

Supplementary table 1: List of all CO lines derived since September 2016

	Donor ID	GB/BD	Age	M/F	DBD/DCD	Blood group	Successful line
1	241	BD	76	M	DCD	AB+	Y
2	241	GB	76	M	DCD	AB+	Y
3	241	IHD (tissue)	76	M	DCD	AB+	Y
4	241	IHD (EpCAM)	76	M	DCD	AB+	N
5	242	BD	50	M	DCD	O+	Y
6	242	IHD	50	M	DCD	O+	Y
7	243	BD	37	M	DCD	O-	Y
8	243	GB	37	M	DCD	O-	Y
9	247	BD	27	F	DBD	O-	N
10	256	BD	56	M	DBD	B+	Y
11	261	BD	77	M	DCD	A+	Y
12	261	GB	77	M	DCD	A+	Y
13	261	IHD	77	M	DCD	A+	Y
14	263	GB	51	F	DCD	A+	Y
15	274	GB	68	M	DCD	A	Y
16	274	IHD	68	M	DCD	A	Y
17	275	GB	63	M	DCD	O+	Y
18	275	BD	63	M	DCD	O+	Y
19	275	IHD (EpCAM)	63	M	DCD	O+	Y
20	283	GB	73	M	DCD	AB+	Y
21	283	BD	73	M	DCD	AB+	Y
22	283	IHD	73	M	DCD	AB+	Y
23	286	BD	54	M	DCD	AB+	Y
24	286	GB	54	M	DCD	AB+	Y
25	292	BD	57	M	DBD	A+	Y
26	292	GB	57	M	DBD	A+	Y
27	292	IHD (EpCAM)	57	M	DBD	A+	Y
28	295	GB	79	F	DBD	O+	Y
29	299	BD	46	M	DBD	O+	Y
30	302	IHD (tissue)	44	M	DCD	B+	Y
31	302	BD	44	M	DCD	B+	Y
32	310	BD	51	M	DBD	O+	Y
33	312	BD	77	F	DCD	O+	Y
34	313	BD	35	F	DCD	O-	Y
35	325	BD	44	F	DCD	O+	Y
36	325	GB	44	F	DCD	O+	Y
37	328	GB	52	F	DCD	B+	Y
38	337	GB	25	F	DCD	A+	Y
39	339	GB	73	F	DCD	A+	Y
40	343	GB	70	F	DBD	A+	Y
41	351	BD	43	F	DBD	A+	Y
42	356	GB	41	F	DCD	O+	Y
43	356	BD (not flushed)	41	F	DCD	O+	N
44	362	GB	60	M	DCD	A+	Y
45	367	GB	70	M	DCD	O+	Y
46	368	GB	58	M	DCD	AB+	Y
47	368	BD (not flushed)	58	M	DCD	AB+	N
48	376	GB	55	M	DCD	A+	Y
49	378	BD	49	M	DCD	O+	Y
50	382	BD (not flushed)	60	F	DBD	O+	Y
51	385	BD	31	M	DBD	O+	Y
52	386	BD (not flushed)	75	F	DCD	O+	N
53	386	GB	75	F	DCD	O+	Y
54	386	IHD (tissue)	75	F	DCD	O+	Y
55	390	BD (not flushed)	68	F	DCD	O+	Y
56	390	GB	68	F	DCD	O+	Y
57	390	IHD	68	F	DCD	O+	Y
58	PBC-1a	IHD (biopsy)	23	F	N/A	AB+	Y
59	PBC-1b	IHD (biopsy)	23	F	N/A	AB+	Y
60	PSC-1C	BD (ERCP)	44	M	N/A	O+	Y
61	PSC-2a	IHD (biopsy)	38	M	N/A	O+	Y
62	PSC-2b	IHD (biopsy)	42	M	N/A	O+	Y
63	PSC-2c	BD (ERCP)	42	M	N/A	O+	Y
64	ERCP-001	BD (ERCP)	29	M	N/A	O+	Y
65	ERCP-002	BD (ERCP)	52	M	N/A	AB+	Y
66	ERCP-003	BD (ERCP)	51	M	N/A	O+	Y
67	ERCP-004	BD (ERCP)	64	M	N/A	O+	Y
68	ERCP-005	BD (ERCP)	35	F	N/A	O+	Y
69	ERCP-006	BD (ERCP)	20	F	N/A	O+	Y
70	ERCP-007	BD (ERCP)	44	M	N/A	A+	Y
71	ERCP-008	BD (ERCP)	50	F	N/A	A+	Y
72	ERCP-009	BD (ERCP)	42	M	N/A	A+	Y
73	ERCP-010	BD (ERCP)	53	F	N/A	O-	Y
74	ERCP-011	BD (ERCP)	61	F	N/A	AB+	Y
75	ERCP-012	BD (ERCP)	73	M	N/A	B+	Y

Supplementary table 1: List of all CO lines derived since September 2016
Table showing key details of all CO lines derived since September 2016: anonymised donor ID number; tissue type (bile duct (BD), gallbladder (GB) or intrahepatic ducts (IHD)); age; sex; donor type (if applicable) (donation after brain death (DBD) or donation after cardiac death (DCD)); blood group; and the success of the line derivation.

Supplementary table 2: List of antibodies used for flow cytometry and immunofluorescence

Antibody	Company	Clone	Product code	concentration
Mouse anti-human cytokeratin 19	Abcam	A53-B/A2	ab7754	1:100
Rabbit anti-human cytokeratin 7	Abcam	EPR1619Y	ab68459	1:100
Goat anti-human Sox9	R&D Systems	polyclonal	AF3075	1:100
Rabbit anti-human albumin	Abcam	EPSISR1	Ab137885	1:100
Mouse anti-human GGT-1	Abcam		Ab55138	1:100
Donkey anti-mouse Alexa Fluor 488	Life Technologies	polyclonal	A2102	1:1000
Donkey anti-rabbit Alexa Fluor 568	Life Technologies	polyclonal	A10042	1:1000
Donkey anti-goat Alexa Fluor 488	Life Technologies	polyclonal	A21447	1:1000