Rogaine vs. Propecia - Hair Counts & Weights

Posted by : admin on Oct 10, 2007 - 11:46 PM
Editorials
Rogaine actually outperformed Propecia in both hair counts and hair weights in a per unit area of scalpWere you aware that Rogaine actually outperformed Propecia in both hair counts and hair weights per unit area of scalp? Two of our users discuss this interesting study in the following article...

One advantage of Propecia is that it obviously affects hair follicles over the entire scalp, whereas Rogaine may have more of a local effect. More where you actually apply it, of course. So the comparison below may slightly favor Rogaine, because the hair weights and counts were only done in a pre-defined area of scalp (the standard 1-inch circle). Either way, their findings were very interesting...

> Bryan Shelton wrote:
> Rogaine causes greater increases in hair weight than Propecia! If you check out Vera Price's recent studies on that topic, you'll see that after 1 year, Rogaine had a 33% increase in hair weight above the starting baseline; Propecia had only 20.4%.

> Uncle Junior wrote:
> If Rogaine causes a larger increase in vellous hairs than Propecia, then I wonder how Vera Price was able to conduct a study that removed this from the equation, which would be necessary to determine how Rogaine increases the diameters of terminal hairs in the manner relevant to this discussion.

Bryan
wrote:

But she didn't remove vellus hairs from the equation!
"Hair weight" refers to the total weight of grown hair; that
is, the total of vellus, intermediate, and terminal hairs. The vellus
hairs in a typical balding guy can obviously be a rather significant fraction
of that total weight.

Here's what _I_ think is the difference in the hair-growing
effects of Propecia and Rogaine: if a given treatment has very little
increase in total hair-counts at the same time that it significantly increases
the total weight of regrown hair (which is close to what Propecia does),
then it seems clear that its main effect is to increase the thickness
of the hair that's already there; in fact, some of the pre-existing vellus
hairs probably become intermediate hairs, some of the pre-existing intermediate
hairs become terminal hairs, and some of the existing terminal hairs become
even thicker than they were. But if another treatment produces an increase
in hair-counts which is also almost numerically identical to its increase
in total hair-weight (which is close to what Dr. Price found in her minoxidil
study), then that suggests that maybe ALL hairs are increasing in rough
proportion to that overall number. That is, brand-new vellus hairs are
being born; some of the old vellus hairs become newer intermediate hairs;
some of the old intermediate hairs become newer terminal hairs; and some
of the older terminal hairs become even thicker. And that idea is supported
by older studies which showed relative increases in ALL those classes
of hair from minoxidil treatment.

Uncle Junior wrote:
Actually, I can't think of how they could get an accurate picture of this
from any study. What did they do? Obviously, simply marking a little circle
on the head and then trimming and weighing the hairs from that area wouldn't
work (discrepencies from inclusion of new vellous hairs, seasonality in
growth, etc.). Best I can figure is they would have to mark of an area and
dye just the tips and base of some hairs. Then trim the hairs above the
dyed base, and view the undyed portion under a microscope to get a look
at the thickness of the hair shafts. Then go back later and look at the
same hairs, indicated by the dye that will now be at the tips (was at the
base), trim those hairs and look at them under a microscope in the same
manner. Get some kind of overall average. This would also have to be done
in numerous sampling areas on the head, since different areas may respond
to treatments in different ways.

Bryan wrote:

Again, Price et al counted and measured the weights of
ALL hairs. Here's a brief description of the procedure from the recent
Propecia study, which is also identical to what they did in the previous
minoxidil study:

"Evaluation procedures. Marking and hair clipping
method. At the first clipping (week -12), a plastic template with a square
hole (1.34 cm^2) was placed over the chosen scalp site. All hairs within
the designated area were pulled through the template with a crochet hook,
grasped, and carefully hand clipped intact with straight surgical scissors
under a magnifying light, which left the hair approximately 1 mm in length
at the scalp. After removal of the template, 2 small, permanent tattoos
were placed in nonadjacent corners of the square clipped area with the
use of a Spalding and Rodgers marking apparatus. [...] At each subsequent
6-week interval visit, the plastic template was placed over the target
area; the 2 small tattoos were used for accurate placement. The hair in
the target area was carefully hand clipped as previously described. The
clipped hairs were placed on prefolded, prelabeled collection paper, the
paper was folded to form a packet, and the packet was placed in a small
glassine envelope and stored until the hair samples were weighed and counted
at the end of the study.

"Hair weight determination. At the end of the initial
48-week study (week 48), hair samples collected at weeks -6, 0, 6, 12,
24, 36, and 48 were weighed in a single session by a technician who was
blinded to treatment, subject, and visit number (ie, time). [...] Before
hair was weighed, each clipped hair sample was degreased with hexane,
dried, and conditioned for at least 24 hours in a room with a constant
temperature and humidity (20 degrees C, 65% relative humidity). The hairs
were then transferred to a weighing pan and weighed in a computerized
balance with a precision of 0.01 mg. After hair was weighed, the hairs
were quantitatively returned to the packet.

"Manual hair counts. After the hair samples were
weighed, the individual hairs from the samples were laid out on a marked
grid in groups of 5 and counted manually. This procedure was carried out
at the end of the initial 48-week study for hair samples collected at
weeks 0, 24, and 48.... Hairs that were shorter than 2 mm in length were
excluded from the count, because these could represent hair shaft fragments
rather than intact hairs."

Bryan

- To read the Rogaine for Men product review, go here: Rogaine Product Review
- To read the Rogaine for Women product review, go here: Rogaine Women Product Review
- To discuss Rogaine with other Men, go here: Men’s Growth Stimulants Forum
- To discuss Rogaine with other Women, go here: Women’s Discussion Forums
- For more information on purchasing Rogaine, please view our Rogaine Shop

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