

## Erratum to: Role of central and peripheral opioid receptors in the cardioprotection of intravenous morphine preconditioning

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The authors would like to publish an erratum to correct the errors in “Abstract” and “Materials and methods” section. The respective corrected paragraphs are given below (emphasis added to corrected text).

#### Corrected Abstract:

**Methods** Sixty-five anesthetized, open chests, male Sprague–Dawley rats were assigned to one of nine groups after intrathecal catheter placement. IPC was induced by three cycles of intermittent occlusion of left anterior descending artery (5 min occlusion interspersed with 5 min of reperfusion). MPC was induced by three consecutive intravenous infusions of 100 µg/kg morphine over 5 min. The opioid receptors antagonist naloxone methiodide (NM), was intravenously or intrathecally, at a dose of 20 **mg/kg** or 20 µg/kg, given 10 min before IPC or MPC (IVNM + IPC, ITNM + IPC, IVNM + MPC, ITNM + MPC). Control group (CON) and intravenously or intrathecally administered NM (IVNM, ITNM) were used as negative controls, respectively. All hearts were subjected to 30 min of ischemia follow by 2 h of reperfusion. Infarct size, as a percentage of the area at risk, was determined by 2, 3,

5-triphenyltetrazolium staining. Heart rate and mean arterial blood pressure were monitored.

#### Corrected Materials and methods:

##### *Study groups and experiments protocol*

Rats were randomly assigned to receive one of nine treatments (Fig. 1). All animals were subjected to 30 min of ischemia by occlusion of the left anterior descending artery followed by 2 h of reperfusion by release of the occlusion: 1. CON, rats were induced by 30 min ischemia and 2 h reperfusion; 2. IPC, before the 30 min ischemia of the left anterior descending artery, rats were subjected to preconditioning by ischemia (IPC, 3 cycles of 5 min ischemia and 5 min reperfusion); 3. MPC, MPC hearts were subjected to three 5 min cycles of intravenous morphine at 100 µg/kg interspersed with 5 min drug-free periods prior to sustained ischemia; 4. IVNM + IPC, naloxone methiodide (NM) 20 **mg/kg** i.v. 10 min before IPC; 5. ITNM + IPC, naloxone methiodide (NM) 20 µg/kg i.t. 10 min before IPC; 6. IVNM + MPC naloxone methiodide (NM) 20 **mg/kg** i.v. 10 min before MPC; 7. ITNM + MPC, naloxone methiodide (NM) 20 µg/kg i.t. 10 min before MPC; 8. IVNM, naloxone methiodide (NM) 20 **mg/kg** i.v. 40 min before ischemia; 9. ITNM, naloxone methiodide (NM) 20 µg/kg i.t. 40 min before ischemia.

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