

The saw palmetto product that has seen the widest clinical and laboratory testing is a European product called Permixon Complex (manufactured by BioMedic). Why should this be listed as a product for treating baldness? For one thing, dihydrotestosterone plays a major role in the development of male-pattern baldness. Dihydrotestosterone is made from testosterone via the action of an enzyme called 5-alpha reductase. There are two forms of this enzyme, one is found in the prostate gland and the other in skin, including the scalp.

Permixon is reported to be active against both forms of this enzyme. Permixon is a standardized preparation that has been well studied in the laboratory. In fact, most of the recent clinical studies on saw palmetto have been done using Permixon and I think its value against BPH is now well documented. The biochemical basis for the activity of Permixon against benign enlargement of the prostate almost certainly includes inhibition of dihydrotestosterone formation within the prostate gland. Interestingly, Permixon inhibits formation of dihydrotestosterone in the prostate gland but not in many other tissues, and it does not alter blood levels of this hormone. However, this is not the whole story; Proscar is very effective in reducing prostatic dihydrotestosterone levels but is relatively ineffective in relieving the symptoms of BPH. The action of testosterone and dihydrotestosterone on the prostate gland is markedly stimulated by the hormone prolactin. Permixon blocks the response of prostate cells to prolactin. Permixon has been reported to inhibit the enzyme 5-lipoxygenase. The products of this enzyme play a very important role in prostate inflammation and edema formation. Dr. Jagat Ghosh, of my laboratory, has shown that the products of this enzyme promote the survival and growth of prostate cancer cells. The increased size of the gland in BPH can arise from an increase in the number of cells lining the prostate ducts, as well as an increase in the number of stromal cells in the space between the ducts. With this background, it is interesting to note that Permixon has been shown to cause the death of both the stromal cells and the cells lining the prostate ducts. This observation has been followed by a study showing that Permixon was able to slow the growth of prostate cancer cells and, at high enough concentrations, even kill these cancer cells. I can find no clinical trial testing Permixon in the treatment of prostate cancer, so it is difficult to know whether this observation is clinically relevant.

What do I recommend? This is a tough question. Consumer Labs doesn't list Permixon, but this could be because it was not tested or that it was tested and the retail version failed. At the moment, I am inclined to use Permixon, because of the published clinical and laboratory data. The effective dose appears to be two 160 mg capsules a day.

Charles E. Myers Jr. M.D.