## Supplementary data:

**Table S1:** Dunnett's multiple comparison test for the effect of petroleum benzene (PB) extract of *M. chamomilla* flower with control on inhibition of CFU in C4-2 cells

Dunnett's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant	Summary	Adjusted P Value
Ctrl vs. 6.25	12.25	4.573 to 19.93	Yes	**	0.002
Ctrl vs. 12.5	22.75	15.07 to 30.43	Yes	***	<0.001
Ctrl vs. 25	34.75	27.07 to 42.43	Yes	***	<0.001
Ctrl vs. 50	59	51.32 to 66.68	Yes	***	<0.001
Ctrl vs. 100	87.5	79.82 to 95.18	Yes	***	<0.001

P<0.05, p<0.01, P<0.001, p>0.0.05 will be considered as significant, highly significant, extremely significant and insignificant respectively compared with control.

**Table S2:** Dunnett's multiple comparisons test for the effect of ethyl acetate (EA) extract of *M. chamomilla* flower with control on inhibition of CFU in C4-2 cells

Dunnett's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant	Summary	Adjusted P Value
Ctrl vs. 6.25	37.5	25.9 to 49.1	Yes	****	0.0001
Ctrl vs. 12.5	55	43.4 to 66.6	Yes	****	0.0001
Ctrl vs. 25	60	48.4 to 71.6	Yes	****	0.0001
Ctrl vs. 50	95	83.4 to 106.6	Yes	****	0.0001
Ctrl vs. 100	105	93.4 to 116.6	Yes	****	0.0001

P<0.05, p<0.01, P<0.001, p>0.0.05 will be considered as significant, highly significant, extremely significant and insignificant respectively compared with control.

**Table S3:** Dunnett's multiple comparisons test for the effect of methanol (MeOH) extract of *M. chamomilla* flower with control on inhibition of CFU in C4-2 cells

Dunnett's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant	Summary	Adjusted P Value
Ctrl vs. 6.25	8	-1.815 to 17.81	No	Ns	0.13
Ctrl vs. 12.5	18.25	8.435 to 28.06	Yes	***	<0.001
Ctrl vs. 25	35.5	25.69 to 45.31	Yes	***	<0.001
Ctrl vs. 50	63	53.19 to 72.81	Yes	***	<0.001
Ctrl vs. 100	80.5	70.69 to 90.31	Yes	***	<0.001

P<0.05, p<0.01, P<0.001, p>0.05 will be considered as significant, highly significant, extremely significant and insignificant respectively compared with control.

**Table S4:** Dunnett's multiple comparisons test for the effect of hydro alcoholic (HA) extract of *M. chamomilla* flower with control on inhibition of CFU in C4-2 cells

Dunnett's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant	Summary	Adjusted P Value
Ctrl vs. 6.25	24	15.46 to 32.54	Yes	****	0.0001
Ctrl vs. 12.5	38	29.46 to 46.54	Yes	****	0.0001
Ctrl vs. 25	49	40.46 to 57.54	Yes	****	0.0001
Ctrl vs. 50	58.5	49.96 to 67.04	Yes	****	0.0001
Ctrl vs. 100	62.5	53.96 to 71.04	Yes	****	0.0001

P<0.05, p<0.01, P<0.001, p>0.0.05 will be considered as significant, highly significant, extremely significant and insignificant respectively compared with control.

**Table S5:** Dunnett's multiple comparisons test for the effect of aqueous (AQ) extract of *M. chamomilla* flower with control on inhibition of CFU in C4-2 cells

Dunnett's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant	Summary	Adjusted P Value
Ctrl vs. 6.25	23.5	16.95 to 30.05	Yes	***	<0.001
Ctrl vs. 12.5	42.25	35.7 to 48.8	Yes	***	<0.001
Ctrl vs. 25	53.75	47.2 to 60.3	Yes	***	< 0.001
Ctrl vs. 50	70.5	63.95 to 77.05	Yes	***	<0.001
Ctrl vs. 100	76.25	69.7 to 82.8	Yes	***	< 0.001

P<0.05, p<0.01, P<0.001, p>0.0.05 will be considered as significant, highly significant, extremely significant and insignificant respectively compared with control.

**Table S6:** Analysis of variance for inhibition of wound healing in C4-2 cells treated with *Matricaria chamomilla* Linn flowers.

Source of Variation	% of total variation	P value	summary	Significant	P value
Interaction	1.766	Ns		No	0.8072
Row Factor	62.48	****		Yes	< 0.0001
Column Factor	28.8	****		Yes	< 0.0001
ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Interaction	909.9	25	36.4	F (25, 72) = 0.7318	P=0.8072
Row Factor	32188	5	6438	F (5, 72) = 129.4	P<0.0001
Column Factor	14835	5	2967	F (5, 72) = 59.66	P<0.0001
Residual	3581	72	49.73	-	-

P<0.05, p<0.01, P<0.001, p>0.05 will be considered as significant, highly significant, extremely significant and insignificant respectively compared with control.

**Table S7:** Dunnett's multiple comparisons test for inhibition of wound healing in C4-2 cells treated with *Matricaria chamomilla* L. flowers extracts

Dunnett's multiple comparisons test Mean Diff.				Summary	Adjusted P Value	
0						
Control vs. MeOH	Control vs. MeOH 0		No	Ns	>0.99	
Control vs. AQ	0	-9.334 to 9.334	No	Ns	>0.99	
Control vs. PE	0	-9.334 to 9.334	No	Ns	>0.99	
Control vs. EA	0	-9.334 to 9.334	No	Ns	>0.99	
Control vs. HA	0	-9.334 to 9.334	No	Ns	>0.99	
24						
Control vs. MeOH	7.108	-2.226 to 16.44	No	Ns	0.19	
Control vs. AQ	0.8085	-8.526 to 10.14	No	Ns	>0.99	
Control vs. PE	s. PE 1.584 -7.75 to 10.92 No		No	Ns	>0.99	
Control vs. EA	2.142	-7.192 to 11.48	No	Ns	0.96	
Control vs. HA	4.505	-4.829 to 13.84	No	Ns	0.60	
48						
Control vs. MeOH	1.027	-8.307 to 10.36 No		Ns	>0.99	
Control vs. AQ	8.886	-0.4482 to 18.22	No	Ns	0.07	
Control vs. PE	-3.778	-13.11 to 5.556	No	Ns	0.74	
Control vs. EA	-4.017	-13.35 to 5.318	No	Ns	0.70	
Control vs. HA	4.15	-5.184 to 13.48	No	Ns	0.67	
72						
Control vs. MeOH	-41.91	-51.24 to -32.57	Yes	***	<0.001	
Control vs. AQ	-9.389	-18.72 to -0.05491	Yes	*	0.05	
Control vs. PE	-32.25	-41.58 to -22.91	Yes	***	<0.001	
Control vs. EA	-46.5	-55.83 to -37.16	Yes	***	<0.001	
Control vs. HA	-26.85	-36.19 to -17.52	Yes	***	<0.001	

 Table S8: Effect of M. chamomilla L. flowers on cell migration in C4-2 cells (Wound closure)

Source of Variation	% of total variation	P value	P value summary	Significant	
Interaction	17.81	< 0.0001	****	Yes	
Row Factor	67.69	< 0.0001	****	Yes	
Column Factor	12.16	< 0.0001	****	Yes	
ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Interaction	8950	20	447.5	F (20, 60) = 22.84	P<0.0001
Row Factor	34012	4	8503	F (4, 60) = 434	P<0.0001
Column Factor	6110	5	1222	F (5, 60) = 62.37	P<0.0001
Residual	1176	60	19.59		

**Table S9:** Dunnett's multiple comparison test on wound closure in C4-2 cells treated with *Matricaria chamomilla* L. flowers extracts

Mean Diff.	95.00% CI of diff.	CI of diff. Significant Summ		Adjusted P Value
	1			
0	-9.334 to 9.334	No	Ns	0.9999
0	-9.334 to 9.334	No	Ns	0.9999
0	-9.334 to 9.334	No	Ns	0.9999
0	-9.334 to 9.334	No	Ns	0.9999
0	-9.334 to 9.334	No	Ns	0.9999
-7.108	-16.44 to 2.226	No	Ns	0.1924
-0.8085	-10.14 to 8.526	No	Ns	0.9997
rol vs. PE -1.584		No	Ns	0.9905
-2.142	-11.48 to 7.192	No	Ns	0.9646
-4.505	-13.84 to 4.829	No	Ns	0.6020
-1.027	-10.36 to 8.307	No	Ns	0.9984
-8.886	-18.22 to 0.4482	No	Ns	0.0672
3.778	-5.556 to 13.11	No	Ns	0.7440
4.017	-5.318 to 13.35	No	Ns	0.6982
-4.15	-13.48 to 5.184	No	Ns	0.6721
41.91	32.57 to 51.24	Yes	****	0.0001
9.389	0.05491 to 18.72	Yes	*	0.0482
32.25	22.91 to 41.58	Yes	****	0.0001
46.5	37.16 to 55.83	Yes	****	0.0001
vs. HA 26.85 17.52		Yes	****	0.0001
	Diff.   0	Diff.         95.00% CI of diff.           0         -9.334 to 9.334           -7.108         -16.44 to 2.226           -0.8085         -10.14 to 8.526           -1.584         -10.92 to 7.75           -2.142         -11.48 to 7.192           -4.505         -13.84 to 4.829           -1.027         -10.36 to 8.307           -8.886         -18.22 to 0.4482           3.778         -5.556 to 13.11           4.017         -5.318 to 13.35           -4.15         -13.48 to 5.184           41.91         32.57 to 51.24           9.389         0.05491 to 18.72           32.25         22.91 to 41.58           46.5         37.16 to 55.83	Diff.         95.00% CI of diff.         Significant           0         -9.334 to 9.334         No           -0         -9.334 to 9.334         No           -7.108         -16.44 to 2.226         No           -0.8085         -10.14 to 8.526         No           -1.584         -10.92 to 7.75         No           -2.142         -11.48 to 7.192         No           -4.505         -13.84 to 4.829         No           -8.886         -18.22 to 0.4482         No           3.778         -5.556 to 13.11         No           4.017         -5.318 to 13.35         No           -4.15         -13.48 to 5.184         No           41.91         32.57 to 51.24         Yes           9.389         0.05491 to 18.72         Yes           32.25         22.91 to 41.58         Yes           46.5         37.16 to 55.83         Yes	Diff.         95.00% CI of diff.         Significant         Summary           0         -9.334 to 9.334         No         Ns           -0         -9.334 to 9.334         No         Ns           -0.8085         -10.14 to 8.526         No         Ns           -0.8085         -10.14 to 8.526         No         Ns           -1.584         -10.92 to 7.75         No         Ns           -2.142         -11.48 to 7.192         No         Ns           -4.505         -13.84 to 4.829         No         Ns           -4.886         -18.22 to 0.4482         No         Ns           3.778         -5.556 to 13.11         No         Ns           4.017         -5.318 to 13.35         No         Ns           41.91         32.57 to 51.24         Yes         *****           9.389         0.05491 to 18.72         Yes         *****           46.5         37.16 to 55.83         Yes         ******

P<0.05, p<0.01, P<0.001, p>0.05 will be considered as significant, highly significant, extremely significant and insignificant respectively compared with control. Data was statistically analyzed by ANOVA followed by Dunnett's test given in Table 19 and 20.