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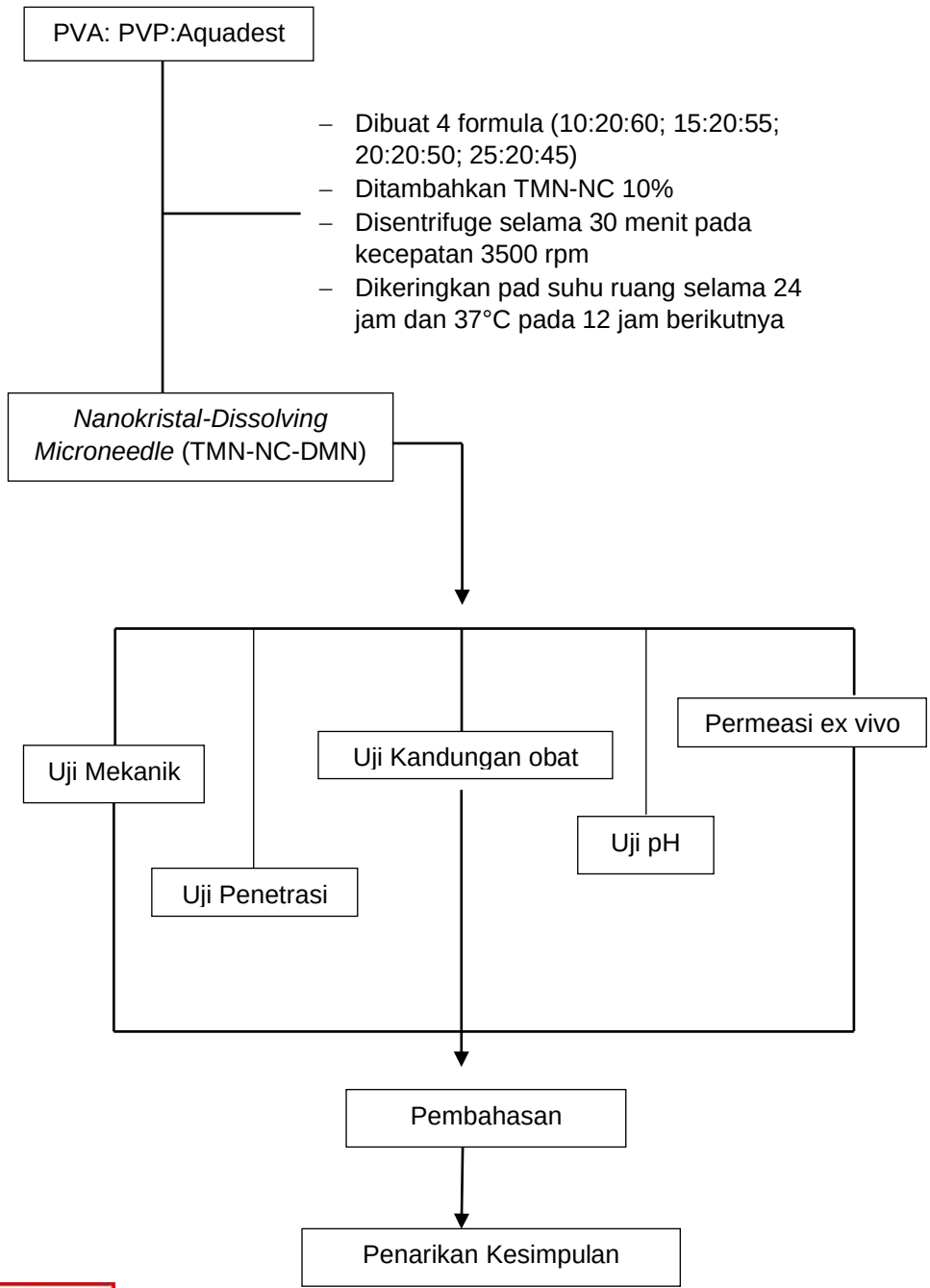
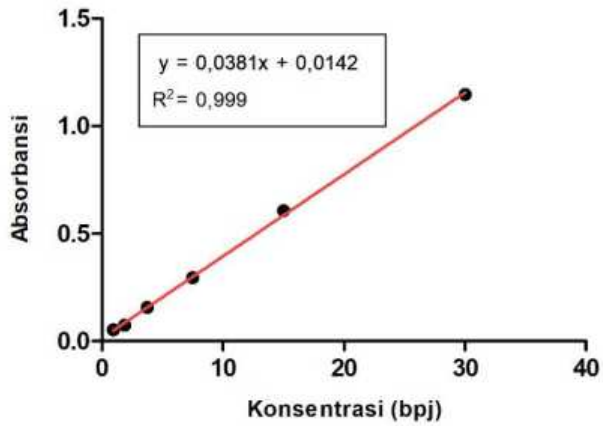
LAMPIRAN

Lampiran 1. Skema kerja umum



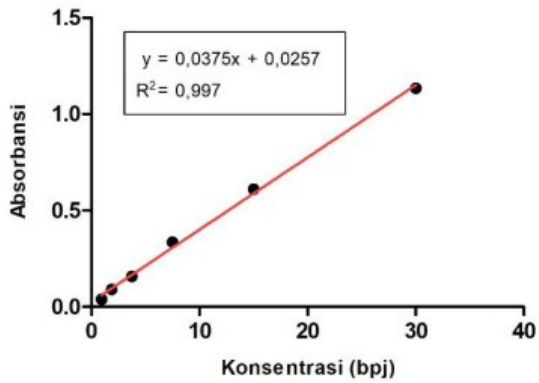
Lampiran 2. Kurva Baku

Lampiran 2.1 Kurva Baku TMN dalam etanol



Gambar 13. Kurva baku TMN dalam etanol

Lampiran 2.2 Kurva Baku TMN dalam PBS-etanol 20%



Gambar 14. Kurva baku TMN dalam PBS-etanol 20%

Lampiran 3 Perhitungan

Lampiran 3.1 Uji permeasi *ex vivo*

Persamaan: y = 0,0375x + 0,0257

Keterangan:

x = konsentrasi

y = absorbansi

- F1 replikasi 1 jam ke-8 diperoleh absorbansi = 0,632, sehingga untuk memperoleh konsentrasi:

y = 0,0375x + 0,0257

0,632 = 0,0375x + 0,0257

$$x = \frac{0,632-0,0257}{0,0,375}$$

x = 16,168

Konsentrasi dalam 1 mL = 16,168 µg/mL x 1 mL

= 16,168 µg = 0,016168 mg

Konsentrasi dalam 28 mL = 16,168 µg/mL x 28 mL

= 452,704 µg = 0,452704 mg

$$\text{Faktor koreksi} = \frac{\text{konsentrasi jam sebelumnya}}{1000} + \text{Faktor koreksi jam sebelumnya}$$

$$= \frac{10,67\ \mu g}{1000} + 0,03560$$

= 0,04627 mg

Jumlah terpermeasi = konsentrasi dalam 28 mL + Faktor koreksi

= 0,452704 mg + 0,04627 mg

= 0,49897 mg

Lampiran 4. Tabel Hasil Evaluasi

Lampiran 4.1 Tabel Kurva Baku TMN dalam etanol

Tabel 2. Kurva baku TMN dalam etanol

Konsentrasi (bpj)	Absorbansi			Rata-rata	SD
	Replikasi 1	Replikasi 2	Replikasi 3		
0,00	0,00	0,00	0,00	0,00	0,00
0,9375	1,126	1,149	1,164	1,14633333	0,015
1,875	0,6	0,595	0,627	0,60733333	0,014
3,75	0,272	0,304	0,311	0,29566667	0,016
7,5	0,132	0,136	0,201	0,15633333	0,031
15	0,074	0,059	0,089	0,074	0,012
30	0,052	0,073	0,034	0,053	0,015

Lampiran 4.2 Tabel kurva baku TMN dalam PBS-etanol 20%

Tabel 3. Kurva baku TMN dalam PBS-etanol 20%

Konsentrasi (bpj)	Absorbansi			Rata-rata	SD
	Replikasi 1	Replikasi 2	Replikasi 3		
0,00	0,00	0,00	0,00	0,00	0,00
0,9375	1,144	1,134	0,541	1,13533333	0,008
1,875	0,671	0,611	0,354	0,60766667	0,065
3,75	0,353	0,336	0,167	0,34766667	0,010
7,5	0,178	0,158	0,1	0,16766667	0,010
15	0,091	0,091	0,032	0,094	0,005
30	0,043	0,039	1,128	0,038	0,005

Lampiran 4.3 Tabel Hasil Uji pH

Tabel 4. Hasil Uji pH

Replikasi	Formula			
	F1	F2	F3	F4
1	5,11	5,19	5,91	5,86
2	5,33	5,61	5,86	5,41
3	5,91	5,94	5,13	5,73
Rata-rata	5,45	5,58	5,63	5,74
SD	0,41	0,37	0,43	0,22

Lampiran 4.4 Tabel Uji Kekuatan Mekanik

Tabel 4. Hasil uji kekuatan mekanik

Formula	Sebelum diberi beban	Sesudah diberi beban	% Reduksi	Rata-rata	SD
F1	787,52	685,66	12,93427469	15,3878	2,3237
	651,27	549,19	15,67399082		
	714,94	589,43	17,55531933		
F2	700,71	611,12	12,78560317	12,08496	1,1488
	813,45	725,93	10,75911242		
	863,56	753,8	12,71017648		
F3	686,97	590,61	21,30515161	10,7365	1,2675
	731,39	680,87	6,907395507		
	714,25	685,7	3,99719986		
F4	818,76	761,69	6,970296546	8,9409	1,6642
	768,91	689,84	10,28338817		
	867,47	789,91	8,940943203		

Lampiran 4.5 Tabel Hasil Uji Kemampuan Penetrasi

Tabel 5. Hasil uji kemampuan penetrasi

Lapisan	**Lubang yang terbentuk**							
	F1		F2		F3		F4	
	Rata-rata	SD	Rata-rata	SD	Rata-rata	SD	Rata-rata	SD
1	100	0,00	100	0,00	100	0,00	100	0,00
2	100	0,00	100	0,00	68	6,16	53	8,60
3	93,66	2,49	69	2,16	62,33	2,05	30,66	3,68
4	81,66	2,05	14,33	4,783	0,00	0,00	0,00	0,00
5	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
6	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
7	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
8	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Lampiran 4.5 Tabel Hasil Uji Kandungan Obat

Tabel 6. Hasil Uji Kandungan Obat

Replikasi	Formula			
	F1	F2	F3	F4
1	94,1	94,8	98,93	98,96
2	98,63	98,6	94,89	99,88
	98,54	98,9	98,81	95,18
ta	97,09	97,43	97,54	98,06
	2,58	2,28	2,30	2,49

Lampiran 5. Hasil Evaluasi Statistik

Lampiran 5.1 Uji pH

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
pH	Formula 1	.281	3	.	.937	3	.515
	Formulas 2	.198	3	.	.995	3	.868
	Formula 3	.219	3	.	.987	3	.780
	Formula 4	.274	3	.	.944	3	.543

a. Lilliefors Significance Correction

ANOVA

pH

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1120.250	3	373.417	.358	.785
Within Groups	8340.667	8	1042.583		
Total	9460.917	11			

Lampiran 5.2 Uji kandungan obat

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
Kandungan_obat	Formula 1	.385	3	.	.751	3	.002
	Formula 2	.362	3	.	.805	3	.125
	Formula 3	.376	3	.	.772	3	.050
	Formula 4	.316	3	.	.890	3	.355

a. Lilliefors Significance Correction

Test Statistics

	Kandungan_obat
Kruskal-Wallis H	5.974
df	3
Asymp. Sig.	.113

a. Kruskal Wallis Test

Lampiran 5.3 Uji kekuatan mekanik

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
Mekanik	Formula 1	.216	3	.	.989	3	.796
	Formula 2	.374	3	.	.776	3	.058
	Formula 3	.224	3	.	.984	3	.761
	Formula 4	.293	3	.	.923	3	.461

a. Lilliefors Significance Correction

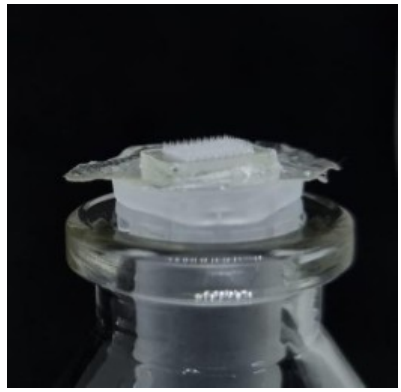
ANOVA

Mekanik

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	42064156.92	3	14021385.64	2.457	.138
Within Groups	45655021.33	8	5706877.667		
Total	87719178.25	11			

Lampiran 6. Dokumentasi Penelitian

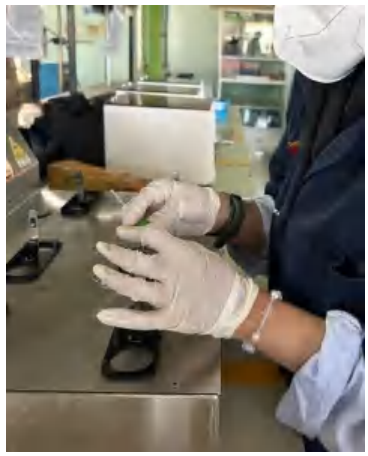
Gambar 15. Formulasi sediaan



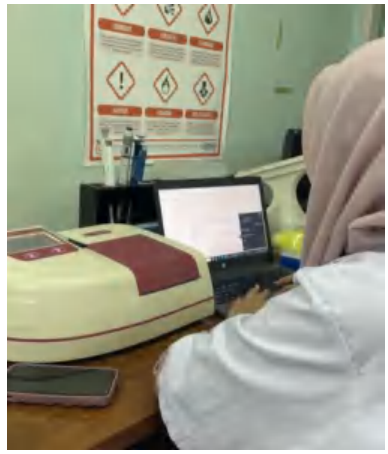
Gambar 16. Sediaan TMN-NC-DMN

Gambar 17. Pengamatan dibawah mikroskop

Gambar 18. Uji mekanik dan penetrasi



mbar 19. Proses uji permeasi *ex vivo*



Gambar 20. Analisis dengan Spektrofotometer Uv-Vis