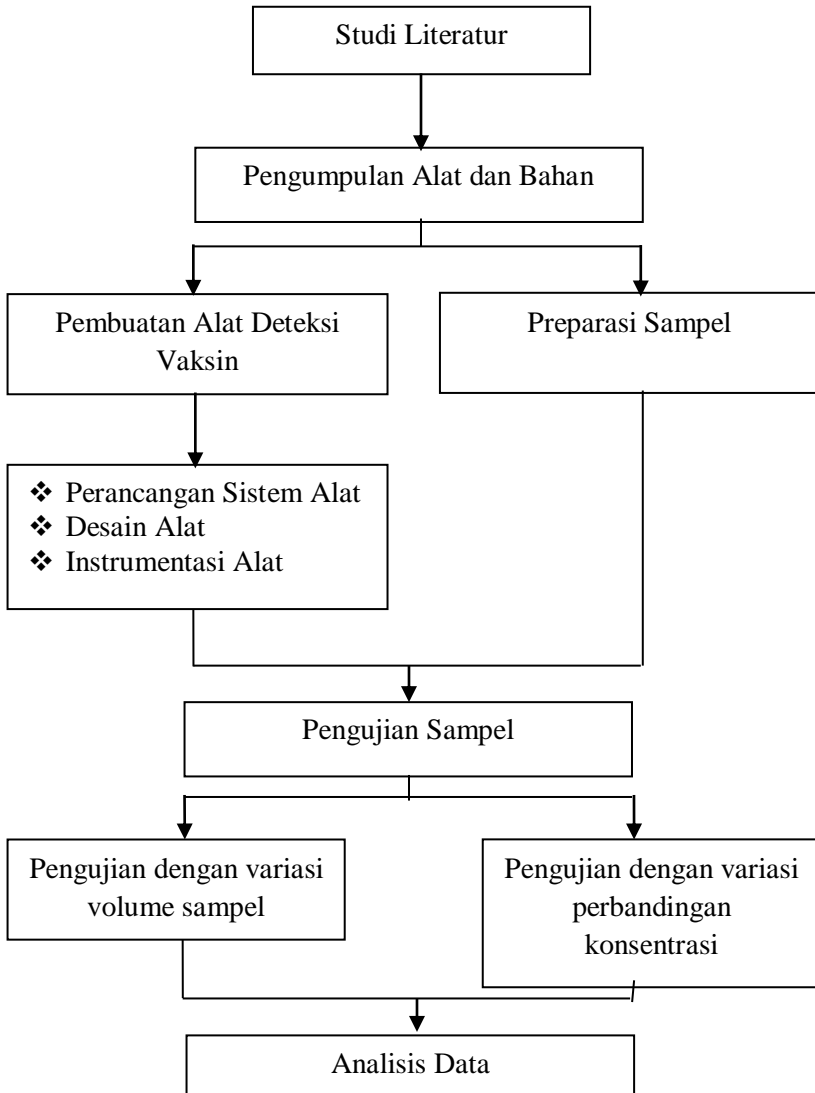


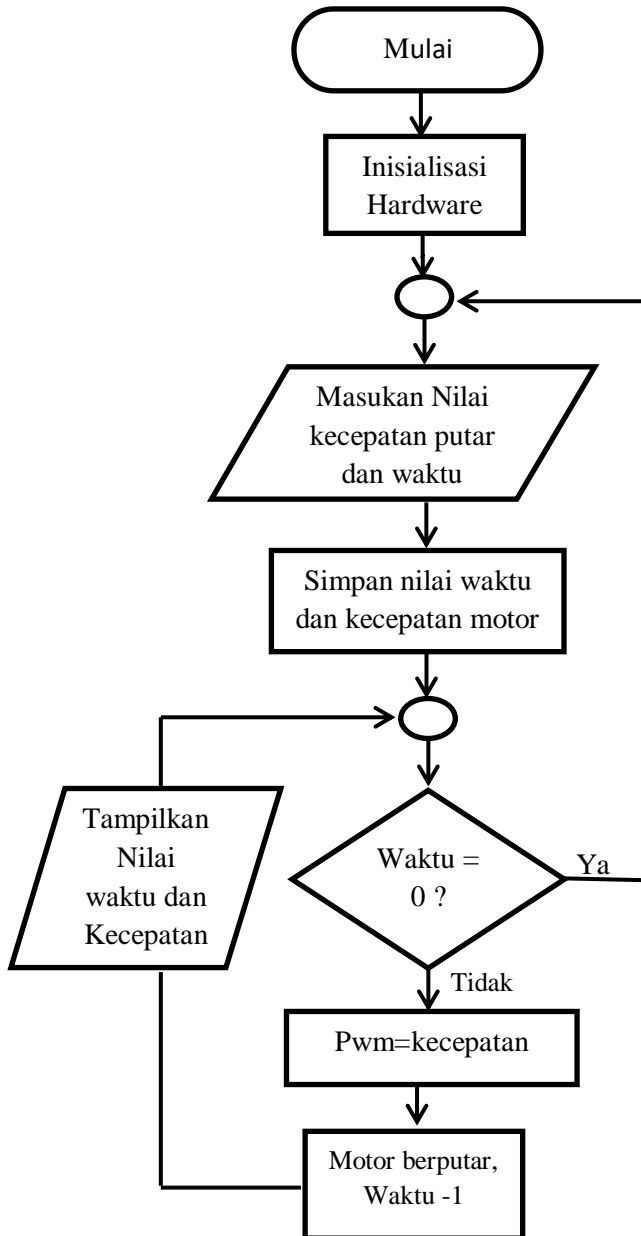
## LAMPIRAN A

### Tahapan Penelitian

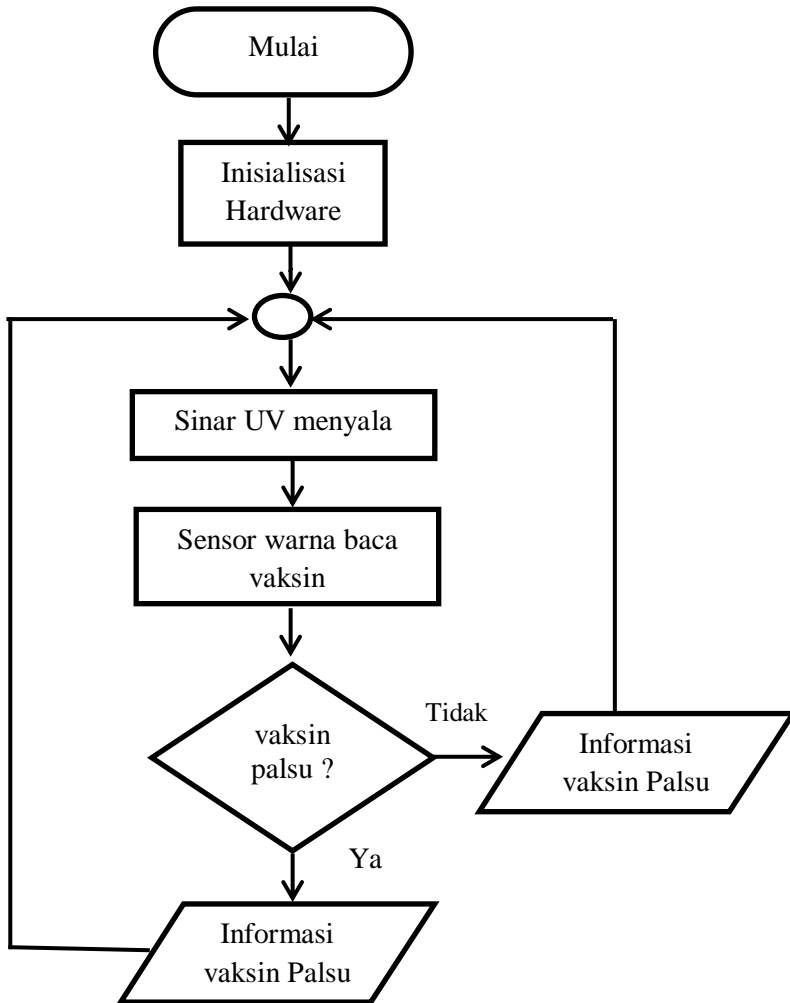
#### A.1 Skema Tahapan Penelitian



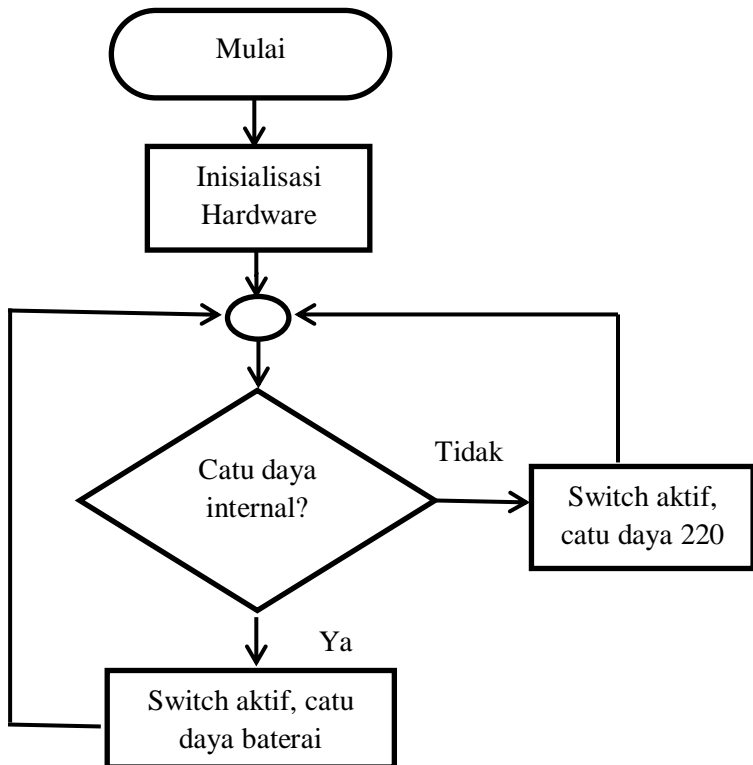
## A.2 Diagram Alir Sistem Kontroling



### A.3 Diagram Alir Sistem Pembacaan



#### A.4 Diagram Alir Sistem Daya



## A.5 Perhitungan dan Pembuatan Larutan Sampel Vaksin Palsu CRD dan ND-IB

**Tabel A.1** Volume Perbandingan Vaksin Palsu

Sampel : Aquades	Jenis	Volume (mL)		
		0,5	0,75	1
1 : 1	Sampel	0,250	0,375	0,500
	Aquades	0,250	0,375	0,500
1 : 2	Sampel	0,167	0,250	0,333
	Aquades	0,333	0,500	0,667
1 : 3	Sampel	0,125	0,188	0,250
	Aquades	0,375	0,563	0,750

Sampel vaksin palsu jenis CRD dan ND-IB dibuat dengan mencampurkan vaksin asli dengan aquades pada berbagai perbandingan konsentrasi. Volume perbandingan vaksin yang digunakan ditampilkan pada **Tabel A.1**. Sampel vaksin diambil sesuai volume yang telah ditentukan dan dimasukkan kedalam botol sampel kemudian ditambahkan aquades pada volume tertentu. Campuran sampel tersebut dikocok kemudian dilakukan pengujian dengan menggunakan alat deteksi vaksin.

## LAMPIRAN B

### Data Hasil Penelitian

**Tabel B.1** Nilai RGB Vaksin Asli CRD

Volume (mL)	Nilai R, G, B		
	I	II	III
0,5	186, 183, 185	227, 188, 192	192, 229, 198
0,75	140, 141, 141	151, 177, 185	180, 183, 179
1	169, 172, 173	198, 198, 204	198, 198, 204

**Tabel B.2** Nilai RGB Vaksin Palsu CRD volume 0,5 mL

Sampel : Aquadres	Nilai R, G, B		
	I	II	III
1 : 1	221, 219, 224	209, 214, 217	232, 235, 230
1 : 2	203, 209, 204	209, 209, 217	238, 235, 255
1 : 3	151, 157, 153	209, 209, 211	209, 209, 211

**Tabel B.3** Nilai RGB Vaksin Palsu CRD volume 0,75 mL

Sampel : Aquadres	Nilai R, G, B		
	I	II	III
1 : 1	203, 203, 198	198, 198, 198	192, 193, 192
1 : 2	209, 209, 211	198, 203, 204	192, 188, 192
1 : 3	157, 125, 128	186, 188, 185	198, 198, 198

**Tabel B.4** Nilai RGB Vaksin Palsu CRD volume 1 mL

<b>Sampel :</b> <b>Aquades</b>	<b>Nilai R, G, B</b>		
	<b>I</b>	<b>II</b>	<b>III</b>
1 : 1	134, 235, 134	186, 188, 192	163, 157, 160
1 : 2	221, 224, 224	203, 198, 204	174, 177, 179
1 : 3	209, 209, 211	198, 198, 198	163, 198, 166

**Tabel B.5** Nilai RGB Vaksin Asli ND-IB

<b>Volume</b> <b>(mL)</b>	<b>Nilai R, G, B</b>		
	<b>I</b>	<b>II</b>	<b>III</b>
0,5	105, 136, 58	174, 141, 147	232, 190, 204
0,75	82, 53, 39	87, 27, 45	180, 131, 147
1	134, 73, 90	140, 84, 102	221, 172, 185

**Tabel B.6** Nilai RGB Vaksin Palsu ND-IB volume 0,5 mL

<b>Sampel :</b> <b>Aquades</b>	<b>Nilai R, G, B</b>		
	<b>I</b>	<b>II</b>	<b>III</b>
1 : 1	140, 94, 102	221, 183, 192	232, 198, 204
1 : 2	232, 203, 204	232, 209, 204	255, 255, 255
1 : 3	209, 177, 179	255, 250, 255	255, 255, 255

**Tabel B.7** Nilai RGB Vaksin Palsu ND-IB volume 0,75 mL

Sampel : Aquadres	Nilai R, G, B		
	I	II	III
1 : 1	209, 209, 179	250, 177, 179	255, 240, 243
1 : 2	128, 84, 90	215, 183, 185	203, 167, 173
1 : 3	29, 79, 83	45, 177, 185	40, 162, 166

**Tabel B.8** Nilai RGB Vaksin Palsu ND-IB volume 1 mL

Sampel : Aquadres	Nilai R, G, B		
	I	II	III
1 : 1	0, 63, 77	0, 63, 71	93, 151, 160
1 : 2	0, 32, 39	105, 157, 160	111, 157, 166
1 : 3	70, 94, 102	157, 188, 198	140, 177, 179

**Tabel B.9** Diameter Lebar Sebaran Vaksin Asli

Vaksin	Diameter (cm)		
	0,5	0,75	1
CRD	8,4	9,7	10,8
	9,9	12,8	12,8
ND-IB	9,1	10,8	12,6
	10	12,7	13,8

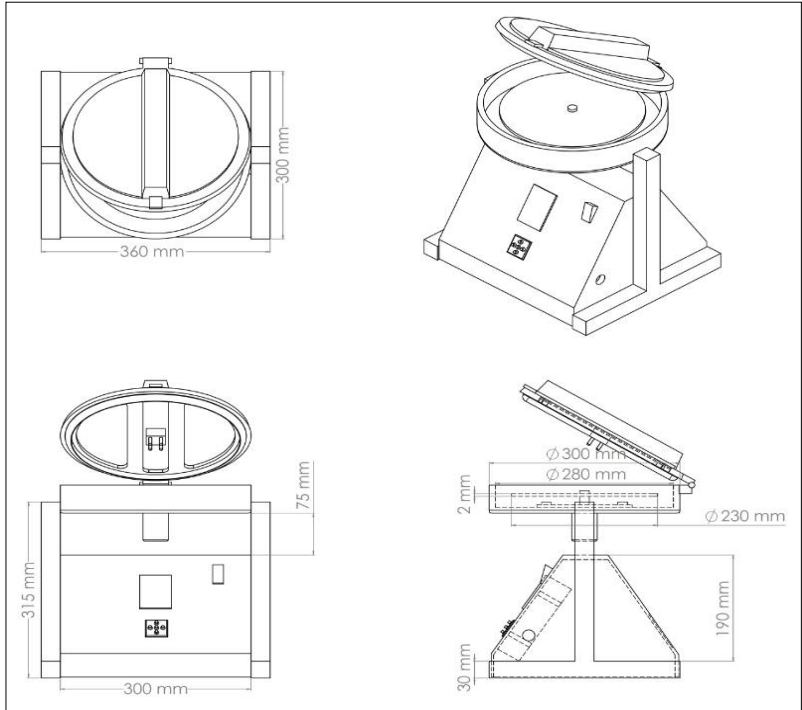


**Tabel B. 10** Diameter Lebar Sebaran Vaksin Palsu

Vaksin	Volume (mL)	Diameter (cm)		
		1 : 1	1 : 2	1 : 3
CRD	0,5	8,5	8,5	9,3
		10,5	9,7	10
	0,75	7,3	10,4	9,2
		8,9	12,2	10,9
	1	12,8	11,3	11,3
		13,4	13,1	12,3
ND-IB	0,5	10,8	9,3	9,4
		12,8	10,5	11,6
	0,75	10,1	10,6	10,2
		11,5	11,5	12,6
	1	12,4	13,1	12,6
		13,2	14,2	14

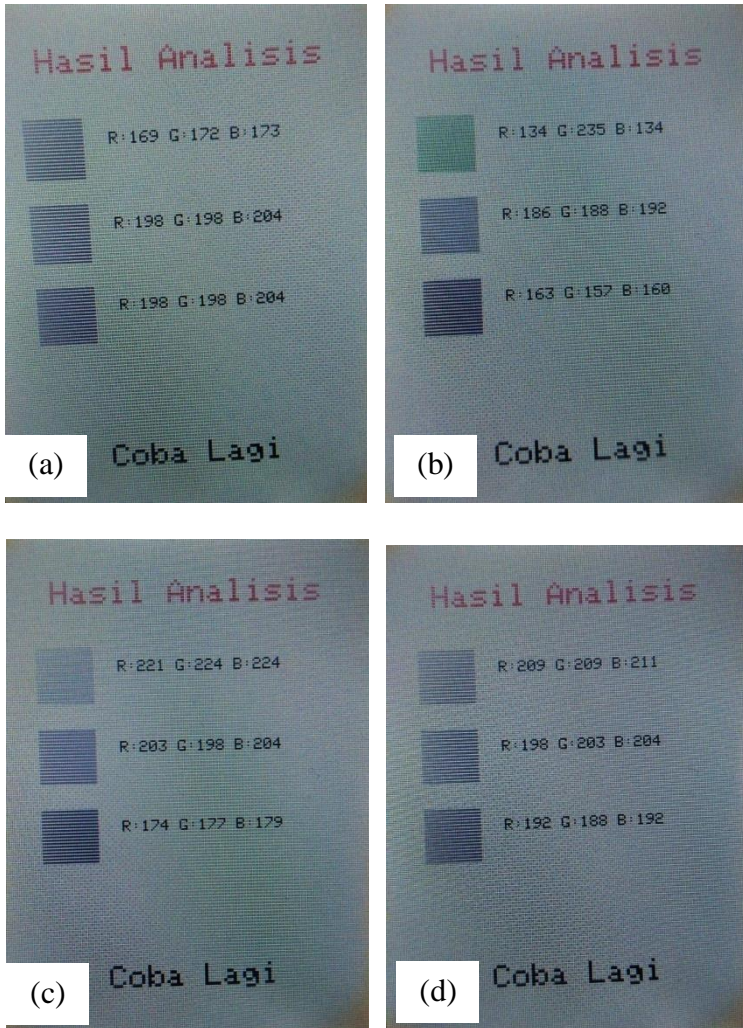
## LAMPIRAN C

**Gambar  
C.1 Detail Ukuran Desain Alat**



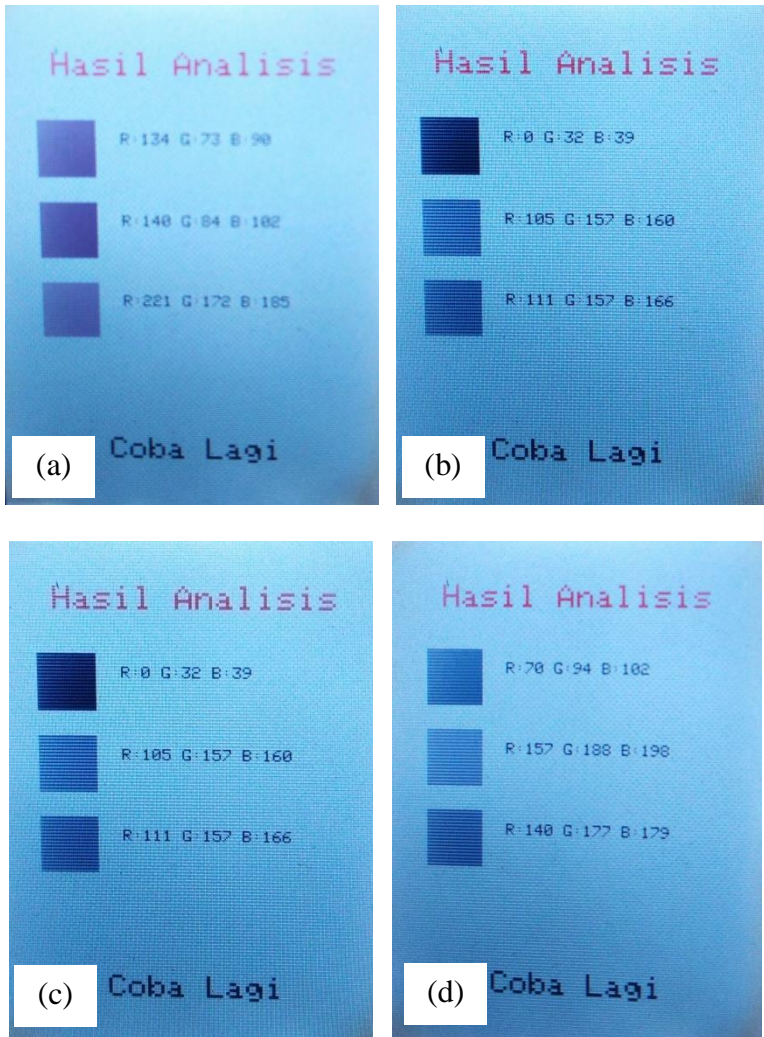
**Gambar C.1 Detail Ukuran Desain Alat**

## C.2 Hasil Nilai RGB Vaksin CRD Pada LCD



**Gambar C.2** Hasil Nilai RGB Vaksin CRD pada LCD (a) Vaksin Asli 1 mL (b) Vaksin Palsu 1 :1 (c) Vaksin Palsu 1 : 2 (d) Vaksin Palsu 1 : 3

### C.3 Hasil Nilai RGB Vaksin ND-IB Pada LCD



**Gambar C.3** Hasil Nilai RGB Vaksin ND-IB pada LCD (a) Vaksin Asli 1 mL (b) Vaksin Palsu 1 : 1 (c) Vaksin Palsu 1 : 2 (d) Vaksin Palsu 1 : 3

### C.4 Hasil Konversi Nilai RGB ke Bentuk Persen CMYK

Tabel C.4.1 Konversi Persen CMYK Vaksin CRD Asli

Vaksin CRD Asli 0,5 mL		
<p>0 2 1 27 CMYK color chart</p>	<p>0 17 15 11 CMYK color chart</p>	<p>16 0 14 10 CMYK color chart</p>
Vaksin CRD Asli 0,75 mL		
<p>1 0 0 45 CMYK color chart</p>	<p>18 4 0 27 CMYK color chart</p>	<p>2 0 2 28 CMYK color chart</p>
Vaksin CRD Asli 1 mL		
<p>2 1 0 32 CMYK color chart</p>	<p>3 3 0 20 CMYK color chart</p>	<p>3 3 0 20 CMYK color chart</p>

**Tabel C.4.2 Konversi Persen CMYK Vaksin ND-IB Asli**

<b>Vaksin ND-IB Asli 0,5 mL</b>																																
<p>CMYK color chart</p> <table border="1"> <tr><th>Color</th><th>Percentage</th></tr> <tr><td>C</td><td>23</td></tr> <tr><td>M</td><td>0</td></tr> <tr><td>Y</td><td>57</td></tr> <tr><td>K</td><td>47</td></tr> </table>	Color	Percentage	C	23	M	0	Y	57	K	47	<p>CMYK color chart</p> <table border="1"> <tr><th>Color</th><th>Percentage</th></tr> <tr><td>C</td><td>0</td></tr> <tr><td>M</td><td>19</td></tr> <tr><td>Y</td><td>16</td></tr> <tr><td>K</td><td>32</td></tr> </table>	Color	Percentage	C	0	M	19	Y	16	K	32	<p>CMYK color chart</p> <table border="1"> <tr><th>Color</th><th>Percentage</th></tr> <tr><td>C</td><td>0</td></tr> <tr><td>M</td><td>18</td></tr> <tr><td>Y</td><td>12</td></tr> <tr><td>K</td><td>9</td></tr> </table>	Color	Percentage	C	0	M	18	Y	12	K	9
Color	Percentage																															
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Color	Percentage																															
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<b>Vaksin ND-IB Asli 1 mL</b>																																
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Color	Percentage																															
C	0																															
M	22																															
Y	16																															
K	13																															

**Tabel C.4.3 Konversi Persen CMYK Vaksin CRD Palsu**

<b>Vaksin CRD Palsu 1:1</b>		
<p>CMYK color chart</p>	<p>CMYK color chart</p>	<p>CMYK color chart</p>
<b>Vaksin CRD Palsu 1:2</b>		
<p>CMYK color chart</p>	<p>CMYK color chart</p>	<p>CMYK color chart</p>
<b>Vaksin CRD Palsu 1:3</b>		
<p>CMYK color chart</p>	<p>CMYK color chart</p>	<p>CMYK color chart</p>

**Tabel C.4.4** Konversi Persen CMYK Vaksin ND-IB Palsu

<b>Vaksin ND-IB Palsu 1:1</b>																										
<p>CMYK color chart</p> <table border="1"><thead><tr><th>C</th><th>M</th><th>Y</th><th>K</th></tr></thead><tbody><tr><td>100</td><td>18</td><td>0</td><td>70</td></tr></tbody></table>	C	M	Y	K	100	18	0	70	<p>CMYK color chart</p> <table border="1"><thead><tr><th>C</th><th>M</th><th>Y</th><th>K</th></tr></thead><tbody><tr><td>100</td><td>11</td><td>0</td><td>72</td></tr></tbody></table>	C	M	Y	K	100	11	0	72	<p>CMYK color chart</p> <table border="1"><thead><tr><th>C</th><th>M</th><th>Y</th><th>K</th></tr></thead><tbody><tr><td>42</td><td>6</td><td>0</td><td>37</td></tr></tbody></table>	C	M	Y	K	42	6	0	37
C	M	Y	K																							
100	18	0	70																							
C	M	Y	K																							
100	11	0	72																							
C	M	Y	K																							
42	6	0	37																							
<b>Vaksin ND-IB Palsu 1:2</b>																										
<p>CMYK color chart</p> <table border="1"><thead><tr><th>C</th><th>M</th><th>Y</th><th>K</th></tr></thead><tbody><tr><td>100</td><td>18</td><td>0</td><td>85</td></tr></tbody></table>	C	M	Y	K	100	18	0	85	<p>CMYK color chart</p> <table border="1"><thead><tr><th>C</th><th>M</th><th>Y</th><th>K</th></tr></thead><tbody><tr><td>34</td><td>2</td><td>0</td><td>37</td></tr></tbody></table>	C	M	Y	K	34	2	0	37	<p>CMYK color chart</p> <table border="1"><thead><tr><th>C</th><th>M</th><th>Y</th><th>K</th></tr></thead><tbody><tr><td>3</td><td>1</td><td>0</td><td>30</td></tr></tbody></table>	C	M	Y	K	3	1	0	30
C	M	Y	K																							
100	18	0	85																							
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3	1	0	30																							
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<p>CMYK color chart</p> <table border="1"><thead><tr><th>C</th><th>M</th><th>Y</th><th>K</th></tr></thead><tbody><tr><td>31</td><td>8</td><td>0</td><td>60</td></tr></tbody></table>	C	M	Y	K	31	8	0	60	<p>CMYK color chart</p> <table border="1"><thead><tr><th>C</th><th>M</th><th>Y</th><th>K</th></tr></thead><tbody><tr><td>21</td><td>5</td><td>0</td><td>22</td></tr></tbody></table>	C	M	Y	K	21	5	0	22	<p>CMYK color chart</p> <table border="1"><thead><tr><th>C</th><th>M</th><th>Y</th><th>K</th></tr></thead><tbody><tr><td>22</td><td>1</td><td>0</td><td>30</td></tr></tbody></table>	C	M	Y	K	22	1	0	30
C	M	Y	K																							
31	8	0	60																							
C	M	Y	K																							
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