

# EDG-5506: A Novel Small Molecule to Protect Dystrophic Muscle



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# Disclaimer

## Disclaimer

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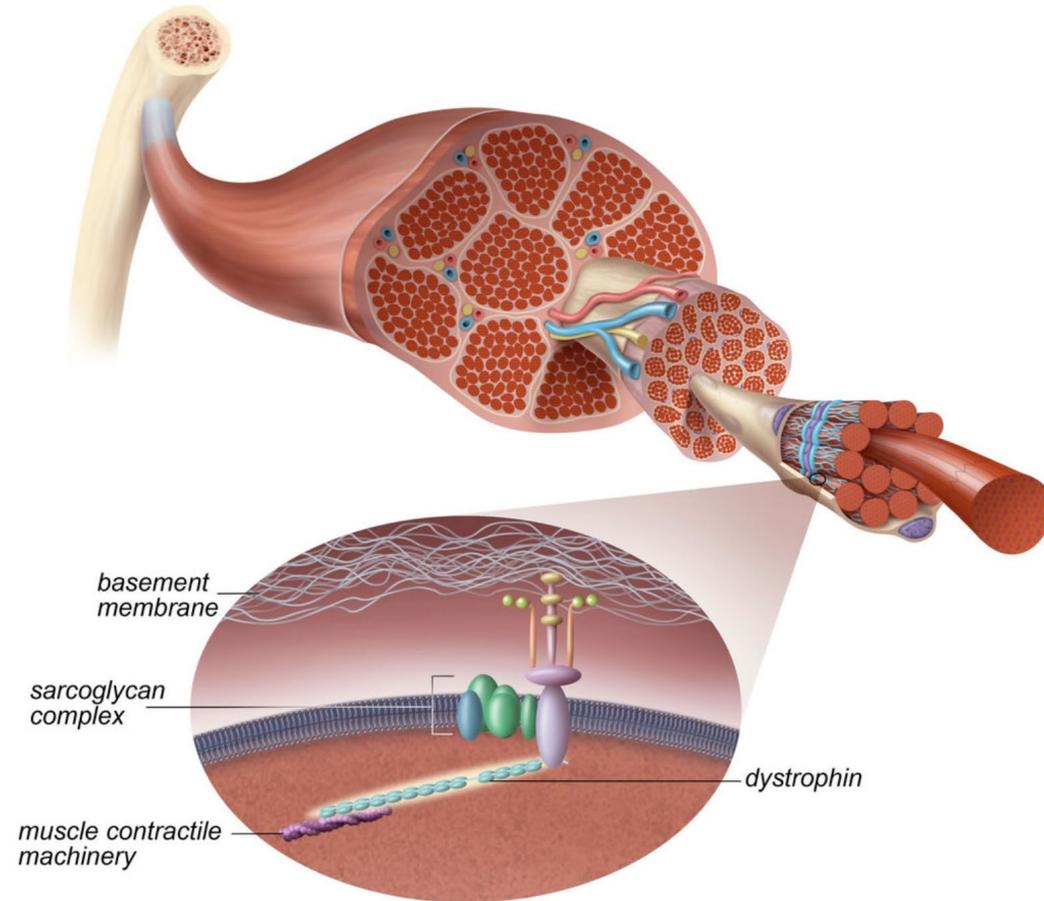
This presentation concerns drugs that are under clinical investigation and which have not yet been approved for marketing by the U.S. Food and Drug Administration (FDA). It is currently limited by federal law to investigational use, and no representation is made as to its safety or effectiveness for the purposes for which it is being investigated.

**EDG-5506 is an investigational drug and is not approved in any territory**

# In Dystrophic Muscle, Everyday Use Triggers Muscle Damage that Ultimately Leads to Loss of Function

When dystrophin is deficient or absent in Becker and Duchenne muscular dystrophy, the stress of everyday use of muscles triggers muscle damage that ultimately leads to loss of function.

The myofibrils that make up a muscle have important proteins called myosin. The interaction of myosin with other proteins causes muscle contraction, and delivers the power of muscles to conduct everyday activities.



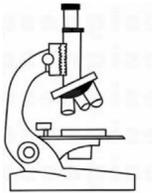
# Edgewise Approach: Protect Susceptible Muscle Fibers

In dystrophic muscle, certain muscle fibers, the fast muscle fibers, are more susceptible to damage due to the lack of dystrophin



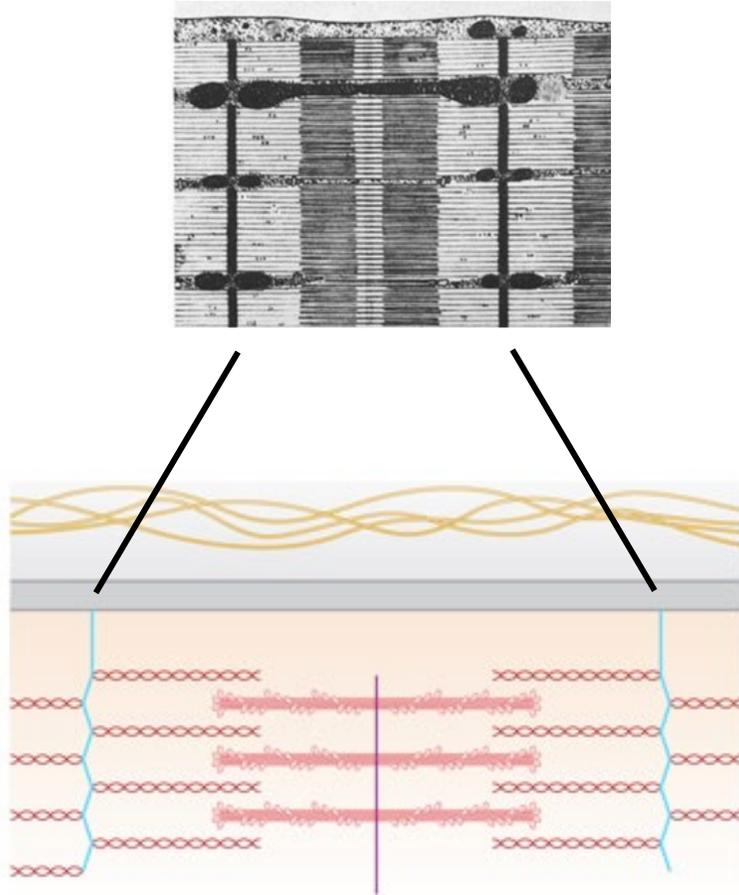
We've designed an investigational therapy, **EDG-5506**, to protect fast muscle fibers from damage. Slow muscle fibers are not directly affected by **EDG-5506**

In animal models of muscular dystrophy, **EDG-5506** protected fast muscle fibers from injury, improved overall strength, and limited muscle wasting and the long-term development of fibrosis, including cardiomyopathy



We believe protecting fast fibers may prevent further muscle degeneration and slow disease progression; a Phase 1 clinical trial to test the effect of EDG-5506 on unaffected adults is ongoing

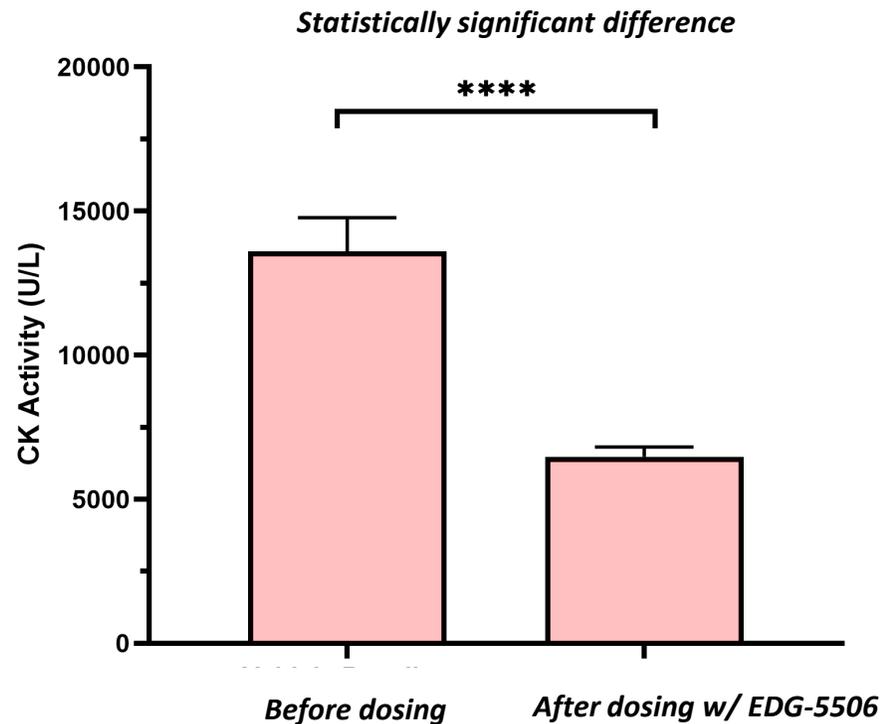
# EDG-5506 Targets Myosin, the Key Protein to Drive Muscle Contraction, but only in Fast Muscle Fibers



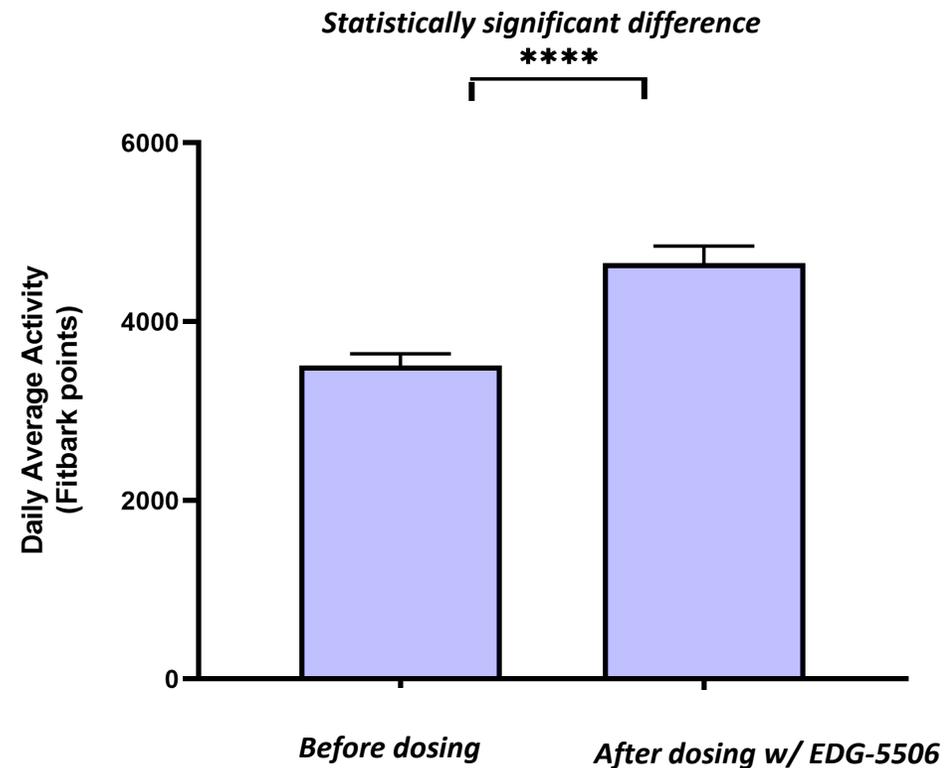
- The key protein in muscle producing contraction is called *myosin*
- EDG-5506 selectively inhibits this protein in fast fibers only
- Our goal is to limit myosin to a level that prevents breakdown but not healthy contraction
- *In animal models of dystrophinopathy, EDG-5506 resulted in decreased CK and other biomarkers, as well as increased activity*

# After Two Weeks of EDG-5506, CK, a Marker of Muscle Damage, Decreased, While Activity Increased in a Dog Model of DMD

*Decreased* injury biomarker  
(plasma CK)



*Increased* activity measured  
with an activity monitor



# The Product Candidate: EDG-5506

- EDG-5506 is a small once daily tablet or liquid suspension
  - Potentially appropriate for any age and any mutation
- Phase 1 in unaffected adults is ongoing
- We are also enrolling adults with Becker for a short study to measure biomarkers and safety
- We are planning a Phase 2 study in adults and adolescents with Becker as well as an open label extension study to begin next year
- We are in the planning stages of a study in boys with Duchenne that we expect will start next year
- EDG-5506 potentially could be used in Duchenne, Becker, Limb-Girdle and other muscular dystrophies



# Thank you!

For questions or comments  
please email us!

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