

Supplementary Table and Figure Legends

Supplementary Table 1. List of microorganisms and chronic suppressive antibiotics in ventricular assist device infection

CNS: coagulase negative staphylococci, MSSA: methicillin susceptible *Staphylococcus aureus*, MRSE: methicillin resistant *Staphylococcus epidermidis*, MRSA: methicillin resistant *Staphylococcus aureus*, MDRP: multidrug resistant *Pseudomonas aeruginosa*, ESBL: extended spectrum beta lactamase.

ST: sulfamethoxazole/trimethoprim, CCL: cefaclor, LVFX: levofloxacin.

VAD: ventricular assist device, VADI: ventricular assist device infection, CSA: chronic suppressive antibiotics.

a CSA was started with ST and RFP, and was later changed to RFP alone at treating physician's discretion.

Supplementary Figure 1. Time flow of the observation period of VADI in this study.

VAD: Ventricular assist device

VADI: Ventricular assist device infection

CSA: Chronic suppressive antibiotics

Supplementary Figure 2. Summary of all ventricular assist device infection cases with or without chronic suppressive antibiotics.

CSA: Chronic suppressive antibiotics

Supplementary Figure 3. Breakdown of causative microorganisms in second ventricular assist device infection cases

MSSA: methicillin susceptible *Staphylococcus aureus*

MRSA: methicillin resistant *Staphylococcus aureus*

P.aeruginosa: *Pseudomonas aeruginosa*

ST: sulfamethoxazole/trimethoprim

VADI: Ventricular assist device infection

CSA: Chronic suppressive antibiotics

Supplementary Table 1. List of microorganisms and chronic suppressive antibiotics in ventricular assist device infection

First VADI	CSA	Recurrent VADI
CNS	ST	No recurrence
MRSE	ST	MSSA
MSSA	CCL	No recurrence
<i>Serratia marcescens</i>	ST (ineffective)	No recurrence
MSSA	CCL	No recurrence
MSSA	ST	No recurrence
MRSE	Minocycline	No recurrence
MRSA	Rifampicin ^a	No recurrence
MSSA	CCL	No recurrence
MSSA	CCL	No recurrence
MSSA	CCL	No recurrence
MSSA	CCL	No recurrence
MSSA	CCL	No recurrence
MSSA	Amoxicillin	No recurrence
MSSA	CCL	No recurrence
MSSA	CCL	No recurrence
MSSA	CCL	No recurrence
MRSA	ST	No recurrence
MSSA	CCL	No recurrence
MSSA	CCL	<i>Staphylococcus hominis, capitis</i>
MSSA	CCL	MSSA
MSSA	CCL	No recurrence
MRSA	ST	No recurrence
MSSA	CCL	No recurrence
<i>Citrobacter species</i>	CCL (ineffective)	<i>Peptostreptococcus species</i>
MSSA	CCL	No recurrence
MRSA	ST	MRSA
MSSA	CCL	MSSA

MRSA	ST	MRSA
MSSA	CCL	No recurrence
MRSA	ST	MRSA
MSSA	CCL	MSSA
MSSA	CCL and LVFX	<i>Pseudomonas aeruginosa</i>
MRSA	ST	<i>Pseudomonas aeruginosa</i>
<i>Pseudomonas aeruginosa</i>	ST (ineffective)	<i>Pseudomonas aeruginosa</i>
MSSA	CCL	MSSA
MSSA	CCL	No recurrence
<i>Pseudomonas aeruginosa</i>	LVFX	<i>Pseudomonas aeruginosa</i>
MSSA	CCL	MSSA
MSSA		No recurrence
<i>Citrobacter koseri</i>		No recurrence
MSSA		No recurrence
CNS		No recurrence
MSSA		MSSA
<i>Pseudomonas aeruginosa</i>		No recurrence
<i>Pseudomonas aeruginosa</i>		<i>Pseudomonas aeruginosa</i>
<i>Enterobacter asburiae</i>		No recurrence
MSSA		Recurrence (no organism identified)
MRSE		MSSA
MDRP		MDRP
<i>Corynebacterium</i> species		No recurrence
MSSA		MSSA
<i>Pseudomonas aeruginosa</i>		No recurrence
<i>Pseudomonas aeruginosa</i>		<i>Pseudomonas aeruginosa</i>
<i>Pseudomonas aeruginosa</i>		<i>Enterobacter asburiae</i>
MSSA		<i>Streptococcus sanguinis</i>
MRSE		No recurrence
<i>Citrobacter koseri</i>		Recurrence (no organism identified)
<i>Pseudomonas aeruginosa</i> quinolone resistant		ESBL producing <i>Escherichia coli</i>

MSSA		<i>Pseudomonas aeruginosa</i>
MSSA		MSSA
MSSA		MSSA
MSSA <i>Pseudomonas aeruginosa</i>		MSSA <i>Pseudomonas aeruginosa</i>
<i>Pseudomonas aeruginosa</i>		No recurrence
MSSA		No recurrence
MSSA		MSSA, <i>Enterobacter species</i>
<i>Pseudomonas aeruginosa</i>		MSSA <i>Pseudomonas aeruginosa</i>
MSSA		MSSA
<i>Pseudomonas aeruginosa</i>		<i>Pseudomonas aeruginosa</i>
MSSA		MSSA
<i>Pseudomonas aeruginosa</i>		<i>Serratia marcescens</i>
MSSA		MSSA
<i>Enterobacter species</i>		<i>Klebsiella species</i>
<i>Pseudomonas aeruginosa</i>		ESBL producing <i>Pseudomonas aeruginosa</i>
<i>Pseudomonas aeruginosa</i>		<i>Pseudomonas aeruginosa</i>
MSSA		Recurrence (no organism identified)

Supplementary Figure 1

First VADI



IV therapy

Observation period without CSA



Observation period with CSA



Recurrent VADI
Transplantation*
Death *
VAD removal *
Observation end

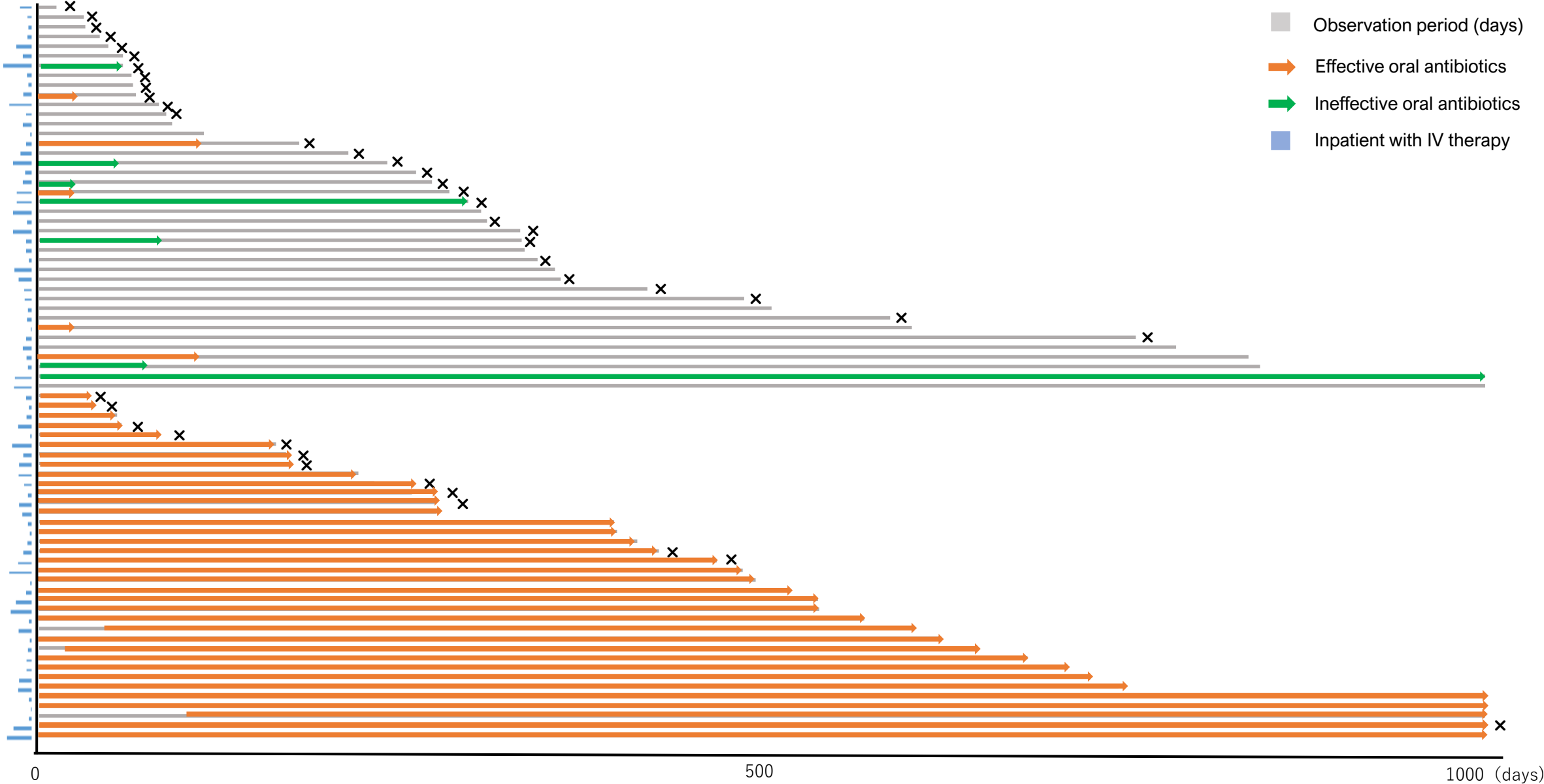
*Competing risk events

Supplementary Figure 2

- ✕ Recurrent episode
- Observation period (days)
- ➡ Effective oral antibiotics
- ➡ Ineffective oral antibiotics
- Inpatient with IV therapy

Without CSA

With CSA



Supplementary Figure 3

