

**Table III.** Cq values of clinical semen samples obtained by reverse transcription-quantitative PCR.

Groups	Sample No.	GAPDH	HSPA4	HIF1A	GSK3B	SMAD2	SOX9
Nor	1	27.919016	38.880604	35.567318	38.5355	34.22936	29.859282
		28.169567	38.340604	35.835221	38.5355	34.01578	29.40776
Nor	2	30.62148	37.056744	36.846093	36.76118	33.552069	31.385784
		30.417027	37.396744	37.095348	36.56453	33.973303	31.974491
Nor	3	30.661694	36.374805		37.195004	37.769233	33.220425
		30.77612	36.86967	35.921944	37.58597	37.43798358	32.984133
Nor	4	27.424313	37.273935	35.59616	34.983734	33.3462	29.337547
		27.512056	37.253935	35.917026	35.051	33.346207	29.718782
Nor	5	26.680145	37.215785	35.2315654	35.448845	32.458916	30.594603
		26.787712	37.473935	35.679672	36.35176	32.87329	30.155828
Nor	6	27.975815	36.17825	37.538791	36.645977	33.81562	30.1135
		27.911049	36.02825	37.4653104	36.80706	33.425889	30.271759
Nor	7	28.375849	36.034714	35.634028	36.7881	33.533535	30.231571
		28.465452	36.342745	36.031418	36.649513	33.12054	30.314085
Nor	8	29.098135	37.447021	36.782296	35.3344832	35.76288046	31.239223
		28.973934	37.340395	36.469796	34.9024832	35.888447	30.45478
Asth	1	28.743036	39.884632	37.4685	36.41728	38.49661	28.890715
		28.93921	39.998352	37.312795	38.57932	38.3315627	28.293486
Asth	2	27.838331	38.779352	39.606491	37.458828	39.085455	28.448984
		27.845724	38.883421	39.72495	38.747837	39.560452	28.829514
Asth	3	24.422035	37.569322	39.225773	36.382847	38.149319	26.151073
		24.499603	37.735203	39.225773	35.309883	38.55961	26.395489
Asth	4	29.142149	38.952754	39.61284	38.021454	36.379135	30.39906
		28.943153	38.85416	39.834084	38.1995	34.849583	28.727766
Asth	5	27.94787	37.899647	38.533083	38.99103	39.62506798	29.623562

		28.209442	37.829098	38.818752	38.62844	39.92787712	29.11257
Asth	6	28.873802	38.946281	38.45744	38.458366	39.5448864	30.030022
		29.022425	38.945338	38.629042	38.103214	39.72678452	30.146725
Asth	7	28.8695	39.579432	39.656246	37.714550	39.512069	30.4227
		28.55907	39.984625	39.288575	37.9439	39.933303	30.765219
Asth	8	27.838331	38.942684	39.71065104	38.505795	40.729233	28.119835
		27.445724	38.642684	38.62529583	37.02889	40.397983	28.786242

Nor: normal group; Asth: asthenozoospermia group.