# Article information:

iRhom pseudoproteases regulate ER stress-induced cell death through IP3 receptors and BCL-2 | Nature Communications  
<https://www.nature.com/articles/s41467-022-28930-4>

# Article summary:

1. iRhoms are catalytically inactive proteins that have important functions in their own right, often derived from the role of their active enzyme ancestors.

2. iRhoms have reported functions in protein homoeostasis, ER to Golgi trafficking, and regulating the cellular response to viruses.

3. iRhoms have a role in processes associated with ER stress responses, including triggering the degradation of EGF-ligands and regulating proteasome activity under ER stress conditions.

# 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:

作为一篇科学研究论文，该文章在介绍iRhoms的功能和其在ER应激响应中的作用方面提供了详细的信息。然而，该文章可能存在一些偏见和片面报道。首先，文章强调了iRhoms作为“伪酶”的特点，并将其解释为这些蛋白质具有重要功能的原因。然而，这种说法可能会误导读者认为这些蛋白质没有任何催化活性，而实际上它们可能具有其他类型的催化活性或结构功能。

其次，在讨论iRhoms在ER应激响应中的作用时，文章主要关注了它们与ADAM17金属蛋白酶的相互作用，并未探讨其他可能涉及到iRhoms的机制。此外，文章也没有提及其他已知的ER应激响应调节因子（如IRE1、PERK等），从而使得读者难以全面理解iRhoms在整个ER应激响应过程中所扮演的角色。

最后，在讨论ER应激诱导细胞死亡机制时，文章强调了CHOP和TRAF2/ASK1/JNK/p38 kinase级联反应对于细胞凋亡起着重要作用。然而，文章并未提及其他可能涉及到细胞死亡的机制（如线粒体途径），从而使得读者难以全面理解ER应激诱导细胞死亡的复杂性。

总之，该文章提供了有关iRhoms在ER应激响应中的作用方面的重要信息，但也存在一些偏见和片面报道。为了更好地理解这些蛋白质在整个ER应激响应过程中所扮演的角色，需要进一步研究和探索。

# Topics for further research:

* Other catalytic or structural functions of iRhoms
* Other mechanisms involving iRhoms in ER stress response
* Other ER stress response regulatory factors besides iRhoms
* Other mechanisms involved in ER stress-induced cell death
* The complexity of ER stress-induced cell death
* Further research and exploration of iRhoms' role in the entire ER stress response process

# Report location:

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