

## Supplemental File

### Tempol reverses the negative effects of morphine on arterial blood-gas chemistry and tissue oxygen saturation in freely-moving rats

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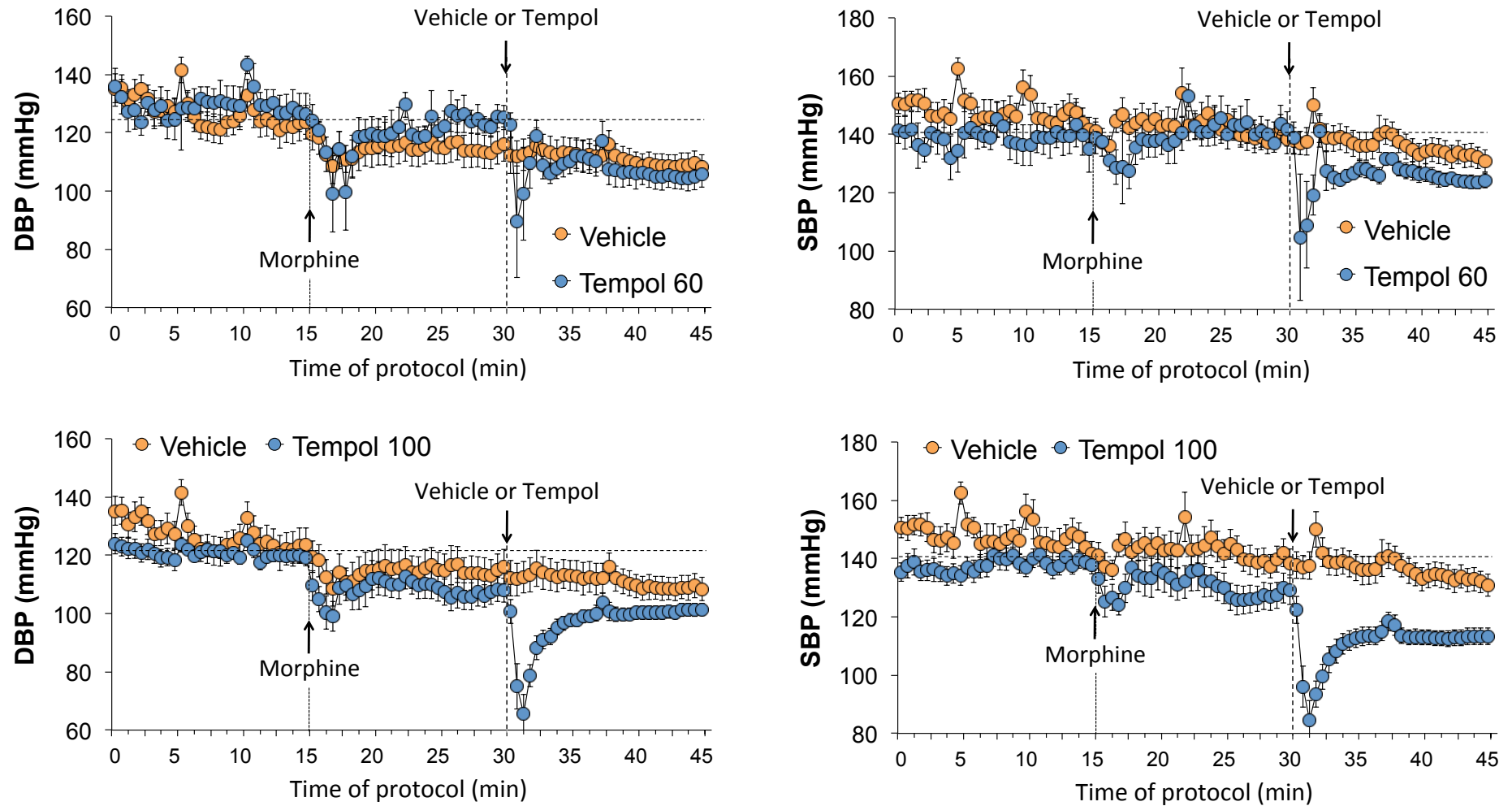
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**Supplemental Table 1.** Baseline parameters

Parameter	Saline (ml/kg)	Tempol (mg/kg, IV)	
		60	100
Number of rats	9	3	10
SpO <sub>2</sub> , %	96.0 ± 0.5	97.5 ± 0.3	96.6 ± 0.5
SBP, mmHg	129 ± 5	129 ± 5	120 ± 2
DBP, mmHg	148 ± 4	139 ± 5	136 ± 3
MAP, mmHg	135 ± 4	132 ± 5	126 ± 3
Heart rate, beats/min	368 ± 13	352 ± 43	393 ± 15
Heart rate/MAP, mmHg/beats/min	2.9 ± 0.2	2.7 ± 0.4	3.1 ± 0.1

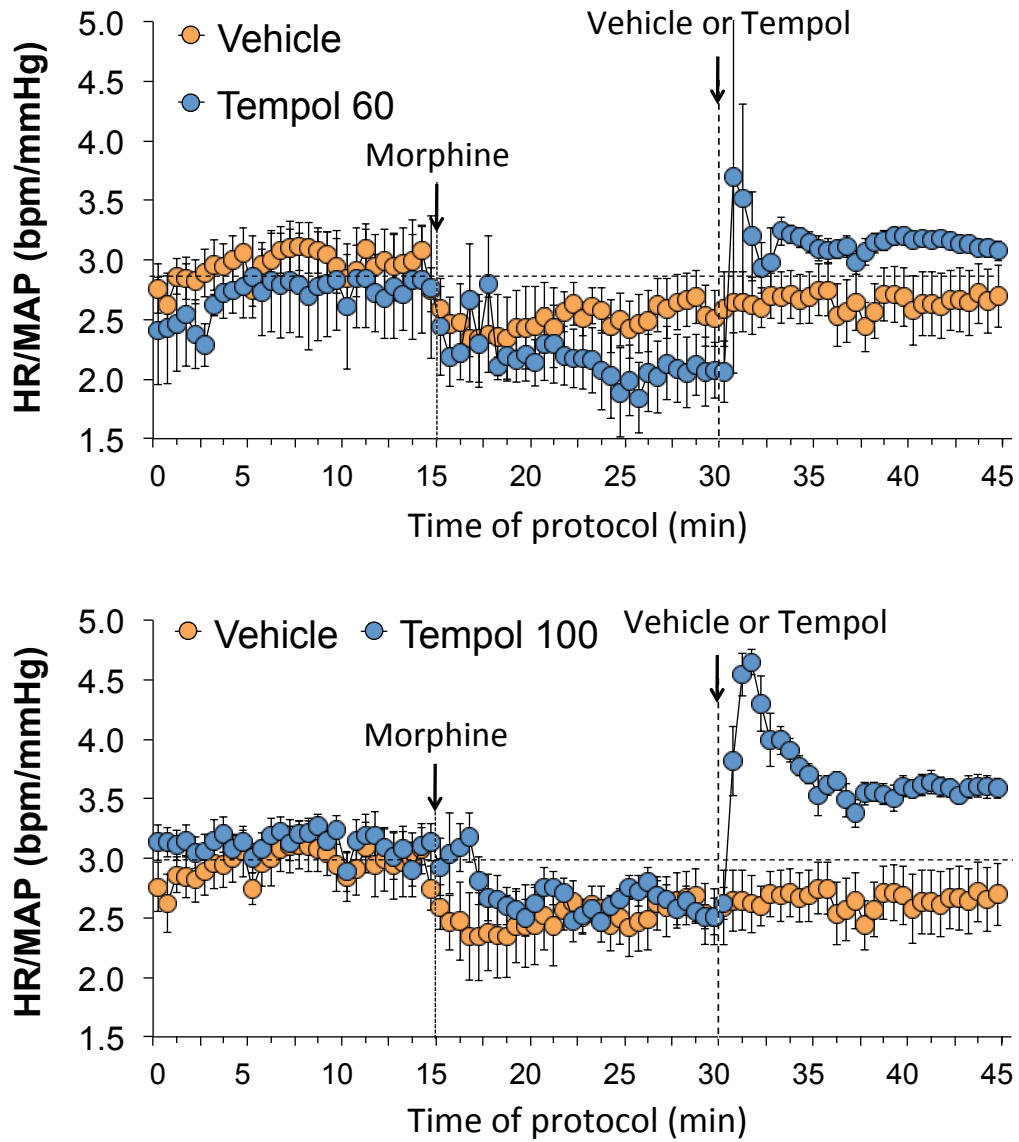
SBP, systolic arterial blood pressure. DBP, diastolic arterial blood pressure. MAP, mean arterial blood pressure. SpO<sub>2</sub>, tissue O<sub>2</sub> saturation. The data are presented as mean ± SEM. There were no between group differences for any parameter (P > 0.05 for all comparisons).

## Supplemental Figure 1



**Supplementary Figure 1.** Changes in diastolic arterial blood pressure (DBP) and systolic arterial blood pressure (SBP) elicited by bolus injection of morphine (10 mg/kg, IV) and the subsequent injection of vehicle (saline), Tempol at 60 mg/kg, IV (Tempol 60) or Tempol at 100 mg/kg, IV (Tempol 100) in freely-moving rats. Data are shown as mean  $\pm$  SEM. The numbers of rats in vehicle, Tempol 60 and Tempol 100 groups were 9, 3 and 10, respectively.

## Supplemental Figure 2



**Supplementary Figure 2.** Changes in mean arterial blood pressure/heart rate ratios (HR/MAP) elicited by bolus injection of morphine (10 mg/kg, IV) and subsequent injection of vehicle (saline), Tempol at 60 mg/kg, IV (Tempol 60) or Tempol at 100 mg/kg, IV (Tempol 100) in freely-moving rats. Data are shown as mean  $\pm$  SEM. The numbers of rats in vehicle, Tempol 60 and Tempol 100 groups were 9, 3 and 10, respectively.