

Supplemental Data

Methylation of CAR is involved in the Suppression of CYP2C19 in HBV-associated Hepatocellular Carcinoma

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Drug Metabolism and Disposition

Supplemental Table 1. Information of primary hepatocytes

Donor No.	Viability and yield	Plateability and confluence	Characterization result			Donor demographics		
			Enzyme	Assay (rate of formation)	Results (pmol/min/million cells)	Physical	Serology	Medical/social history
TLY	91% post-thaw viability by trypan blue exclusion 7.35 million viable cells	0.336 OD MTT value and 99% confluent monolayer at day 5	CYP2C8	desethylamodiaquine	135	Age: 2 months Gender: Female Race: Caucasian	HBV: - HCV:- HIV: -	No medical history; no ETOH use; no tobacco use.
			CYP2C9	4'-methylhydroxytolbutamide	185			
			CYP2C19	4'-hydroxymephenytoin	13.9			
			CYP1A2	acetaminophen	3.05			
			CYP3A4	6β-hydroxytestosterone	73.9			
FLO	93% post-thaw viability by trypan blue exclusion 7.95 million viable cells	0.304 OD MTT value and 95% confluent monolayer at day 5	CYP2C9	4'-methylhydroxytolbutamide	42.7	Age: 14 months Gender: Male Race: Hispanic	HBV: - HCV:- HIV: -	No medical history; no ETOH use; no tobacco use.
			CYP2C19	4'-hydroxymephenytoin	27.9			
			CYP1A2	acetaminophen	28.9			
			CYP3A4	6β-hydroxytestosterone	41.6			

Supplemental Table 2. Information of liver species

Patient No.	Gender	Age	diagnosis	HBV infection
246139	male	70	Hepatocellular carcinoma	HBsAg+ HBcAb+
246355	male	42	Hepatocellular carcinoma	Chronic Hepatitis B history HBsAg+ HBcAb+
246564	male	74	Hepatocellular carcinoma	HBsAg+ HBcAb+ HBeAb+
247172	male	46	Hepatocellular carcinoma	HBV DNA 20700000 copies/ml HBsAg+ HBcAb+ HBeAb+
234747	female	44	Hepatocellular carcinoma	HBV DNA 2230 copies/ml HBsAg+ HBcAb+ HBeAb+
247942	male	45	Hepatocellular carcinoma	HBV DNA 3980 copies/ml HBsAg+ HBcAb+ HBeAb+
239307	female	64	Hepatocellular carcinoma	HBV DNA 160000 copies/ml
241641	female	32	Hepatocellular carcinoma	Chronic Hepatitis B history HBsAg+ HBcAb+
249299	female	50	Hepatocellular carcinoma	HBsAg+ HBcAb+ HBeAb+
245853	male	57	Hepatocellular carcinoma	HBV DNA<1000 copies/ml HBsAg+ HBcAb+ HBeAb+
255732	male	49	Hepatocellular carcinoma	HBV DNA<1000 copies/ml HBsAg+ HBcAb+ HBeAb+
247255	male	55	Hepatocellular carcinoma	Chronic Hepatitis B history HBsAg+ HBcAb+
249868	male	57	Hepatocellular carcinoma	HBsAg+ HBcAb+ HBeAb+
247845	male	55	Mixed hepatocellular carcinoma and cholangiocarcinoma	HBsAg+ HBcAb+ HBeAb+
206208	male	37	Hepatocellular carcinoma	HBV DNA 14100 copies/ml HBsAg+ HBcAb+
257049	male	45	Mixed hepatocellular carcinoma and cholangiocarcinoma	HBV DNA 72300 copies/ml
251637	female	45	Hepatocellular carcinoma	HBV DNA 12200000 copies/ml
247940	female	48	Hepatocellular carcinoma	HBsAg+ HBcAb+ HBeAb+
262535	male	51	Hepatocellular carcinoma	Chronic Hepatitis B history HBsAg+ HBcAb+
264373	female	67	Hepatocellular carcinoma	HBV DNA<1000 copies/ml HBsAg+ HBcAb+ HBeAb+
263725	female	71	Hepatocellular carcinoma	Chronic Hepatitis B history HBsAg+ HBcAb+
267244	male	55	Hepatocellular carcinoma	HBsAg+ HBcAb+ HBeAb+
261029	male	51	Hepatocellular carcinoma	HBsAg+ HBcAb+ HBeAb+
263725	female	71	Hepatocellular carcinoma	HBV DNA 7410000 copies/ml HBsAg+ HBcAb+ HBeAb+
258231	male	57	Hepatocellular carcinoma	HBsAg+ HBcAb+ HBeAb+
261610	female	50	Hepatocellular carcinoma	HBsAg+ HBcAb+ HBeAb+
276873	male	46	Hepatocellular carcinoma	HBV DNA<1000 copies/ml HBsAg+ HBcAb+ HBeAb+
281392	male	42	Hepatocellular carcinoma	HBV DNA 38100 copies/ml HBsAg+ HBcAb+ HBeAb+
281621	female	57	Hepatocellular carcinoma	Chronic Hepatitis B history HBsAg+ HBcAb+
281691	male	57	Hepatocellular carcinoma	HBsAg+ HBcAb+ HBeAb+