## Supplementary Table 1 Demographic Characteristics of Study Subjects

	Victims (n=32,499)	Non-victims (n=5,255,389)	P value	
Prefectures	(n=32,499)	(n-3,233,369)		
Hiroshima n, (%)	8,755 (26.9)	2,192,580 (41.7)		
Okayama n, (%)	15,111 (46.5)	1,462,068 (27.8)	<0.001*	
Ehime n, (%)	6,206 (19.1)	1,073,717 (20.4)	<0.001	
Missing or other n, (%)	2,427 (7.47)	527,024 (10.0)		

We compared prefectures in which study subjects visited any medical institution before and after the disaster between the victim and non-victim group.

<sup>\*</sup> P value was estimated with the  $\chi 2$  test.

## Supplementary Table 2 Estimates of Change in Occurrence of Prescriptions for IBS Drugs Among All Subjects

Measure of Interest	Coefficient	Standard error	95% Confidence interval	P value
Pre-disaster trend: non-victims	-0.001	0.001	-0.002 - 0.001	0.279
Pre-disaster mean level difference: victims versus non-victims	0.090	0.010	0.069 - 0.110	< 0.001
Pre-disaster difference in the mean slope: victims versus non-victims	-0.005	0.002	-0.0080.001	0.006
Post-disaster trend: non-victims	0.007	0.006	-0.005 - 0.018	0.271
Difference pre- and post-disaster: non-victims	0.000	0.001	-0.001 - 0.002	0.696
Difference in the first month of the disaster: victims versus non-victims	0.053	0.016	0.020 - 0.086	0.002
Post-disaster difference in the mean slope: victims versus non-victims	0.010	0.003	0.004 - 0.015	0.001

IBS: irritable bowel syndrome

This was evaluated by a linear regression model with a controlled time series analysis.

## Supplementary Table 3 Estimates of Change in Occurrence of Prescriptions for IBS-related Drugs Among Pre-disaster Users

Variable	Coefficient	Standard error	95% Confidence interval	P value
Pre-disaster trend: non-victims	-0.056	0.016	-0.0880.023	0.001
Pre-disaster mean level difference: victims versus non-victims	4.484	1.124	2.211 - 6.756	< 0.001
Pre-disaster difference in the mean slope: victims versus non-victims	0.025	0.150	-0.278 - 0.327	0.869
Post-disaster trend: non-victims	-2.932	0.281	-3.52.365	< 0.001
Difference pre- and post-disaster: non-victims	-0.184	0.031	-0.2460.122	< 0.001
Difference in the first month of the disaster: victims versus non-victims	-0.392	1.244	-2.906 - 2.122	0.754
Post-disaster difference in the mean slope: victims versus non-victims	0.368	0.210	-0.055 - 0.792	0.087

IBS: irritable bowel syndrome

This was evaluated by a linear regression model with a controlled time series analysis.