

Supplementary Table 1. Survey for medical staff perception about ASP in EOL care

| Contents of survey |
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| 1. This survey is used for research purposes. Do you agree with the survey? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 2. What is your gender? <input type="checkbox"/> Female <input type="checkbox"/> Male |
| 3. How old are you? (Write in numbers) Answer: _____ |
| 4. What is your occupation? <input type="checkbox"/> 1 st -year resident <input type="checkbox"/> 2 nd -year resident <input type="checkbox"/> 3 rd -year resident <input type="checkbox"/> Internal medicine specialist (hospitalist) <input type="checkbox"/> Internal medicine specialist (non-hospitalist) |
| 5. How much do you know about the antibiotic stewardship program (ASP)? (ASP is an intervention activity that supports optimal use of antibiotics, including medication, duration of treatment, and route of administration) <input type="checkbox"/> Fully aware <input type="checkbox"/> Aware <input type="checkbox"/> Neutral <input type="checkbox"/> Do not know <input type="checkbox"/> Unaware at all |
| 6. How much do you know about the advantages of ASP? (ASP can improve patients' treatment outcomes, reduce <i>Clostridioides difficile</i> infections, reduce adverse drug reactions, reduce medical costs, and reduce antibiotic resistance.) <input type="checkbox"/> Fully aware <input type="checkbox"/> Aware <input type="checkbox"/> Neutral <input type="checkbox"/> Do not know <input type="checkbox"/> Unaware at all |
| 7. Do you think ASP is important in patients with end-of-life (EOL)? <input type="checkbox"/> Strongly important <input type="checkbox"/> Important <input type="checkbox"/> Neutral <input type="checkbox"/> Do not matter <input type="checkbox"/> Strongly do not matter <input type="checkbox"/> Do not consider it so far |
| 8. Do you consider the use or cessation of antibiotics for patients with EOL when writing POLST? <input type="checkbox"/> Strongly yes <input type="checkbox"/> Yes <input type="checkbox"/> Neutral <input type="checkbox"/> No <input type="checkbox"/> Strongly no |
| 9. Do you explain to the patient (or caregivers) about the use or cessation of antibiotics when writing POLST? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 10. Do you adjust the antibiotics after POLST? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 11. Who has the most significant impact on determining antibiotics use after POLST? <input type="checkbox"/> Medical staff <input type="checkbox"/> Patient <input type="checkbox"/> Caregiver |
| 12. Do you think blood culture tests are needed after POLST? <input type="checkbox"/> Strongly agree <input type="checkbox"/> Agree <input type="checkbox"/> Neutral <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree |
| 13. What should you do if an infectious condition could not be ruled out after POLST? <input type="checkbox"/> No blood culture tests, no antibiotics <input type="checkbox"/> No blood culture tests, immediate antibiotics use or change <input type="checkbox"/> Blood culture tests start, immediate antibiotics use or change <input type="checkbox"/> Blood culture tests start, check the result first |
| 14. Why do you maintain using antibiotics or replace them with broad-spectrum antibiotics after POLST? <input type="checkbox"/> I am not 100% sure about the prognosis of the dying phase <input type="checkbox"/> I want to give the impression of "healing as much as possible" instead of the impression of "giving up" <input type="checkbox"/> I think antibiotics can postpone the course of death <input type="checkbox"/> I think antibiotics can relieve the pain due to infection <input type="checkbox"/> Antibiotic treatment burden is not excessive (e.g., route of administration, frequency, side effects, cost) <input type="checkbox"/> It seems that the hospital where I work encourages the use of antibiotics in EOL patients <input type="checkbox"/> There is a request from the patient to continue antibiotic treatment in the EOL situation <input type="checkbox"/> There is a request from caregivers to continue antibiotic treatment in the EOL situation |

Supplementary Table 1. Continued

Contents of survey

- There is a request from medical staff to continue antibiotic treatment in the EOL situation
- Others (You can fill out the blank below)

15. Why would you stop or de-escalate antibiotics after POLST?

- It is judged antibiotics no longer treat infections in the POLST status
- I think it can reduce the occurrence of antimicrobial resistance (e.g., multi-resistance bacteria)
- I am worried about *Clostridioides difficile* infection
- I am concerned about systemic or local antibiotic side effects (e.g., azotemia, urticaria)
- Antibiotic treatment burden is excessive
(e.g., frequency and route of administration, measurement of drug concentration)
- I want to reduce the cost of using antibiotics for patients.
- There is a request from the patient to stop antibiotic treatment in the EOL situation
- There is a request from caregivers to stop antibiotic treatment in the EOL situation
- There is a request from medical staff to stop antibiotic treatment in the EOL situation
- Others (You can fill out the blank below)

ASP, antimicrobial stewardship programs; EOL, end-of-life; POLST, physician orders for life-sustaining treatment.