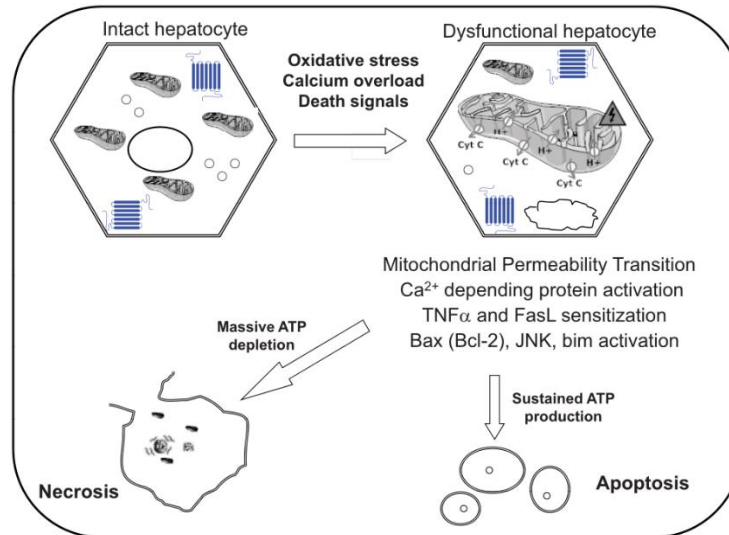


## Liver-Disease-Related Mitochondria Studies

Mitochondria are the primary source of energy for hepatocytes and play a major role in extensive oxidative metabolism and normal liver function. This critical role also designates mitochondria as a gateway function at the center of signaling pathways mediating hepatocyte injury, as impaired mitochondrial function can affect cell survival and contribute to the development and persistence of liver disease.



The role of mitochondria during chronic liver diseases (Grattagliano, 2011).

Major changes include impaired electron transport chain and oxidative phosphorylation resulting in the reduced oxidative metabolism of various substrates, reduced ATP synthesis and reduced tolerance of hepatocytes to stress injury. Mitochondrial dysfunction is often accompanied by structural changes that result in swelling of organelles and formation of inclusion bodies in the mitochondrial matrix (Figure 1).

Creative Biogene works with you to validate and explore the pathogenesis of [mitochondria-associated liver diseases](#) and possible interventions, with professional services and products to support your research.

### Specific Liver Diseases

Creative Biogene offers comprehensive testing services for the evaluation of a variety of liver diseases.

You could also benefit from our established liver disease models. Creative Biogene offers comprehensive mitochondria-focused tests and services with the advantage of our cell-based and animal-based models.