# Article information:

Small-molecule-biased formyl peptide receptor agonist compound 17b protects against myocardial ischaemia-reperfusion injury in mice | Nature Communications
<https://www.nature.com/articles/ncomms14232>

# Article summary:

1. There is a lack of effective pharmacological treatments for MI and post-MI cardiac remodelling, leading to millions of deaths annually.

2. FPRs represent a novel therapeutic target in MI, where inflammation is a major contributing mechanism.

3. This study investigated the potential of small-molecule FPR agonists Cmpd17b and Cmpd43 as cardioprotective agents against MI injury, revealing that Cmpd17b mediates a range of cardioprotective effects up to 7 days post ischaemia-reperfusion (I–R) in vivo.

# 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 provides an overview of the current paucity of effective pharmacological treatments for MI and post-MI cardiac remodelling, and how FPRs represent a novel therapeutic target in this context due to their ability to interact with multiple structurally diverse ligands that can stimulate opposing cellular responses downstream of receptor activation. The article then goes on to discuss the potential of small-molecule FPR agonists Cmpd17b and Cmpd43 as cardioprotective agents against MI injury, revealing that Cmpd17b mediates a range of cardioprotective effects up to 7 days post ischaemia-reperfusion (I–R) in vivo.

The article appears to be reliable and trustworthy overall, providing evidence for its claims through research conducted both in vitro and in vivo. The authors provide detailed descriptions of their methods used throughout the study, which adds credibility to their findings. Furthermore, the authors acknowledge potential limitations such as differences between species when it comes to FPR signalling fingerprints, as well as the need for further research into the long-term effects of these compounds on cardiac injury responses.

However, there are some points that could be improved upon in terms of trustworthiness and reliability. For example, while the authors do mention potential limitations such as differences between species when it comes to FPR signalling fingerprints, they do not explore this point further or provide any evidence or counterarguments regarding this issue. Additionally, while they do mention possible risks associated with using these compounds for treating MI injuries, they do not provide any details about what these risks may be or how they can be mitigated. Finally, while the authors present both sides equally when discussing their findings regarding Cmpd17b and Cmpd43's efficacy as cardioprotective agents against MI injury, they do not explore any other potential alternatives or treatments that could be used instead or alongside these compounds for treating MI injuries.

# Topics for further research:

* Cardiac remodelling post-MI
* Pharmacological treatments for MI
* FPRs as therapeutic targets
* Long-term effects of FPR agonists
* Potential risks of FPR agonists
* Alternative treatments for MI injury

# Report location:

<https://www.fullpicture.app/item/48c7eb978f0f35a4e40031a37fee7c7a>