

# Several Genetic Mutations

Associated with Peripartum Cardiomyopathy (PPCM), many of which overlap with those found in other forms of dilated cardiomyopathy (DCM). Research indicates that around 10-20% of PPCM cases have an identifiable genetic component. Some of the key mutations include:

## Known Genetic Mutations in PPCM:

### 1 **TTN [Titin gene]**

One of the most common mutations found in both PPCM and DCM. Titin is crucial for heart muscle function, and mutations can lead to weakened cardiac muscle.

### 2 **LMNA [Lamin A/C]**

Linked to both PPCM and severe forms of cardiomyopathy, often leading to conduction system disease and arrhythmias.

### 3 **MYH7 [Myosin Heavy Chain 7]**

Plays a role in heart muscle contraction. Mutations can impair force generation in the heart.

### 4 **PLN [Phospholamban]**

Involved in calcium regulation in heart cells. Mutations can cause arrhythmias and worsening heart function.

### 5 **BAG3 [BCL2 Associated Athanogene 3]**

Important for maintaining heart muscle cell function under stress. Mutations are linked to heart failure progression.

### 6 **RBM20 [RNA Binding Motif Protein 20]**

Regulates splicing of heart muscle proteins. Mutations can contribute to a more severe disease course.

### 7 **DSP [Desmoplakin]**

This is the gel-like substance inside the cell where most of the cell's chemical reactions take place.

### 8 **SCN5A [Sodium Voltage-Gated Channel Alpha Subunit 5]**

Affects electrical signaling in the heart, increasing the risk of arrhythmias in PPCM patients.