Genetic variation impacts pharmacokinetics of exemestane

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(HealthDay)—The *OATP1B1* c.521>C single nucleotide polymorphism

(SNP) influences exemestane pharmacokinetics in healthy postmenopausal women, according to a study published online July 29 in the *Journal of Clinical Pharmacy and Therapeutics*.

B.J. Gregory, Pharm.D., from the Harding University College of Pharmacy in Searcy, Ark., and colleagues conducted a retrospective pharmacogenetic study to examine the impact of the *OATP1B1* c.521T>C SNP (rs4149056) on the pharmacokinetics of exemestane in healthy volunteers. Exemestane was administered orally to 14 healthy postmenopausal women; they were all sampled for pharmacokinetic analyses and genotyped retrospectively.

The researchers found that five of the subjects were carriers of the minor C allele (*OATP1B1* c.521TC+ CC) and nine were carriers of *OATP1B1* c.521TT genotype. Over eight-hours post-dosing, pharmacokinetics were analyzed. The *OATP1B1* genotype groups had statistically significant differences in the plasma exemestane area under the curve (AUC_{0-8}) (P = 0.04). Statistically significant differences were also seen in the plasma AUC_{0-8} of 17-hydroexemestane between the *OATP1B1* genotype groups (P = 0.04).

"Our data suggest that the *OATP1B1* c.521T>C SNP may influence exemestane pharmacokinetics in humans," the authors write.

More information: Abstract
Full Text (subscription or payment may be required)

exemestane.html