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## Lampiran 1

Sebelum melakukan pengujian dalam skala yang besar atau seluruh data pasien COVID 19 terlebih dahulu dilakukan pengujian dalam skala kecil yaitu sebagai berikut :

**Tabel 4. 1. Pengujian kNN skala kecil (1289-1293)**

P	Status	X1	X2	X3	X4
P1	Mati	2	77	0	9
P2	Hidup	1	62	0	9
P3	Mati	2	62	0	0
P4	Hidup	2	50	0	0
P5	?	2	42	0	13

Untuk mencari status dari p5 akan digunakan konsep dasar dari kNN yaitu Euclidean Distance of P5 (2,42,0,13) dimana P1, P2, P3, P4 adalah data training dengan persamaan sebagai berikut :

$$\hat{Y}(P) = \sqrt{\sum_{i=1}^n (x_{training}^i - y_{testing}^i)^2}$$

Keterangan :

$\hat{Y}(P)$  = Status

$x_{training}^i$  = Data Training

$y_{testing}^i$  = Data Testing

i = Variabel Data

n = Dimensi Data

maka,

$$\hat{Y}_{P1} = \sqrt{(X_{1P1} - X_{1P5})^2 + (X_{2P1} - X_{2P5})^2 + (X_{3P1} - X_{3P5})^2 + (X_{4P1} - X_{4P5})^2}$$

$$\hat{Y}_{P1} = \sqrt{(2 - 2)^2 + (77 - 42)^2 + (0 - 0)^2 + (9 - 13)^2}$$

$$\hat{Y}_{P1} = \sqrt{(0)^2 + (35)^2 + (0)^2 + (-4)^2}$$

$$\hat{Y}_{P1} = \sqrt{0 + 1225 + 0 + 16}$$

$$\hat{Y}_{P1} = \sqrt{1241}$$

$$\hat{Y}_{P1} = 35.228 \text{ (Mati)}$$

$$\begin{aligned} \hat{Y}_{P2} \\ = \sqrt{(X_{1P2} - X_{1P5})^2 + (X_{2P2} - X_{2P5})^2 + (X_{3P2} - X_{3P5})^2 + (X_{4P2} - X_{4P5})^2} \end{aligned}$$

$$\hat{Y}_{P2} = \sqrt{(1 - 2)^2 + (62 - 42)^2 + (0 - 0)^2 + (9 - 13)^2}$$

$$\hat{Y}_{P2} = \sqrt{(-1)^2 + (20)^2 + (0)^2 + (-4)^2}$$

$$\hat{Y}_{P2} = \sqrt{1 + 400 + 0 + 16}$$

$$\hat{Y}_{P2} = \sqrt{417}$$

$$\hat{Y}_{P2} = 20.421 \text{ (Hidup)}$$

$$\begin{aligned} \hat{Y}_{P3} \\ = \sqrt{(X_{1P2} - X_{1P5})^2 + (X_{2P2} - X_{2P5})^2 + (X_{3P2} - X_{3P5})^2 + (X_{4P2} - X_{4P5})^2} \end{aligned}$$

$$\hat{Y}_{P3} = \sqrt{(2 - 2)^2 + (62 - 42)^2 + (0 - 0)^2 + (0 - 13)^2}$$

$$\hat{Y}_{P3} = \sqrt{(0)^2 + (20)^2 + (0)^2 + (-13)^2}$$

$$\hat{Y}_{P3} = \sqrt{0 + 400 + 0 + 169}$$

$$\hat{Y}_{P3} = \sqrt{569}$$

$$\hat{Y}_{P3} = 23.854 \text{ (Mati)}$$

$$\hat{Y}_{P4} = \sqrt{(X_{1P2} - X_{1P5})^2 + (X_{2P2} - X_{2P5})^2 + (X_{3P2} - X_{3P5})^2 + (X_{4P2} - X_{4P5})^2}$$

$$\hat{Y}_{P4} = \sqrt{(2 - 2)^2 + (50 - 42)^2 + (0 - 0)^2 + (0 - 13)^2}$$

$$\hat{Y}_{P4} = \sqrt{0^2 + (8)^2 + (0)^2 + (-13)^2}$$

$$\hat{Y}_{P4} = \sqrt{0 + 64 + 0 + 169}$$

$$\hat{Y}_{P4} = \sqrt{233}$$

$$\hat{Y}_{P4} = 15.264 \text{ (Mati)}$$

Hasil dari perhitungan algoritma kNN menggunakan *Euclidean Distance* sebagai berikut :

**Tabel 4. 2. Hasil Euclidean P1, P2, P3 P4**

$\hat{Y}_{P4}$	15.246	Mati
$\hat{Y}_{P2}$	20.421	Hidup
$\hat{Y}_{P3}$	23.854	Mati
$\hat{Y}_{P1}$	35.228	Mati

Berdasarkan hasil perhitungan diatas maka Prediksi Status P5 dapat di ketahui dengan cara membandingkan nilai nilai  $X_{P5}$  terhadap hasil Euclidean P1, P2, P3 dan P4. Untuk nilai  $X_{1P5} = 2$  mendekati hasil dari  $\hat{Y}_{P4} = 15.246$  jadi diprediksi Mati, untuk nilai  $X_{2P5} = 42$  mendekati hasil dari  $\hat{Y}_{P1} = 35.228$  jadi diprediksi Mati, untuk nilai  $X_{3P5} = 0$  mendekati hasil dari  $\hat{Y}_{P4} = 15.246$  jadi diprediksi Mati, nilai  $X_{4P5} = 13$  mendekati hasil dari  $\hat{Y}_{P4} = 15.246$  jadi diprediksi Mati, maka P5 di prediksi Mati. Confusion Matrix dapat dilihat pada tabel 4.10 :

**Tabel 4. 3. Confution Matriks data skala kecil**

**Confusion Matrix**

	Predicted	
	Hidup	Mati

### Confusion Matrix

		Predicted	
		Hidup	Mati
Observed	Hidup	0	1
	Mati	0	0

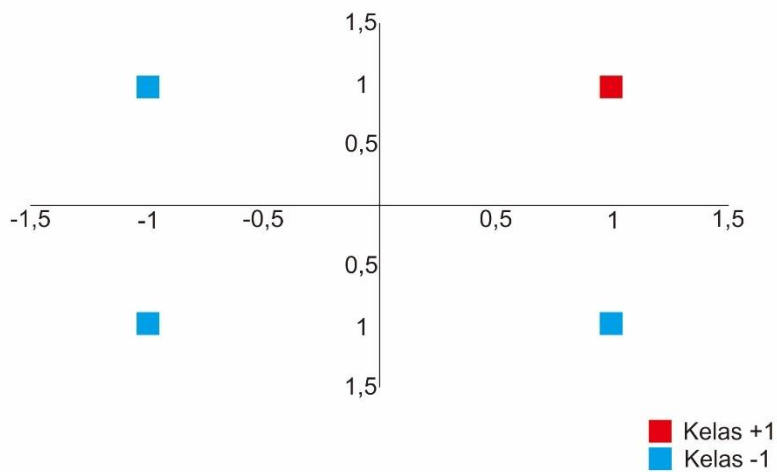
Untuk Algoritma SVM memiliki tahapan seperti berikut :

1. Visualisasikan Data
2. Meminimalisir Nilai Margin
3. Mencari Persamaan Hyperplane
4. Visualisasi Hyperplane
5. Melakukan Pengujian Data
6. Melakukan Klasifikasi.

Langkah pertama yaitu menentukan Hyperplane

$x_1$	$x_2$	Kelas (y)	Support Vector (SV)
1	1	1	1
1	-1	-1	1
-1	1	-1	1
-1	-1	-1	0





Karena ada dua variable ( $x_1$  dan  $x_2$ ), maka  $w$  juga akan memiliki 2 fitur ( $w_1$  dan  $w_2$ ). Formulasi yang digunakan adalah sebagai berikut :

Meminimalkan nilai :

$$\frac{1}{2} \|w\|^2 = \frac{1}{2} (w_1^2 + w_2^2)$$

Syarat :

$$y_i(w_1 \cdot x_i + b) \geq 1, \quad i = 1, 2, 3, \dots, N$$

$$y_i(w_1 \cdot x_1 + w_2 \cdot x_2 + b) \geq 1$$

$x_1$	$x_2$	Kelas ( $y$ )
1	1	1
1	-1	-1
-1	1	-1
-1	-1	-1

Contoh perhitungan :

$$y_1(w_1 \cdot x_1 + w_2 \cdot x_2 + b) \geq 1$$

$$1(w_1 \cdot 1 + w_2 \cdot 1 + b) \geq 1$$

$$(w_1 + w_2 + b) \geq 1$$

Hasil :

1.  $(w_1 + w_2 + b) \geq 1$ , untuk  $y_1 = 1, x_1 = 1, x_2 = 1$
2.  $(-w_1 + w_2 - b) \geq 1$ , untuk  $y_2 = -1, x_1 = 1, x_2 = -1$
3.  $(w_1 - w_2 - b) \geq 1$ , untuk  $y_3 = -1, x_1 = -1, x_2 = 1$
4.  $(w_1 + w_2 - b) \geq 1$ , untuk  $y_4 = -1, x_1 = -1, x_2 = -1$

Kemudian menjumlahkan persamaan yang telah didapatkan :

1. Jumlahkan persamaan (1) dan (2)

$$\begin{array}{r} (w_1 + w_2 + b) \geq 1 \\ (w_1 + w_2 + b) \geq 1 \end{array}$$

----- +

$$2w_2 = 2$$

Maka  $w_2 = 1$

2. Jumlahkan persamaan (1) dan (3)

$$\begin{array}{r} (w_1 + w_2 + b) \geq 1 \\ (w_1 - w_2 - b) \geq 1 \end{array}$$

----- +

$$2w_1 = 2$$

Maka  $w_1 = 1$

3. Jumlahkan persamaan (2) dan (3)

$$\begin{array}{r} (-w_1 + w_2 - b) \geq 1 \\ (w_1 - w_2 - b) \geq 1 \end{array}$$

----- +

$$-2b = 2$$

Maka  $b = -1$

Sehingga didapatkan persamaan hyperplane :

$$\begin{array}{l} w_1 \cdot x_1 + w_2 \cdot x_2 + b = 0 \\ x_1 + x_2 - 1 = 0 \end{array}$$

$$x_2 = 1 - x_1$$

Selanjutnya mengklasifikasikan menggunakan persamaan hyperplane yang didapatkan :

$$f(x) = x_1 + x_2 - 1$$

$$kelas = \text{sign}(f(x))$$

No	Data Uji		Hasil Klasifikasi
	$x_1$	$x_2$	$kelas = \text{sign}(x_1 + x_2 - 1)$
1	1	5	$\text{sign}(1 + 5 - 1) = +1$
2	-1	4	$\text{sign}(-1 + 4 - 1) = +1$
3	0	7	$\text{sign}(0 + 7 - 1) = +1$
4	-9	0	$\text{sign}(-9 + 0 - 1) = -1$
5	2	-2	$\text{sign}(2 - 2 - 1) = -1$

Maka dari percobaan tersebut kita menemukan bahwa yang termasuk dalam kelas +1 ada tiga data 1, 2, dan 3 sedangkan yang masuk kedalam kelas -1 ada 2 data yaitu 4 dan 5.

## Lampiran 2

- **Pengujian 1 nilai K kNN**

**Tabel Lampiran 1 Hasil Pengujian 1 kNN Semua Nilai K**

K	Accuracy	Precision	Recall	AUC
1	0.980	0.979	0.980	0.703
2	0.978	0.978	0.978	0.817
3	0.983	0.981	0.983	0.777
4	0.984	0.982	0.984	0.822
5	0.985	0.982	0.985	0.811
6	0.985	0.984	0.985	0.841
7	0.982	0.979	0.982	0.829
8	0.985	0.982	0.985	0.818
9	0.985	0.982	0.985	0.846
10	0.981	0.977	0.981	0.849

- **Pengujian 2 nilai K kNN**

**Tabel Lampiran 2 Pengujian 2 kNN Semua Nilai K**

K	Accuracy	Precision	Recall	AUC
1	0.977	0.978	0.977	0.730
2	0.978	0.979	0.978	0.787
3	0.985	0.983	0.985	0.821
4	0.987	0.985	0.987	0.844
5	0.986	0.984	0.986	0.806
6	0.985	0.983	0.985	0.837
7	0.986	0.984	0.986	0.834

8	0.984	0.982	0.984	0.817
9	0.983	0.981	0.983	0.831
10	0.985	0.983	0.985	0.859

- **Pengujian 3 nilai K kNN**

**Tabel Lampiran 3 Pengujian 3 kNN Semua Nilai K**

K	Accuracy	Precision	Recall	AUC
1	0.980	0.979	0.980	0.731
2	0.979	0.978	0.979	0.772
3	0.985	0.983	0.985	0.774
4	0.985	0.982	0.985	0.800
5	0.985	0.982	0.985	0.808
6	0.984	0.982	0.984	0.814
7	0.985	0.982	0.985	0.816
8	0.983	0.980	0.983	0.814
9	0.984	0.981	0.984	0.835
10	0.983	0.979	0.983	0.824

## Lampiran 2

- **Hasil Pengujian 1 kNN K=1**

**Tabel Lampiran 4 Hasil Pengujian 1 KNN K=1**

### Model Performance Metrics

	Hidup	Mati	Average / Total
Support	5328	106	5434
Accuracy	0.980	0.980	0.980
Precision (Positive Predictive Value)	0.988	0.489	0.979

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Recall (True Positive Rate)	0.991	0.415	0.980
False Positive Rate	0.585	0.009	0.297
False Discovery Rate	0.012	0.511	0.261
F1 Score	0.990	0.449	0.979
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.703	0.703	0.703
Negative Predictive Value	0.489	0.988	0.739
True Negative Rate	0.415	0.991	0.703
False Negative Rate	0.009	0.585	0.297
False Omission Rate	0.511	0.012	0.261
Threat Score	31.071	0.286	15.678
Statistical Parity	0.983	0.017	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 1 kNN K=2**

**Tabel Lampiran 5 Hasil Pengujian 1 KNN K=2**

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	5315	119	5434
Accuracy	0.978	0.978	0.978
Precision (Positive Predictive Value)	0.989	0.508	0.978
Recall (True Positive Rate)	0.989	0.504	0.978
False Positive Rate	0.496	0.011	0.253

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
False Discovery Rate	0.011	0.492	0.251
F1 Score	0.989	0.506	0.978
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.817	0.817	0.817
Negative Predictive Value	0.508	0.989	0.749
True Negative Rate	0.504	0.989	0.747
False Negative Rate	0.011	0.496	0.253
False Omission Rate	0.492	0.011	0.251
Threat Score	29.869	0.343	15.106
Statistical Parity	0.978	0.022	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 1 kNN K=3**

**Tabel Lampiran 6 Hasil Pengujian 1 KNN K=3**

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	5318	116	5434
Accuracy	0.983	0.983	0.983
Precision (Positive Predictive Value)	0.987	0.691	0.981
Recall (True Positive Rate)	0.996	0.405	0.983
False Positive Rate	0.595	0.004	0.299
False Discovery Rate	0.013	0.309	0.161
F1 Score	0.992	0.511	0.981

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.777	0.777	0.777
Negative Predictive Value	0.691	0.987	0.839
True Negative Rate	0.405	0.996	0.701
False Negative Rate	0.004	0.595	0.299
False Omission Rate	0.309	0.013	0.161
Threat Score	33.314	0.423	16.869
Statistical Parity	0.987	0.013	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 1 kNN K=4**

**Tabel Lampiran 7 Hasil Pengujian 1 KNN K=4**

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	5313	121	5434
Accuracy	0.984	0.984	0.984
Precision (Positive Predictive Value)	0.988	0.733	0.982
Recall (True Positive Rate)	0.996	0.455	0.984
False Positive Rate	0.545	0.004	0.275
False Discovery Rate	0.012	0.267	0.139
F1 Score	0.992	0.561	0.982
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.822	0.822	0.822



**Model Performance Metrics**

	Hidup	Mati	Average / Total
Negative Predictive Value	0.733	0.988	0.861
True Negative Rate	0.455	0.996	0.725
False Negative Rate	0.004	0.545	0.275
False Omission Rate	0.267	0.012	0.139
Threat Score	34.822	0.519	17.671
Statistical Parity	0.986	0.014	1.000

*Note.* All metrics are calculated for every class against all other classes.

- Hasil Pengujian 1 kNN K=5

**Tabel Lampiran 8 Hasil Pengujian 1 KNN K=5**

**Model Performance Metrics**

	Hidup	Mati	Average / Total
Support	5320	114	5434
Accuracy	0.985	0.985	0.985
Precision (Positive Predictive Value)	0.988	0.746	0.982
Recall (True Positive Rate)	0.997	0.412	0.985
False Positive Rate	0.588	0.003	0.295
False Discovery Rate	0.012	0.254	0.133
F1 Score	0.992	0.531	0.983
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.811	0.811	0.811
Negative Predictive Value	0.746	0.988	0.867
True Negative Rate	0.412	0.997	0.705

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
False Negative Rate	0.003	0.588	0.295
False Omission Rate	0.254	0.012	0.133
Threat Score	35.360	0.475	17.917
Statistical Parity	0.988	0.012	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 1 kNN K=6**

**Tabel Lampiran 9 Hasil Pengujian 1 KNN K=6**

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	5306	128	5434
Accuracy	0.985	0.985	0.985
Precision (Positive Predictive Value)	0.987	0.889	0.984
Recall (True Positive Rate)	0.999	0.438	0.985
False Positive Rate	0.563	0.001	0.282
False Discovery Rate	0.013	0.111	0.062
F1 Score	0.993	0.586	0.983
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.841	0.841	0.841
Negative Predictive Value	0.889	0.987	0.938
True Negative Rate	0.438	0.999	0.718
False Negative Rate	0.001	0.563	0.282
False Omission Rate	0.111	0.013	0.062

**Model Performance Metrics**

	Hidup	Mati	Average / Total
Threat Score	35.093	0.651	17.872
Statistical Parity	0.988	0.012	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 1 kNN K=7**

**Tabel Lampiran 10 Hasil Pengujian 1 KNN K=7**

**Model Performance Metrics**

	Hidup	Mati	Average / Total
Support	5301	133	5434
Accuracy	0.982	0.982	0.982
Precision (Positive Predictive Value)	0.984	0.762	0.979
Recall (True Positive Rate)	0.997	0.361	0.982
False Positive Rate	0.639	0.003	0.321
False Discovery Rate	0.016	0.238	0.127
F1 Score	0.991	0.490	0.978
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.829	0.829	0.829
Negative Predictive Value	0.762	0.984	0.873
True Negative Rate	0.361	0.997	0.679
False Negative Rate	0.003	0.639	0.321
False Omission Rate	0.238	0.016	0.127
Threat Score	28.573	0.417	14.495
Statistical Parity	0.988	0.012	1.000

### Model Performance Metrics

	Hidup	Mati	Average / Total
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*Note.* All metrics are calculated for every class against all other classes.

- Hasil Pengujian 1 kNN K=8

**Tabel Lampiran 11 Hasil Pengujian 1 KNN K=8**

### Model Performance Metrics

	Hidup	Mati	Average / Total
Support	5327	107	5434
Accuracy	0.985	0.985	0.985
Precision (Positive Predictive Value)	0.987	0.755	0.982
Recall (True Positive Rate)	0.998	0.346	0.985
False Positive Rate	0.654	0.002	0.328
False Discovery Rate	0.013	0.245	0.129
F1 Score	0.992	0.474	0.982
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.818	0.818	0.818
Negative Predictive Value	0.755	0.987	0.871
True Negative Rate	0.346	0.998	0.672
False Negative Rate	0.002	0.654	0.328
False Omission Rate	0.245	0.013	0.129
Threat Score	34.967	0.394	17.680
Statistical Parity	0.991	0.009	1.000

*Note.* All metrics are calculated for every class against all other classes.

- Hasil Pengujian 1 kNN K=9

Tabel Lampiran 12 Hasil Pengujian 1 KNN K=9

**Model Performance Metrics**

	Hidup	Mati	Average / Total
Support	5326	108	5434
Accuracy	0.985	0.985	0.985
Precision (Positive Predictive Value)	0.987	0.760	0.982
Recall (True Positive Rate)	0.998	0.352	0.985
False Positive Rate	0.648	0.002	0.325
False Discovery Rate	0.013	0.240	0.127
F1 Score	0.992	0.481	0.982
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.846	0.846	0.846
Negative Predictive Value	0.760	0.987	0.873
True Negative Rate	0.352	0.998	0.675
False Negative Rate	0.002	0.648	0.325
False Omission Rate	0.240	0.013	0.127
Threat Score	34.961	0.404	17.682
Statistical Parity	0.991	0.009	1.000

*Note.* All metrics are calculated for every class against all other classes.

- Hasil Pengujian 1 kNN K=10

Tabel Lampiran 13 Hasil Pengujian 1 KNN K=10

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	5308	126	5434
Accuracy	0.981	0.981	0.981
Precision (Positive Predictive Value)	0.982	0.756	0.977
Recall (True Positive Rate)	0.998	0.246	0.981
False Positive Rate	0.754	0.002	0.378
False Discovery Rate	0.018	0.244	0.131
F1 Score	0.990	0.371	0.976
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.849	0.849	0.849
Negative Predictive Value	0.756	0.982	0.869
True Negative Rate	0.246	0.998	0.622
False Negative Rate	0.002	0.754	0.378
False Omission Rate	0.244	0.018	0.131
Threat Score	26.490	0.270	13.380
Statistical Parity	0.992	0.008	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 2 kNN K=1**

**Tabel Lampiran 14 Hasil Pengujian 2 KNN K=1**

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	10660	209	10869
Accuracy	0.977	0.977	0.977
Precision (Positive Predictive Value)	0.990	0.409	0.978

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Recall (True Positive Rate)	0.987	0.474	0.977
False Positive Rate	0.526	0.013	0.270
False Discovery Rate	0.010	0.591	0.301
F1 Score	0.988	0.439	0.978
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.730	0.730	0.730
Negative Predictive Value	0.409	0.990	0.699
True Negative Rate	0.474	0.987	0.730
False Negative Rate	0.013	0.526	0.270
False Omission Rate	0.591	0.010	0.301
Threat Score	28.972	0.250	14.611
Statistical Parity	0.978	0.022	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 2 kNN K=2**

**Tabel Lampiran 15 Hasil Pengujian 2 KNN K=2**

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	10660	209	10869
Accuracy	0.978	0.978	0.978
Precision (Positive Predictive Value)	0.989	0.440	0.979
Recall (True Positive Rate)	0.989	0.455	0.978
False Positive Rate	0.545	0.011	0.278

**Model Performance Metrics**

	Hidup	Mati	Average / Total
False Discovery Rate	0.011	0.560	0.285
F1 Score	0.989	0.447	0.979
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.787	0.787	0.787
Negative Predictive Value	0.440	0.989	0.715
True Negative Rate	0.455	0.989	0.722
False Negative Rate	0.011	0.545	0.278
False Omission Rate	0.560	0.011	0.285
Threat Score	30.198	0.267	15.232
Statistical Parity	0.980	0.020	1.000

*Note.* All metrics are calculated for every class against all other classes.

- Hasil Pengujian 2 kNN K=3

**Tabel Lampiran 16 Hasil Pengujian 2 KNN K=3**

**Model Performance Metrics**

	Hidup	Mati	Average / Total
Support	10660	209	10869
Accuracy	0.985	0.985	0.985
Precision (Positive Predictive Value)	0.989	0.655	0.983
Recall (True Positive Rate)	0.995	0.455	0.985
False Positive Rate	0.545	0.005	0.275
False Discovery Rate	0.011	0.345	0.178



**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
F1 Score	0.992	0.537	0.984
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.821	0.821	0.821
Negative Predictive Value	0.655	0.989	0.822
True Negative Rate	0.455	0.995	0.725
False Negative Rate	0.005	0.545	0.275
False Omission Rate	0.345	0.011	0.178
Threat Score	38.165	0.444	19.305
Statistical Parity	0.987	0.013	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 2 kNN K=4**

**Tabel Lampiran 17 Hasil Pengujian 2 KNN K=4**

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	10660	209	10869
Accuracy	0.987	0.987	0.987
Precision (Positive Predictive Value)	0.990	0.736	0.985
Recall (True Positive Rate)	0.997	0.493	0.987
False Positive Rate	0.507	0.003	0.255
False Discovery Rate	0.010	0.264	0.137
F1 Score	0.993	0.590	0.986
Matthews Correlation Coefficient			NaN

**Model Performance Metrics**

	Hidup	Mati	Average / Total
Area Under Curve (AUC)	0.844	0.844	0.844
Negative Predictive Value	0.736	0.990	0.863
True Negative Rate	0.493	0.997	0.745
False Negative Rate	0.003	0.507	0.255
False Omission Rate	0.264	0.010	0.137
Threat Score	42.663	0.572	21.617
Statistical Parity	0.987	0.013	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 2 kNN K=5**

**Tabel Lampiran 18 Hasil Pengujian 2 KNN K=5**

**Model Performance Metrics**

	Hidup	Mati	Average / Total
Support	10668	201	10869
Accuracy	0.986	0.986	0.986
Precision (Positive Predictive Value)	0.988	0.758	0.984
Recall (True Positive Rate)	0.998	0.358	0.986
False Positive Rate	0.642	0.002	0.322
False Discovery Rate	0.012	0.242	0.127
F1 Score	0.993	0.486	0.984
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.806	0.806	0.806
Negative Predictive Value	0.758	0.988	0.873

**Model Performance Metrics**

	Hidup	Mati	Average / Total
True Negative Rate	0.358	0.998	0.678
False Negative Rate	0.002	0.642	0.322
False Omission Rate	0.242	0.012	0.127
Threat Score	37.883	0.411	19.147
Statistical Parity	0.991	0.009	1.000

*Note.* All metrics are calculated for every class against all other classes.

- Hasil Pengujian 2 kNN K=6

**Tabel Lampiran 19 Hasil Pengujian 2 KNN K=6**

**Model Performance Metrics**

	Hidup	Mati	Average / Total
Support	10658	211	10869
Accuracy	0.985	0.985	0.985
Precision (Positive Predictive Value)	0.988	0.736	0.983
Recall (True Positive Rate)	0.997	0.384	0.985
False Positive Rate	0.616	0.003	0.309
False Discovery Rate	0.012	0.264	0.138
F1 Score	0.993	0.505	0.983
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.837	0.837	0.837
Negative Predictive Value	0.736	0.988	0.862
True Negative Rate	0.384	0.997	0.691
False Negative Rate	0.003	0.616	0.309

**Model Performance Metrics**

	Hidup	Mati	Average / Total
False Omission Rate	0.264	0.012	0.138
Threat Score	36.779	0.431	18.605
Statistical Parity	0.990	0.010	1.000

*Note.* All metrics are calculated for every class against all other classes.

- Hasil Pengujian 2 kNN K=7

**Tabel Lampiran 20 Hasil Pengujian 2 KNN K=7**

**Model Performance Metrics**

	Hidup	Mati	Average / Total
Support	10671	198	10869
Accuracy	0.986	0.986	0.986
Precision (Positive Predictive Value)	0.987	0.795	0.984
Recall (True Positive Rate)	0.999	0.313	0.986
False Positive Rate	0.687	0.001	0.344
False Discovery Rate	0.013	0.205	0.109
F1 Score	0.993	0.449	0.983
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.834	0.834	0.834
Negative Predictive Value	0.795	0.987	0.891
True Negative Rate	0.313	0.999	0.656
False Negative Rate	0.001	0.687	0.344
False Omission Rate	0.205	0.013	0.109
Threat Score	36.997	0.369	18.683

**Model Performance Metrics**

	Hidup	Mati	Average / Total
Statistical Parity	0.993	0.007	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 2 kNN K=8**

**Tabel Lampiran 21 Hasil Pengujian 2 KNN K=8**

**Model Performance Metrics**

	Hidup	Mati	Average / Total
Support	10648	221	10869
Accuracy	0.984	0.984	0.984
Precision (Positive Predictive Value)	0.986	0.778	0.982
Recall (True Positive Rate)	0.998	0.317	0.984
False Positive Rate	0.683	0.002	0.343
False Discovery Rate	0.014	0.222	0.118
F1 Score	0.992	0.450	0.981
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.817	0.817	0.817
Negative Predictive Value	0.778	0.986	0.882
True Negative Rate	0.317	0.998	0.657
False Negative Rate	0.002	0.683	0.343
False Omission Rate	0.222	0.014	0.118
Threat Score	33.006	0.366	16.686
Statistical Parity	0.992	0.008	1.000

*Note.* All metrics are calculated for every class against all other classes.

- Hasil Pengujian 2 kNN K=9

**Tabel Lampiran 22 Hasil Pengujian 2 KNN K=9**

**Model Performance Metrics**

	Hidup	Mati	Average / Total
Support	10635	234	10869
Accuracy	0.983	0.983	0.983
Precision (Positive Predictive Value)	0.985	0.827	0.981
Recall (True Positive Rate)	0.999	0.286	0.983
False Positive Rate	0.714	0.001	0.357
False Discovery Rate	0.015	0.173	0.094
F1 Score	0.992	0.425	0.979
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.831	0.831	0.831
Negative Predictive Value	0.827	0.985	0.906
True Negative Rate	0.286	0.999	0.643
False Negative Rate	0.001	0.714	0.357
False Omission Rate	0.173	0.015	0.094
Threat Score	30.520	0.344	15.432
Statistical Parity	0.993	0.007	1.000

*Note.* All metrics are calculated for every class against all other classes.

- Hasil Pengujian 2 kNN K=10

Tabel Lampiran 23 Hasil Pengujian 2 KNN K=10

<b>Model Performance Metrics</b>			
	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	10671	198	10869
Accuracy	0.985	0.985	0.985
Precision (Positive Predictive Value)	0.987	0.678	0.982
Recall (True Positive Rate)	0.997	0.308	0.985
False Positive Rate	0.692	0.003	0.347
False Discovery Rate	0.013	0.322	0.167
F1 Score	0.992	0.424	0.982
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.859	0.859	0.859
Negative Predictive Value	0.678	0.987	0.833
True Negative Rate	0.308	0.997	0.653
False Negative Rate	0.003	0.692	0.347
False Omission Rate	0.322	0.013	0.167
Threat Score	35.122	0.313	17.717
Statistical Parity	0.992	0.008	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 3 kNN K=1**

Tabel Lampiran 24 Hasil Pengujian 3 KNN K=1

<b>Model Performance Metrics</b>			
	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	15953	351	16304

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Accuracy	0.980	0.980	0.980
Precision (Positive Predictive Value)	0.988	0.536	0.979
Recall (True Positive Rate)	0.991	0.470	0.980
False Positive Rate	0.530	0.009	0.269
False Discovery Rate	0.012	0.464	0.238
F1 Score	0.990	0.501	0.979
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.731	0.731	0.731
Negative Predictive Value	0.536	0.988	0.762
True Negative Rate	0.470	0.991	0.731
False Negative Rate	0.009	0.530	0.269
False Omission Rate	0.464	0.012	0.238
Threat Score	30.699	0.350	15.524
Statistical Parity	0.981	0.019	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 3 kNN K=2**

**Tabel Lampiran 25 Hasil Pengujian 3 KNN K=2**

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	15974	330	16304
Accuracy	0.979	0.979	0.979
Precision (Positive Predictive Value)	0.988	0.489	0.978



**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Recall (True Positive Rate)	0.991	0.418	0.979
False Positive Rate	0.582	0.009	0.295
False Discovery Rate	0.012	0.511	0.261
F1 Score	0.989	0.451	0.979
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.772	0.772	0.772
Negative Predictive Value	0.489	0.988	0.739
True Negative Rate	0.418	0.991	0.705
False Negative Rate	0.009	0.582	0.295
False Omission Rate	0.511	0.012	0.261
Threat Score	29.981	0.287	15.134
Statistical Parity	0.983	0.017	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 3 kNN K=3**

**Tabel Lampiran 26 Hasil Pengujian 3 KNN K=3**

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	15998	306	16304
Accuracy	0.985	0.985	0.985
Precision (Positive Predictive Value)	0.989	0.660	0.983
Recall (True Positive Rate)	0.996	0.425	0.985
False Positive Rate	0.575	0.004	0.290

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
False Discovery Rate	0.011	0.340	0.176
F1 Score	0.992	0.517	0.984
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.774	0.774	0.774
Negative Predictive Value	0.660	0.989	0.824
True Negative Rate	0.425	0.996	0.710
False Negative Rate	0.004	0.575	0.290
False Omission Rate	0.340	0.011	0.176
Threat Score	38.021	0.419	19.220
Statistical Parity	0.988	0.012	1.000

*Note.* All metrics are calculated for every class against all other classes.

- Hasil Pengujian 3 kNN K=4

**Tabel Lampiran 27 Hasil Pengujian 3 KNN K=4**

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	15979	325	16304
Accuracy	0.985	0.985	0.985
Precision (Positive Predictive Value)	0.989	0.676	0.982
Recall (True Positive Rate)	0.996	0.431	0.985
False Positive Rate	0.569	0.004	0.287
False Discovery Rate	0.011	0.324	0.168
F1 Score	0.992	0.526	0.983

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.800	0.800	0.800
Negative Predictive Value	0.676	0.989	0.832
True Negative Rate	0.431	0.996	0.713
False Negative Rate	0.004	0.569	0.287
False Omission Rate	0.324	0.011	0.168
Threat Score	36.412	0.439	18.425
Statistical Parity	0.987	0.013	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 3 kNN K=5**

**Tabel Lampiran 28 Pengujian 3 KNN K=5**

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	15968	336	16304
Accuracy	0.985	0.985	0.985
Precision (Positive Predictive Value)	0.987	0.766	0.982
Recall (True Positive Rate)	0.998	0.360	0.985
False Positive Rate	0.640	0.002	0.321
False Discovery Rate	0.013	0.234	0.124
F1 Score	0.992	0.490	0.982
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.808	0.808	0.808

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Negative Predictive Value	0.766	0.987	0.876
True Negative Rate	0.360	0.998	0.679
False Negative Rate	0.002	0.640	0.321
False Omission Rate	0.234	0.013	0.124
Threat Score	34.113	0.419	17.266
Statistical Parity	0.990	0.010	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 3 kNN K=6**

**Tabel Lampiran 29 Pengujian 3 KNN K=6**

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	15980	324	16304
Accuracy	0.984	0.984	0.984
Precision (Positive Predictive Value)	0.987	0.735	0.982
Recall (True Positive Rate)	0.997	0.343	0.984
False Positive Rate	0.657	0.003	0.330
False Discovery Rate	0.013	0.265	0.139
F1 Score	0.992	0.467	0.982
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.814	0.814	0.814
Negative Predictive Value	0.735	0.987	0.861
True Negative Rate	0.343	0.997	0.670

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
False Negative Rate	0.003	0.657	0.330
False Omission Rate	0.265	0.013	0.139
Threat Score	34.206	0.379	17.292
Statistical Parity	0.991	0.009	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 3 kNN K=7**

**Tabel Lampiran 30 Pengujian 3 KNN K=7**

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	15987	317	16304
Accuracy	0.985	0.985	0.985
Precision (Positive Predictive Value)	0.986	0.793	0.982
Recall (True Positive Rate)	0.999	0.278	0.985
False Positive Rate	0.722	0.001	0.362
False Discovery Rate	0.014	0.207	0.111
F1 Score	0.992	0.411	0.981
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.816	0.816	0.816
Negative Predictive Value	0.793	0.986	0.889
True Negative Rate	0.278	0.999	0.638
False Negative Rate	0.001	0.722	0.362
False Omission Rate	0.207	0.014	0.111

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Threat Score	33.189	0.320	16.755
Statistical Parity	0.993	0.007	1.000

*Note.* All metrics are calculated for every class against all other classes.

- **Hasil Pengujian 3 kNN K=8**

**Tabel Lampiran 31 Pengujian 3 KNN K=8**

**Model Performance Metrics**

	<b>Hidup</b>	<b>Mati</b>	<b>Average / Total</b>
Support	15982	322	16304
Accuracy	0.983	0.983	0.983
Precision (Positive Predictive Value)	0.985	0.718	0.980
Recall (True Positive Rate)	0.998	0.261	0.983
False Positive Rate	0.739	0.002	0.371
False Discovery Rate	0.015	0.282	0.148
F1 Score	0.992	0.383	0.980
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.814	0.814	0.814
Negative Predictive Value	0.718	0.985	0.852
True Negative Rate	0.261	0.998	0.629
False Negative Rate	0.002	0.739	0.371
False Omission Rate	0.282	0.015	0.148
Threat Score	31.334	0.276	15.805
Statistical Parity	0.993	0.007	1.000

### Model Performance Metrics

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**Hidup Mati Average / Total**

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*Note.* All metrics are calculated for every class against all other classes.

- Hasil Pengujian 3 kNN K=9

Tabel Lampiran 32 Pengu

jian 3 KNN K=9

### Model Performance Metrics

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**Hidup Mati Average / Total**

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Support	15982	322	16304
Accuracy	0.984	0.984	0.984
Precision (Positive Predictive Value)	0.985	0.770	0.981
Recall (True Positive Rate)	0.999	0.239	0.984
False Positive Rate	0.761	0.001	0.381
False Discovery Rate	0.015	0.230	0.123
F1 Score	0.992	0.365	0.979
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.835	0.835	0.835
Negative Predictive Value	0.770	0.985	0.877
True Negative Rate	0.239	0.999	0.619
False Negative Rate	0.001	0.761	0.381
False Omission Rate	0.230	0.015	0.123
Threat Score	31.109	0.265	15.687
Statistical Parity	0.994	0.006	1.000

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*Note.* All metrics are calculated for every class against all other classes.

- Hasil Pengujian 3 kNN K=10

Tabel Lampiran 33 Pengujian 3 KNN K=10

**Model Performance Metrics**

	Hidup	Mati	Average / Total
Support	15965	339	16304
Accuracy	0.983	0.983	0.983
Precision (Positive Predictive Value)	0.984	0.737	0.979
Recall (True Positive Rate)	0.998	0.248	0.983
False Positive Rate	0.752	0.002	0.377
False Discovery Rate	0.016	0.263	0.139
F1 Score	0.991	0.371	0.978
Matthews Correlation Coefficient			NaN
Area Under Curve (AUC)	0.824	0.824	0.824
Negative Predictive Value	0.737	0.984	0.861
True Negative Rate	0.248	0.998	0.623
False Negative Rate	0.002	0.752	0.377
False Omission Rate	0.263	0.016	0.139
Threat Score	29.509	0.267	14.888
Statistical Parity	0.993	0.007	1.000

*Note.* All metrics are calculated for every class against all other classes.



## Lampiran 3

Tabel Lampiran 34 Data Awal

NO	TANGGAL	UMUR	JENIS KELAMIN	KOMORBID	MENINGGAL	SEMBUH
1		55	P		19-Mar-20	#N/A
2		58	L		25-Mar-20	#N/A
3		49	L		#N/A	3-Apr-20
4		48	P		#N/A	3-Apr-20
5		51	L		25-Mar-20	#N/A
6		34	P		#N/A	4-Apr-20
7		50	L		#N/A	4-Apr-20
8		49	L		#N/A	4-Apr-20
9		70	L		#N/A	5-Apr-20
10		57	L		#N/A	5-Apr-20
11		61	L		#N/A	5-Apr-20
12		58	P		#N/A	5-Apr-20
13		64	P		26-Mar-20	#N/A
14		3	L		#N/A	5-Apr-20
15		25	P		#N/A	6-Apr-20
16		56	L		#N/A	11-Apr-20
17		67	L		#N/A	11-Apr-20
18		59	L		#N/A	11-Apr-20
19		46	L		#N/A	17-Apr-20
20		77	P		#N/A	17-Apr-20
21		60	L		#N/A	17-Apr-20
22		44	P		#N/A	17-Apr-20

23		34	L		#N/A	17-Apr-20
24		35	P		#N/A	17-Apr-20
25		74	P		#N/A	17-Apr-20
26		40	L		#N/A	#N/A
27		65	P		#N/A	17-Apr-20
28		36	P		#N/A	17-Apr-20
29		58	P		#N/A	17-Apr-20
30		60	L		30-Mar-20	#N/A
31		53	P		#N/A	17-Apr-20
32		34	L		#N/A	17-Apr-20
33		56	L		#N/A	18-Apr-20
34		55	P		#N/A	18-Apr-20
35		85	L		1-Apr-20	#N/A
36		52	P		#N/A	18-Apr-20
37		43	L		#N/A	18-Apr-20
38		56	L		#N/A	18-Apr-20
39		52	L		#N/A	18-Apr-20
40		37	L		#N/A	18-Apr-20
41		58	L		6-Apr-20	#N/A
42		47	L		#N/A	18-Apr-20
43		47	L		#N/A	18-Apr-20
44		46	P		#N/A	19-Apr-20
45		44	P		#N/A	20-Apr-20
46		40	P		#N/A	20-Apr-20
47		46	P		#N/A	20-Apr-20
48		51	P		#N/A	20-Apr-20

49		49	L		#N/A	20-Apr-20
50		52	L		#N/A	20-Apr-20
51		66	L		#N/A	#N/A
52		52	L		6-Apr-20	#N/A
53		73	L		8-Apr-20	#N/A
54		34	L		#N/A	20-Apr-20
55		50	L		#N/A	20-Apr-20
56		33	L		#N/A	22-Apr-20
57		47	L		#N/A	22-Apr-20
58		59	L		#N/A	#N/A
59		50	P		#N/A	22-Apr-20
60		37	P		#N/A	#N/A
61		67	P		8-Apr-20	#N/A
62		43	L		#N/A	22-Apr-20
63		66	L		#N/A	22-Apr-20
64		68	P		#N/A	23-Apr-20
65		49	P		#N/A	24-Apr-20
66		63	L		#N/A	25-Apr-20
67		48	P		#N/A	25-Apr-20
68		62	L		#N/A	25-Apr-20
69		69	L		#N/A	25-Apr-20
70		52	P		10-Apr-20	#N/A
71		36	L		#N/A	25-Apr-20
72		25	L		#N/A	25-Apr-20
73		46	P		#N/A	25-Apr-20
74		51	P		#N/A	25-Apr-20

75		37	L		#N/A	25-Apr-20
76		37	L		#N/A	25-Apr-20
77		51	P		#N/A	25-Apr-20
78		72	L		10-Apr-20	#N/A
79		68	P		#N/A	4-Aug-20
80		39	P		#N/A	25-Apr-20
81		52	P		#N/A	25-Apr-20
82		65	L		#N/A	25-Apr-20
83		51	P		#N/A	26-Apr-20
84		34	P		#N/A	26-Apr-20
85		31	L		#N/A	28-May-20
86		41	P		#N/A	26-Apr-20
87		21	L		#N/A	28-May-20
88		30	L		#N/A	26-Apr-20
89		31	L		#N/A	21-May-20
90		29	L		#N/A	26-Apr-20
91		61	p		#N/A	26-Apr-20
92		61	p		12-Apr-20	26-Aug-20
93		18	L		#N/A	27-May-20
94		29	L		#N/A	27-Apr-20
95		77	P		#N/A	27-Apr-20
96		45	L		#N/A	28-Apr-20
97		82	P		13-Apr-20	#N/A
98		53	L		22-Apr-20	#N/A
99		33	P		#N/A	11-Jul-20
...	...	...	...	...	...	...

...	...	...	...	...	...	...
...	...	...	...	...	...	...
65148	24 Agustus 2022	51	L		#N/A	Sembuh, 4 September 2022
65149	24 Agustus 2022	46	L		#N/A	21-Aug-20
65150	24 Agustus 2022	1	P		#N/A	Sembuh, 4 September 2022
65151	24 Agustus 2022	61	P		#N/A	Sembuh, 4 September 2022
65152	24 Agustus 2022	12	P		#N/A	Sembuh,13 September 2022
65153	24 Agustus 2022	66	L		#N/A	Sembuh, 4 September 2022
65154	24 Agustus 2022	16	L		#N/A	Sembuh, 4 September 2022
65155	24 Agustus 2022	12	L		#N/A	Sembuh, 4 September 2022
65156	24 Agustus 2022	27	L		#N/A	Sembuh, 4 September 2022
65157	24 Agustus 2022	30	P		#N/A	Sembuh, 4 September 2022
65158	24 Agustus 2022	21	P		#N/A	Sembuh, 4 September 2022

65159	24 Agustus 2022	49	L		#N/A	Sembuh, 4 September 2022
65160	24 Agustus 2022	28	P		#N/A	Sembuh, 4 September 2022
65161	24 Agustus 2022	2	P		#N/A	Sembuh, 4 September 2022
65162	24 Agustus 2022	52	L		#N/A	18-Jul-20
65163	24 Agustus 2022	45	L		#N/A	13-Jan-21
65164	24 Agustus 2022	1	P		#N/A	Sembuh, 4 September 2022
65165	25 Agustus 2022	64	P		#N/A	Sembuh, 5 September 2022
65166	25 Agustus 2022	40	L		#N/A	Sembuh, 5 September 2022
65167	25 Agustus 2022	40	L		#N/A	18 Agustus 2021
65168	25 Agustus 2022	42	L		#N/A	5-Oct-20
65169	25 Agustus 2022	41	L		#N/A	Sembuh, 5 September 2022
65170	25 Agustus 2022	67	L		#N/A	Sembuh, 5 September 2022

65171	25 Agustus 2022	81	L		#N/A	Sembuh, 18 September 2022
65172	25 Agustus 2022	34	P		#N/A	30-Jan-21
65173	26 Agustus 2022	34	L		#N/A	Sembuh, 6 September 2022
65174	26 Agustus 2022	0	L		#N/A	Sembuh,13 September 2022
65175	26 Agustus 2022	20	P		#N/A	Sembuh,13 September 2022
65176	26 Agustus 2022	34	P		#N/A	2-Aug-20
65177	26 Agustus 2022	33	P		#N/A	6-Mar-21
65178	27 Agustus 2022	61	P		#N/A	2-Jan-21
65179	27 Agustus 2022	39	P		#N/A	27 Oct 20
65180	27 Agustus 2022	17	L		#N/A	Sembuh, 6 September 2022
65181	27 Agustus 2022	20	L		#N/A	Sembuh, 8 September 2022
65182	28 Agustus	38	P		#N/A	14 Agustus 2021

	2022					
65183	28 Agustus 2022	31	L		#N/A	Sembuh, 8 September 2022
65184	28 Agustus 2022	33	P		#N/A	10-Apr-21
65185	28 Agustus 2022	8	L		#N/A	Sembuh, 8 September 2022
65186	28 Agustus 2022	13	L		#N/A	Sembuh, 8 September 2022
65187	28 Agustus 2022	19	L		#N/A	Sembuh,9 September 2022
65188	30 Agustus 2022	10	L		#N/A	Sembuh,9 September 2022
65189	30 Agustus 2022	77	L		#N/A	Sembuh, 18 September 2022
65190	30 Agustus 2022	47	P		#N/A	Sembuh, 18 September 2022
65191	30 Agustus 2022	76	P		#N/A	Sembuh, 18 September 2022
65192	30 Agustus 2022	11	L		#N/A	Sembuh,9 September 2022
65193	30 Agustus 2022	19	P		#N/A	Sembuh,9 September 2022



65194	30 Agustus 2022	18	P		#N/A	Sembuh,9 September 2022
65195	30 Agustus 2022	24	P		#N/A	Sembuh,9 September 2022
65196	30 Agustus 2022	21	P		#N/A	Sembuh,9 September 2022
65197	30 Agustus 2022	27	L		#N/A	Sembuh,9 September 2022
65198	31 Agustus 2022	15	P		#N/A	Sembuh, 10 September 2022
65199	31 Agustus 2022	45	P		#N/A	Sembuh, 10 September 2022
65200	31 Agustus 2022	0	L		#N/A	Sembuh, 18 September 2022
65201	31 Agustus 2022	33	P		#N/A	4 Nop 20
65202	31 Agustus 2022	25	P		#N/A	Sembuh, 10 September 2022
65203	31 Agustus 2022	21	P		#N/A	04 Maret 2022
65204	31 Agustus 2022	17	P		#N/A	Sembuh, 10 September

						2022
65205	31 Agustus 2022	29	P		#N/A	04 Maret 2022
65206	31 Agustus 2022	19	L		#N/A	Sembuh, 11 September 2022
65207	31 Agustus 2022	52	P		#N/A	Sembuh, 11 September 2022
65208	31 Agustus 2022	78	P		#N/A	Sembuh, 11 September 2022
65209	31 Agustus 2022	53	L		#N/A	Sembuh, 11 September 2022
65210	31 Agustus 2022	36	L		#N/A	Sembuh, 01 Agustus 2022

## Lampiran 4

Tabel Lampiran 35 Data Olah Pasien Covid 19 Kota Makassar

Waktu	Status	Umur	Jenis Kelamin	Komorbid
51	Hidup	62	2	0
32	Hidup	26	1	0
32	Hidup	43	1	0
32	Hidup	8	2	0
16	Hidup	19	1	0
41	Hidup	22	1	0
32	Hidup	37	2	0
32	Hidup	35	1	0
32	Hidup	28	1	0
32	Hidup	27	2	0
32	Hidup	31	2	0
32	Hidup	34	1	0
23	Hidup	32	1	0
32	Hidup	34	2	0
32	Hidup	31	1	0
32	Hidup	1	2	0
32	Hidup	35	1	0
16	Hidup	31	1	0
32	Hidup	30	1	0
32	Hidup	34	2	0
32	Hidup	32	1	0
32	Hidup	28	2	0

16	Hidup	35	1	0
32	Hidup	28	1	0
16	Hidup	31	1	0
32	Hidup	36	1	0
8	Hidup	24	1	0
32	Hidup	34	2	0
32	Hidup	32	1	0
32	Hidup	31	1	0
32	Hidup	0,3	2	0
32	Hidup	5	1	0
32	Hidup	43	1	0
32	Hidup	52	1	0
32	Hidup	21	1	0
32	Hidup	27	2	0
25	Hidup	40	1	0
16	Hidup	42	2	0
23	Hidup	26	2	0
16	Hidup	48	2	0
32	Hidup	24	1	0
32	Hidup	30	1	0
23	Hidup	39	2	0
6	Hidup	57	1	0
32	Hidup	32	1	0
32	Hidup	27	1	0
32	Hidup	44	1	0
32	Hidup	24	1	0

32	Hidup	45	1	0
23	Hidup	31	1	0
32	Hidup	29	1	0
27	Hidup	33	1	0
23	Hidup	29	1	0
23	Hidup	23	1	0
23	Hidup	30	1	0
26	Hidup	49	2	0
32	Hidup	47	1	0
32	Hidup	3	1	0
32	Hidup	24	1	0
13	Hidup	44	2	0
32	Hidup	24	1	0
19	Hidup	24	2	0
32	Hidup	2	1	0
32	Hidup	33	1	0
23	Hidup	27	1	0
23	Hidup	27	1	0
23	Hidup	27	2	0
32	Hidup	80	2	0
25	Hidup	34	2	0
25	Hidup	43	1	0
25	Hidup	29	2	0
16	Hidup	19	2	0
24	Hidup	19	2	0
24	Hidup	36	2	0

24	Hidup	24	2	0
24	Hidup	34	2	0
19	Hidup	46	2	0
16	Hidup	46	1	0
94	Hidup	23	2	0
16	Hidup	21	1	0
24	Hidup	25	1	0
24	Hidup	44	2	0
23	Hidup	17	1	0
24	Hidup	53	1	0
24	Hidup	55	1	0
24	Hidup	41	2	0
24	Hidup	33	2	0
24	Hidup	55	2	0
24	Hidup	31	2	0
24	Hidup	79	1	0
24	Hidup	58	1	0
24	Hidup	14	2	0
16	Hidup	10	2	0
27	Hidup	57	1	0
5	Hidup	38	1	0
27	Hidup	1	2	0
31	Hidup	67	2	0
15	Hidup	17	1	0
15	Hidup	19	1	0
...	...	...	...	...

...	...	...	...	...
...	...	...	...	...
11	Hidup	45	2	0
11	Hidup	37	1	0
11	Hidup	11	2	0
11	Hidup	31	2	0
11	Hidup	27	2	0
11	Hidup	35	1	0
11	Hidup	8	2	0
11	Hidup	35	1	0
11	Hidup	33	1	0
11	Hidup	19	1	0
11	Hidup	5	2	1
11	Hidup	28	1	0
19	Hidup	71	2	1
11	Hidup	18	1	0
11	Hidup	51	2	0
19	Hidup	79	2	0
11	Hidup	12	1	0
11	Hidup	71	2	0
11	Hidup	29	1	0
11	Hidup	17	1	0
10	Hidup	37	1	0
19	Hidup	30	2	0
11	Hidup	11	2	0
11	Hidup	64	2	0

18	Hidup	61	1	0
10	Hidup	20	1	0
10	Hidup	39	1	0
9	Hidup	72	1	0
17	Hidup	90	1	0
9	Hidup	15	1	0
17	Hidup	56	2	0
17	Hidup	6	2	0
9	Hidup	49	1	0
9	Hidup	50	1	0
10	Hidup	4	2	0
10	Hidup	2	1	1
10	Hidup	48	1	0
11	Hidup	48	2	0
11	Hidup	38	1	0
11	Hidup	28	1	0
11	Hidup	30	2	0
16	Hidup	73	1	0
12	Hidup	69	2	0
12	Hidup	63	1	0
12	Hidup	49	1	0
11	Hidup	48	1	0
11	Hidup	34	1	0
21	Hidup	33	2	1
11	Hidup	75	1	0
11	Hidup	66	2	0



12	Hidup	52	1	0
11	Hidup	12	1	1
11	Hidup	22	2	0
11	Hidup	1	2	0
11	Hidup	32	1	0
11	Hidup	63	2	0
11	Hidup	40	1	0
11	Hidup	47	1	0
19	Hidup	70	1	0
19	Hidup	31	2	0
12	Hidup	38	2	0
12	Hidup	15	2	0
12	Hidup	14	2	0
12	Hidup	14	2	0
14	Hidup	37	2	0
14	Hidup	36	1	0
13	Hidup	17	1	0
13	Hidup	49	2	0
12	Hidup	23	1	0
12	Hidup	92	1	0
12	Hidup	13	2	0
12	Hidup	16	1	0
12	Hidup	10	1	0
12	Hidup	13	1	0
12	Hidup	48	2	0
12	Hidup	29	1	0

12	Hidup	28	2	0
17	Hidup	37	1	0
17	Hidup	5	2	0
12	Hidup	22	2	0
12	Hidup	4	2	0
12	Hidup	27	2	0
12	Hidup	48	1	0
12	Hidup	9	1	0
13	Hidup	17	2	0
13	Hidup	71	1	0
13	Hidup	28	2	0
13	Hidup	4	1	0
12	Hidup	51	2	0
12	Hidup	16	1	0
12	Hidup	32	1	0
12	Hidup	41	2	0
12	Hidup	11	2	0
13	Hidup	55	1	0
13	Hidup	45	2	0
13	Hidup	9	2	0
12	Hidup	91	1	0
12	Hidup	33	1	0
11	Hidup	28	1	0
11	Hidup	59	2	0
11	Hidup	46	2	0
11	Hidup	30	1	0

11	Hidup	65	1	0
11	Hidup	51	1	0
15	Hidup	59	2	0
11	Hidup	0	1	0
11	Hidup	71	2	0
11	Hidup	37	1	0
11	Hidup	44	1	0
11	Hidup	50	2	0
15	Hidup	1	2	0
11	Hidup	12	2	0
11	Hidup	51	2	0
11	Hidup	1	1	0
11	Hidup	61	1	0
20	Hidup	12	1	0
11	Hidup	66	2	0
11	Hidup	16	2	0
11	Hidup	12	2	0
11	Hidup	27	2	0
11	Hidup	30	1	0
11	Hidup	21	1	0
11	Hidup	49	2	0
11	Hidup	28	1	0
11	Hidup	2	1	0
11	Hidup	1	1	0
11	Hidup	64	1	0
11	Hidup	40	2	0

11	Hidup	41	2	0
11	Hidup	67	2	1
24	Hidup	81	2	0
11	Hidup	34	2	0
18	Hidup	0	2	0
18	Hidup	20	1	0
10	Hidup	17	2	0
12	Hidup	20	2	0
11	Hidup	31	2	0
11	Hidup	8	2	0
11	Hidup	13	2	0
12	Hidup	19	2	0
10	Hidup	10	2	0
19	Hidup	77	2	0
19	Hidup	47	1	0
19	Hidup	76	1	0
10	Hidup	11	2	0
10	Hidup	19	1	0
10	Hidup	18	1	0
10	Hidup	24	1	0
10	Hidup	21	1	0
10	Hidup	27	2	0
10	Hidup	15	1	0
10	Hidup	45	1	0
18	Hidup	0	2	0
10	Hidup	25	1	0

10	Hidup	17	1	0
11	Hidup	19	2	0
11	Hidup	52	1	0
11	Hidup	78	1	0
11	Hidup	53	2	0