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Supplementary Material

Identification of Epigenetic Biomarkers of Adolescent Idiopathic Scoliosis Progression: A Workflow to Assess Local Gene Expression

Simona Neri [1,*], Elisa Assirelli [1], Marco Manzetti [2,3], Giovanni Viroli [2,3], Marco Ialuna [2], Matteo Traversari [2], Jacopo Ciaffi [1], Francesco Ursini [1,3], Cesare Faldini [2,3] and Alberto Ruffilli [2,3]

[1] Medicine and Rheumatology Unit, IRCCS Istituto Ortopedico Rizzoli, 40136 Bologna, Italy; elisa.assirelli@ior.it (E.A.); jacopo.ciaffi@ior.it (J.C.); francesco.ursini@ior.it (F.U.)
[2] 1st Orthopaedic and Traumatologic Clinic, IRCCS Istituto Ortopedico Rizzoli, 40136 Bologna, Italy; marco.manzetti@ior.it (M.M.); giovanni.viroli@ior.it (G.V.); marco.ialuna@ior.it (M.I.); matteo.traversari@ior.it (M.T.); cesare.faldini@ior.it (C.F.); alberto.ruffilli@ior.it (A.R.)
[3] Department of Biomedical and Neuromotor Sciences (DIBINEM), Alma Mater Studiorum University of Bologna, 40126 Bologna, Italy
* Correspondence: simona.neri@ior.it

Table S1. Array based gene expression analysis. Expression of 32 putative housekeeping genes was investigated in bone, muscle, and ligament tissues from 3 AIS and 1 control donors. Cycle threshold (Ct) values are indicated. B AIS= adolescent idiopathic scoliosis spinal facet; M AIS= adolescent idiopathic scoliosis paravertebral muscle; L AIS= adolescent idiopathic scoliosis ligament; B CTR= control spinal facet; M CTR= control paravertebral muscle; L CTR= control ligament.

	B AIS1	B AIS2	B AIS3	M AIS1	M AIS2	M AIS3	L AIS1	L AIS2	L AIS3	B CTR	M CTR	L CTR
18S	16,297	22,326	17,39	9,187	18,699	9,277	15,953	10,854	14,923	22,572	9,234	15,060
GAPDH	26,121	33,322	30,375	18,364	28,138	18,960	28,121	23,290	28,097	36,963	21,220	26,866
HPRT1	29,503	35,592	34,695	27,294	32,308	27,291	32,119	27,898	32,296	>40	27,959	31,815
GUSB	28,539	34,450	34,947	28,180	31,217	27,590	>40	>40	>40	>40	>40	>40
ACTB	35,188	>40	>40	24,617	31,653	25,384	29,105	23,609	28,987	>40	26,440	29,264
B2M	24,783	30,856	29,896	21,259	24,137	21,064	24,798	21,477	26,407	34,483	23,325	26,121
HMBS	28,792	34,219	34,891	28,902	34,522	28,737	34,947	32,105	34,030	>40	29,160	33,904
IPO8	30,720	36,022	35,526	27,187	31,470	27,221	31,485	26,970	30,066	>40	26,935	30,133
PGK1	25,870	32,838	32,656	22,384	29,461	23,558	28,323	25,142	28,924	39,542	24,724	28,327
RPLP0	25,840	31,668	27,000	22,152	27,250	22,301	27,640	22,940	27,063	>40	23,117	27,445
TBP	33,936	>40	38,519	29,138	38,233	28,830	33,424	28,980	32,507	>40	29,423	33,057
TFRC	28,201	32,965	35,707	26,129	31,991	25,891	31,975	29,127	33,510	>40	25,457	31,926
UBC	25,884	31,862	32,225	20,639	27,414	21,388	25,971	21,260	24,930	35,464	22,100	26,177
YWHAZ	27,322	34,969	34,780	29,835	32,918	31,073	32,524	30,238	34,581	>40	33,381	33,974
PPIA	24,299	26,932	28,295	24,419	27,730	24,408	27,849	23,745	26,989	28,284	24,953	25,623
POLR2A	29,273	32,851	33,598	27,199	29,952	26,988	30,003	27,560	28,476	38,615	28,144	31,120
ACTN2	30,043	35,487	32,997	26,183	29,939	26,357	29,781	25,852	29,633	>40	26,860	29,198
ATP1A2	31,215	38,747	35,494	24,987	32,906	25,880	28,056	27,311	29,980	>40	30,954	32,417
BAG4	28,937	34,111	34,111	25,931	29,746	25,317	30,106	25,834	29,514	38,131	26,126	30,035

C1orf61	31,809	37,187	36,142	26,651	34,989	29,342	33,966	28,911	34,050	>40	31,175	35,460
CD58	29,434	35,028	34,307	25,116	29,989	25,351	29,149	25,728	28,013	>40	26,429	29,477
CENPA	31,241	37,355	35,414	26,689	31,571	26,867	31,909	28,124	31,714	>40	27,556	31,217
DCT	28,570	35,601	34,503	27,102	32,766	27,340	32,893	27,833	31,024	>40	28,205	31,738
GABRD	29,170	32,848	31,413	27,973	29,840	27,911	30,158	28,116	28,358	34,866	28,544	30,359
JAK3	33,234	37,411	35,488	26,879	31,744	27,181	30,070	26,278	29,925	>40	28,553	31,107
PLA2G2A	27,505	33,210	33,980	25,053	29,004	25,506	28,846	25,524	29,016	>40	27,192	29,955
RXFP3	19,398	22,442	20,440	16,431	21,632	16,186	21,974	19,945	20,581	21,073	17,641	21,505
SFPQ	31,041	37,070	34,982	26,376	32,207	26,763	32,976	28,338	30,531	>40	27,315	31,521
SHH	29,260	35,316	32,850	27,844	32,563	27,990	33,325	28,839	32,831	>40	28,893	31,842
VCAM1	24,922	28,433	27,135	21,219	27,804	21,848	>40	>40	>40	>40	>40	>40
WNT1	28,002	35,534	29,863	24,685	32,589	25,385	29,582	25,912	30,298	>40	25,449	29,334
WNT2	23,228	25,588	25,065	22,981	27,311	22,910	25,699	23,359	26,698	26,053	23,245	25,519