



## DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room -WO66-G609  
Silver Spring, MD 20993-0002

MAR 22 2011

Ms. Stacey Paetschow Wessman  
Senior Principal Regulatory Affairs Specialist  
Medtronic, Inc.  
8200 Coral Sea Street, MS, MV S11  
Mounds View, MN 55112

Re: P980016/S240  
Marquis DR Model 7274; Marquis VR Models 7230Cx, 7230B, and 7230E; Maximo DR Model 7278; Maximo VR Models 7232Cx, 7232B, and 7232B; Intrinsic 30/Intrinsic Models 7287 and 7288; EnTrust Models D154VRC, D154DRG; Maximo II Models D284DRG, D284VRC; Virtuoso DR Models D154AWG, D154VWC; EnTrust Models D153ATG, D153DRG, D153VRC, D154ATG; Virtuoso II Models D274DRG, D274VRC; Secura Models D224DRG, D224VRC;

P010031/S198  
InSync II Marquis Model 7289; InSync III Marquis Model 7279; InSync Sentry Models 7297, 7299; InSync Maximo Models 7303, 7304; Concerto Models C154DWK, C164AWK; Concerto II Model D274TRK; Consulta Model D224TRK; Maximo II Model D284TRK;

P980035/S168  
Adapta Models ADD01, ADDR01, ADDR03, ADDR06, ADDRL1, ADDRS1, ADSR01, ADSR03, ADSR06, ADVDD01; Relia Models RED01, REDR01, RES01, RESR01, REVDD01; Sensia Models SED01, SEDR01, SEDRL1, SES01, SESR01; Versa Model VEDR01; Kappa 700/600 and Kappa 900/800 IPG Models KDR601, KDR603, KDR606, KDR651, KDR653, KDR721, KDR701, KDR703, KDR706, KDR731, KDR733, KD701, KD703, KD706, KVDD701, KSR701, KSR703, KSR706, KDR801, KDR803, KDR806, KDR921, KDR901, KDR903, KDR906, KDR931, KDR933, KD901, KD903, KD906, KVDD901, KSR901, KSR903, KSR906; EnPulse IPG Models E2DR21, E2DR31, E2DR33, E2DR01, E2DR03, E2DR06, E2D01, E2D03, E2VDD01, E2SR01, E2SR03, E2SR06; Sigma IPG Models: SDR303, SDR306, SDR203, SD303, SD203, SVDD303, SSR303, SSR306, SSR203, SS303, SS203, SS103, SS106, SVVI103, DR353, SR353, VDD353;

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P970012/S68

Kappa 400 IPG Models KDR401, KDR403, KSR401, KSR403;

P010015/S86

InSync CRT-P Model 8040; InSync III CRT-P Model 8042;

P990001/S68

Vitatron DA+ C Series and T Series IPG Models C20A1, C60A1, C20A3, C60A3, T20A1, T60A1; Jade II, Topaz II, Vita IPG Models: 220,520, 522, 310;

P890003/S192

Preva IPG Models 7088, 7089, 7078; Prevade IPG Models 7068; and Prodigy IPG Model 8158

Filed: May 17, 2010

Dear Ms. Wessman:

The Center for Devices and Radiological Health (CDRH) of the Food and Drug Administration (FDA) has completed its evaluation of your premarket approval application (PMA) supplement, which requested approval for the change of the materials, power supply, and incoming inspection process for the following AVX capacitors to be used in the above referenced IPGs. Those capacitors are: XT009, XT045, XT082, XT096, XT113, XTC002, XTC018, XTC029, XT014, XT053, XT084, XT097, XT114, XTC004, XTC019, XTC030, XT017, XT058, XT085, XT099, XT116, XTC005, XTC020, XT023, XT060, XT086, XT103, XT118, XTC006, XTC021, XT027, XT067, XT087, XT104, XT120, XTC007, XTC023, XT032, XT068, XT088, XT105, XT121, XTC008, XTC024, XT038, XT070, XT090, XT106, XT122, XTC009, XTC025, XT041, XT072, XT091, XT108, XT123, XTC010, XTC026, XT043, XT077, XT092, XT109, XT124, XTC013, XTC027, XT044, XT078, XT095, XT110, XTC001, XTC017, XTC028, XT097, XT118, XT009, XT017, XT044, XT070, XT085, XT087, and XT114. Based upon the information submitted, the PMA supplement is approved. You may begin commercial distribution of the device as modified by your PMA supplement in accordance with the conditions described below.

The sale and distribution of this device are restricted to prescription use in accordance with 21 CFR 801.109 and under section 515(d)(1)(B)(ii) of the Federal Food, Drug, and Cosmetic Act (the act). The device is further restricted under section 515(d)(1)(B)(ii) of the act insofar as the labeling must specify the specific training or experience practitioners need in order to use the device. FDA has determined that these restrictions on sale and distribution are necessary to provide reasonable assurance of the safety and effectiveness of the device. Your device is therefore a restricted device subject to the requirements in sections 502(q) and (r) of the act, in addition to the many other FDA requirements governing the manufacture, distribution, and marketing of devices.

Continued approval of this PMA is contingent upon the submission of periodic reports, required under 21 CFR 814.84, at intervals of one year (unless otherwise specified) from the date of approval of the original PMA. Two copies of this report, identified as "Annual Report" (please use this title even if the specified interval is more frequent than one year) and bearing the applicable PMA reference number, should be submitted to the address below. The Annual Report should indicate the beginning and ending date of the period covered by the report and should include the information required by 21 CFR 814.84.

In addition to the above, and in order to provide continued reasonable assurance of the safety and effectiveness of the device, the Annual Report must include, separately for each model number (if applicable), the number of devices sold and distributed during the reporting period, including those distributed to distributors. The distribution data will serve as a denominator and provide necessary context for FDA to ascertain the frequency and prevalence of adverse events, as FDA evaluates the continued safety and effectiveness of the device.

In addition, because your device is a pacemaker, implantable cardioverter-defibrillator (ICD), or system lead, FDA has determined that the following additional information is necessary to provide continued reasonable assurance of the safety and effectiveness of the device. In the Annual Report, provide the following information known by or reported to the applicant:

1. The number of pulse generators domestically implanted and the number of reported explants and deaths.
2. A breakdown of the reported deaths into pulse generators related and non-pulse generator related.
3. A breakdown of the reported explants into the number reported that were:
  - a. For pacemakers and pulse generators: at end of battery life, the number that had complications not resolvable by programming, and, as applicable, the numbers that experienced other safety and effectiveness complications as ascertained by the user, applicant, or otherwise, or
  - b. For leads: associated with mechanical failure, associated with clinical complications, and as applicable, the numbers that experienced other safety and effectiveness complications as ascertained by the user, applicant, or otherwise.
4. The number of pulse generators returned to the applicant for cause from domestic sources, with a breakdown into:
  - a. For pacemakers and pulse generators: the number currently in analysis, the number operating properly, and the number at normal battery depletion and failed (with the failure mechanisms described).

- b. For leads: the number currently in analysis, the number operating properly, the number failed (with failure mechanisms described); broken down into groupings for full leads and partial leads.
5. A cumulative survival table for the pulse generators.

Before making any change affecting the safety or effectiveness of the device, you must submit a PMA supplement or an alternate submission (30-day notice) in accordance with 21 CFR 814.39. All PMA supplements and alternate submissions (30-day notice) must comply with the applicable requirements in 21 CFR 814.39. For more information, please refer to the FDA guidance document entitled, "Modifications to Devices Subject to Premarket Approval (PMA) - The PMA Supplement Decision-Making Process"

([www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm089274.htm](http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm089274.htm)).

You are reminded that many FDA requirements govern the manufacture, distribution, and marketing of devices. For example, in accordance with the Medical Device Reporting (MDR) regulation, 21 CFR 803.50 and 21 CFR 803.52, you are required to report adverse events for this device. Manufacturers of medical devices, including in vitro diagnostic devices, are required to report to FDA no later than 30 calendar days after the day they receive or otherwise becomes aware of information, from any source, that reasonably suggests that one of their marketed devices:

1. May have caused or contributed to a death or serious injury; or
2. Has malfunctioned and such device or similar device marketed by the manufacturer would be likely to cause or contribute to a death or serious injury if the malfunction were to recur.

Additional information on MDR, including how, when, and where to report, is available at [www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm](http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm).

In accordance with the recall requirements specified in 21 CFR 806.10, you are required to submit a written report to FDA of any correction or removal of this device initiated by you to: (1) reduce a risk to health posed by the device; or (2) remedy a violation of the act caused by the device which may present a risk to health, with certain exceptions specified in 21 CFR 806.10(a)(2). Additional information on recalls is available at [www.fda.gov/Safety/Recalls/IndustryGuidance/default.htm](http://www.fda.gov/Safety/Recalls/IndustryGuidance/default.htm).

CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

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Failure to comply with any post-approval requirement constitutes a ground for withdrawal of approval of a PMA. The introduction or delivery for introduction into interstate commerce of a device that is not in compliance with its conditions of approval is a violation of law.

U.S. Food and Drug Administration  
Center for Devices and Radiological Health  
PMA Document Mail Center – WO66-G609  
10903 New Hampshire Avenue  
Silver Spring, MD 20993-0002

If you have questions concerning this approval order, please contact [redacted] at [redacted]

Sincerely yours,

  
*[Signature]* Bram D. Zuckerman, M.D.  
Director  
Division of Cardiovascular Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health