



# Hair preservation after scalp cooling in 3000 patients

## The Dutch Scalp Cooling Registry, 2013

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### Background

- Severe hair loss is very common in & distressing for chemotherapy patients
- Scalp cooling: - Applied in >75 Dutch hospitals
  - Mostly positive outcomes in CIA reduction
  - Applied before, during & after chemotherapy infusion
- Aims registration:
  - Estimate results by type & dose of chemotherapy: patient information
  - Identify associated characteristics
  - Identify best practices in hospitals

### Results

- n=2945
- Breast (81%), GI (6%), Ovarian (5%), Prostate (4%), Lung (2%), Other (2%)
- (Neo-)Adjuvant (65%), Palliative (35%)
- Overall 51% did not need a head cover (range 6% – 97%) (Table 1)
- Wetting hair seems to improve the results in most regimens
- No scalp skin metastases reported until August 2013
- See [www.scalpcooling.nl](http://www.scalpcooling.nl) for a complete overview of results per type of chemotherapy & a map of scalp cooling in the world

### Conclusion

- Scalp cooling is effective in most chemotherapy regimens
- Overall results are stable over time when comparing with Dutch data published in 2012
- Additional analyses warranted of preliminary results for wetting hair
- Result should & can be improved; research is inevitable

### Methods

- Scalp cooling using Paxman device in 55 Dutch hospitals
- Data collected from 2006 to August 2013
- Pre cooling time 30 minutes, post cooling time mainly 90 minutes
- Endpoint: wearing wig or head cover
- Special attention for influence of wetting hair before start of scalp cooling using data from 2010 and onwards (changed wording of question)



Table 1 Results of scalp cooling by type/dose of chemotherapy (2006-2013)

| Chemotherapy | Chemotherapy in mgr/m <sup>2</sup> | n=   | % no head cover |
|--------------|------------------------------------|------|-----------------|
| AC           | A60C600                            | 196  | 36              |
| AC : D       | A60C600 : D100                     | 41   | 66              |
| AC : T       | A60C600 : T80                      | 90   | 55              |
| DAC          | D75A50C500 ('TAC')                 | 102  | 6               |
| D            | D75                                | 118  | 97              |
| D            | D100                               | 118  | 59              |
| D            | D75combi <sup>a</sup>              | 67   | 64              |
| FAC          | F500/600A50/60C500/600             | 81   | 47              |
| FEC          | F500/600E50-85C500/600             | 90   | 53              |
| FEC          | F500E90C500                        | 598  | 52              |
| FEC          | F500/600E100C500/600               | 344  | 35              |
| FEC : D      | F500E90/100C500 : D100             | 297  | 49              |
| TCarbo       | T50-90Carbo2-4 <sup>b</sup>        | 25   | 88              |
| TCarbo       | T175Carbo4-6 <sup>b</sup>          | 119  | 31              |
| T            | T50-100 <sup>c</sup>               | 163  | 77              |
| Irino        | Irino350                           | 104  | 30              |
| TOTAL        |                                    | 2945 | 51              |

A = doxorubicine, C = cyclophosphamide, D = docetaxel, T = paclitaxel, F = 5-fluorouracil, E = epirubicine, Carbo = carboplatin, Irino = irinotecan,  
: = sequential scheme / = or - = to  
a combi = combination with cyclophosphamide, capecitabine, carboplatin, gemcitabine, methotrexate, myocet or xeloda, b Carbo dosage in AUC, c T50-100 = monotherapy or combination with avastin, capecitabine or herceptin  
d FAC = less good results in 1 hospital using wetting of hair  
Data until 2010 (n=1411) published in Acta Oncol. 2012; 51:497-504

Table 2 Results of scalp cooling with/without wetting hair (2010-2013)

| Chemotherapy in mgr/m <sup>2</sup> | n=  | % no head cover |                 |
|------------------------------------|-----|-----------------|-----------------|
|                                    |     | No wet hair     | Wet hair        |
| A60C600                            | 107 | 29              | 35              |
| A60C600 : T80                      | 57  | 48              | 69              |
| D100                               | 51  | 64              | 61              |
| F500/600A50/60C500/600             | 35  | 67 <sup>d</sup> | 35 <sup>d</sup> |
| F500/600E100C500/600               | 190 | 29              | 41              |
| F500E90/100C500 : D100             | 228 | 45              | 55              |
| Irino350                           | 52  | 23              | 41              |

