

### **Supplementary Table 1. Inclusion/exclusion criteria**

#### **Inclusion criteria:**

- Female outpatients aged 18–75 years
- Diagnosis of acute lower uUTI occurring for the first time or acute relapse of chronic recurrent uUTI
- Typical symptoms of cystitis (pollakisuria, dysuria and urgency)
- Bacterial count of  $10^4$  –  $10^6$  colony forming units (CFU)/mL in midstream urine
- Presence of  $>20$  leukocytes/ $\mu$ L of urine measured by dipstick test
- No antibiotic treatment required according to the investigator
- Women of childbearing potential were allowed to participate only if they used a highly effective method of contraception
- Written informed consent


#### **Exclusion criteria:**

- Known hypersensitivity to any of the active substances or excipients of the study medication
- Antibiotic treatment during the past 8 days or indication for antibiotic treatment for the current infection
- Patients with trichomoniasis, chlamydiosis or gonorrhea
- Use of concomitant medication that may have an effect on the UTI, including other phytotherapeutics with similar effects, saluretics (including those in antihypertensives) or other drugs with a similar mode of action, urinary acidifying agents (e.g., Acimethin®), antibiotics, or phytotherapeutics with possible antibiotic effects
- Patients with suspected ovarian inflammation (e.g., adnexitis)
- Patients with suspected renal inflammation (e.g., pyelonephritis)
- Patients with complicated UTI (e.g., obstruction, stones, reflux)
- Patients with overactive bladder
- Patients with vegetative urogenital syndrome
- Patients who were currently participating or had participated in another clinical trial within 30 days before enrollment
- Patients in poor general condition
- Alcohol- or drug-addicted patients
- Pregnant or nursing women or women not using highly effective methods of contraception
- Patients with mental illness or no/limited legal capacity
- Patients held in an institution by legal or official order
- Patients who were not proficient in spoken or written German
- Patients with a urine bacterial count  $>10^6$  CFU/mL were to be excluded from further participation in the study unless they specifically wished to continue treatment with the study medication.
- No contraindications against the study medication were known at the time of study protocol preparation.

**Supplementary Table 2.** Schedule of study assessments

	Baseline (Day 0)	After 1 day (Day 1)	After 6±1 days (Day 7)
Diagnosis, medical history, physical examination	x		
Inclusion/exclusion criteria	x		
Safety laboratory	x		x
Urine dipstick test for leukocytes and nitrite	x	x	x
Midstream urine culture (bacterial counts)	x		x
Adverse events		x	x
Documentation of symptoms (investigator / patient diary)	x	x	x
Need for antibiotic treatment		x	x
Final evaluation (investigator and patient)			x
Treatment	Continuously from Day 0 to Day 7		

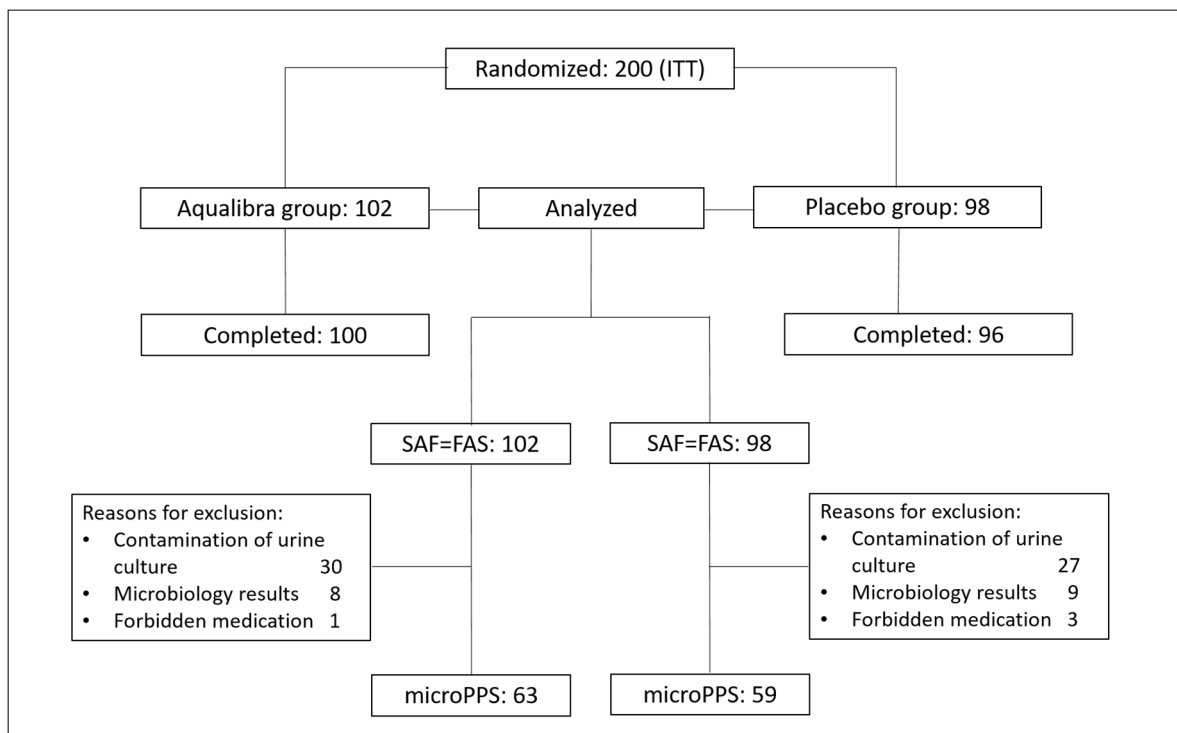
ACSS Questionnaire						
First visit (diagnostic form) - Part A						
Time: ____:____ Date of evaluation: ____/____/____ (dd/mm/yyyy)						
Please indicate whether you have had the following symptoms during the past 24 hours, and how severe they were: (Please mark <input checked="" type="checkbox"/> <u>only one</u> answer for each symptom)						
		0	1	2	3	
Typical	1	Frequent urination of small volumes of urine (going to the toilet very often)	<input type="checkbox"/> No <i>4 or less times per day</i>	<input type="checkbox"/> Yes, mild <i>5-6 times/ day</i>	<input type="checkbox"/> Yes, moderate <i>7-8 times/day</i>	<input type="checkbox"/> Yes, severe <i>9-10 or more times/day</i>
	2	Urgent urination (a strong and uncontrollable urge to pass urine)	<input type="checkbox"/> No	<input type="checkbox"/> Yes, mild	<input type="checkbox"/> Yes, moderate	<input type="checkbox"/> Yes, severe
	3	Feeling pain or burning when passing urine	<input type="checkbox"/> No	<input type="checkbox"/> Yes, mild	<input type="checkbox"/> Yes, moderate	<input type="checkbox"/> Yes, severe
	4	Incomplete bladder emptying after urination	<input type="checkbox"/> No	<input type="checkbox"/> Yes, mild	<input type="checkbox"/> Yes, moderate	<input type="checkbox"/> Yes, severe
	5	Pain or uncomfortable pressure in the lower abdomen (suprapubic area)	<input type="checkbox"/> No	<input type="checkbox"/> Yes, mild	<input type="checkbox"/> Yes, moderate	<input type="checkbox"/> Yes, severe
	6	Visible blood in your urine	<input type="checkbox"/> No	<input type="checkbox"/> Yes, mild	<input type="checkbox"/> Yes, moderate	<input type="checkbox"/> Yes, severe
Sum of "Typical" scores=					points	
Differential	7	Loin (low back) pain*	<input type="checkbox"/> No	<input type="checkbox"/> Yes, mild	<input type="checkbox"/> Yes, moderate	<input type="checkbox"/> Yes, severe
	8	Vaginal discharge (especially in the mornings)	<input type="checkbox"/> No	<input type="checkbox"/> Yes, mild	<input type="checkbox"/> Yes, moderate	<input type="checkbox"/> Yes, severe
	9	Urethral discharge (without urination)	<input type="checkbox"/> No	<input type="checkbox"/> Yes, mild	<input type="checkbox"/> Yes, moderate	<input type="checkbox"/> Yes, severe
	10	High body temperature (chills/fever) (Please indicate <input checked="" type="checkbox"/> if measured)	<input type="checkbox"/> No ≤37.5 °C	<input type="checkbox"/> Yes, mild 37.6-37.9 °C	<input type="checkbox"/> Yes, moderate 38.0-38.9 °C	<input type="checkbox"/> Yes, severe ≥39.0 °C
* often unilateral (on one side)					Sum of "Differential" scores=	points
Quality of life	11	Please give an overall rating of how much these symptoms, mentioned above, bothered you in the past 24 hours (Please mark <input checked="" type="checkbox"/> <u>only one</u> answer)				
		<input type="checkbox"/> 0 Do not feel any discomfort (No symptoms at all. Felt as good as usual) <input type="checkbox"/> 1 Feeling little discomfort (Feeling somewhat worse than usual) <input type="checkbox"/> 2 Feeling moderate discomfort (Feeling quite bad) <input type="checkbox"/> 3 Feeling extreme discomfort (Feeling terrible)				
	12	Please choose the number, which most closely describes your normal work/everyday activities were affected by your symptoms, mentioned above, in the past 24 hours (Please mark <input checked="" type="checkbox"/> <u>only one</u> answer)				
		<input type="checkbox"/> 0 Not affected at all (Carrying out usual daily activities) <input type="checkbox"/> 1 Mildly affected (Able to carry out daily activities with some discomfort) <input type="checkbox"/> 2 Moderately affected (Only able to carry out daily activities with significant effort) <input type="checkbox"/> 3 Extremely affected (Almost impossible to carry out daily activities)				
Additional	13	Please indicate, how much your social activities were affected by your symptoms, mentioned above, in the past 24 hours (Please mark <input checked="" type="checkbox"/> <u>only one</u> answer)				
		<input type="checkbox"/> 0 Not affected at all (Able to enjoy normal social activities) <input type="checkbox"/> 1 Mildly affected (Not able to do some social activities) <input type="checkbox"/> 2 Moderately affected (Only able to do a few social activities) <input type="checkbox"/> 3 Extremely affected (Not able to do any social activity - symptoms keep me a 'prisoner' in my home)				
	Sum of "QoL" scores=					points
	14	Please indicate whether you have the followings today:				
	Menstruation (women's monthly period) ?	<input type="checkbox"/> No	<input type="checkbox"/> Yes			
	Premenstrual symptoms?	<input type="checkbox"/> No	<input type="checkbox"/> Yes			
	Symptoms of the menopause ?	<input type="checkbox"/> No	<input type="checkbox"/> Yes			
	Are you pregnant?	<input type="checkbox"/> No	<input type="checkbox"/> Yes			
	Do you have diabetes mellitus (sugar diabetes) ?	<input type="checkbox"/> No	<input type="checkbox"/> Yes			



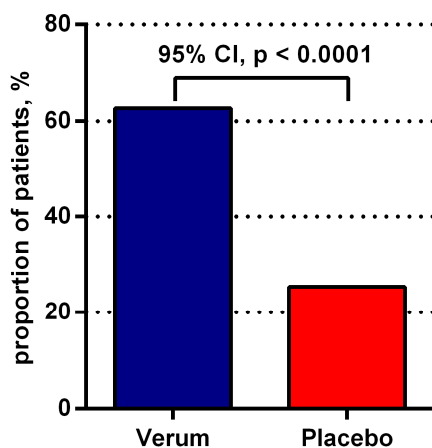
**STOP**

Please do not forget to return completed questionnaire back to your physician

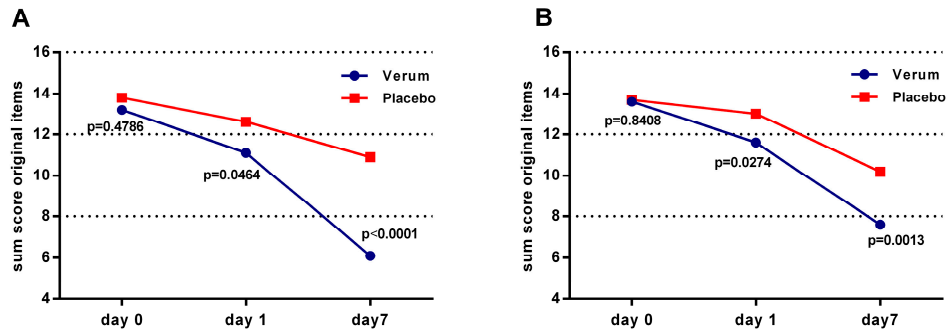
Thank you for cooperation



**Supplementary Figure 1.** Disposition of patients. FAS: full analysis set; ITT: intention-to-treat; microPPS: per-protocol set (patients with evaluable microbiologic data: patients with a bacterial count  $\geq 10^4$  CFU/mL at the time of inclusion, whose urine cultures were not contaminated and who did not take any concomitant medication that could interfere with urine culture); SAF: safety analysis set.



**Supplementary Figure 2.** Secondary analysis of the primary endpoint using microbiologic response criteria as defined by current draft guidelines (i.e., a bacterial count reduction from  $\geq 10^5$  to  $<10^3$  CFU/mL).



**Supplementary Figure 3.** Comparison of mean sum-scores of clinical symptoms based on the originally documented symptoms (original items) from Day 0 to Day 7 in the (A) microPP and (B) ITT population.