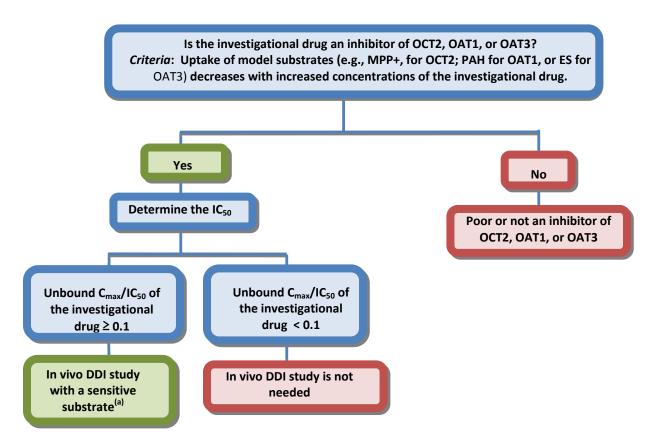
Figure 11. Decision tree to determine whether an investigational drug is an inhibitor of OCT2, OAT1, or OAT3 and when an in vivo clinical study is needed — (Modified From Figures in Giacomini KM, *et al*, Nat. Rev Drug Discov. 9: 215-236, 2010)



MPP<sup>+</sup>, 1-methyl-4-phenylpyridinium; PAH, *para*-aminohippuric acid; ES, estrone-3-sulfate.

For investigational drugs that are OAT1 or OAT3 inhibitors, multiple OAT1 or OAT3 substrates could be used in clinical DDI studies, including zidovudine, acyclovir, ciprofloxacin, tenofovir, or methotrexate.

<sup>&</sup>lt;sup>(a)</sup> For the investigational drug that is an OCT2 inhibitor, metformin may be used as the substrate for the clinical drug interaction study.