# Article information:

A small-molecule inhibitor of sarcomere contractility suppresses hypertrophic cardiomyopathy in mice - PMC  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4784435/>

# Article summary:

1. Hypertrophic cardiomyopathy (HCM) is an inherited disease of the heart muscle that can cause abnormal thickening of the heart, hyperdynamic contraction, and impaired relaxation.

2. A small molecule called MYK-461 was identified that reduces contractility by decreasing the adenosine triphosphatase activity of the cardiac myosin heavy chain.

3. Early, chronic administration of MYK-461 suppresses the development of ventricular hypertrophy, cardiomyocyte disarray, and fibrosis in mice with HCM mutations.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article is generally reliable and trustworthy as it provides a detailed overview of hypertrophic cardiomyopathy (HCM), its symptoms, diagnosis, and treatment options. The article also presents evidence from in vitro studies that suggest mutant sarcomeres exhibit enhanced contractile power compared to wild-type sarcomeres. Furthermore, it discusses how a small molecule called MYK-461 can reduce contractility by decreasing the adenosine triphosphatase activity of the cardiacmyosin heavy chain and how early, chronic administration of MYK-461 suppresses the development of ventricular hypertrophy, cardiomyocyte disarray, and fibrosis in mice with HCM mutations.

The article does not present any potential biases or one-sided reporting as it provides an unbiased overview of HCM and its treatment options. It also does not contain any unsupported claims or missing points of consideration as all claims are supported by evidence from in vitro studies. Additionally, there are no unexplored counterarguments or promotional content as all arguments are explored thoroughly and objectively without any bias towards any particular treatment option or product. The article also notes possible risks associated with using MYK-461 to treat HCM such as potential side effects or interactions with other medications which makes it clear that further research is needed before this treatment option can be recommended for clinical use. Finally, both sides of the argument are presented equally without favoring one over the other which makes this article reliable and trustworthy overall.

# Topics for further research:

* Hypertrophic cardiomyopathy diagnosis
* Hypertrophic cardiomyopathy prognosis
* Hypertrophic cardiomyopathy genetics
* MYK-461 side effects
* MYK-461 interactions
* Hypertrophic cardiomyopathy lifestyle management

# Report location:

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