

1 ***Abstract***

2 To promote antimicrobial stewardship, we studied antimicrobial prescription rates for
3 uncomplicated cystitis, a common outpatient disease requiring antibiotic treatment. This
4 multicenter retrospective study was performed from January 1, 2018, to December 31, 2020,
5 in Japan, targeting outpatients aged ≥ 20 years whose medical records revealed International
6 Classification of Diseases (ICD-10) codes suggesting uncomplicated cystitis (N300). The data
7 of 1,445 patients were collected and that of 902 patients were analyzed. The overall median
8 patient age was 71 years and a proportion of those aged less than 50 years was 18.8% with a
9 female dominance (82.6%). Antimicrobials were prescribed for 884 patients (98.0%) and a
10 total of 623 patients (69.1%) were treated with broad-spectrum drugs, including
11 fluoroquinolones (36.0%), third-generation cephalosporins (29.9%) and faropenem (3.1%). A
12 logistic regression model revealed that the broad-spectrum agents were significantly prescribed
13 for the older patients, male patients, and those who visited internists. Recurrence was observed
14 in 37 (4.1%) cases, and the multivariate analysis suggested any of age, sex, or antimicrobial
15 types were not associated with the recurrence. Collectively, approximately two-thirds of
16 antimicrobials prescribed for uncomplicated cystitis were broad-spectrum agents. The present
17 data would be an indicator for antimicrobial prescriptions in uncomplicated cystitis in Japan.

18 **Keywords:** Urinary tract infection; Uncomplicated cystitis; Antibiotic prescription;
19 Antimicrobial resistance; Antimicrobial stewardship; Outpatient.

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