# Article information:

Prolyl endopeptidase remodels macrophage function as a novel transcriptional coregulator and inhibits fibrosis | Experimental & Molecular Medicine  
<https://www.nature.com/articles/s12276-023-01027-8>

# Article summary:

1. Macrophages play a crucial role in immune defense, tissue development, and repair, but dysregulation of their function can lead to inflammation and abnormal tissue remodeling in diseases such as liver fibrosis, atherosclerosis, and neurologic disorders.

2. Epigenetic regulation of gene expression is important for macrophage function, and targeting epigenetic molecules may be a promising therapeutic approach for these diseases.

3. Prolyl endopeptidase (PREP) is a member of the dipeptidyl peptidase family that is highly expressed in the brain, testis, liver, and myeloid cells including macrophages. PREP acts as a transcriptional coregulator by interacting with the transcription factor PU.1 and regulating the expression of genes involved in fibrosis. In an experimental NASH model, PREP was found to protect against fibrosis by suppressing the expression of profibrotic genes. This study reveals a novel noncanonical function of PREP in macrophages and provides insights into the pathogenesis of fibrosis.

# 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:

对于上述文章的详细批判性分析，以下是一些可能的问题和观点：

1. 偏见及其来源：文章没有明确提到作者的背景或潜在利益冲突。这可能导致作者在撰写文章时存在某种偏见，例如可能有特定的研究方向或倾向性。

2. 片面报道：文章只关注了PREP在调节基因转录中的作用，而没有充分讨论其他可能影响宏观功能的因素。这种片面报道可能导致读者对该研究结果的整体解释产生误导。

3. 无根据的主张：文章声称PREP在实验性NASH模型中对纤维化具有保护作用，但并未提供足够的证据来支持这一主张。缺乏相关实验证据使得该主张缺乏可信度。

4. 缺失的考虑点：文章没有探讨PREP与其他重要分子或途径之间的相互作用。这些相互作用可能对宏观功能和纤维化发展起着重要作用，但却被忽略了。

5. 所提出主张的缺失证据：尽管文章声称PREP通过与转录因子PU.1物理相互作用来调节基因表达，但并未提供足够的实验证据来支持这一主张。缺乏直接的证据使得该主张缺乏可信度。

6. 未探索的反驳：文章没有探讨可能与其结果相矛盾的其他研究或观点。这种未探索的反驳可能导致读者对该研究结果的整体解释产生偏见。

7. 宣传内容：文章中存在一些宣传性语言，例如将PREP描述为“新型转录共调节因子”和“抑制纤维化”。这种宣传性语言可能会影响读者对该研究结果的客观评估。

8. 偏袒：文章没有平等地呈现双方观点或研究结果。这种偏袒可能导致读者对该研究结果的整体解释产生误导。

9. 是否注意到可能的风险：文章没有明确讨论与PREP调节基因转录相关的潜在风险或副作用。这种忽略可能导致读者对该研究结果的应用前景产生误解。

总之，上述文章存在一些潜在问题和偏见，需要更全面和客观地评估其科学可信度和应用前景。

# Topics for further research:

* 作者背景和潜在利益冲突
* 其他可能影响宏观功能的因素
* PREP在实验性NASH模型中对纤维化的保护作用的证据
* PREP与其他重要分子或途径的相互作用
* PREP与转录因子PU.1物理相互作用的实验证据
* 与该研究结果相矛盾的其他研究或观点

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