

Supplemental Tables for:

Patient-Reported Outcomes and Early Discontinuation in Aromatase Inhibitor-Treated Postmenopausal Women with Early Stage Breast Cancer

Norah Lynn Henry et al.

Table S1: 47-Item General Symptom Burden Tool and Select Items Used in Current Analysis by Six Symptom Clusters

ITEM	Items Used in Six Symptom Clusters
1. Weight gain	Weight/Body Image
2. Diarrhea	Not used
3. Hot flashes	Vasomotor Symptoms
4. Cold sweats	Vasomotor Symptoms
5. Trouble sleeping	Cognitive
6. Joint pain	Musculoskeletal
7. Aches in neck and/or skull	Musculoskeletal
8. Cold hands and/or feet	Musculoskeletal
9. Numbness and tingling	Musculoskeletal
10. Breast pains	Musculoskeletal
11. Constipation	Not used
12. Skin crawls	Not used
13. Headaches	Not used
14. Pounding of the heart	Not used
15. Dizziness	Not used
16. Blind spots before the eyes	Not used
17. Irritable and nervous	Mood
18. Feel blue and depressed	Mood
19. Forgetfulness	Cognitive
20. Excitable	Mood
21. Can't concentrate	Cognitive
22. Crying spells	Mood
23. Feeling of suffocation	Mood
24. Worry about body	Weight/Body Image
25. Feeling of fright or panic	Mood
26. Worry about nervous breakdown	Mood
27. Tired feelings	Cognitive
28. Heavy menstrual flow	Vulvovaginal
29. Vaginal dryness	Vulvovaginal
30. Pain with intercourse	Vulvovaginal
31. Loss of appetite	Weight/Body Image
32. Dry mouth	Not used
33. Nausea	Not used
34. Abnormal sweating	Vasomotor Symptoms
35. Drowsiness	Cognitive
36. Food cravings	Weight/Body Image
37. Weakness	Musculoskeletal
38. Shakiness or tremor	Mood
39. Increased appetite	Weight/Body Image
40. Weight loss	Weight/Body Image
41. Skin rash	Not used
42. Short temper	Mood
43. Heart racing	Mood
44. Feeling anxious (restless, panicky)	Mood
45. Difficulty urinating	Not used

46. Increased need to urinate	Not used
47. Bladder incontinence	Not used

All item responses ranged from 0 to 4 with a higher score associated with worse symptom burden

Table S2: Baseline Patient-Reported Outcome Measures for Entire Study Population and by Treatment Arm

PRO Measure	All Participants			Exemestane			Letrozole			*P-value
	N	Mean (SD)	Median (Range)	N	Mean (SD)	Median (Range)	N	Mean (SD)	Median (Range)	
EuroQOL VAS (Range, 0-100)	489	83.80 (12.55)	85.0 (30-100)	243	84.54 (11.54)	85 (30-100)	246	83.07 (13.46)	85 (40-100)	0.45
CESD (Range, 0-60)	490	8.20 (7.59)	6.0 (0-51)	243	8.25 (7.77)	6 (0-44)	247	8.19 (7.42)	6 (0-51)	0.90
HADSA (Range, 0-21)	489	4.12 (3.18)	3.0 (0-19)	243	4.22 (3.30)	4 (0-19)	246	4.03 (3.07)	3 (0-16)	0.59
Symptom Clusters										
(Range, 0-4)										
Weight/Body	490	0.23 (0.34)	0.17	243	0.23 (0.36)	0.17	247	0.23	0.17	0.95
Image			(0-2)			(0-2)		(0.33)	(0-1.67)	
Vasomotor	490	0.49 (0.63)	0.33	243	0.46 (0.61)	0.33 (0-3.67)	247	0.51	0.33	0.34
Symptoms			(0-3.67)					(0.65)	(0-3)	
Vulvovaginal	486	0.45 (0.83)	0	241	0.44 (0.84)	0	245	0.45	0	0.83
			(0-4)			(0-4)		(0.83)	(0-4)	
Musculo-skeletal	490	0.54 (0.51)	0.40	243	0.50 (0.46)	0.33	247	0.59	0.50	0.14
			(0-2.67)			(0-2.5)		(0.55)	(0-2.67)	
Cognitive	490	0.66 (0.65)	0.40	243	0.68 (0.68)	0.60	247	0.63	0.40	0.60
			(0-3.4)			(0-3)		(0.61)	(0-3.4)	
Mood	490	0.18 (0.34)	0	243	0.18 (0.36)	0	247	0.18	0.09	0.21
			(0-2.82)			(0-2.82)		(0.32)	(0-2.3)	

QOL –quality-of-life; VAS – visual analogue scale; CESD - Center for Epidemiologic Studies – Depression; HADSA - Anxiety subscale of the Hospital Anxiety and Depression Scale; SD – standard deviation . *P-value comparing baseline measures between exemestane and letrozole patients using Wilcoxon rank sum test

Table S3: Mean Change from Baseline in Symptom Clusters by Drug

Symptom Cluster (Range 0-4)	Month	N	Exemestane	N	Letrozole	p-value
			Mean (SD)		Mean (SD)	
Weight/Body Image	1	235	0.04 (0.43)	238	0.01 (0.36)	0.83
	3	212	0.09 (0.43)	224	0.02 (0.36)	0.16
	6	186	0.11 (0.44)	209	0.01 (0.35)	0.036
	12	153	0.08 (0.37)	183	0.07 (0.39)	0.63
	24	123	0.09 (0.53)	155	0.04 (0.38)	0.82
Vasomotor	1	235	0.12 (0.61)	238	0.11 (0.62)	0.65
	3	212	0.13 (0.60)	224	0.11 (0.64)	0.53
	6	186	0.08 (0.58)	209	0.02 (0.67)	0.38
	12	153	0.11 (0.62)	183	0.04 (0.68)	0.08
	24	123	0.04 (0.59)	155	-0.05 (0.65)	0.31
Vulvovaginal	1	232	0.01 (0.67)	236	0.03 (0.73)	0.83
	3	209	0.01 (0.77)	219	0.10 (0.85)	0.29
	6	184	0.06 (0.80)	205	0.24 (0.84)	0.14
	12	151	0.17 (0.82)	182	0.23 (0.95)	0.61
	24	121	0.26 (0.93)	152	0.41 (0.99)	0.23
Musculoskeletal	1	235	0.09 (0.50)	238	0.04 (0.43)	0.36
	3	212	0.20 (0.54)	224	0.07 (0.47)	0.023
	6	186	0.23 (0.55)	209	0.11 (0.49)	0.033
	12	153	0.22 (0.51)	183	0.11 (0.46)	0.034
	24	123	0.20 (0.56)	155	0.08 (0.46)	0.17
Cognitive	1	235	0.01 (0.60)	238	0.03 (0.57)	0.83
	3	212	0.14 (0.66)	224	0.04 (0.62)	0.018
	6	186	0.07 (0.64)	209	0.06 (0.59)	0.84
	12	153	0.08 (0.64)	183	0.11 (0.65)	0.83
	24	123	0.04 (0.61)	155	0.13 (0.68)	0.52
Mood	1	235	0.04 (0.41)	238	-0.01 (0.28)	0.20
	3	212	0.06 (0.30)	224	0.03 (0.36)	0.44
	6	186	0.05 (0.28)	209	0.01 (0.3)	0.012
	12	153	0.05 (0.34)	183	0.04 (0.31)	0.60
	24	123	0.03 (0.39)	155	0.03 (0.35)	0.21

Table S4. Spearman correlation of change in HRQOL (Baseline to 3 months) and 3-month serum concentration of estrogens.

QOL Measure Month 3 value-Baseline	3 month Levels of		
	Estradiol	Estrone	Estrone-1-sulfate
CESD	-0.04	-0.04	0.02
HADSA	-0.04	-0.04	-0.03
EUROQOL	0.04	0.03	0.02
Cluster 1: Weight/Body Image	-0.09	-0.04	0.03
Cluster 2: Vasomotor Symptoms	-0.008	-0.04	-0.05
Cluster3: Vulvovaginal	0.02	0.009	-0.05
Cluster 4: Musculoskeletal	0.008	0.12*	0.13*
Cluster 5: Cognitive	-0.14*	-0.01	0.01
Cluster 6: Mood	-0.02	-0.07	-0.04

*p<0.05

Spearman correlation of change in HRQOL (Baseline to 3 months) and change in serum concentration of estrogens (Baseline to 3 months).

QOL Measure Month 3 value-Baseline	Change (3 month - Baseline) in Levels of		
	Estradiol	Estrone	Estrone-1-sulfate
CESD	-0.07	-0.08	-0.03
HADSA	-0.135*	-0.10	-0.06
EUROQOL	0.05	0.04	-0.004
Cluster 1: Weight/Body Image	-0.02	0.005	0.01
Cluster 2: Vasomotor Symptoms	-0.15*	-0.11*	-0.16*
Cluster3: Vulvovaginal	0.10*	0.10*	0.14*
Cluster 4: Musculoskeletal	0.02	0.02	0.03
Cluster 5: Cognitive	-0.08	-0.05	-0.06
Cluster 6: Mood	-0.03	-0.04	-0.03

*p<0.05

Spearman correlation of change in HRQOL (Baseline to 3 months) serum concentration of exemestane or letrozole at 3 months (n=395)

QOL Measure Month 3 value-Baseline	ALL	3 month Levels of	
		Exemestane (n=180)	Letrozole (n=215)
CESD	-0.14*	-0.13	-0.01
HADSA	-0.04	-0.09	-0.02
EUROQOL	0.07	0.07	-0.05
Cluster 1: Weight/Body Image	-0.14*	-0.22*	-0.23*
Cluster 2: Vasomotor Symptoms	0.03	-0.10	0.04
Cluster3: Vulvovaginal	0.07	0.10	-0.05
Cluster 4: Musculoskeletal	-0.11*	-0.05	-0.02
Cluster 5: Cognitive	-0.10	-0.10	0.08
Cluster 6: Mood	0.02	-0.05	0.13

*p<0.05