Dilated cardiomyopathy (DCM) is principally characterized by left ventricular enlargement and/or a reduction in systolic function. In many cases for individuals with DCM, no etiology can be determined, therefore clinicians should suspect that a pathogenic variant of the LMNA gene may be the underlying cause. Initial signs of LMNA-related DCM are sudden cardiac arrest leading to death, owing to prevalence of arrythmias in the individual. Researchers at Stanford University have developed a novel approach to the treatment and prevention of proarrhythmic in LMNA-related DCM by establishing the link between hyperactivation of signaling pathways and the LMNA gene in patient-specific induced pluripotent stem cell-derived cardiomyocytes (iPSC-CMs), and subsequent treatment using tyrosine kinase inhibitors.

Applications

- Treatment and prevention of LMNA-related dilated cardiomyopathy

Advantages

- Reduces the risk of cardiac arrest and sudden death
- Systemic, non-invasive, therapies to treat DCM using tyrosine kinase inhibitors

Publications
  Activation of PDGF pathway links LMNA mutation to dilated cardiomyopathy 

**Patents**

- Published Application: [20230032239](https://example.com/20230032239)

**Innovators**

- Vittavat Termglinchan
- Ioannis Karakikes
- Joseph Wu
- Jaecheol Lee
- Sebastian Diecke

**Licensing Contact**

**Minxing Li**

Licensing and Strategic Alliances Manager

[Email](mailto:example@email.com)