28AB-ISMS03 **Tissue Distribution of Teneligliptin in Rats and Comparisons with Data Reported for Other Dipeptidyl Peptidase-4 Inhibitors**

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We investigated the tissue distribution of teneligliptin, a dipeptidyl peptidase (DPP)-4 inhibitor, in rats, and compared it with tissue distributions previously reported for other DPP-4 inhibitors. Following the oral administration of [$^{14}$C]teneligliptin to rats, it was predominantly distributed to the kidney and liver. Of note, the elimination of [$^{14}$C]teneligliptin from tissues with high DPP-4 activity (kidney, liver, and lung) was slower in wild-type rats than in DPP-4-deficient rats, especially in the kidney. The marked difference between the two strains suggests that the high binding affinity of teneligliptin for DPP-4 is involved in tissue distribution. The currently marketed DPP-4 inhibitors are highly distributed to the liver, kidney, and lung, but the extent of tissue distribution varies greatly among the drugs. The differences in the tissue distributions of DPP-4 inhibitors might be related to differences in their pleiotropic effects.