 0,5$

TITIK KNOT			GCV		
$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$	$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$
2,41	1,77	2,53	60,72	44,05	61,74
4,93	2,53	3,55			
7,03	3,49	4,75			
13,16	3,97	7,03			
14,71	6,31	9,61			
21,03	9,61	10,27			
	13,16	12,42			
	14,71	14,71			
	15,73	21,03			

5. Titik knot dan nilai GCV untuk regresi *penalized kuantil spline* linier pada $\theta = 0,25; 0,50; \text{ dan } 0,75$ untuk y dengan x_2 pada $\lambda = 1$

TITIK KNOT			GCV		
$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$	$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$
2,47	6,55	2,53	57,92	39,30	55,11
4,75	13,16	4,21			
7,03	21,03	4,93			
13,16		21,03			
21,03					

6. Titik knot dan nilai GCV untuk regresi *penalized kuantil spline* linier pada $\theta = 0,25; 0,50; \text{ dan } 0,75$ untuk y dengan x_2 pada $\lambda = 1,5$

TITIK KNOT			GCV		
$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$	$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$
4,75	6,37	5,59	57,55	39,29	53,79
7,15	13,16	21,03			
	21,03				

7. Titik knot dan nilai GCV untuk regresi *penalized kuantil spline* linier pada $\theta = 0,25; 0,50; \text{ dan } 0,75$ untuk simultan y dengan x_1 dan x_2 pada $\lambda = 0,5$

GCV		
$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$
63,90	40,32	67,70

8. Titik knot dan nilai GCV untuk regresi *penalized kuantil spline* linier pada $\theta = 0,25; 0,50; \text{ dan } 0,75$ untuk simultan y dengan x_1 dan x_2 pada $\lambda = 1$

GCV		
$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$
63,41	38,37	58,55

9. Titik knot dan nilai GCV untuk regresi *penalized kuantil spline* linier pada $\theta = 0,25; 0,50; \text{ dan } 0,75$ untuk simultan y dengan x_1 dan x_2 pada $\lambda = 1,5$

GCV		
$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$
67,63	37,58	56,04

10. Perbandingan nilai GCV minimum dengan $\lambda = 0,5; 1; \text{ dan } 1,5$ pada kuantil $\theta = 0,25; 0,50; \text{ dan } 0,75$

λ	GCV		
	$\theta = 0,25$	$\theta = 0,50$	$\theta = 0,75$
y dengan x_1			
0,5	63,89	39,72	55,91
1	62,19	40,08	51,95
1,5	65,96	39,48	52,62
y dengan x_2			
0,5	60,72	44,05	61,74
1	57,92	39,30	55,11
1,5	57,55	39,29	53,79
y dengan x_1 dan x_2			
0,5	63,90	40,32	67,70
1	63,41	38,37	58,55
1,5	67,63	37,58	56,04

Lampiran 4. Interval Kepercayaan Trombosit Pasien DBD

1. Estimasi interval kepercayaan Trombosit pasien DBD dengan Tingkat Kepercayaan 95% untuk $\theta = 0,25$

Parameter	Batas Bawah	Batas Atas
β_1	66,80	89,35
β_2	-131,32	-108,77
β_3	-24,59	-2,04
β_4	62,63	85,18
β_5	5,84	16,70
β_6	-75,53	-52,98
β_7	0,09	22,46

2. Estimasi interval kepercayaan Trombosit pasien DBD dengan Tingkat Kepercayaan 95% untuk $\theta = 0,50$

Parameter	Batas Bawah	Batas Atas
β_1	58,46	75,10
β_2	-107,92	-91,28
β_3	46,56	63,20
β_4	-69,88	-53,25
β_5	3,16	19,80
β_6	-18,47	-1,83
β_7	17,34	33,98
β_8	-79,43	-62,79

3. Estimasi interval kepercayaan Trombosit pasien DBD dengan Tingkat Kepercayaan 95% untuk $\theta = 0,75$

Parameter	Batas Bawah	Batas Atas
β_1	56,52	77,04
β_2	-109,86	-89,34
β_3	44,62	65,14
β_4	-71,82	-51,30
β_5	1,22	21,74
β_6	20,42	0,11
β_7	15,39	35,92