

## Supplemental Information

**SUPPLEMENTAL TABLE 5** Baseline Blood Tests

	Ondansetron Group, <i>n</i> = 462		Placebo Group, <i>n</i> = 456		<i>P</i>
	No. Children Tested (%)	Median (IQR)	No. Children Tested (%)	Median (IQR)	
Bicarbonate, mmol/L	72 (15.6)	16.5 (13.1–19.0)	85 (18.6)	16.5 (13.7–18.6)	.93
Sodium, mmol/L	77 (16.7)	136 (134–139)	89 (19.5)	136 (134–139)	.97
Potassium, mmol/L	76 (16.5)	4.2 (3.8–4.5)	88 (19.3)	4.1 (3.7–4.4)	.05
Chloride, mmol/L	74 (16.0)	101 (99–104)	82 (18.0)	102 (98–105)	.78
Urea nitrogen, mmol/L	8 (1.7)	14.8 (8.3–22.3)	12 (2.6)	8.5 (7.0–13.3)	.14
Creatinine, $\mu$ mol/L	17 (3.7)	0.4 (0.3–0.5)	17 (3.7)	0.4 (0.2–0.5)	.19
White blood cell count, $\times 10^9/L$	95 (20.6)	11.5 (9.6–15.9)	95 (20.8)	11.1 (8.7–15.3)	.49
Platelets, $\times 10^9/L$	94 (20.3)	388 (302–495)	95 (20.8)	376 (293–501)	.78
Hemoglobin, g/L	94 (20.3)	112 (103–120)	95 (20.8)	115 (102–126)	.21

**SUPPLEMENTAL TABLE 6** Follow-up

	Placebo ( <i>n</i> = 456), <i>n</i> (%)	Ondansetron ( <i>n</i> = 462), <i>n</i> (%)	<i>P</i>
24-h follow-up			
Telephone, mobile, <i>n</i> (%)	164 (36.0)	186 (38.2)	.27
In-person, home, <i>n</i> (%)	20 (4.4)	25 (4.9)	
In-person, enrolling institution, <i>n</i> (%)	271 (59.6)	251 (56.9)	
48-h follow-up			
Telephone, mobile, <i>n</i> (%)	431 (94.7)	444 (96.1)	.35
In-person, enrolling institution, <i>n</i> (%)	24 (5.3)	18 (3.9)	
72-h follow-up			
Telephone, mobile, <i>n</i> (%)	452 (99.3)	454 (98.3)	.22
In-person, enrolling institution <i>n</i> (%)	3 (0.7)	8 (1.7)	

At the follow-up visit, research officers determined if the child required another ED visit, had received intravenous fluid treatment, or had been hospitalized. Daily attempts were made to contact caregivers who were noncompliant by telephone for 7 d, and when contacted, information was gathered regarding the child's health status and dehydration severity. Hospital records were reviewed to confirm caregivers' reports. If the child was admitted or received treatment at a different institution, data were collected by telephone.

**SUPPLEMENTAL TABLE 7** Secondary Analysis of the Primary Outcome Analyzed Employing a Logistic Regression Model Fitted With Treatment Group and Adjusted for the Administration of Other Antiemetic Agents, Antibiotics, and Zinc Before the Random Assignment and the Number of Vomiting Episodes in the Preceding 24 Hours

Factors	OR (95% CI)	<i>P</i>
Ondansetron	0.70 (0.49 to 1.00)	.05
Placebo	1	
In preceding 24 h preenrollment		
Antiemetic used		
Yes	0.99 (0.63 to 1.55)	.96
No	1	
Antibiotics used		
Yes	1.75 (1.08 to 2.84)	.02
No	1	
Zinc used		
Yes	1.52 (0.58 to 3.99)	.40
No	1	
Maximal No. vomiting episodes per episode	1.12 (1.06 to 1.19)	<.001

See Supplemental Table 8 for related regression diagnostic.

**SUPPLEMENTAL TABLE 8** Secondary Analysis of the Primary Outcome Analyzed Employing a Logistic Regression Model Fitted With Treatment Group and Adjusted for the Administration of Other Antiemetic Agents, Antibiotics, and Zinc Before the Random Assignment and the Number of Vomiting Episodes in the Preceding 24 Hours: Regression Diagnostic

−2 log likelihood	816.458
Likelihood ratio $\chi^2 = 23.5$ , df = 5	<i>P</i> = .000268
Nagelkerke $R^2$	0.042
Hosmer-Lemeshow test	<i>P</i> = .116
Classification accuracy	82.9%
SE of residual	0.012

df, degrees of freedom.

**SUPPLEMENTAL TABLE 9** Secondary Analysis of the Primary Outcome Analyzed Employing a Logistic Regression Model Fitted With Treatment Group and Adjusted for A Priori Identified Covariates and Interaction Terms

Factors	OR (95% CI)	P
Treatment		
Ondansetron	0.31 (0.10 to 0.97)	.05
Placebo	1	
In preceding 24 h before enrollment		
Antiemetic used		
Yes	1.00 (0.64 to 1.57)	>.99
No	1	
Antibiotics used		
Yes	1.60 (0.98 to 2.60)	.06
No	1	
Zinc used		
Yes	1.40 (0.53 to 3.67)	.50
No	1	
Presence of $\geq 3$ vomiting		
Yes	1.30 (0.72 to 2.36)	.39
No	1	
Presence of $\geq 3$ diarrheal stools		
Yes	1.26 (0.78 to 2.05)	.35
No	1	
Demographic		
Age, mo	0.99 (0.97 to 1.01)	.19
(treatment) $\times$ (presence of $\geq 3$ vomiting)	1.42 (0.53 to 3.82)	.49
(treatment) $\times$ (presence of $\geq 3$ diarrheal stools)	1.73 (0.81 to 3.69)	.16
(treatment) $\times$ (age in mo)	1.01 (0.98 to 1.04)	.62

See Supplemental Table 10 for related regression diagnostic.

**SUPPLEMENTAL TABLE 10** Secondary Analysis of the Primary Outcome Analyzed Employing a Logistic Regression Model Fitted With Treatment Group and Adjusted for A Priori Identified Covariates and Interaction Terms: Regression Diagnostic

−2 log likelihood	813.514
Likelihood ratio $\chi^2 = 24.330$ , df = 8	$P = .00202$
Nagelkerke $R^2$	0.047
Hosmer-Lemeshow test	$P = .904$
Classification accuracy	82.9%
SE of residual	0.012

df, degrees of freedom.

**SUPPLEMENTAL TABLE 11** Adverse Events

	Ondansetron ( <i>n</i> = 462), <i>n</i> (%)	Placebo ( <i>n</i> = 456), <i>n</i> (%)
Upper respiratory tract infection	3 (0.7)	1 (0.2)
Hyperpyrexia	0 (0)	3 (0.7)
Urinary tract infection	1 (0.2)	0 (0)
Dysentery	1 (0.2)	0 (0)
Measles	1 (0.2)	1 (0.2)
Allergic reaction	0 (0)	1 (0.2)

No adverse events were classified as serious by the site investigators.