

Supplemental Appendix for: Weekly Paclitaxel-induced Neurotoxicity in Breast Cancer: Outcomes and Dose Response Hannah Timmins et al.

Appendix S1. Supplementary Methods

FACT-GOG Ntx

Neuropathy related items were scored on a 5-point scale ("Not at all" = 0, "A little" =1, "Somewhat" = 2 "Quite a bit" =3 "Very much" = 4) based on severity. Totals (out of 52) were reversed score in accordance with the manual, with lower scores indicating greater burden of symptoms. Neuropathy symptom severity was classified using the first two questions of the FACT-GOG-Ntx (Item 1:'I have numbness or tingling in my hands' or Item 2: 'I have numbness or tingling in my feet' Range: 0-4), with patients reporting 'Quite a bit' (3) or 'Very much' (4) classified as reporting greater symptom severity.

Total Neuropathy Score Clinical version

Examination included tests of vibration and pin prick sensibility, deep tendon reflexes and manual muscle testing. Neurotips (Owens Mumford, Woodstock, UK) were used to assess pin prick sensitivity based on ability to correctly distinguish between a sharp and blunt stimulus. Vibration-sense examination was conducted with Rydel-Seiffer tuning fork in digit 1 of the hands and feet. TNSc scores were used to classify patients as having 'Mild' (1-4) or 'Moderate' (≥5) neuropathy.²⁵

Two-point discrimination

A two-point discriminator (Touch-Test[®] Two-Point Discriminator, North Coast Medical, Inc., California, USA model NC12776, range: 2–15 mm) was used to evaluate the cutaneous sensitivity of the sole of the first left metatarsus.²⁷ Participants were asked to distinguish between one or two points, utilizing the smallest distance in which \geq 70% trials were correct for analysis.

Von Frey monofilaments

Distal sensation in digit 2 of the dominant hand was evaluated using Von Frey monofilaments (Optihair2-Set, Marstock Nervtest, Germany, range:0.125-128 mN). Five trials were conducted using a series of ascending and descending bending forces to produce a mechanical detection threshold (mN).



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Table S1. Comparison between prospective and cross-sectional cohorts. There was no difference in age, cumulative dose or neuropathy based on patient report and clinical examination, between patient recruited prospectively or cross-sectionally. As such both sets of patients were included in the analysis evaluating the effect of dose modification on follow-up neuropathy outcomes.

	Age (Years) Mean ±SE	Cumulative paclitaxel dose (mg/m²) Mean ±SE	Total Neuropathy Score clinical version Mean ±SE
Cross-sectional (n= 23)	57.4±2.4	802.9±36.0	4.57±.65
Prospective (n= 82)	51.2±1.3	861.8±15.9	3.57±.27
P value	Mann-Whitney U =664.5 p=0.31	Mann-Whitney U =732.0 p=0.80	Mann-Whitney U =778.0 p=0.20

Table S2. Follow-up group comparison. There was no significant difference in cumulative dose or age between those who had a follow-up assessment at 12 months post-treatment (n=56) and those who do not (n=27).

	Age (Years)	Cumulative paclitaxel dose (mg/m²)	
	Mean ±SE	Mean ±SE	
Follow-up at 12 months (n=56)	51.1±1.5	845.1±20.6	
No Follow-up at 12 months (n=27)	51.2±2.4	899.9±21.4	
P value	Mann-Whitney U =753.0 p=.977	Mann-Whitney U =589.0 p=.0.74	