

**Table S1.** Technical characteristics of the antibodies used for immunohistochemistry.

Antibody	Clone	Manufacturer	Dilution
NTCP	<i>Rabbit Polyclonal</i>	AbCam [330 Cambridge Science Park Cambridge CB4 OFL UK]	1:250
BSEP	<i>Rabbit Polyclonal</i>	AbCam [330 Cambridge Science Park Cambridge CB4 OFL UK]	1:200
P-Gly	<i>Rabbit Polyclonal</i>	AbCam [330 Cambridge Science Park Cambridge CB4 OFL UK]	1:100
ASBT	<i>Rabbit Polyclonal</i>	Bioss [Schloss-Rahe-Str. 15 52072 Aachen Germany]	1:100
MRP-4	<i>Rabbit Polyclonal</i>	AbCam [330 Cambridge Science Park Cambridge CB4 OFL UK]	1:200
Osteopontin	<i>Rabbit Polyclonal</i>	Antibodies online [Dunwoody Park, Suite 145 - Atlanta, GA 30338 - US]	1:100
Caspase-3	<i>Rabbit Polyclonal</i>	AbCam [330 Cambridge Science Park Cambridge CB4 OFL UK]	1:50
TLR-4	<i>Rabbit Polyclonal</i>	Lifespan Bioscience, UK	1:100

NTCP, solute carrier family 10 member; BSEP, bile salt export pump; P-Gly, P-Glycoprotein; ASBT, solute carrier family 10 member 2; MRP4, multidrug resistance protein 4; TLR-4, Toll Like Receptor 4.

**Table S2.** Liver histology score according to the scoring systems developed by Ishak et al. [1].

Modified HAI grading: Necroinflammatory scores							
Periportal or periseptal interface hepatitis (piecemeal necrosis)	Score	Confluent necrosis	Score	Focal (spotty) lytic necrosis, apoptosis and focal inflammation	Score	Portal inflammation	Score
Absent	0	Absent	0	Absent	0	None	0
Mild	1	Focal confluent necrosis	1	One focus per 10x objective	1	Mild,	1
Mild/moderate	2	Zone 3 necrosis in some areas	2	Two to four foci per 10x objective	2	Moderate,	2
Moderate	3	Zone 3 necrosis in most areas	3	Five to ten foci per 10x objective	3	Moderate/marked	3
Severe	4	Zone 3 necrosis / occasional portal-central bridging	4	More than ten foci per 10x objective	4	Marked	4
		Zone 3 necrosis + multiple bridging	5				
		Panacinar or multiacinar necrosis	6				

\*Does not include diffuse sinusoidal infiltration by inflammatory cells

**Table S3.** Staging, architectural changes and fibrosis according to the scoring systems developed by Ishak et al. [1] and to METAVIR (Meta-analysis of Histological Data in Viral Hepatitis) [2].

Fibrosis score following two scoring systems				
Ishak's scheme [1]		METAVIR system [2]		Comparison
Change	Score	Description	Score	
No fibrosis	0	No fibrosis	0	0
Fibrous expansion of some portal areas, with or without short fibrous septa	1	Stellate enlargement of portal tract but without septa formation	1	1 vs 1
Fibrous expansion of most portal areas, with or without short fibrous septa	2	Stellate enlargement of portal tract but without septa formation	1	2 vs 1
Fibrous expansion of most portal areas, with occasional portal to portal (P-P) bridging	3	Enlargement of portal tract with rare septa formation	2	3 vs 2
Fibrous expansion of portal areas with marked bridging [portal to portal (P-P) as well as portal to central (P-C)]	4	Numerous septa formation	3	4 vs 3
Marked bridging (P-P and/or P-C) with occasional modules (incomplete cirrhosis)	5	Numerous septa formation	3	5 vs 3
Cirrhosis, probable or definite	6	Cirrhosis	4	6 vs 4

**Table S4.** Serum creatinine (mg/dL) of rats during cirrhosis induction at week 1 (T1), week 2 (T2), week 4 (T4), week 8 (T8) and week 12 (T12). Creatinine of control rats was steadily normal (< 0.17 mg/dL).

ID	T1	T2	T4	T8	T12
1	< 0.17	< 0.17	0.18	0.19	0.44
2	< 0.17	< 0.17	0.24	< 0.17	0.35
3	0.18	< 0.17	0.26	< 0.17	0.19
4	< 0.17	< 0.17	0.26	< 0.17	0.47
5	< 0.17	< 0.17	0.28	< 0.17	0.30
6	< 0.17	< 0.17	< 0.17	< 0.17	0.29
7	< 0.17	< 0.17	0.23	0.26	0.22
8	< 0.17	< 0.17	0.21	< 0.17	0.22
9	< 0.17	< 0.17	< 0.17	< 0.17	0.38
10	< 0.17	< 0.17	< 0.17	< 0.17	0.53
11	< 0.17	< 0.17	n.d.	< 0.17	0.36
12	< 0.17	< 0.17	< 0.17	< 0.17	0.24
13	< 0.17	< 0.17	< 0.17	< 0.17	0.57
14	< 0.17	< 0.17	< 0.17	< 0.17	0.56
15	< 0.17	< 0.17	< 0.17	0.25	0.40
16	< 0.17	< 0.17	< 0.17	0.25	0.48
17	< 0.17	0.22	< 0.17	0.18	0.35
18	< 0.17	< 0.17	< 0.17	0.17	0.44
19	< 0.17	< 0.17	< 0.17	0.20	0.23
20	< 0.17	< 0.17	< 0.17	0.19	0.42
21	< 0.17	0.19	< 0.17	0.26	0.23

**Table S5.** Serum total bilirubin (mg/dL) of rats during cirrhosis induction at week 1 (T1), week 2 (T2), week 4 (T4), week 8 (T8) and week 12 (T12). Total bilirubin of control rats was steadily normal (< 0.15 mg/dL).

ID	T1	T2	T4	T8	T12
1	< 0.15	< 0.15	< 0.15	< 0.15	2.42
2	< 0.15	< 0.15	< 0.15	< 0.15	3.49
3	< 0.15	< 0.15	< 0.15	0.16	2.74
4	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
5	< 0.15	< 0.15	< 0.15	< 0.15	3.76
6	< 0.15	< 0.15	< 0.15	< 0.15	1.88
7	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
8	< 0.15	< 0.15	< 0.15	< 0.15	0.59
9	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
10	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
11	< 0.15	< 0.15	n.d.	< 0.15	< 0.15
12	< 0.15	< 0.15	< 0.15	< 0.15	0.63
13	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
14	< 0.15	< 0.15	< 0.15	< 0.15	1.26
15	< 0.15	< 0.15	< 0.15	< 0.15	2.11
16	< 0.15	< 0.15	< 0.15	< 0.15	1.6
17	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
18	< 0.15	< 0.15	< 0.15	< 0.15	0.4
19	< 0.15	< 0.15	< 0.15	< 0.15	2.23
20	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
21	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15

## References

- Ishak K, Baptista A, Bianchi L, Callea F, De Groote J, Gudat F, Denk H, Desmet V, Korb G, MacSween RN, et al. Histological grading and staging of chronic hepatitis. *J Hepatol.* 1995 Jun;22(6):696-9. doi: 10.1016/0168-8278(95)80226-6.
- Bedossa P, Poynard T. An algorithm for the grading of activity in chronic hepatitis C. The METAVIR Cooperative Study Group. *Hepatology.* 1996 Aug;24(2):289-93. doi: 10.1002/hep.510240201.