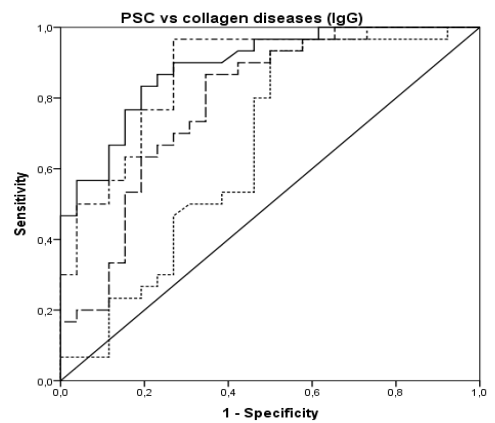
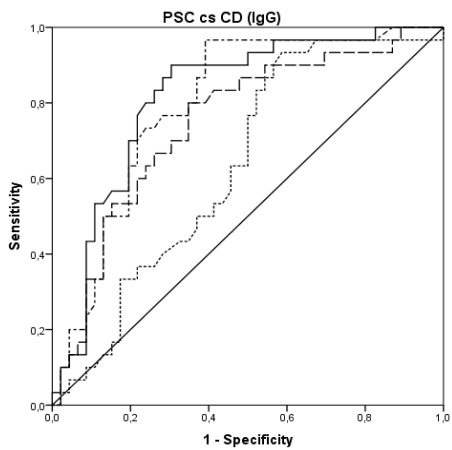
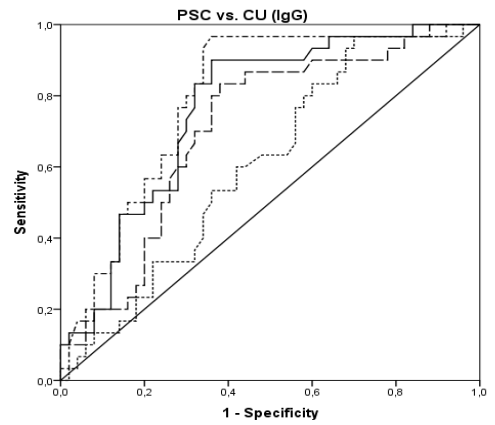
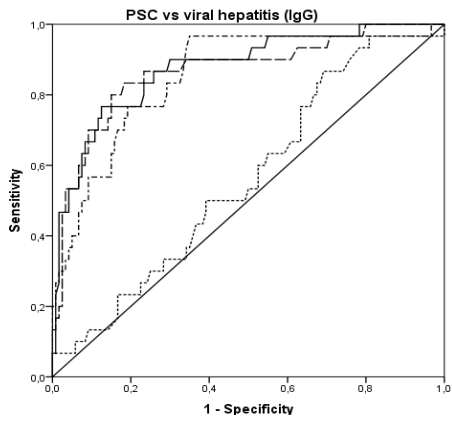
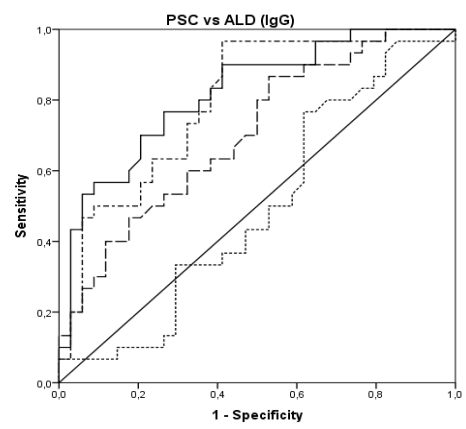
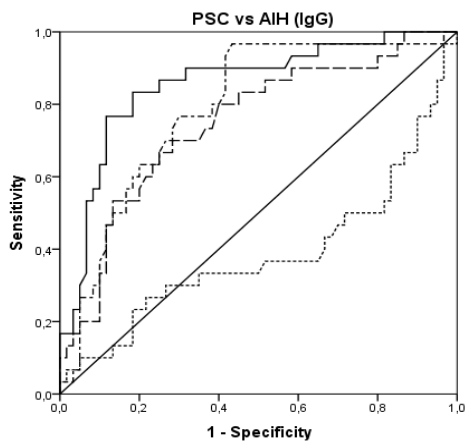
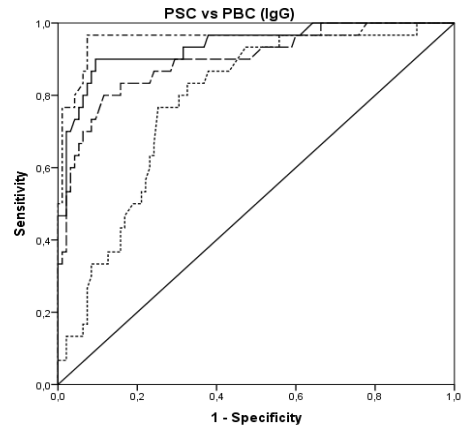
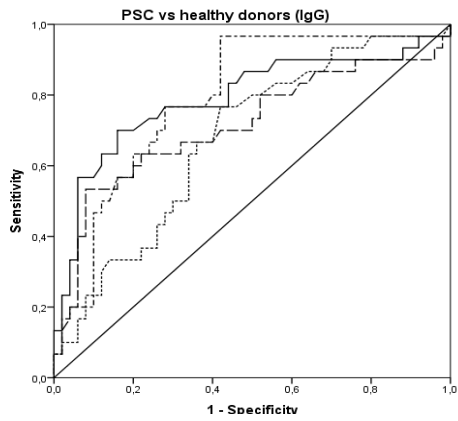


Additional file 4



Receiver operating curve (ROC) analysis for IgG-antibodies to the four SO-proteins comparing sera from PSC patients with those from healthy donors, PBC, AIH, alcoholic liver disease (ALD), viral hepatitis, ulcerative colitis (CU), Crohn disease (CD), and collagen disorders (B) — SO-fl; — · SO-I - - SO-II SO-III

Significances for anti-SO antibodies of the **IgG-type** comparing PSC-patients and patients with other disorders by ROC curves calculating area under the curves (AUC)

PSC vs.	SO-fl		SO-I		SO-II		SO-III	
	AUC	p	AUC	p	AUC	p	AUC	p
Healthy donors	0,79	0,000	0,79	0,000	0,71	0,001	0,68	0,009
PBC	0,94	0,000	0,96	0,000	0,90	0,000	0,78	0,000
AIH	0,86	0,000	0,79	0,000	0,75	0,000	0,39	0,077
ALD	0,82	0,000	0,80	0,000	0,70	0,005	0,49	0,936
Viral hepatitis	0,88	0,000	0,85	0,000	0,87	0,000	0,56	0,302
Ulcerative colitis (CU)	0,76	0,000	0,80	0,000	0,71	0,002	0,61	0,111
Crohn disease (CD)	0,816	0,000	0,80	0,000	0,75	0,000	0,63	0,049
Collagen disorders	0,89	0,000	0,87	0,000	0,79	0,000	0,66	0,041
PSC treated	0,70	0,012	0,69	0,021	0,62	0,141	0,61	0,181

Significances for anti-SO antibodies of the **IgM-type** comparing PSC-patients and patients with other disorders by ROC curves (not shown as a figure) calculating area under the curves (AUC)

PSC vs.	SO fl		SO I		SO II		SO III	
	AUC	p	AUC	p	AUC	p	AUC	p
Healthy donors	0,64	0,045	0,55	0,484	0,67	0,011	0,75	0,000
PBC	0,95	0,000	0,87	0,000	0,97	0,000	0,97	0,000
AIH	0,82	0,000	0,76	0,000	0,83	0,000	0,90	0,000
ALD	0,79	0,000	0,71	0,004	0,80	0,000	0,85	0,000
Viral hepatitis	0,81	0,000	0,71	0,000	0,80	0,000	0,83	0,000
Ulcerative colitis	0,75	0,000	0,66	0,015	0,80	0,000	0,813	0,000
Crohn disease	0,72	0,001	0,65	0,034	0,68	0,009	0,801	0,000
Collagen disorders	0,95	0,000	0,85	0,000	0,93	0,000	0,95	0,041
PSC treated	0,75	0,002	0,72	0,007	0,75	0,002	0,75	0,002

AUC = area under the curve