# Article information:

m6A methyltransferase METTL3 participated in sympathetic neural remodeling post-MI via the TRAF6/NF-κB pathway and ROS production - PubMed
<https://pubmed.ncbi.nlm.nih.gov/35717715/>

# Article summary:

1. The m6A methyltransferase METTL3 is involved in sympathetic neural remodeling post-MI via the TRAF6/NF-κB pathway and ROS production.

2. Intramyocardial injection of lentivirus carrying METTL3-shRNA inhibited METTL3 expression in vivo, which decreased cytokine release (TNF-α and IL-1β) and downregulated nerve growth factor expression.

3. Downregulation of METTL3 expression attenuated the excessive sympathetic neural remodeling induced by MI, further reducing the incidence of VAs and improving cardiac function.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable as it provides a detailed description of the research conducted, including methods used, results obtained, and conclusions drawn from them. The authors have also provided evidence to support their claims, such as Western blotting to measure protein levels, immunofluorescence assays to measure cell types present in the heart tissue, methylated immunoprecipitation-qPCR to measure m6A levels of TRAF6 mRNA 3'-UTR, co-immunoprecipitation experiments to prove that METTL3 combines with TRAF6, programmed electrical stimulation to measure sympathetic activity, renal sympathetic nerve activity recording to measure sympathetic activity, and haemodynamic measurements to assess cardiac function.

The article does not appear to be biased or one-sided as it presents both sides equally. It does not contain any promotional content or partiality towards any particular point of view. The authors have also noted possible risks associated with their research such as potential side effects from intramyocardial injection of lentivirus carrying METTL3-shRNA.

The only potential issue with the article is that it does not explore any counterarguments or missing points of consideration that could potentially affect the results obtained from this study.

# Topics for further research:

* Cardiac sympathetic activity
* Cardiac function assessment
* m6A levels of mRNA
* Intramyocardial injection of lentivirus
* Co-immunoprecipitation experiments
* Western blotting protein levels

# Report location:

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