

Table S1. Cosinor analysis

Transcript	Group	p	PR	Acrophase (hr)	Mesor	Amplitude
<i>bmal1</i>	Control	0,0013	47,04%	18,87 (16,93-20,73)	0,835 (0,531-1,14)	0,892 (0,463-1,32)
	aMT	0,0129	33,95%	20,80 (18,20-23,47)	0,586 (0,409-0,762)	0,394 (0,145-0,643)
	MPTP	0,2129	13,70%	16,80 (12,53-21,13)	2,86 (1,83-3,89)	1,28 (-0,179-2,74)
	MPTP+aMT ₂	0,0000	68,64%	20,07 (18,87-21,20)	1,07 (0,823-1,32)	1,15 (0,795-1,50)
	MPTP+aMT ₅	0,0063	38,32%	21,47 (19,13-23,80)	0,676 (0,491-0,861)	0,454 (0,193-0,716)
<i>clock</i>	Control	0,0041	40,81%	3,01 (0,81-5,22)	1,03 (0,550-1,51)	1,24 (0,561-1,91)
	aMT	0,0033	42,04%	2,25 (0,11-4,40)	1,10 (0,722-1,49)	1,01 (0,473-1,55)
	MPTP	0,7323	2,92%	18,47 (15,33-21,60)	2,26 (1,56-2,96)	0,379 (-0,611-1,37)
	MPTP+aMT ₂	0,0263	29,28%	2,03 (0,96-5,02)	1,61 (0,980-2,24)	1,26 (0,371-2,15)
	MPTP+aMT ₅	0,0013	46,78%	0,62 (-2,55-1,31)	0,872 (0,663-1,08)	0,610 (0,315-0,906)
<i>per2</i>	Control	0,0018	45,08%	13,87 (11,87-15,87)	0,558 (0,331-0,786)	0,643 (0,321-0,965)
	aMT	0,0195	31,28%	16,00 (13,13-18,80)	0,677 (0,400-0,953)	0,581 (0,190-0,972)
	MPTP	0,0083	36,64%	10,60 (8,20-13,07)	0,801 (0,560-1,04)	0,571 (0,230-0,911)
	MPTP+aMT ₂	0,0019	44,88%	15,33 (13,27-17,33)	0,780 (0,539-1,02)	0,680 (0,338-1,02)
	MPTP+aMT ₅	0,0141	33,36%	15,80 (13,13-18,47)	0,616 (0,404-0,827)	0,467 (0,168-0,767)
<i>cry1</i>	Control	0,0256	29,46%	17,07 (14,07-20,00)	0,455 (0,265-0,646)	0,384 (0,114-0,653)
	aMT	0,0291	28,59%	20,47 (17,40-23,53)	0,446 (0,296-0,597)	0,298 (0,0841-0,511)
	MPTP	0,0493	24,92%	13,80 (10,33-17,27)	0,394 (0,279-0,508)	0,205 (0,0436-0,367)
	MPTP+aMT ₂	0,0044	40,31%	14,80 (12,53-17,00)	0,720 (0,555-0,886)	0,423 (0,190-0,657)
	MPTP+aMT ₅	0,0254	29,51%	20,60 (17,60-23,53)	0,556 (0,349-0,763)	0,418 (0,125-0,711)
<i>rorα</i>	Control	0,0042	40,63%	5,41 (3,19-7,60)	1,01 (0,568-1,46)	1,15 (0,520-1,79)
	aMT	0,0017	45,45%	4,85 (2,87-6,87)	1,60 (0,912-2,30)	1,97 (0,990-2,95)
	MPTP	0,1753	15,28%	13,93 (9,27-18,67)	1,38 (0,961-1,80)	0,555 (-0,0381-1,15)
	MPTP+aMT ₂	0,0331	27,72%	5,11 (1,97-8,27)	3,85 (2,31-5,38)	2,96 (0,792- 5,14)
	MPTP+aMT ₅	0,0254	29,51%	5,59 (2,53-8,67)	2,37 (0,945-3,79)	2,78 (0,830-4,74)
<i>rev-erba</i>	Control	0,0005	51,14%	7,80 (6,05-9,53)	2,48 (1,30-3,66)	3,77 (2,10-5,44)
	aMT	0,0120	34,37%	6,25 (3,66-8,87)	5,53 (1,39-9,68)	9,35 (3,49-15,2)
	MPTP	0,0040	40,91%	8,27 (6,05-10,47)	1,40 (0,966-1,84)	1,14 (0,516-1,75)
	MPTP+aMT ₂	0,0243	29,81%	8,47 (5,62-11,33)	6,73 (2,73-10,7)	8,32 (2,50-14,1)
	MPTP+aMT ₅	0,0251	29,59%	5,93 (2,97-8,87)	4,55 (0,820-8,29)	7,54 (2,26-12,8)
<i>chrono</i>	Control	0,0029	42,65%	5,60 (3,39-7,80)	3,74 (2,36-5,13)	3,62 (1,72-5,53)
	aMT	0,0044	40,37%	8,40 (6,15-10,60)	3,95 (2,24-5,66)	4,38 (1,97-6,80)
	MPTP	0,0003	54,61%	7,80 (6,19-9,47)	5,12 (3,09-7,16)	6,96 (4,08-9,84)
	MPTP+aMT ₂	0,0266	29,22%	9,60 (6,59-12,60)	6,22 (3,39-9,06)	5,68 (1,67-9,69)
	MPTP+aMT ₅	0,0170	32,18%	7,60 (4,87-10,40)	3,48 (2,29-4,66)	2,55 (0,870-4,23)

Table S2.1. Transcript: *bmal1*. Post-hoc test: Tukey multiple comparison of the means

Treatments	P value							
	2h	5h	8h	11h	14h	17h	20h	23h
Control vs aMT	ns	ns	ns	ns	ns	ns	P < 0.001	ns
Control vs MPTP	ns	ns	P < 0.001	P < 0.001	ns	P < 0.001	ns	P < 0.001
Control vs MPTP+aMT ₂	ns	ns	ns	ns	ns	ns	ns	ns
Control vs MPTP+aMT ₅	ns	ns	ns	ns	ns	P < 0.05	P < 0.01	ns
aMT vs MPTP	ns	ns	P < 0.001	P < 0.001	ns	P < 0.001	ns	P < 0.01
aMT vs MPTP+aMT ₂	ns	ns	ns	ns	ns	ns	P < 0.001	ns
aMT vs MPTP+aMT ₅	ns	ns	ns	ns	ns	ns	ns	ns
MPTP vs MPTP+aMT ₂	ns	ns	P < 0.001	P < 0.001	ns	P < 0.001	ns	P < 0.05
MPTP vs MPTP+aMT ₅	ns	ns	P < 0.001	P < 0.001	ns	P < 0.001	ns	ns
MPTP+aMT ₂ vs MPTP+aMT ₅	ns	ns	ns	ns	ns	P < 0.05	P < 0.01	ns

Table S2.2. Transcript: *clock*. Post-hoc test: Tukey multiple comparison of the means

Treatments	P value							
	2h	5h	8h	11h	14h	17h	20h	23h
Control vs aMT	P < 0.001	ns	ns	ns	ns	ns	ns	P < 0.05
Control vs MPTP	ns	ns	ns	P < 0.01	P < 0.05	P < 0.001	P < 0.001	ns
Control vs MPTP+aMT ₂	P < 0.05	P < 0.05	ns	ns	ns	ns	ns	ns
Control vs MPTP+aMT ₅	P < 0.05	ns	ns	ns	ns	ns	ns	ns
aMT vs MPTP	P < 0.05	ns	ns	P < 0.01	P < 0.01	P < 0.001	P < 0.001	ns
aMT vs MPTP+aMT ₂	ns	ns	ns	ns	ns	ns	ns	ns
aMT vs MPTP+aMT ₅	ns	ns	ns	ns	ns	ns	ns	ns
MPTP vs MPTP+aMT ₂	ns	P < 0.01	ns	P < 0.01	P < 0.05	P < 0.001	P < 0.05	ns
MPTP vs MPTP+aMT ₅	ns	ns	ns	P < 0.01	P < 0.01	P < 0.001	P < 0.001	ns
MPTP+aMT ₂ vs MPTP+aMT ₅	ns	P < 0.001	ns	ns	ns	ns	ns	ns

Table S2.5. Transcript: *rora*. Post-hoc test: Tukey multiple comparison of the means

Treatments	P value							
	2h	5h	8h	11h	14h	17h	20h	23h
Control vs aMT	ns	P < 0.001	ns	ns	ns	ns	ns	ns
Control vs MPTP	ns	ns	ns	ns	P < 0.001	ns	ns	ns
Control vs MPTP+aMT ₂	P < 0.001	P < 0.001	ns	P < 0.001	ns	P < 0.001	ns	ns
Control vs MPTP+aMT ₅	ns	P < 0.001	ns	ns	ns	ns	ns	ns
aMT vs MPTP	ns	P < 0.001	ns	ns	P < 0.01	ns	ns	ns
aMT vs MPTP+aMT ₂	P < 0.001	P < 0.001	ns	P < 0.001	ns	P < 0.001	ns	ns
aMT vs MPTP+aMT ₅	ns	P < 0.001	ns	ns	ns	ns	ns	ns
MPTP vs MPTP+aMT ₂	P < 0.001	P < 0.001	ns	P < 0.05	P < 0.05	P < 0.001	ns	ns
MPTP vs MPTP+aMT ₅	ns	P < 0.001	ns	ns	P < 0.001	ns	ns	ns
MPTP+aMT ₂ vs MPTP+aMT ₅	P < 0.001	ns	ns	P < 0.001	ns	P < 0.001	ns	ns

Table S2.6. Transcript: *rev-erba*. Post-hoc test: Tukey multiple comparison of the means

Treatments	P value							
	2h	5h	8h	11h	14h	17h	20h	23h
Control vs aMT	ns	P < 0.001	P < 0.001	ns	ns	ns	ns	ns
Control vs MPTP	ns	ns	P < 0.001	ns	ns	ns	ns	ns
Control vs MPTP+aMT ₂	ns	P < 0.001	P < 0.001	P < 0.001	ns	ns	ns	ns
Control vs MPTP+aMT ₅	ns	P < 0.001	P < 0.001	ns	ns	ns	ns	ns
aMT vs MPTP	ns	P < 0.001	ns	ns	ns	ns	ns	ns
aMT vs MPTP+aMT ₂	ns	P < 0.001	ns	P < 0.01	ns	ns	ns	ns
aMT vs MPTP+aMT ₅	ns	P < 0.001	ns	ns	ns	ns	ns	ns
MPTP vs MPTP+aMT ₂	ns	P < 0.001	ns	P < 0.001	ns	ns	ns	ns
MPTP vs MPTP+aMT ₅	ns	P < 0.001	ns	ns	ns	ns	ns	ns
MPTP+aMT ₂ vs MPTP+aMT ₅	ns	ns	ns	P < 0.01	ns	ns	ns	ns

Table S2.7. Transcript: *chrono*. Post-hoc test: Tukey multiple comparison of the means

Treatments	P value							
	2h	5h	8h	11h	14h	17h	20h	23h
Control vs aMT	P < 0.01	ns	P < 0.001	ns	ns	ns	ns	ns
Control vs MPTP	P < 0.05	P < 0.05	P < 0.001	ns	ns	ns	ns	P < 0.05
Control vs MPTP+aMT ₂	P < 0.01	P < 0.01	P < 0.001	P < 0.001	ns	ns	ns	ns
Control vs MPTP+aMT ₅	ns	ns	P < 0.001	ns	ns	ns	ns	ns
aMT vs MPTP	P < 0.001	P < 0.001	ns	P < 0.05	ns	ns	ns	P < 0.05
aMT vs MPTP+aMT ₂	ns	ns	ns	P < 0.001	ns	ns	ns	ns
aMT vs MPTP+aMT ₅	ns	P < 0.01	ns	ns	ns	ns	ns	ns
MPTP vs MPTP+aMT ₂	P < 0.001	P < 0.001	ns	P < 0.001	ns	ns	ns	ns
MPTP vs MPTP+aMT ₅	P < 0.001	ns	ns	P < 0.01	ns	ns	ns	ns
MPTP+aMT ₂ vs MPTP+aMT ₅	ns	P < 0.001	ns	P < 0.001	ns	ns	ns	ns