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Supplement to The Risk of Rectal Temperature Measurement in Neutropenia

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Supplementary tables to the above cited manuscript are presented below and on the following pages.

Supplementary Table 1. Bloodstream Infection Pathogens Detected and the Probable Contaminants.

Confirmed Bloodstream Infection - Pathogen	Probable Contaminant
<i>Enterococcus faecium</i> (1)	<i>Staphylococcus</i> , coagulase-negative (6)
<i>Escherichia coli</i> (10)	<i>Corynebacterium</i> (1)
<i>Staphylococcus</i> , coagulase-negative (1 in more than 2 consecutive cultures)	<i>Micrococcus</i> (1)
<i>Pseudomonas aeruginosa</i> (7)	<i>Streptococcus gallolyticus</i> group (1)
<i>Staphylococcus aureus</i> (4 in total, 1 of them MRSA)	
<i>Klebsiella pneumoniae</i> (10)	
<i>Moraxella osloensis</i> (1)	
<i>Streptococcus pneumoniae</i> (1)	
<i>Streptococcus pyogenes</i> (1)	
<i>Citrobacter koseri</i> (1)	
<i>Providencia stuartii</i> (1)	
<i>Clostridium difficile</i> (1)	
<i>Campylobacter</i> (1)	

Supplementary Table 2. Demographic and Clinical Characteristics of the Matched Cohort.

Parameter	Oral Measurement (n=111)	Rectal Measurement (n=37)	P Value
Males, n (%)	51 (45.9)	14 (37.8)	0.389
Age at admission (years), mean±SD	61.04±19.09	64.12±19.85	0.402
Smoker, n (%)	30 (27.0)	10 (27.0)	0.977
Temperature (°C), mean±SD	37.13±0.48	37.49±0.64	0.003
MASCC, median (IQR)	10 (9-11)	9 (8-11)	0.142
CCI, median (IQR)	5 (2-7)	4 (2-6)	0.302
Charlson index >4, n (%)	65 (58.6)	21 (56.8)	0.847
Ischemic heart disease, n (%)	1 (0.9)	1 (2.7)	0.411
Diabetes mellitus, n (%)	16 (14.4)	6 (16.2)	0.793
Cerebrovascular accident, n (%)	0 (0)	0 (0)	1.000
Chronic kidney disease, n (%)	15 (13.5)	5 (13.5)	1.000
Dementia, n (%)	1 (0.9)	6 (16.2)	<0.001
Bedridden, n (%) [†]	1 (0.9)	10 (27.8)	<0.001
Hematological tumors, n (%) [†]	59 (53.2)	21 (58.3)	0.623
Solid tumors, n (%) ^{*,†}	35 (32.1)	8 (22.2)	0.273
Mucositis, n (%)	9 (8.1)	3 (8.1)	0.977
Perianal infections, n (%)	3 (2.7)	1 (2.7)	0.987
Current chemotherapy treatment, n (%) ^{*,†}	57 (51.8)	14 (38.9)	0.178
Currently treated, including taxanes, n (%) [†]	7 (6.3)	2 (5.6)	0.861
Suspected infection as a reason for admission, n (%) ^{*,†}	47 (43.1)	19 (52.8)	0.293
NEU, mean±SD (10 ³ /microL)	0.23±0.15	0.26±0.15	0.335
WBC, mean±SD (10 ³ /microL)	4.5±6.41	2.6±3.57	0.025
HGB, mean±SD (g/dL)	10.19±2.01	9.66±2.61	0.209
PLT, mean±SD (10 ³ /microL)	125.48±95.25	116.5±95.25	0.621
Composite outcome, n (%)	29 (26.1)	9 (24.3)	0.828
ICU during index hospitalization, n (%)	1 (0.9)	1 (2.7)	0.411
Duration of hospitalization, median (IQR)	3 (1-4)	2 (0-5)	0.231
Hospitalization longer than one week, n (%)	11 (9.9)	6 (16.2)	0.297
Release from ED, n (%)	26 (23.4)	16 (43.2)	0.021
Positive blood cultures, n (%)	6 (5.4)	2 (5.4)	1.000
Blood cultures confirmed as pathological, n (% out of positive cultures)	4 (66.7)	2 (100)	0.396
Contaminated blood cultures, n (% out of positive cultures)	2 (33.3)	0 (0)	0.346
Gram positive blood cultures, n (% out of pathological cultures)	1 (25)	1 (50)	0.346

Parameter	Oral Measurement (n=111)	Rectal Measurement (n=37)	P Value
Gram-negative blood cultures, n (% out of pathological cultures)	3 (75)	1 (50)	1.000
<i>Pseudomonas</i> blood cultures, n (% out of Gram-negative cultures)	1 (33.3)	0 (0)	0.537
Vasopressors during hospitalization, n (%)	0 (0)	0 (0)	1.000
Hospitalization in oncology ward, n (%)	47 (42.3)	4 (10.8)	<0.001
Hospitalization in internal medicine department, n (%)	38 (34.2)	19 (51.4)	0.064
Mortality during hospitalization, n (%)	18 (16.2)	2 (5.4)	0.096
30-Day mortality, n (%)	2 (1.8)	2 (5.4)	0.242

* Number of patients with missing data in oral group: Solid tumors (2); Current chemotherapy treatment (1); Suspected infection as a reason for admission (2).

† Number of patients with missing data in rectal group: Bedridden (1); Hematological tumors (1); Solid tumors (1); Current chemotherapy treatment (1); Currently treated, including taxanes (1); Suspected infection as a reason for admission (1).

CCI, Charlson comorbidity index; Composite outcome: ICU admission, in-hospital mortality, administration of vasopressors, hospitalization >7 days; ED, emergency department; HGB, hemoglobin; ICU, intensive care unit; IQR, interquartile range; SD, standard deviation; MASCC, Multinational Association for Supportive Care in Cancer; NEU, neutrophils; PLT, platelets; WBC, white blood cells.

Supplementary Table 3. Multivariate Sensitivity Analysis Including Only Hospitalized Patients, by Bacteremia and In-hospital Mortality.

Model	Covariate	OR (95% CI)	P Value
Bacteremia	Rectal vs. oral temperature measurement	0.608 (0.108-3.433)	0.573
	Current chemotherapy	0.727 (0.268-1.970)	0.531
	Solid tumor	2.488 (0.944-6.556)	0.065
	Poor function (bedridden/dementia)	3.392 (0.861-13.364)	0.081
In-hospital mortality	Rectal vs. oral temperature measurement	0.411 (0.051-3.290)	0.402
	Admission age >60 years	1.795 (1.280-2.516)	0.001
	Suspected infection	0.644 (0.325-1.277)	0.208
	Hematologic disease	0.342 (0.172-0.681)	0.002