STUDY TITLE	**WRAP-IT- World-wide Randomized Antibiotic Envelope Infection Prevention Trial**
STUDY POPULATION	**Patient underwent for following procedure:** **1.New Implant (CRTD only)** **2.Box changes (Pacemaker, CRTP, ICD and CRTD)**
PRINCIPAL INVESTIGATOR	Dr. Surinder Kaur
STUDY COORDINATOR	Siti Norbaya Abd Razak Contact number : 03 – 2617 8200 ext 3122
START DATE	15 Oct 2015
END DATE	15 Oct 2018
INCLUSION	• Subject is more than 18 years old and willing to provide written informed consent • Subject is schedule to have one of the following procedures: - Existing Cardiovascular Implantable Electronic Device (CIED) undergoing IPG,ICD,CRTP and CRTD replacement or upgrade with a new Medtronic Generator - Subject planned to have lead added, or extracted and added for upgrades can be enrolled - De novo CRTD system implant • Patient has existing study eligible Medtronic Cardiovascular Implantable Electronic Device (CIED) in which the pocket was not accessed within the last 365 days, and is undergoing pocket or lead revision. • Subject is willing to provide contact information for the physician who provide follow-up care for his/her Cardiovascular Implantable Electronic Device (CIED) • Subject is willing and able to comply with scheduled follow-up and study related activities

EXCLUSION	• Known allergy to minocycline or rifampicin or their derivatives or any other known contraindication to implantation of the TYRX envelope • Receiving therapy with oral immunosuppressive agents or more than 20mg/day of prednisolone or equivalent • Hemodialysis or peritoneal dialysis • Prior cardiac transplantation or existing ventricular assist device (VAD) • Required long-term vascular access for any reason. • Prior history of a Cardiovascular Implantable Electronic Device (CIED) infection, other prosthetic device infection, or endovascular infection, including endocarditis, in past 12 month • Physical, clinical, or laboratory sign and symptom consistent with an active infection (including but not limited to pneumonia, urinary tract, cellulitis, or bacteremia) • Systemic Lupus erythematous, because minocycline has been reported to aggravate this condition • Female patient who is pregnant or of childbearing potential and not on reliable form of birth control. Women of childbearing potential are required to have negative pregnancy test within 7 days prior to device procedure. • Participant in another study may confound result of this study. Co-enrollment in concurrent trials is only allowed when documented pre-approval is obtained from Medtronic study manager