# Article information:

Role of the CLOCK protein in liver detoxification - Zhao - 2019 - British Journal of Pharmacology - Wiley Online Library  
<https://bpspubs.onlinelibrary.wiley.com/doi/full/10.1111/bph.14828>

# Article summary:

1. The circadian clock system is composed of positive (including CLOCK, NPAS2, and BMAL1) and negative (including PER and CRY) limbs.

2. CLOCK plays an important role in regulating physiological processes such as cell cycle, lipid metabolism, glucose metabolism, and immune responses.

3. This study established a Clock knockout mouse strain to investigate the effects of CLOCK protein on liver detoxification.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article is generally reliable and trustworthy in its reporting of the research conducted by Zhao et al. The authors provide a comprehensive overview of the circadian clock system and its components, as well as the roles of CLOCK protein in various physiological processes. The article also provides a detailed description of the methods used to establish the Clock knockout mouse strain and analyze its effects on liver detoxification.

However, there are some potential biases that should be noted. For example, the authors do not explore any counterarguments or alternative explanations for their findings; they only present their own conclusions without considering other possible interpretations or implications of their results. Additionally, while the authors discuss potential clinical applications of their findings, they do not mention any potential risks associated with using chronotherapeutics with drugs such as cyclophosphamide. Finally, it should be noted that this article was published in a journal affiliated with Wiley Online Library; thus it may have been subject to partiality or promotional content from Wiley Online Library's editorial staff or sponsors.

# Topics for further research:

* Chronotherapeutics
* Circadian clock system components
* CLOCK protein functions
* Cyclophosphamide risks
* Alternative explanations for research findings
* Clinical applications of chronotherapeutics

# Report location:

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