Supplementary Online Content

Himelstein AL, Foster JC, Khatcheressian JL, et al. Effect of longer interval vs standard dosing of zoledronic acid on skeletal events in patients with bone metastasis: a randomized clinical trial. *JAMA*. doi:10.1001/jama.2016.19425

This supplementary material has been provided by the authors to give readers additional information about their work.

eAppendix. List of participating institutions

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eTable 1. Patient baseline characteristics for C-telopeptide companion study

Characteristic	**ZA q 4 weeks (N=284)**	**ZA q 12 weeks (N=269)**
Age, median (range), years	65 (31-88)	66 (35-93)
Gender		
Male	123 (43.3%)	122 (45.4%)
Female	161 (56.7%)	147 (54.6%)
Race		
White	256 (90.1%)	224 (83.3%)
Black	27 (9.5%)	34 (12.6%)
Unknown/Other	1 (0.4%)	11 (4.1%)
BSA, mean (SD)	1.9 (0.3)	1.9 (0.2)
ECOG PS		
0	155 (54.6%)	125 (46.5%)
1	101 (35.6%)	114 (42.4%)
2	25 (8.8%)	28(10.4%)
Unspecified	3 (1.0%)	2 (0.7%)
Diagnosis		
Breast cancer	140 (49.3%)	130 (48.3%)
Prostate cancer	106 (37.3%)	104 (38.7%)
Multiple myeloma	38 (13.4%)	35 (13.0%)
Serum creatinine, median (Q1-Q3), mg/dL	0.9 (0.7-1.0)	0.9 (0.7-1.0)
Prior SRE	79 (27.8%)	66 (24.5%)
Prior oral bisphosphonate	21 (7.4%)	25 (9.3%)

SI conversion factors: To convert serum creatinine to µmol/L, multiply values by 88.4.
Abbreviations: ZA, Zoledronic acid; BSA, Body surface area; SD, Standard deviation; ECOG PS, Eastern Cooperative Oncology Group performance status; SRE, Skeletal-related events

eTable 2. Types of skeletal-related events by treatment group

Incidence of SRE by arm All patients				
	Arm A: Zoledronic Acid Q 4 Wks (N=911)	Arm B: Zoledronic Acid Q 12 Wks (N=911)	Total (N=1822)	p value
Did patient have a SRE within 2 years				.71[1]
of registration?				
Missing	29	27	56	
No	622 (70.5%)	631 (71.4%)	1253 (71.0%)	
Yes	260 (29.5%)	253 (28.6%)	513 (29.0%)	
Did patient have radiation to bone				.19[1]
within 2 years of registration?				
Missing	29	27	56	
No	697 (79.0%)	721 (81.6%)	1418 (80.3%)	
Yes	185 (21.0%)	163 (18.4%)	348 (19.7%)	
Did patient have a clinical fracture				.16[1]
within 2 years of registration?				
Missing	29	27	56	
No	820 (93.0%)	805 (91.1%)	1625 (92.0%)	
Yes	62 (7.0%)	79 (8.9%)	141 (8.0%)	
Did patient have a spinal cord				.40[1]
compression within 2 years of				
registration?				
Missing	29	27	56	
No	859 (97.4%)	854 (96.6%)	1713 (97.0%)	
Yes	23 (2.6%)	30 (3.4%)	53 (3.0%)	
Did patient have surgery to bone within				.01[1]
2 years of registration?				
Missing	29	27	56	
No	860 (97.5%)	842 (95.2%)	1702 (96.4%)	
Yes	22 (2.5%)	42 (4.8%)	64 (3.6%)	

[1]Fisher Exact

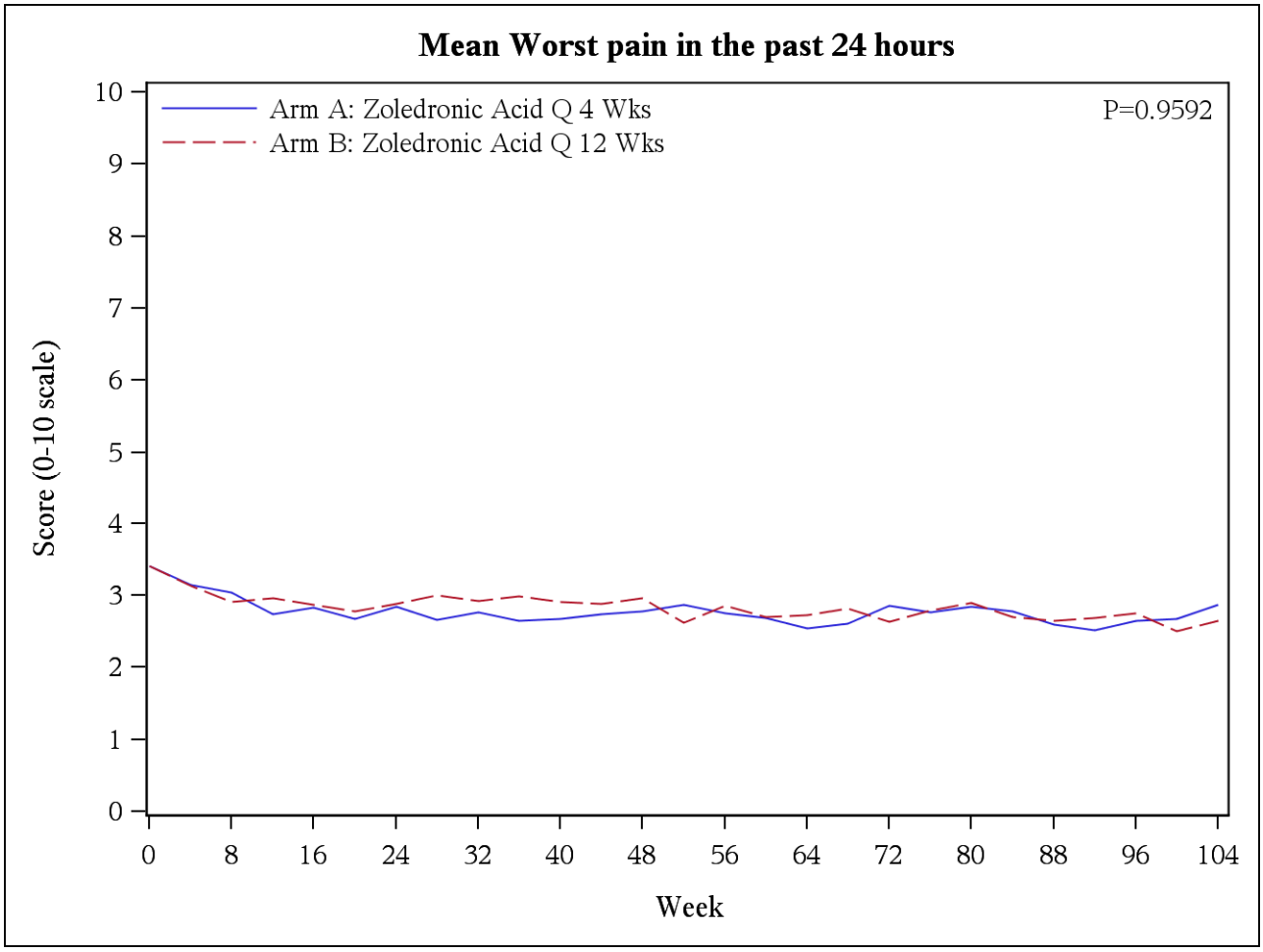
Abbreviation: SRE, Skeletal-related events

eTable 3. Adherence to treatment by group

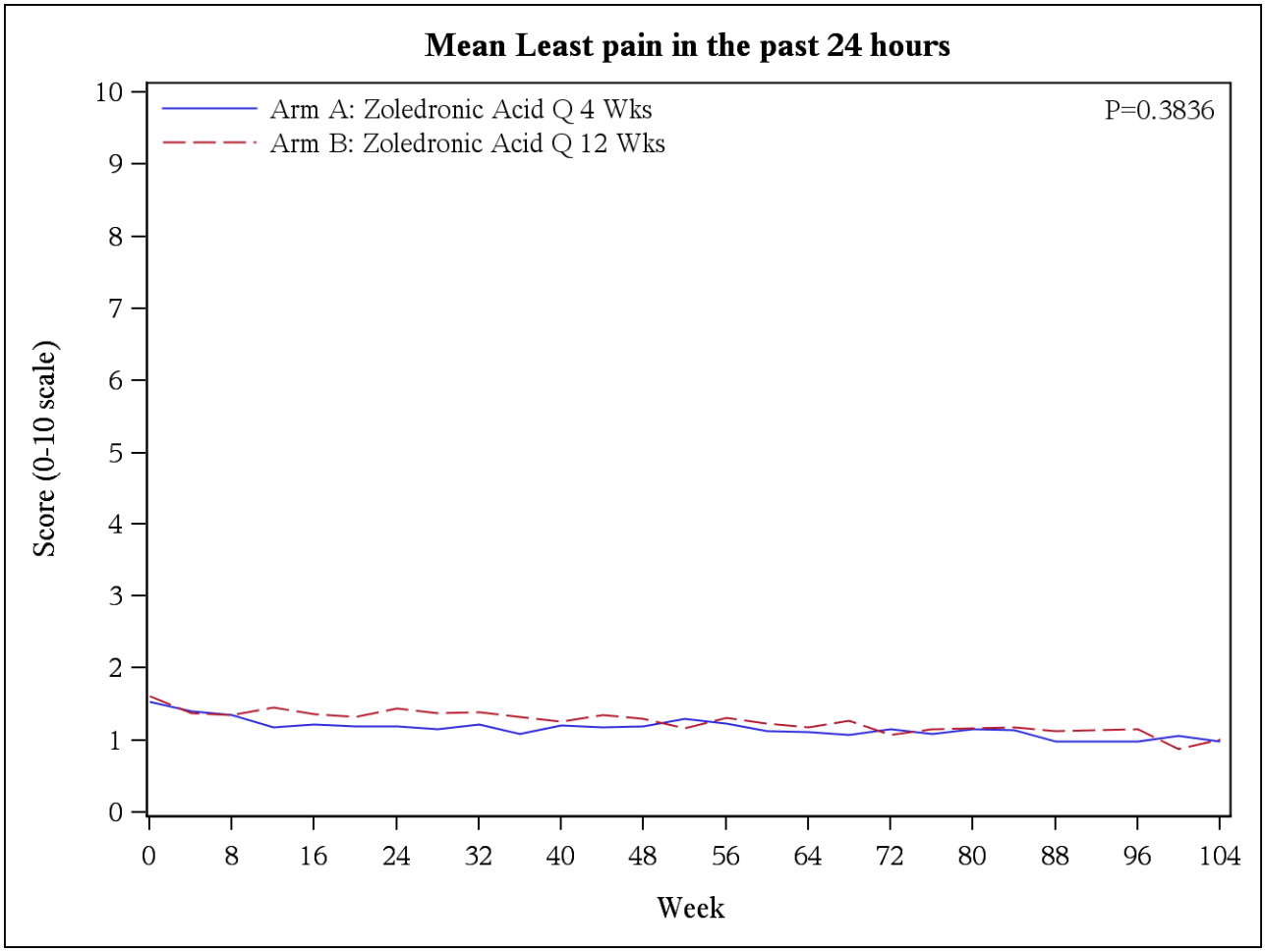
Total Number of Doses, Dose Delays, and Delays per Number of Doses				
	Arm A: Zoledronic Acid Q 4 Wks (N=911)	Arm B: Zoledronic Acid Q 12 Wks (N=911)	Total (N=1822)	p value
Total number of doses given				<.001[1]
N	911	911	1822	
Mean (SD)	13.5 (8.8)	5.2 (3.3)	9.3 (7.8)	
Median	13.0	6.0	7.0	
Q1, Q3	5.0, 22.0	2.0, 8.0	3.0, 14.0	
Range	(0.0-26.0)	(0.0-24.0)	(0.0-26.0)	
Total number of dose delays				<.001[1]
N	873	863	1736	
Mean (SD)	1.5 (1.9)	0.7 (1.3)	1.1 (1.7)	
Median	1.0	0.0	0.0	
Q1, Q3	0.0, 2.0	0.0, 1.0	0.0, 2.0	
Range	(0.0-13.0)	(0.0-12.0)	(0.0-13.0)	
Number of delays per dose				<.001[1]
N	870	846	1716	
Mean (SD)	0.1 (0.3)	0.2 (0.3)	0.1 (0.3)	
Median	0.1	0.0	0.0	
Q1, Q3	0.0, 0.2	0.0, 0.2	0.0, 0.2	
Range	(0.0-4.5)	(0.0-4.0)	(0.0-4.5)	

[1]Kruskal Wallis

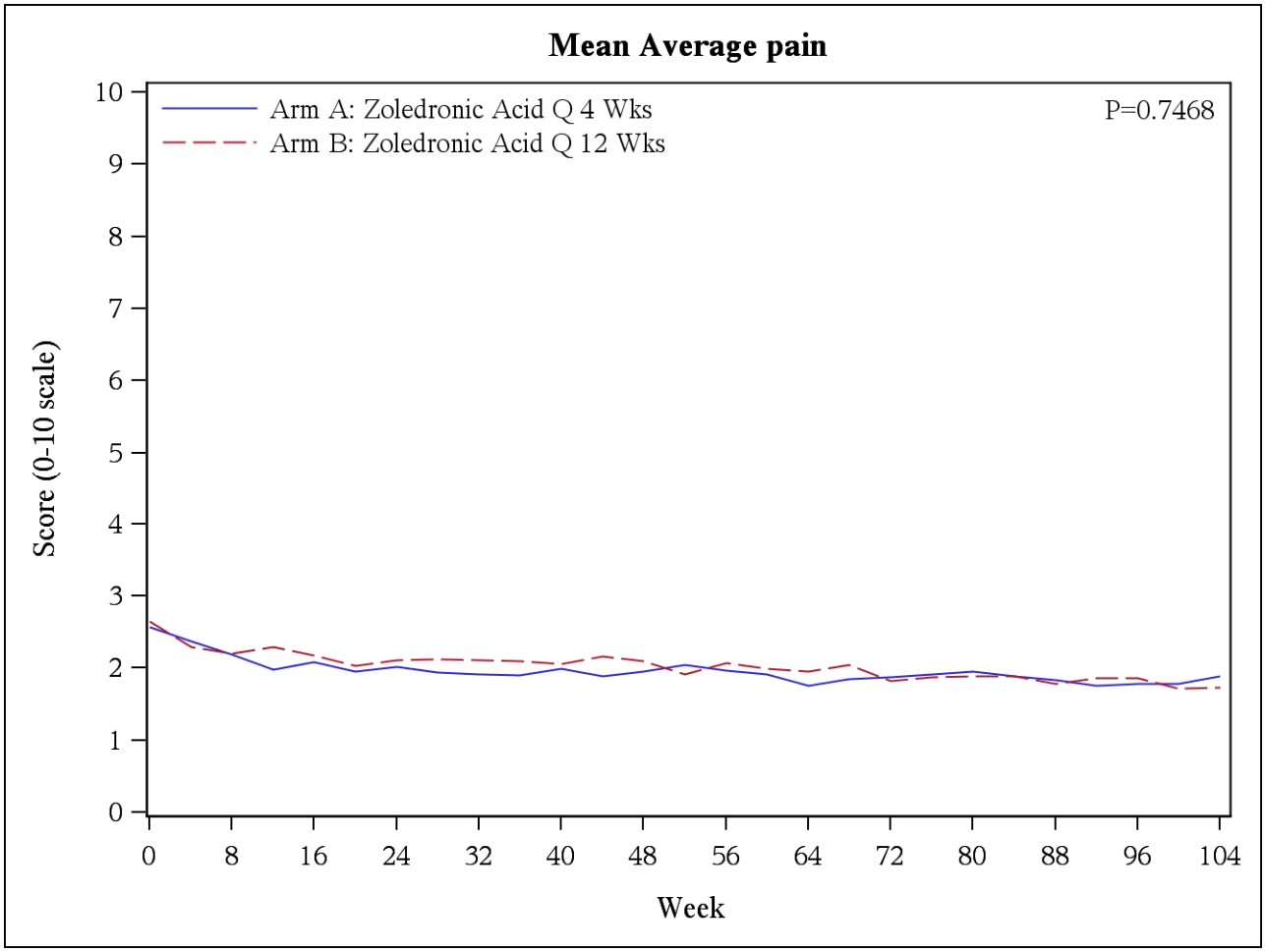
eFigure 1. Brief Pain Inventory mean worst pain



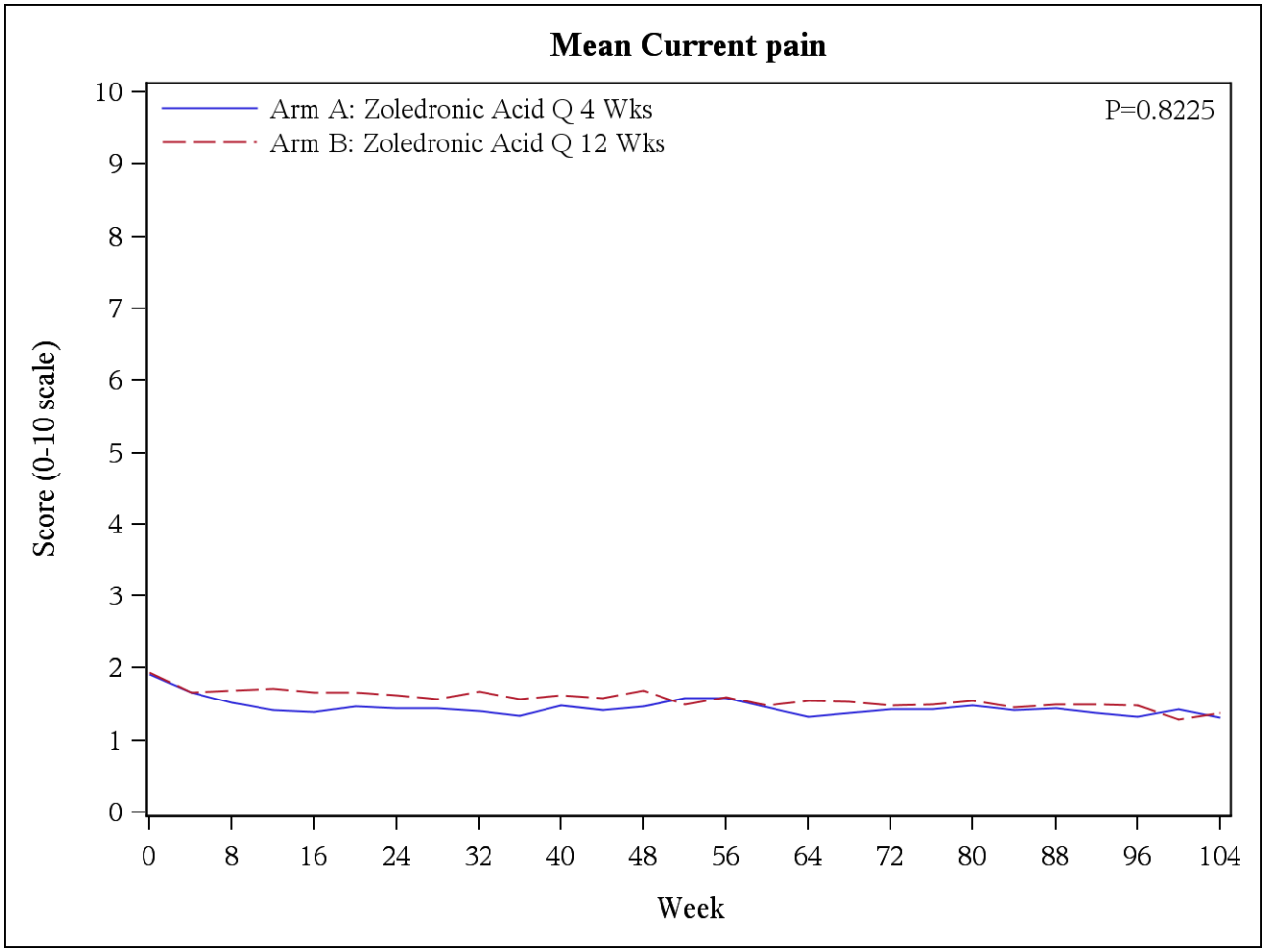
eFigure 2. Brief Pain Inventory mean least pain



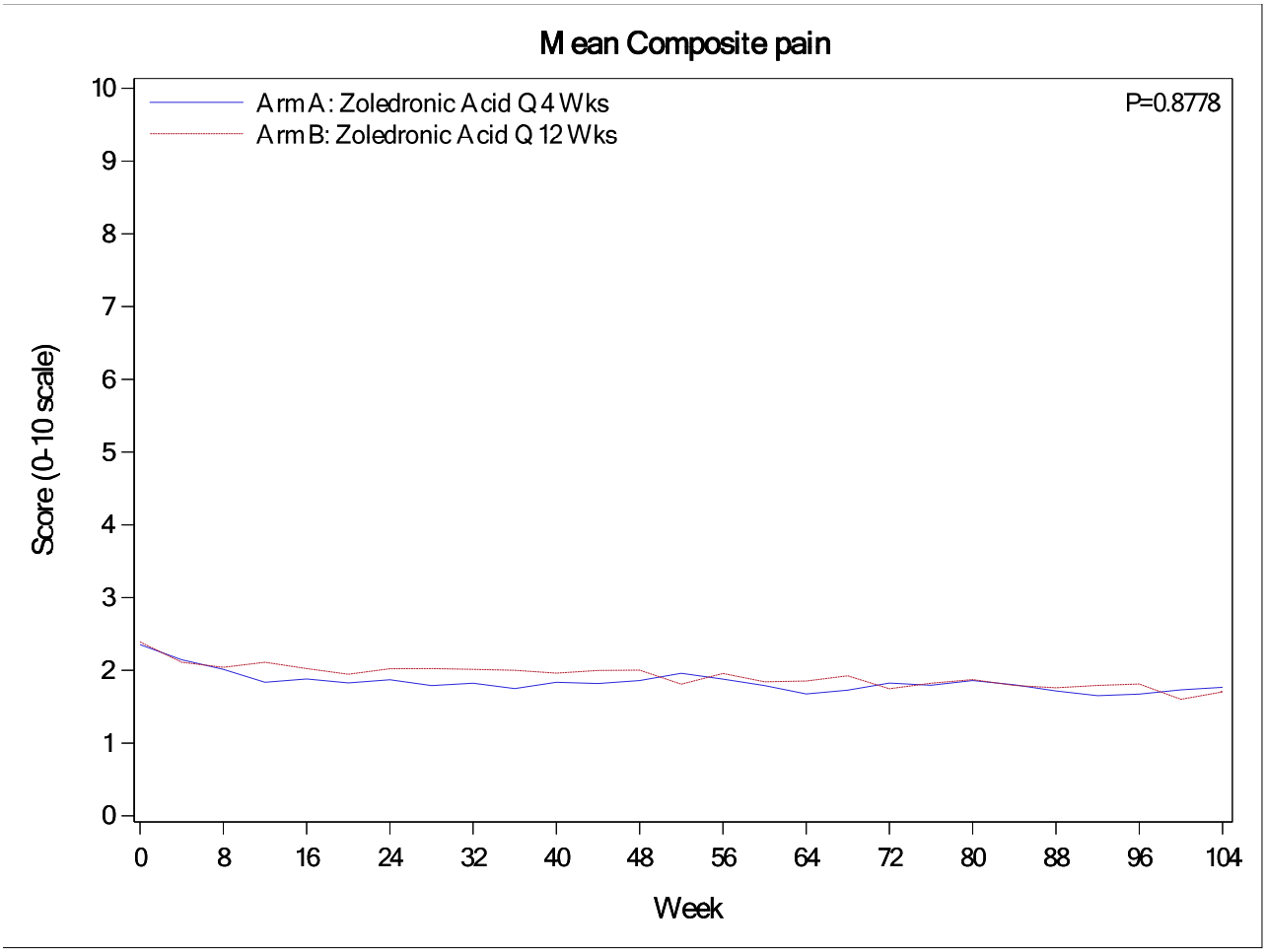
eFigure 3. Brief Pain Inventory mean average pain



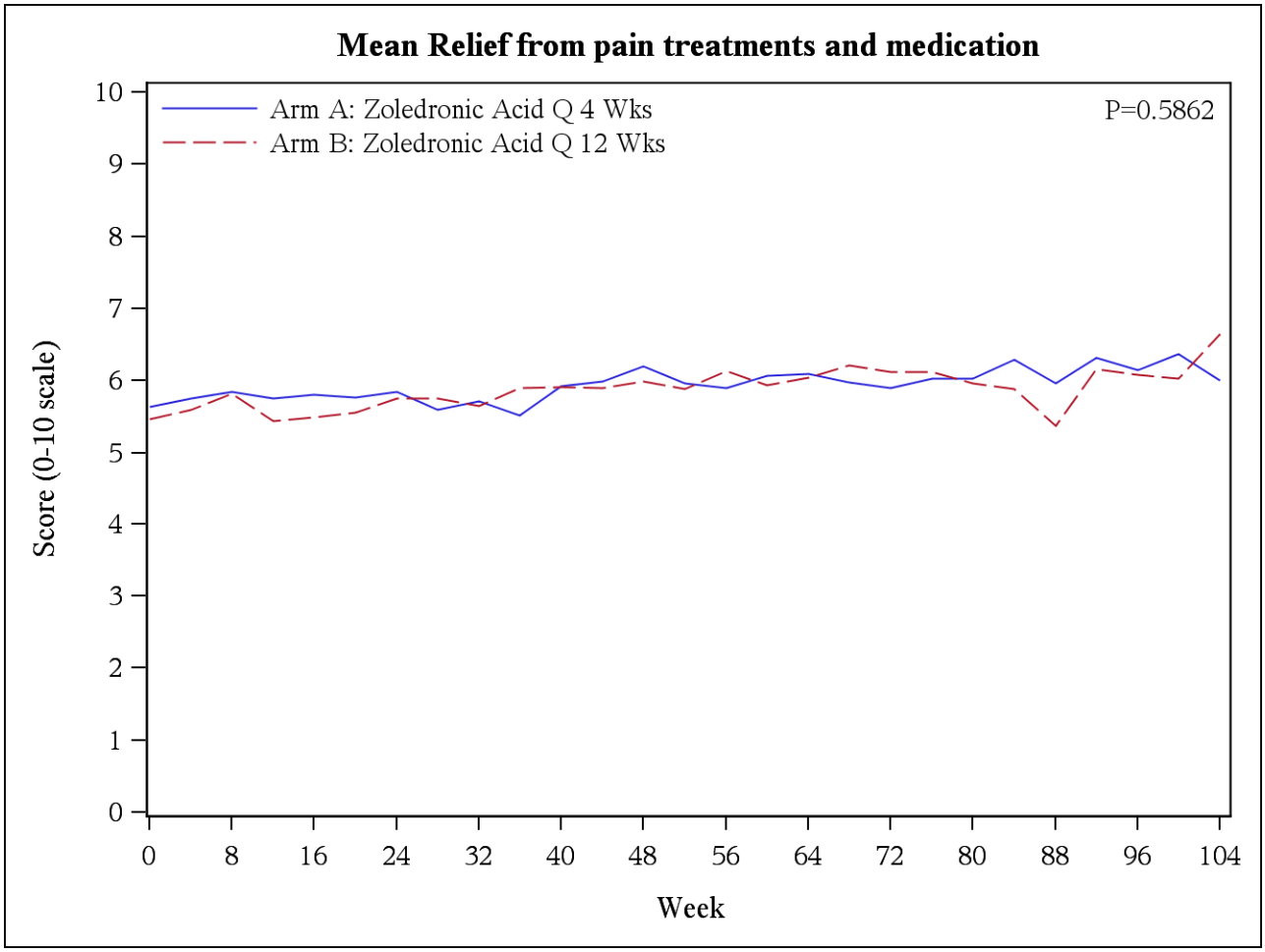
eFigure 4. Brief Pain Inventory mean current pain



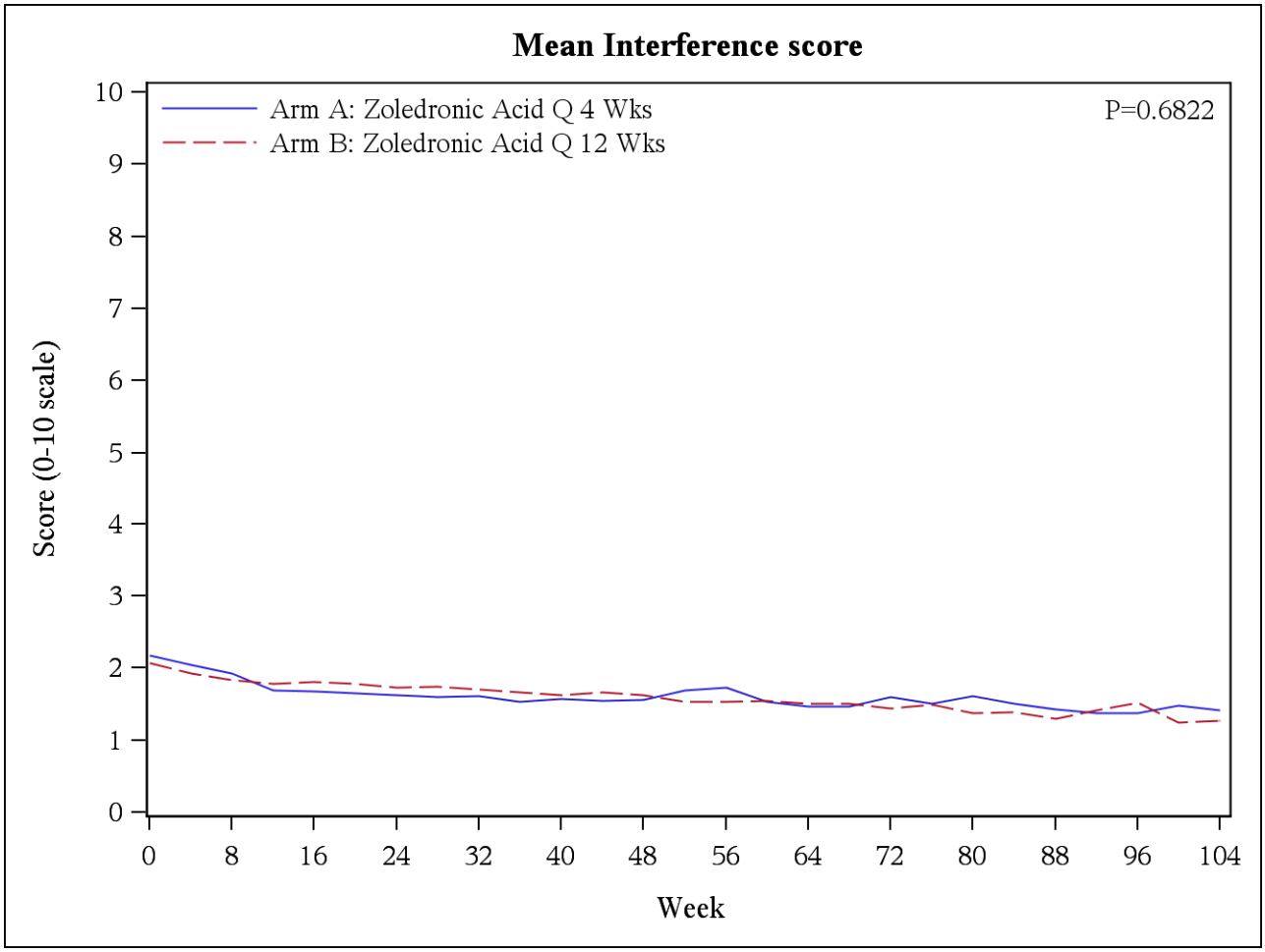
eFigure 5. Brief Pain Inventory mean composite pain



eFigure 6. Brief Pain Inventory mean relief from pain with treatments or medications



eFigure 7. Brief Pain Inventory mean interference score



eFigure 8. ECOG performance status