

Supplemental Table S1. Sensitivity analyses: Associations of fluctuations in biomarkers of inflammation with sleep and physical activity among patients with gynecologic cancer treated with chemotherapy and noncancer controls excluding those with metastatic disease

Variable	Moderate to Vigorous Activity							
	IL-10	IL-1b	TNF-alpha	TNFR1	TNFR2	CRP	IL6^	IL-1ra^
Intercept	1.79***	1.85***	1.88***	1.75***	1.89***	1.93***	1.84***	1.78***
Group	-0.44***	-0.68***	-0.68***	-0.52**	-0.68***	-0.62***	-0.53***	-0.52***
Between-person variance in cytokine	2.99E-03	-6.69E-03	-8.56E-03	5.29E-04	-8.00E-05	-0.03	0.04	7.99E-03
Within-person variance in cytokine	2.46E-03	-1.65E-03	-1.77E-03	-2.00E-05	1.80E-05	1.38E-03	-0.01	0.02
Group x between-person variance in cytokine	-5.70E-03	0.04	0.01	-3.10E-04	9.00E-05	0.02	-0.05	4.62E-03
Group x within-person variance in cytokine	-8.14E-03*	6.46E-03	-9.87E-03	2.80E-05	-1.00E-05	-8.03E-03	-0.01	-0.06

Variable	Light Activity							
	IL-10	IL-1b	TNF-alpha	TNFR1	TNFR2	CRP	IL6^	IL-1ra^
Intercept	3.20***	3.23***	3.24***	2.90***	3.03***	3.29***	3.12***	3.12***
Group	-0.69***	-0.78***	-0.52	-0.13	-0.27	-0.54**	-0.50***	-0.25
Between-person variance in cytokine	-5.99E-03	-0.03	-0.02	1.03E-03	2.80E-05	-0.05	-0.07	-0.04
Within-person variance in cytokine	-6.55E-03	-0.04*	-0.02*	-3.90E-04	-1.10E-04	-8.26E-03	-0.08*	-0.03
Group x between-person variance in cytokine	0.01	0.09	7.37E-03	-2.06E-03	-2.00E-04	0.03	0.05	-0.06
Group x within-person variance in cytokine	-1.03E-03	0.03	1.63E-03	-1.77E-03	-3.00E-05	-0.04	0.05	-0.06

Variable	Sedentary Time							
	IL-10	IL-1b	TNF-alpha	TNFR1	TNFR2	CRP	IL6^	IL-1ra^
Intercept	10.65***	10.66***	10.35***	11.05***	10.79***	10.45***	10.76***	10.75***
Group	0.65	0.83*	1.31*	0.09	0.46	0.43	0.44	0.25
Between-person variance in cytokine	-1.41E-03	0.02	0.04*	-1.73E-03	-6.00E-05	0.06	0.06	4.19E-03
Within-person variance in cytokine	0.01*	0.05	6.81E-03	1.13E-03	1.16E-04	-0.01	0.04	7.43E-03
Group x between-person variance in cytokine	-1.65E-03	-0.07	-0.05	3.07E-03	1.33E-04	3.60E-03	0.21	0.08
Group x within-person variance in cytokine	2.25E-03	0.01	1.41E-03	-3.96E-03	-8.20E-04	0.09*	0.04	0.18

Variable	Hours Awake after Sleep Onset							
	IL-10	IL-1b	TNF-alpha	TNFR1	TNFR2	CRP	IL6^	IL-1ra^
Intercept	1.50***	1.46***	1.37***	1.41***	1.45***	1.34***	1.50***	1.49***
Group	0.50**	0.50**	0.59**	0.49**	0.38	0.53***	0.45***	0.73***
Between-person variance in cytokine	-1.80E-04	3.35E-04	8.87E-03	3.14E-04	6.50E-05	0.03	-8.01E-03	-0.01
Within-person variance in cytokine	-2.95E-03	-1.18E-03	-6.24E-03	-4.20E-04	-6.00E-05	1.76E-03	-0.01	-0.05
Group x between-person variance in cytokine	-3.40E-03	-0.03	-0.01	-4.20E-04	2.60E-05	-0.03	-0.22	-0.13
Group x within-person variance in cytokine	-3.23E-03	0.03	6.91E-03	-2.90E-04	1.21E-04	-1.78E-03	0.05	-0.03

Variable	Sleep Efficiency							
	IL-10	IL-1b	TNF-alpha	TNFR1	TNFR2	CRP	IL6^	IL-1ra^
Intercept	0.79***	0.80***	0.81***	0.81***	0.81***	0.83***	0.81***	0.81***
Group	-0.04*	-0.04*	-0.06*	-0.03	-0.03	-0.05*	-0.05**	-0.09***
Between-person variance in cytokine	4.53E-04	9.87E-04	-1.35E-03	-2.00E-05	-2.00E-05	-5.15E-03	3.82E-03	-1.29E-03
Within-person variance in cytokine	-5.20E-04	-3.78E-03	-1.92E-03*	1.90E-05	1.90E-05	-1.97E-03	-7.80E-03	-2.31E-03
Group x between-person variance in cytokine	3.57E-04	1.49E-03	1.96E-03	7.42E-06	5.71E-07	4.71E-03	0.02	0.02*
Group x within-person variance in cytokine	6.37E-04	4.24E-03	4.81E-04	-2.50E-04	-4.00E-05	3.42E-03	4.13E-03	0.01

Analyses controlled for age, education, comorbidities, and menopausal status.

^IL-6 and IL-1Ra were natural log-transformed.

*** = $p < .001$; ** = $p < .01$; * = $p < .05$