Bile acid homeostasis controls CAR signaling pathways in mouse testis through FXRalpha.

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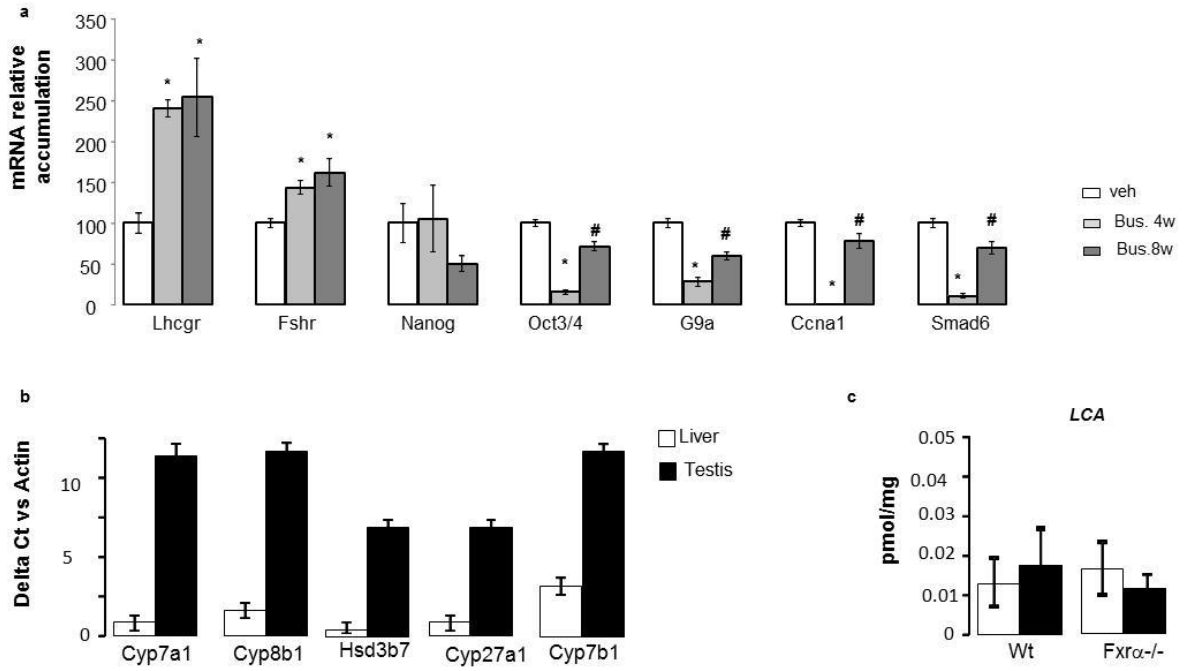

Fig. S1. a/ Testicular mRNA accumulation of *Lcgr, Fshr, Nanog, Oct3/4, G9a, Ccna1 and Smad6*, normalized to *β-actin* mRNA levels in whole testes of C57BL/6J mice treated with busulfan (20 mg/kg, one injection IP) at T0, 4, or 8 weeks (n = 8 per group). *Denotes significant difference from the T0 time point; #denotes significant difference from the 4-week time point ($P < 0.05$). **b/** Analysis of the relative liver and testicular levels of *Cyp7a1*, *Cyp8b1*, *Hsd3b7*, *Cyp27a1* and *Cyp7b1*. The relative levels are represented as delta-Ct versus β-actin. **c/** Testicular concentration of LCA in testis of Wt and Fxrα-/- males fed a control or BA-diet for 2 weeks (n = 5 per group).

In all panels, data are expressed as means ± standard error of the mean. Statistical analysis: *$P < 0.05$.

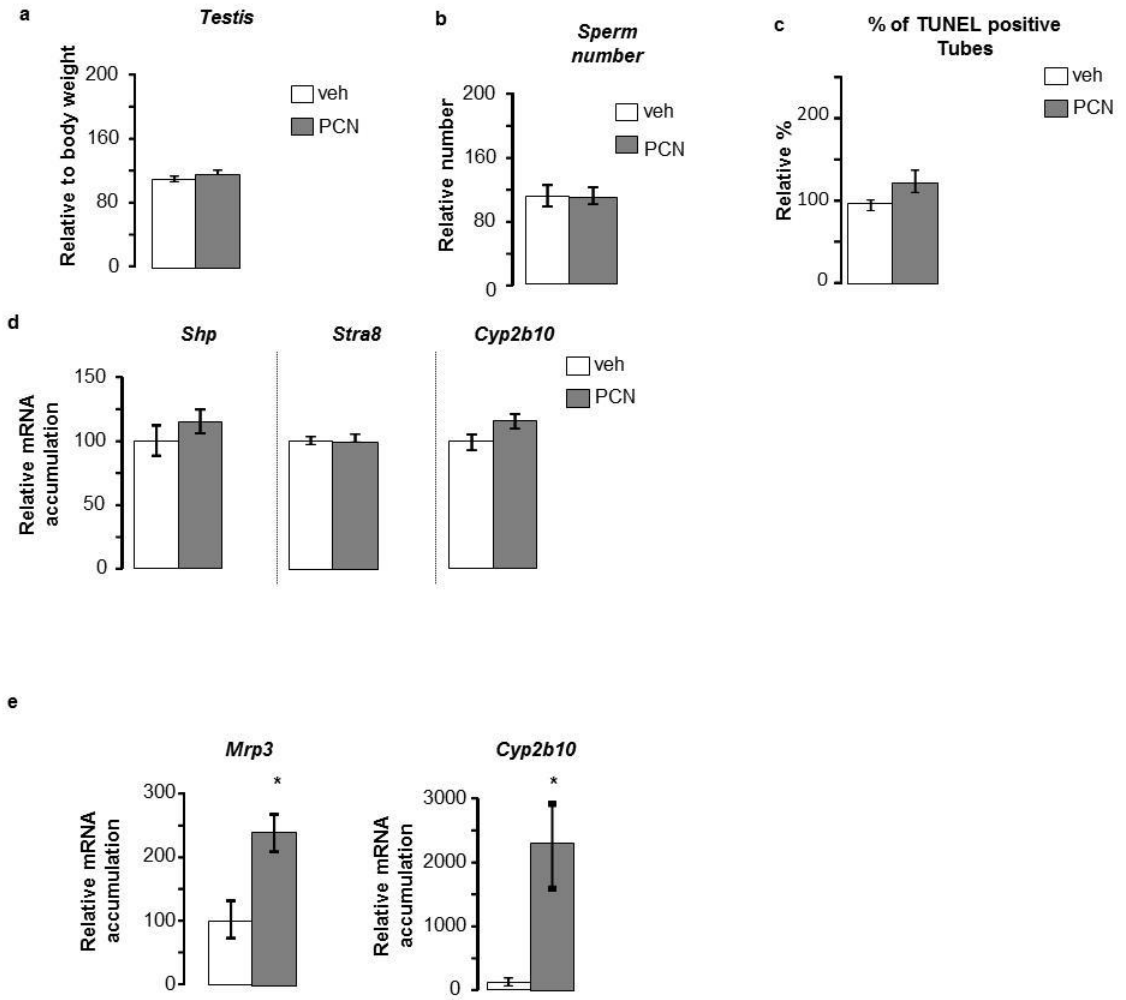

Fig. S2. a/ Testis weight normalized to body weight in wild-type C57Bl6 males treated 2 weeks with PCN (50mg/kg/day) or vehicle (DMSO) (n=6 to 7 per group). **b/** Spermatozoa count in the head of the epididymis of C57Bl6 males treated 2 weeks with PCN (50mg/kg/day) or vehicle (DMSO) (n=6 to 7 per group). **c/** Quantification of TUNEL analyses in C57Bl6 males treated 2 weeks with PCN (50mg/kg/day) or vehicle (DMSO), the number of tubules with TUNEL-positive cells is indicated as the number of positive tubes per 100 seminiferous tubules (n = 6-7). **d/** Testicular mRNA accumulation of *Shp, Stra8 and Cyp2b10* normalized to *β-actin* mRNA levels in C57Bl6 males treated 2 weeks with PCN (50mg/kg/day) or vehicle (DMSO). Vehicle-treated mice were arbitrarily fixed at 100% (n=6 to 7 per group). **e/** Liver mRNA accumulation of *Mrp3 and Cyp2b10* normalized to *β-actin* mRNA levels in C57Bl6 males treated 2 weeks with PCN (50mg/kg/day) or vehicle (DMSO). Vehicle-treated mice were arbitrarily fixed at 100% (n=6 to 7 per group).

In all panels, data are expressed as means ± standard error of the mean. Statistical analysis: $*P < 0.05$.

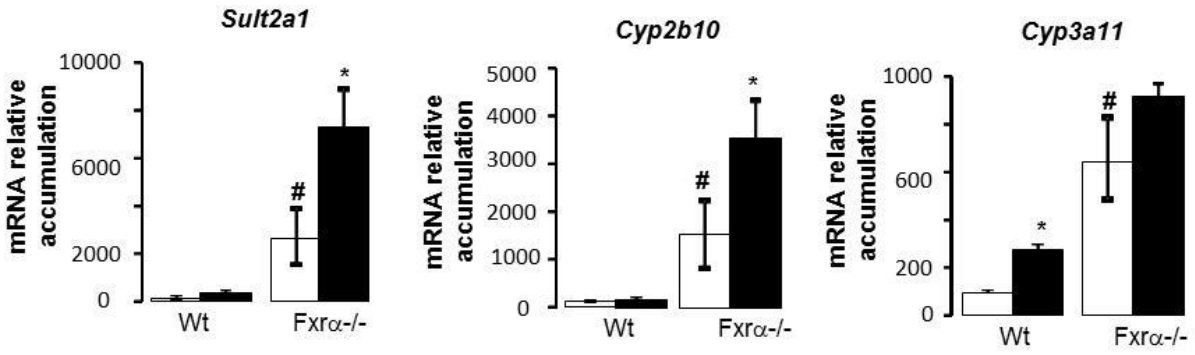

Fig. S3. Liver mRNA expression of *Sult2a1*, *Cyp2b10* and *Cyp3a11* normalized to *β-actin* mRNA levels in wild-type and Fxrα-/- adult mice fed a control or BA-diet (n = 6 -10 per group).

Data are expressed as means ± standard error of the mean. Statistical analysis: $*P < 0.05$.

Table S1

PLZF	**FW**	ACACAGACAGACCCATACTGG
	REV	TCACCTGTATGTGAGCGAAGG
HSD3B7	**FW**	ACCTGCACCTGAGTTCTTGG
	REV	CAATCACATTCTGTGTGCCC
AACS	**FW**	GTGGTGCTGATCCCCTATGT
	REV	CTTGCCAGGAAATCATCCAG
TPN1	**FW**	ACCAGCCGCAAGCTAAAGACTCAT
	REV	TCAGACTGGCATTTACCCACTCT
TSX	**FW**	ATGATGACACCGACGATCAGG
	REV	TCGGTACTGCTGACTCTGTCC