New therapy developed for atherosclerosis

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Researchers at Ben-Gurion University (BGU) and the Sheba Medical Center in Israel have developed a new therapy to treat atherosclerosis and prevent heart failure with a new biomedical polymer that reduces arterial plaque and inflammation in the cardiovascular system.

This innovative E-selectin-targeting nano-polymer has several advantages. First, it targets only damaged tissue and does not harm healthy tissue. At present, there are several available treatment options for atherosclerosis, but no other therapy reverses arterial damage and improves the heart muscle. Lastly, the polymer has no side effects, unlike statins, which are currently the leading medication used for treating atherosclerosis.

Patented and in preclinical stage, the new polymer has been tested on mice with positive results. The myocardial function of the treated mice was greatly improved, there was less inflammation and a significant decrease in the thickness of the arteries.

The researchers are now seeking a pharmaceutical company to bring the polymer therapy through the next stages of drug development and ultimately to market.