

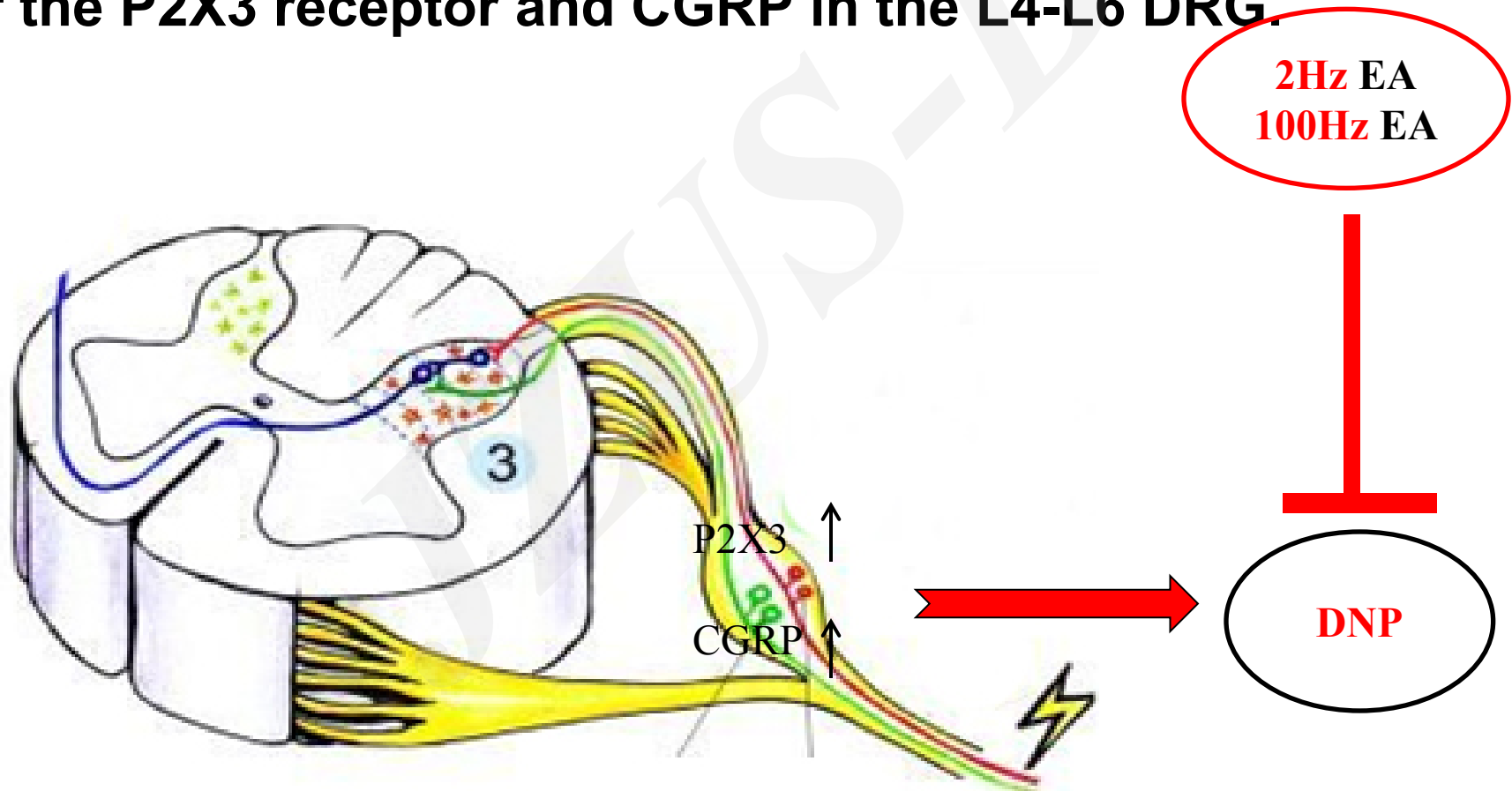
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# **Effects of electroacupuncture at 2 and 100 Hz on rat type 2 diabetic neu-ropathic pain and hyperalgesia-related protein expression in the dorsal root ganglion**

**Key words:** Electroacupuncture, Type 2 diabetic neuropathic pain (DNP), Dorsal root ganglion(DRG), P2X3 receptor, Calcitonin gene-related peptide (CGRP)

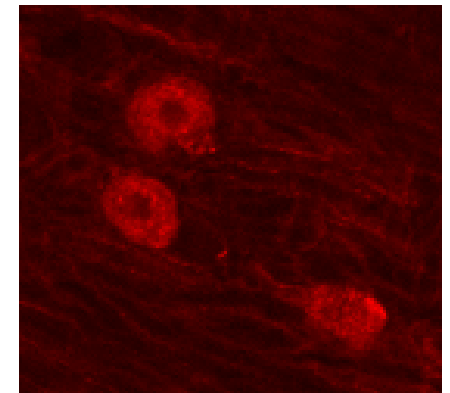
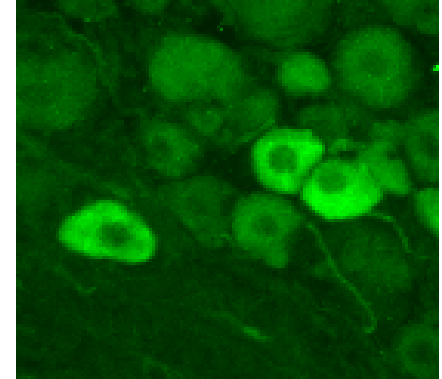
# Research Summary

This study is mainly to investigate the analgesic effects of EA at 2 Hz and 100 Hz on type 2 DNP and on the expression of the P2X3 receptor and CGRP in the L4-L6 DRG.



# *Innovation points*

- Establishment of **type 2 DNP Model** for the advantage frequency of EA treatment
- EA at both 2 Hz and 100 Hz relieved type 2 DNP, the analgesic effect of EA was **stronger at 2 Hz.**
- **P2X3 receptor** expression decreased in L4-L6 DRGs following EA at 2 Hz and **in L5 and L6 DRGs** following **EA at 100 Hz.**
- EA at both 2 Hz and 100 Hz down-regulated CGRP overexpression in L4-L6 DRGs.



# ***Innovation points***

**A series of comprehensive figures were given to support the conclusion EA at 2 Hz is a good option for the management of type 2 DNP.**

**Figure 1 | A combination of a high-fat and high-sugar diet plus a small dose of STZ-injection successfully induced type 2 DNP.**

**Figure 2 | Effects of EA at 2 Hz or 100 Hz on DNP-induced thermal hyperalgesia**

**Figure 3 | Effects of EA at frequencies of 2 Hz or 100 Hz on the DRG P2X3 receptors of DNP rats.**

**Figure 4 | Effects of EA at frequencies of 2 Hz and 100 Hz on DRG CGRP of DNP rats.**