

Reviewer's comments, author's response, and editor's comments:

[Fei-Xiang Wu, Rui-Rui Pan, Wei-Feng Yu, Renyu Liu. Dezocine and neuropathic pain. Trans Periop & Pain Med 2014, 1\(1\):5-8](#)

Reviewer 1.

This is a very brief paper with a single finding and 2 figures. More studies have to be performed to better establish the observation that dezocine attenuates neuropathic pain by using more than one dose, testing the effects of specific antagonists/inhibitors, evaluated more behavioral test such as the cold plate test and thus build a full manuscript.

- This is a very preliminary pilot study. We agree that further studies need to be performed in the future.

Reviewer #2:

1. A single dose of drug was tested. Thus, they are not able to provide indication of the relative potency of dezocine for neuropathic, as opposed to thermal, pain relief. The authors try to make a case that it is better than traditional opioids, but do not provide a comparison with morphine or any other traditional opioid.

- A dose response and comparison with other opioids especially comparison with buprenorphine is needed?

2. While there is an effect at the 3 mg/kg dose, is there a ceiling effect? Is this as good as it gets? It is important to know whether it is a partial agonist (which is likely) since that may greatly limit its utility against more severe neuropathic pain.

- Similar answer to the first question. It is well-known that dezocine is a mu partial agonist. However, it might be needed to perform a functional assay again to verify the action since the function study was performed in 70s.

3. The authors discuss the uptake inhibitor properties of dezocine. However, they do not comment upon the fact that the doses of dezocine needed to inhibit the transporters are almost 1000-fold higher than their affinity a mu opioid receptors, making it unlikely that this uptake inhibition is playing a significant role in their effect. If it were, they should still see an effect in an opioid receptor KO mouse.

- This is a good suggestion to use knockout mouse, however this is beyond the scope of this study.

Editor's comment

Neuropathic pain remains one of the toughest conditions for management in pain medicine. It is still controversial whether opioids could be used in neuropathic pain. This study explores an old opioid for potential usage in neuropathic pain and found that dezocine might have some value in neuropathic pain management. While the design of the experiment is quite simple, the methodology is sound and the results are convincing. Thus, the editor and the editorial team feel that while this is a simple study, it fits the mission of the translational perioperative and medicine to translate an old drug for novel clinical usage for a difficult disease without optimal medication available. Further studies could potentially be accomplished using well-defined clinical trials rather than further animal studies in settings where dezocine is not available clinically, benefit patients as early as possible.