Effects of Heart Rate Monitors on St. Jude Medical Implantable Cardiac Rhythm Devices

Background
A heart rate monitor consists of a transmitter and a wrist receiver. The transmitter is strapped around the patient’s chest and detects his/her heart rate. It then transmits this information to the wrist receiver, which displays the heart rate for the user. St. Jude Medical performed informal testing on a heart rate monitor from a heart rate monitor manufacturer (Polar) to determine if transmission of information between the components of the heart rate monitor would affect the ability of St. Jude Medical pacemakers and implantable cardioverter defibrillators (ICDs) to sense intrinsic activity, pace in the absence of intrinsic activity, and appropriately detect and diagnose arrhythmias.

Potential Effects
During testing, the Polar A1 heart rate monitor did not cause any damage or reprogramming to the test pacemaker or ICD. Under normal operating conditions, heart rate monitors should not cause interference with the performance of St. Jude Medical pacemakers and ICDs. A search of literature showed no reports of any interference.

Recommendations
Although we can not guarantee the effect of any heart rate monitor on a pacemaker or ICD, we do not anticipate any interference.

If you have any questions on this topic, please contact St. Jude Medical Technical Services at 800-722-3774.