

### *Study limitations*

This study has the following limitations: how to stimulate sweating in a standardized manner, how to compensate for different levels of sweating on the back, and how to exclude small anhidrotic/hypohidrotic areas, which may be artefacts. Heat stimulation was carried out in a sauna, as sweating from the trunk is thermo-regulated. When the sweating from the back began, an iodine-starch imprint was performed. It was not important to keep external factors, such as the temperature in the sauna and the duration of the visit to the sauna, constant between subjects, since the rate of sweating was individual and the quality of the imprints would be inadequate if the back was too dry or too wet when performing the iodine-starch test. However, on an individual basis the autonomic sudomotor neurone signalling to the sweat glands on the back was homogenous, which enabled us to compare the 16 measuring points. It is well known that sweating is more prominent in the middle of the back, down the spine, than on the lateral parts of the back. We compensated this heterogeneity by randomizing the subjects to different treatment sequences, which minimizes any potential bias. In addition, position on the back (lateral/medial) was incorporated in the statistical models, hence adjusting the treatment effects for position effects. In our study approximately 20% of imprints were excluded because of uncertain margins and artefacts due to too much or too little sweat on the back. To eliminate possible bias the exclusion was carried out prior to un-blinding.

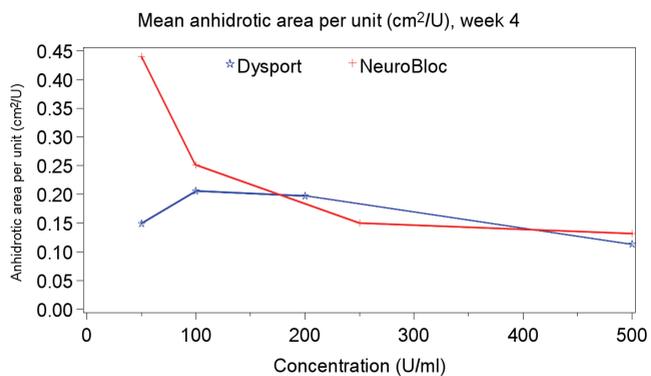


Fig S1. Enlargement of Fig. 2. to make explicit the mean anhidrotic area per unit for Dysport and NeuroBloc at week 4.

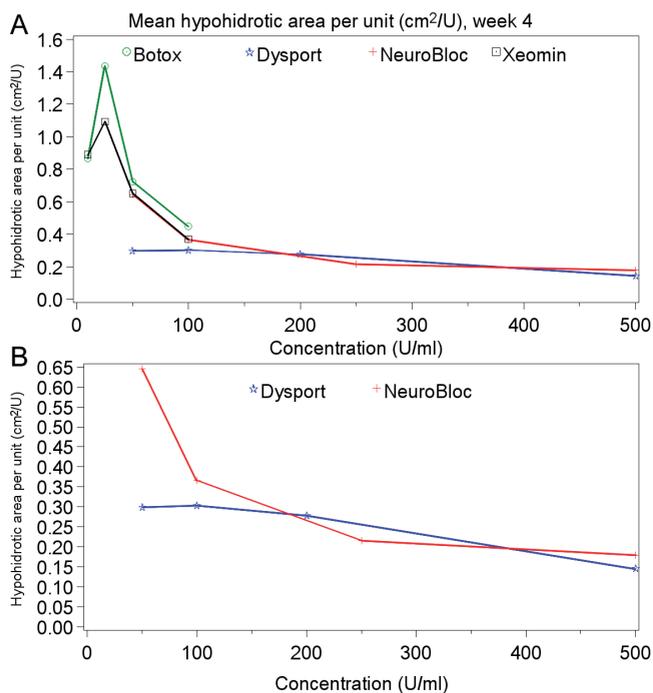


Fig. S2(A). Mean hypohidrotic area per unit 4 weeks after injection of Botox®, Dysport®, Xeomin® and NeuroBloc® at 4 different concentrations. Clear peaks can be seen for Botox and Xeomin, demonstrating that the optimal concentration for both products is 25 U/ml. There is no apparent difference between Dysport 50 U/ml, 100 U/ml and 200 U/ml. The mean hypohidrotic area per unit emerging where Dysport 500 U/ml has been injected is, however, smaller than that for the other 3 concentrations of Dysport. Optimal concentration for NeuroBloc is 50 U/ml. (B) Enlargement of Fig. S2A. to make explicit the mean hypohidrotic area per unit for Dysport and NeuroBloc at week 4.

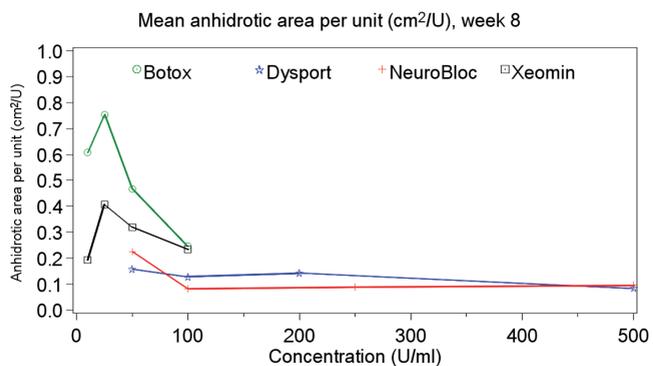


Fig. S3. Mean anhidrotic area per unit 8 weeks after injection of Botox®, Dysport®, Xeomin® and NeuroBloc® at 4 different concentrations. Clear peaks can be seen for Botox and Xeomin, demonstrating that the optimal concentration for both products is 25 U/ml. There is no apparent difference between Dysport 50 U/ml, 100 U/ml and 200 U/ml. The mean anhidrotic area per unit emerging where Dysport 500 U/ml has been injected is, however, smaller than that for the other 3 concentrations of Dysport. The optimal concentration for NeuroBloc is 50 U/ml.

Table SI. Descriptive statistics of anhidrotic area per unit (cm<sup>2</sup>/U) at week 4, 8 and 12 (all data except 1 outlier\*)

| Product (U/ml) | Time-point | Mean  | SD    |
|----------------|------------|-------|-------|
| Botox® 10      | Week 4     | 0.362 | 0.374 |
|                | Week 8     | 0.607 | 0.901 |
|                | Week 12    | 0.339 | 0.455 |
| Botox 25       | Week 4     | 0.980 | 0.544 |
|                | Week 8     | 0.754 | 0.685 |
|                | Week 12    | 0.616 | 0.473 |
| Botox 50       | Week 4     | 0.495 | 0.218 |
|                | Week 8     | 0.467 | 0.310 |
|                | Week 12    | 0.423 | 0.302 |
| Botox 100      | Week 4     | 0.330 | 0.186 |
|                | Week 8     | 0.246 | 0.185 |
|                | Week 12    | 0.297 | 0.169 |
| Xeomin® 10     | Week 4     | 0.227 | 0.344 |
|                | Week 8     | 0.192 | 0.296 |
|                | Week 12*   | 0.238 | 0.239 |
| Xeomin 25      | Week 4     | 0.740 | 0.563 |
|                | Week 8     | 0.406 | 0.346 |
|                | Week 12    | 0.522 | 0.395 |
| Xeomin 50      | Week 4     | 0.420 | 0.246 |
|                | Week 8     | 0.319 | 0.168 |
|                | Week 12    | 0.349 | 0.199 |
| Xeomin 100     | Week 4     | 0.269 | 0.125 |
|                | Week 8     | 0.234 | 0.119 |
|                | Week 12    | 0.257 | 0.168 |
| NeuroBloc® 50  | Week 4     | 0.440 | 0.273 |
|                | Week 8     | 0.225 | 0.159 |
|                | Week 12    | 0.095 | 0.093 |
| NeuroBloc 100  | Week 4     | 0.251 | 0.157 |
|                | Week 8     | 0.081 | 0.115 |
|                | Week 12    | 0.083 | 0.083 |
| NeuroBloc 250  | Week 4     | 0.150 | 0.069 |
|                | Week 8     | 0.088 | 0.056 |
|                | Week 12    | 0.076 | 0.039 |
| NeuroBloc 500  | Week 4     | 0.132 | 0.052 |
|                | Week 8     | 0.097 | 0.047 |
|                | Week 12    | 0.065 | 0.040 |
| Dysport® 50    | Week 4     | 0.149 | 0.130 |
|                | Week 8     | 0.157 | 0.127 |
|                | Week 12    | 0.131 | 0.130 |
| Dysport 100    | Week 4     | 0.206 | 0.143 |
|                | Week 8     | 0.128 | 0.104 |
|                | Week 12    | 0.174 | 0.093 |
| Dysport 200    | Week 4     | 0.198 | 0.090 |
|                | Week 8     | 0.142 | 0.063 |
|                | Week 12    | 0.135 | 0.065 |
| Dysport 500    | Week 4     | 0.113 | 0.082 |
|                | Week 8     | 0.084 | 0.077 |
|                | Week 12    | 0.087 | 0.073 |

SD: standard deviation.

Table SII. Statistical analysis of anhidrotic area per unit ( $\text{cm}^2/\text{U}$ ), week 4, mixed model analysis of variance (ANOVA). Differences between dissimilar products at the same concentrations (100 U/ml or 50 U/ml) and at optimal concentrations are shown

| Products (U/ml)             | LS mean | 95% CI         | p-value |
|-----------------------------|---------|----------------|---------|
| Botox® 100 – Xeomin® 100    | 0.070   | -0.033, 0.173  | 0.1725  |
| Botox 100 – Dysport® 100    | 0.133   | 0.027, 0.239   | 0.0162  |
| Botox 100 – NeuroBloc® 100  | 0.082   | -0.033, 0.197  | 0.1539  |
| Xeomin 100 – Dysport 100    | 0.064   | -0.009, 0.137  | 0.0848  |
| Xeomin 100 – NeuroBloc 100  | 0.012   | -0.075, 0.099  | 0.7760  |
| Dysport 100 – NeuroBloc 100 | -0.052  | -0.142, 0.039  | 0.2518  |
| Botox 50 – Xeomin 50        | 0.082   | -0.070, 0.234  | 0.2763  |
| Botox 50 – Dysport 50       | 0.351   | 0.226, 0.477   | <0.0001 |
| Botox 50 – NeuroBloc 50     | 0.063   | -0.101, 0.226  | 0.4381  |
| Xeomin 50 – Dysport 50      | 0.269   | 0.150, 0.387   | 0.0001  |
| Xeomin 50 – NeuroBloc 50    | -0.019  | 0.140, -0.179  | 0.8054  |
| Dysport 50 – NeuroBloc 50   | -0.288  | -0.423, -0.154 | 0.0002  |
| Botox 25 – Xeomin 25        | 0.231   | -0.171, 0.633  | 0.2490  |
| Botox 25 – Dysport 100      | 0.775   | 0.479, 1.071   | <0.0001 |
| Botox 25 – NeuroBloc 50     | 0.540   | 0.230, 0.851   | 0.0018  |
| Xeomin 25 – Dysport 100     | 0.544   | 0.236, 0.852   | 0.0019  |
| Xeomin 25 – NeuroBloc 50    | 0.309   | -0.013, 0.631  | 0.0589  |
| Dysport 100 – NeuroBloc 50  | -0.235  | -0.370, -0.100 | 0.0016  |

LS mean: least squares mean; CI: confidence interval