Supplementary Online Content

Dregmans E, Kaal AG, Meziyerh S, et al. Analysis of variation between diagnosis at admission vs discharge and clinical outcomes among adults with possible bacteremia. *JAMA Netw Open*. 2022;5(6):e2218172. doi:10.1001/jamanetworkopen.2022.18172

eTable. Final Determinants of Misdiagnosis
eFigure. Flow Diagram of Patients

This supplementary material has been provided by the authors to give readers additional information about their work.
eTable. Final Determinants of Misdiagnosis<sup>abc</sup>

| Candidate predictors                                      | B (Lasso) |
|-----------------------------------------------------------|-----------|
| Age (per decade)                                          | 0.110     |
| Dementia                                                  | 0.359     |
| Positive urine sediment with no Loeb criteria<sup>de</sup> | 0.139     |
| Site of infection at ED                                   |           |
| Abdominal                                                 | 0.333     |
| Bone and Joint                                            | 1.217     |
| CNS                                                       | 1.628     |
| Intravascular                                             | 1.896     |
| Respiratory                                               | reference |
| Skin and Soft tissue                                      | 0         |
| Urogenital                                                | 0.156     |

<sup>a</sup> Abbreviations: B regression coefficients, CNS central nervous system, ED emergency department, Lasso Least Absolute Shrinkage and Selection Operator.

<sup>b</sup> One-standard error rule was applied to the optimal lambda value, c-statistic (0.70).

<sup>c</sup> The predicted probability of a misdiagnosis was determined by $P = \frac{1}{1+exp(-3.04 + 0.01 \times \text{age (year)} + 0.36 \times \text{dementia} + 0.14 \times \text{positive urine sediment with no Loeb criteria} + 0.33 \times \text{abdominal focus} + 1.22 \times \text{bone/joint focus} + 1.63 \times \text{CNS focus} + 1.90 \times \text{intravascular focus} + 0.16 \times \text{urogenital focus})]}$.

Instruction: If a predictor is scored positively, the given weight needs to be filled in.

<sup>d</sup> Loeb criteria means dysuria, suprapubic pain/tenderness, frequency or urgency. Positive urine sediment indicates nitrite positive or >5 white blood cells per high-power field.

<sup>e</sup> Occurred in 22.1% (36/163) of the misdiagnosed patients and 14.4% (183/1267) in the correctly diagnosed patients.
**eFigure.** Flow Diagram of Patients

Flow diagram of inclusion.

- 2333 patients presented at the ED from whom a blood culture was taken
  - Excluded (n=856)
    - outpatient treatment (n=523)
    - transferred to another hospital (n=32)
    - diagnosed with no infection at the ED (n=172)
    - diagnosed with unidentified site of infection at the ED (n=129)
  - 1477 patients included
    - 55.9% men, median age 68 (IQR 56-78)