

Claims

1. A cardiac rhythm management system, comprising:
at least one first implantable stimulation device and at least one second implantable
5 stimulation device,
wherein the at least one first implantable stimulation device comprises a first detection
unit adapted to detect a patient's cardiac rhythm and a first processor adapted to analyze
the detected patient's cardiac rhythm and to deliver signals for a first antitachycardia
pacing therapy,
10 wherein the at least one second implantable stimulation device comprises a second
detection unit (200, 203) adapted to detect the patient's cardiac rhythm and a second
processor adapted to analyze the detected patient's cardiac rhythm and to deliver
signals for shock therapy or a second antitachycardia pacing therapy, and
wherein the first processor is adapted to allow delivery of signals for antitachycardia
15 pacing therapy only if the analysis of the patient's cardiac rhythm within a pre-defined
preceding time period A reveals a pre-defined tachycardia criterion A' and an absence
of a shock therapy, and/or
wherein the second processor is adapted to allow delivery of signals for shock therapy
or a second antitachycardia therapy only if the analysis of the patient's cardiac rhythm
20 within a pre-defined preceding time period B (300) reveals a pre-defined tachycardia
criterion B' and an absence of a first antitachycardia pacing therapy provided by the
at least one first implantable stimulation device.
2. The cardiac rhythm management system according to claim 1, wherein the first
25 processor is adapted to prevent delivery of signals for antitachycardia pacing therapy
for a time period C if the analysis of the patient's cardiac rhythm within the time period
A reveals delivery of a shock therapy.
3. The cardiac rhythm management system according to claim 1 or 2, wherein the second
30 processor is adapted to prevent delivery of signals for shock therapy or a second
antitachycardia pacing therapy for a time period D (300', 330) if the analysis of the

patient's cardiac rhythm within the time period B reveals delivery of a first antitachycardia pacing therapy.

4. The cardiac rhythm management system according to any of the claims 2 to 3, wherein
5 the first processor is adapted to re-analyze the patient's cardiac rhythm according to the pre-defined tachycardia criterion A' during the time period C and/or the second processor is adapted to re-analyze the patient's cardiac rhythm according to the pre-defined tachycardia criterion B' during the time period D (300', 330).
- 10 5. The cardiac rhythm management system according to any of the claims 2 to 3, wherein the first processor is adapted to re-analyze the patient's cardiac rhythm according to a pre-defined tachycardia criterion C' during the time period C and/or the second processor is adapted to re-analyze the patient's cardiac rhythm according to a pre-defined tachycardia criterion D' during the time period D, wherein the pre-defined
15 tachycardia criterion C' is different from the pre-defined tachycardia criterion A' and the pre-defined tachycardia criterion D' is different from the second pre-defined tachycardia criterion.
6. The cardiac rhythm management system according to any of the claims 2 to 5, wherein
20 the first and/or second processor are/is adapted to terminate the time period C and/or the time period D upon receipt of a termination signal.
7. The cardiac rhythm management system according to any of the preceding claims, wherein the delivery of at least one shock during the shock therapy by a shock unit of
25 the second implantable stimulation device comprises a loading time period (310) prior the at least one shock is applied by the shock unit to the patient, wherein the application of the at least one shock by the shock unit is prevented if the patient's cardiac rhythm within a time period E (330) during or after the loading time period (310) does not correspond to a pre-defined tachycardia criterion E'.
- 30 8. The cardiac rhythm management system according to any of the preceding claims, wherein the first implantable stimulation device is an implantable leadless pacemaker

(ILP), and the second implantable stimulation device is a subcutaneous implantable cardioverter defibrillator (1) or a second ILP.

9. A cardiac rhythm management method for a cardiac rhythm management system,
5 comprising
at least one first implantable stimulation device, for example an ILP (30), and
at least one second implantable stimulation device, for example a subcutaneous
implantable cardioverter defibrillator (1) or a second ILP,
wherein a first detection unit of the at least one first implantable stimulation device
10 detects a patient's cardiac rhythm and a first processor of the at least one first
implantable stimulation device analyzes the detected patient's cardiac rhythm,
wherein a second detection unit (200, 203) of the at least one second implantable
stimulation device detects the patient's cardiac rhythm and a second processor of the
at least one second implantable stimulation device analyzes the detected patient's
15 cardiac rhythm, and
wherein the first processor delivers signals for a first antitachycardia pacing therapy
only if the analysis of the patient's cardiac rhythm within a pre-defined preceding time
period A reveals a pre-defined tachycardia criterion A' and an absence of a shock
therapy, and/or
20 wherein the second processor delivers of signals for shock therapy or a second
antitachycardia pacing therapy only if the analysis of the patient's cardiac rhythm
within a pre-defined preceding time period B (300) reveals a pre-defined tachycardia
criterion B' and an absence of a first antitachycardia pacing therapy.
- 25 10. The cardiac rhythm management method according to claim 9, wherein the first
processor prevents delivery of signals for antitachycardia pacing therapy for a time
period C if the analysis of the patient's cardiac rhythm within the time period A reveals
delivery of a shock therapy.
- 30 11. The cardiac rhythm management method according to claim 9 or 10, wherein the
second processor prevents delivery of signals for shock therapy or a second
antitachycardia pacing therapy for a time period D (300', 330) if the analysis of the

patient's cardiac rhythm within the time period B reveals delivery of a first antitachycardia pacing therapy.

12. The cardiac rhythm management method according to any of claims 9 to 11, wherein
5 the first processor re-analyzes the patient's cardiac rhythm according to the pre-defined tachycardia criterion A' during the time period C and/or the second processor re-analyzes the patient's cardiac rhythm according to the pre-defined tachycardia criterion B' during the time period D (300', 330).
13. The cardiac rhythm management method according to any of claims 9 to 11, wherein
10 the first processor re-analyzes the patient's cardiac rhythm according to a pre-defined tachycardia criterion C' during the time period C and/or the second processor re-analyzes the patient's cardiac rhythm according to a pre-defined tachycardia criterion D' during the time period D, wherein the pre-defined tachycardia criterion C' is
15 is different from the pre-defined tachycardia criterion A' and the pre-defined tachycardia criterion D' is different from the pre-defined tachycardia criterion B'.
14. The cardiac rhythm management method according to any of the claims 10 to 13 and
20 15 to 16, wherein the first and/or second processor terminates the time period C and/or the time period D upon receipt of a termination signal.
15. The cardiac rhythm management method according to any of the claims 9 to 14,
wherein the delivery of at least one shock during the shock therapy by a shock unit of
the defibrillation device comprises waiting for a loading time period (310) prior the at
25 least one shock is applied by the shock unit to the patient, wherein the shock unit does not deliver the at least one shock if the patient's cardiac rhythm within a time period E (330) during or after the loading time period (310) does not correspond to a pre-defined tachycardia criterion E'.