As stated above, in the intestine, inhibition of the efflux transport-er P-gp with no effect on the enzyme.3 will decrease metabolism.If this process of diffusion and active transport occurred repeatedly, the circulation of the drug from the lumen to the intracellular com-partment would potentially prolong the intracellular residence time of the drug, decrease the rate of absorption, and result in increased drug metabolism by CYP3A4 relative to the parent drug crossing the intestine (Fig.Drugs absorbed into the .intestinal epithelium can interact with P-gp and be actively extruded back into the intestinal lumen. 2).3