Injectable biomaterials for cardiac tissue engineering

Biomaterials have significant potential to treat various cardiac conditions. In particular, new therapies for myocardial infarction are needed given that heart failure postmyocardial infarction continues to a leading cause of death. Biomaterial and tissue engineering approaches to myocardial repair are providing exciting new possibilities. Injectable biomaterials are particularly attractive since they have the potential to be delivered via a minimally invasive, catheter-based approach, thereby requiring less recovery time and reducing the chances of infection. Recent developments and translational progress with injectable biomaterials designed specifically for treating the heart will be discussed.