## Wearable Devices in Cardiovascular Medicine

Vladimir Redzhepov and Dmitry Pertsau

Belarusian State University of Informatics and Radioelectronics, Minsk, Belarus, vladimir.redzhepov@gmail.com

**Keywords**: wearables; cardiovascular; physiological signals; sensors; personal health

**Abstract.** Wearable technology, often known as "wearables," encompasses a variety of electronic devices designed for hands-free use. These devices play a significant role in measuring physiological signals, diagnosing medical conditions, and even treating diseases. Recent advancements in miniaturization, sensor technology, battery life, and production costs have led to the development of highly sophisticated wearables equipped with numerous sensors. Modern smartwatches, for instance, feature capabilities such as pulse and oxygen saturation monitoring, movement and activity tracking, distance and location tracking, sound recording and electrocardiogram recording. These multifunctional devices not only enhance personal health monitoring but also contribute to a broader understanding of individual health patterns, paving the way for proactive healthcare management. The purpose of the article is a review of existing wearable devices and their features in cardiovascular medicine.