Randomised study in the Netherlands shows that a reduction in scalp cooling time to 45 minutes, did not reduce the effectiveness of the Paxman Scalp Cooling System in preventing hair loss in docetaxel treated cancer patients.

**Results**

*Head cover or wig prevention.*

No head cover or wig required in 88% of patients following 45 minutes post-infusion cooling after 3-weekly docetaxel, compared with 74% after 90 minutes post-infusion cooling.

**Tolerance**

Headaches were only reported in 20% of patients, with only 5% of patients discontinuing scalp cooling.

- Visual analogue scale (VAS): mean score = 69 (0 = bad, 100 = good).
- Headache: 80% no headaches; 13% mild headaches and 7% moderate/severe headaches.
- 5% of patients discontinued scalp cooling because of intolerance.
Methods

- Trial involving 166 cancer patients from 11 hospitals in the Netherlands, carried out in 2 phases, to determine the effectiveness and tolerance of scalp cooling.

Chemotherapy regimens:

- 3-weekly docetaxel (75 mg/m2 or 100 mg/m2).

Scalp cooling times:

- Pre-infusion cooling time: 30 minutes.
- Cooling was maintained during the infusion period.
- Post-infusion cooling time: phase I: 90 minutes; Phase II: 90 minutes vs 45 minutes.
- Phase I = non-randomised; phase II randomised.
- Effectiveness based on whether patient required head cover or wig.

Patients:

- Age range 35-79 years, mean age 44.
- Docetaxel 75 mg/m2 (39%); 100 mg/m2 (61%) 36% male.
- Breast cancer (49%), prostate cancer (33%), lung carcinoma (23%).
- Patients views related to comfort and acceptability of scalp cooling were collated by contact nurse.
- Tolerance of scalp cooling determined.

88% of patients didn’t require a head cover or wig following 45 minutes post-infusion cooling after 3 weekly docetaxel.

20% of patients reported headaches.

C.J.G. van den Hurk, M.E. van den Akker-van Marle et al. Impact of scalp cooling on chemotherapy-induced alopecia, wig use and hair growth of patients with cancer.