# A Prospective Study of Docetaxel-associated Pain Syndrome

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## Introduction

- Taxane-associated acute pain syndrome (T-APS) is a common side-effect of taxane chemotherapy.
- At present, the prospective studies which study T-APS examine only paclitaxel patients.

### Results

- A total of 278 patients were accrued, 217 analyzed, and 188 in the docetaxel cohort.
- A total of 74.5% of docetaxel patients experienced joint pain flare and 78.2% experienced muscle pain flare at some point in the course of three treatment cycles.
- Joint and muscle pain peaked on days 4-5 for each cycle and median pain severity for joint and muscle pain was 4/10 during the 21-day period.
- Median onset of joint pain flare was 3 days for cycle 1 and 4 days for cycles 2 and 3, with an average median duration of 4 days. Median onset of muscle pain flare was 4 days for all three cycles, with a median duration of 4 days for cycles 1 and 2, and 5 days for cycle 3.
- Joint and muscle pain persisted one year after treatment in approximately half of responding patients.



### **Materials and Methods**

- For three consecutive treatment cycles, taxane-naive breast cancer patients completed diaries on days 1-7, 14, 21, and telephone questionnaires 1, 3, 6, 9 and 12 months following treatment.
- Questionnaires to assess pain and interference were adapted from the Brief Pain Inventory.
- To examine the experience of arthralgia and myalgia as one syndrome, information on patient experiences with arthralgia or myalgia was elicited separately in order to determine how closely experiences of each toxicity correlated with each other.
- A ≥2 point increase from baseline was defined as an arthralgia or myalgia "pain flare" and only those with "flare" were included in calculations of incidence.

## Conclusions

 This study documents the significant prevalence of T-APS in docetaxel patients and shows long-term pain persistence.



Table 1: **Docetaxel (n=217):** (A) & (B): Proportion of patients experiencing a  $\geq$ 2 point increase in joint pain and muscle severity, respectively, for each of the diary days 1-7, 14, and 21; (C) & (D): Mean average joint and muscle pain severity, respectively for each of the diary days 1-7, 14, and 21.

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