

Periportal zone (zone 1)		Perivenous zone (zone 3)	
Hepatocytes	smaller	Hepatocytes	larger
Mitochondria	larger	Mitochondria	smaller
Golgi membrane	↑	Golgi membrane	↓
Golgi glycogen	↑	Golgi glycogen	↓
Smooth ER	↓	Smooth ER	↑
Lysosomes	↓	Lysosomes	↑
Fenestrae	↓	Fenestrae	↑
Kupffer cells	↑ larger	Kupffer cells	↓ smaller
Ito cells	↑	Ito cells	↓
PIT cells	↑	PIT cells	↓
<ul style="list-style-type: none"> – gluconeogenesis – β-oxidation of fatty acids – urea synthesis from amino acids – glutamine hydrolysis – amino acid degradation – mitochondrial carbonic anhydrase – bile acid-dependent fraction – glycogen synthesis from lactate or amino acids – glycogen degradation – O₂ uptake – cholesterol synthesis – citrate cycle – respiratory chain reactions – pigment deposition 		<ul style="list-style-type: none"> – glycolysis – liponeogenesis – glutamine synthesis – glutamate transport – cytosolic carbonic anhydrase – bile acid-independent fraction – glycogen synthesis from glucose – glycogen degradation to lactate – biotransformation – ketogenesis 	