Supplementary table 2 Correlation between clinical parameters and biological markers of IgA activity (IgA in blood, IGHA1, IGHA2 and AID expression in cecum mucosa and blood) in H and IBS-D participants.

	Bowel movements		Stool form		Abdominal pain severity		Abdominal pain frequency		IBS-SSS		HADS-A		HADS-D	
	r_s	p Value	r_s	p Value	r_s	p Value	r_s	p Value	r_s	p Value	r_s	p Value	r_s	p Value
IgA in blood	H(n=29)	IBS-D(n=39)	H(n=29)	IBS-D(n=39)	H(n=30)	IBS-D(n=39)	H(n=30)	IBS-D(n=39)	H(n=30)	IBS-D(n=38)	H(n=29)	IBS-D(n=39)	H(n=29)	IBS-D(n=39)
	0.1250	0.3098	0.2005	0.1012	0.1318	0.2803	0.2266	0.0618	0.1158	0.3469	0.04608	0.7090	0.1129	0.3595
Cecum gene expression	H(n=15)	IBS-D(n=15)	H(n=15)	IBS-D(n=15)	H(n=15)	IBS-D(n=15)	H(n=15)	IBS-D(n=15)	H(n=15)	IBS-D(n=14)	H(n=15)	IBS-D(n=15)	H(n=15)	IBS-D(n=15)
IGHA1	-0.1398	0.4612	-0.1691	0.3716	-0.1198	0.5284	0.03864	0.8393	-0.05046	0.7949	0.06105	0.7486	-0.2064	0.2738
IGHA2	0.1255	0.5087	0.1501	0.4286	0.05653	0.7667	-0.04508	0.8130	0.06985	0.7188	-0.03962	0.8353	0.2666	0.1544
AID	-0.1207	0.5254	-0.04728	0.8040	-0.01852	0.9226	0.1510	0.4258	0.04807	0.8044	0.02442	0.8981	-0.1812	0.3379
Blood gene expression	H(n=26-28)	IBS-D(n=38)	H(n=26-28)	IBS-D(n=38)	H(n=27-29)	IBS-D(n=38)	H(n=27-29)	IBS-D(n=38)	H(n=27-29)	IBS-D(n=37)	H(n=27-29)	IBS-D(n=38)	H(n=27-29)	IBS-D(n=38)
IGHA1	-0.1386	0.2747	-0.1656	0.1909	-0.04186	0.7406	-0.05870	0.6423	-0.02758	0.8287	0.02104	0.8679	-0.1360	0.2799
IGHA2	0.1267	0.3105	-0.01765	0.8881	0.05341	0.6678	-0.04707	0.7053	0.01940	0.8771	-0.1857	0.1354	-0.2016	0.1046
AID	-0.02257	0.8595	-0.1015	0.4247	-0.09368	0.4579	-0.04932	0.6964	-0.04446	0.7272	0.03153	0.8031	-0.1110	0.3786

AID, activation-induced cytidine deaminase; IGHA1, heavy chain of the immunoglobulin A1; IGHA2, heavy chain of the immunoglobulin A2; H, healthy controls; IBS, irritable bowel syndrome; IBS-D, diarrhoea-predominant IBS; IBS-SSS, IBS symptom severity scale. * p < 0.05, ** p < 0.01, *** p < 0.001.