Systemic blood clearance of high extraction drugs is limited by organ perfusion (blood flow)

There are many drugs that are extensively metabolized by the liver by drug metabolizing enzymes (DME). In many cases a single DME is responsible for the metabolic clearance of a drug. For many drugs the intrinsic metabolic clearance by the liver far exceeds the liver blood flow of an animal species. In such cases the systemic clearance of the drug from blood is limited by the organ blood flow (liver blood flow for hepatically cleared drugs).

