



AJ MEDICAL DEVICES

**Contact:** Robert Arzbaecher

**Location:** Wilmette, IL

**Email:** [arzbaecher@cardioalarm.com](mailto:arzbaecher@cardioalarm.com)

**Tel:** 847 251 5020

**Website:** under development



U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health



National Institutes of Health Commercialization Assistance Program  
(NIH-CAP)

## Company Profile

**Industry Sector:** Medical Devices

**Company Overview:** AJ Medical Devices (AJM) develops patient monitoring systems based on small sensors implanted under the skin in a 15-minute outpatient procedure. These sensors communicate through the skin via wireless transmission. The company was founded by a team of engineers and cardiologists with experience in the design and use of medical devices, who understand market needs and modern computer and communications technologies. AJM's products will serve patients by focusing on ambulatory and at-home care with state-of-the-art wireless technology. The first product, CardioAlarm, which is intended for patients with significant risk of cardiac arrest, is expected to create a billion dollar market and, like most medical devices, will generate a large profit margin.

**Target Market(s):** Major Hospitals in U S and Europe; Private Cardiology Groups

## Management

**President:** Robert Arzbaecher is an internationally known expert in cardiac technology. His academic career included professorships in Engineering and in Medicine as well as positions as Department Chairman and Institute Director. He is past president of two international cardiology societies and is currently on the faculty of University of Chicago. He has invented several devices for the cardiac market and founded and sold three companies to develop them.

**Chief Technical Officer:** Michael Garrett is an electronics expert with 30 years experience in medical device design, development, and production.

**Medical Director:** Martin Burke is a renowned University of Chicago cardiologist specializing in patients with heart rhythm problems. He lectures worldwide and implants 250 pacemakers and defibrillators annually.

## Key Value Drivers

**Technology\*:** Each year, 300,000 people in the US suffer sudden cardiac arrest out of the hospital and because of delay in calling 911 only 2-5% survive. Our primary product, CardioAlarm, is a small device implanted under the skin that automatically detects cardiac arrest and uses wireless to alert bystanders and call 911. The implantation is a 15-minute outpatient procedure performed under local anesthetic.

**Competitive Advantage:** AJM will have FDA approval and be first to the market with an implanted, wireless cardiac arrest monitor/alarm for an ambulatory/at-home patient. The only competing product is an implanted defibrillator, which costs ten times as much as CardioAlarm, is indicated for a much smaller number of patients, is much more invasive, and can shock the patient inadvertently.

**Plan & Strategy:** Gain FDA approval for market release of CardioAlarm, and be acquired by a major medical device company within 2 years.

## Product Pipeline

**First Product:** CardioAlarm combines wireless technology with an implanted sensor that alerts bystanders and notifies local EMS Dispatching of the event and the patient's location. This will speed rescue and improve survival of patients experiencing cardiac arrest. Each year there are an estimated one million patients who would qualify for the device based on their cardiac risk factors.

**Future Products:** CardioAlarm is the first of a series of devices that will use AJM's unique dual-device platform: 1) a small implant containing electronic circuitry for sensing and transmitting a physiologic signal and 2) a handheld device for forwarding the data to a central medical or emergency facility. This is a new concept with implications not only in cardiology but also in many other areas of medical diagnosis and therapy in which a measurement is performed continuously and unobtrusively in a tiny implanted sensor and data are transmitted externally for processing, diagnosis, and possible action.