

Balding
Updated: 08/26/2004

ABSTRACTS

Unique preclinical characteristics of GG745, a potent dual inhibitor of 5AR.

Bramson HN, Hermann D, Batchelor KW, et al.

J Pharmacol Exp Ther. 1997 Sep; 282(3):1496-502.

Selective inhibition of type 2 5alpha-reductase has been shown to be efficacious in the treatment of benign prostatic hyperplasia. Pharmacokinetic and pharmacodynamic results are reported of treatment with a potent inhibitor of both 5alpha-reductase isozymes, GG745, in rats, dogs and men. In the rat, GG745 has a similar effect on DHT-driven prostatic growth as finasteride, another dual 5alpha-reductase inhibitor in this species. However, GG745 appears to be more potent in the rat, a result that likely reflects the greater inherent potency and terminal half-life of GG745 (14 hr) compared with that of finasteride (1 hr). These pharmacokinetic differences are also maintained in the dog (65 and 4 hr for GG745 and finasteride, respectively). From these results, the literature, and in vitro studies, we estimated doses of GG745 likely to prove efficacious in reducing DHT levels in man. These estimated values were predictive of single-dose effects of GG745 in man. Results from single-dose evaluations in man indicate that GG745 has a terminal half-life of approximately 240 hr, and single doses of >10 mg decreased DHT levels significantly more than did single 5-mg doses of finasteride. These data support the hypothesis that a molecule (GG745) that effectively inhibits both 5alpha-reductases will lower serum DHT levels significantly more than a molecule that inhibits only a single 5alpha-reductase isozyme (e.g., finasteride, a selective inhibitor of the type 2 enzyme in man)

The effects of finasteride on scalp skin and serum androgen levels in men with androgenetic alopecia.

Drake L, Hordinsky M, Fiedler V, et al.

J Am Acad Dermatol. 1999 Oct; 41(4):550-4.

BACKGROUND: Data suggest that androgenetic alopecia is a process dependent on dihydrotestosterone (DHT) and type 2 5alpha-reductase. Finasteride is a type 2 5alpha-reductase inhibitor that has been shown to slow further hair loss and improve hair growth in men with androgenetic alopecia. **OBJECTIVE:** We attempted to determine the effect of finasteride on scalp skin and serum androgens. **METHODS:** Men with androgenetic alopecia (N = 249) underwent scalp biopsies before and after receiving 0.01, 0.05, 0.2, 1, or 5 mg daily of finasteride or placebo for 42 days. **RESULTS:** Scalp skin DHT levels declined significantly by 13.0% with placebo and by 14.9%, 61.6%, 56.5%, 64.1%, and 69.4% with 0.01, 0.05, 0.2, 1, and 5 mg doses of finasteride, respectively. Serum DHT levels declined significantly (P <.001) by 49.5%, 68.6%, 71.4%, and 72.2% in the 0.05, 0.2, 1, and 5 mg finasteride treatment groups, respectively. **CONCLUSION:** In this study, doses of finasteride as low as 0.2 mg per day maximally decreased both scalp skin and serum DHT levels. These data support the rationale used to conduct clinical trials in men with male pattern hair loss at doses of finasteride between 0.2 and 5 mg

Sulfasalazine for alopecia areata.

Ellis CN, Brown MF, Voorhees JJ.

J Am Acad Dermatol. 2002 Apr; 46(4):541-4.

Sulfasalazine is used as a therapy for various autoimmune conditions, including psoriasis; its effectiveness is presumed to be the result of its immunomodulatory effects. We have treated patients with severe alopecia areata with sulfasalazine as part of our dermatology practice and have noticed cosmetically acceptable regrowth in 23% of patients in whom a response could be determined. In view of its good safety profile, sulfasalazine may be considered for systemic treatment of severe alopecia areata

The Finasteride Male Pattern Hair Loss Study Group. Long-term (5-year) multinational experience with finasteride 1 mg in the treatment of men with androgenetic alopecia.

These statements have not been evaluated by the FDA. These products are not intended to diagnose, treat, cure or prevent any disease. The information provided on this site is for informational purposes only and is not intended as a substitute for advice from your physician or other health care professional or any information contained on or in any product label or packaging. You should not use the information on this site for diagnosis or treatment of any health problem or for prescription of any medication or other treatment. You should consult with a healthcare professional before starting any diet, exercise or supplementation program, before taking any medication, or if you have or suspect you might have a health problem. You should not stop taking any medication without first consulting your physician.