

## **Supplemental materials**

### **Serum pharmacodynamic biomarkers for chronic corticosteroid treatment of children**

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**Supplemental Table S1: demographic of DMD patients and healthy controls used in this study**

ID	Age	CS treatment	Length on CS (in weeks)	Additional medication
<b>Healthy control group</b>				
CNT	6	NA	NA	none
CNT	7.02	NA	NA	none
CNT	10.3	NA	NA	none
CNT	8.0	NA	NA	none
CNT	8.4	NA	NA	none
CNT	9.35	NA	NA	none
<b>Cross-sectional group</b>				
DMD-1 naïve	4.00	No	NA	vitamin D
DMD-2 naïve	4.30	No	NA	vitamin D
DMD-3 naïve	4.40	No	NA	vitamin D/Coenzyme Q10/Albuterol/Zyrtec
DMD-4 naïve	4.40	No	NA	Acetaminophen/Neurontin
DMD-5 naïve	4.90	No	NA	none
DMD-6 naïve	5.60	No	NA	none
DMD-7 naïve	6.80	No	NA	vitamin D/calcium
DMD-8 naïve	8.00	No	NA	Vitamin D/Calcium/Minerals
DMD-9 naïve	9.20	No	NA	Vitamin D/Calcium/Acetaminophen
DMD-10 + GC	4.30	Yes	6	multivitamins
DMD-11 + GC	5.60	Yes	12	vitamin D
DMD-12 + GC	7.40	Yes	12	vitamin D
DMD-13 + GC	9.50	Yes	18	vitamin D/calcium
DMD-14 + GC	9.60	Yes	18	vitamin D
<b>Longitudinal group</b>				
DMD patient 1	7.8	No	0	vitamin D
DMD patient 1	8.13	Yes	6	vitamin D/fish oil
DMD patient 1	8.38	Yes	9	vitamin D/fish oil
DMD patient 1	8.61	Yes	12	vitamin D/multivitamins
DMD patient 1	9.15	Yes	18	vitamin D/multivitamins/ Albuterol/Idebenone
DMD patient 2	6.3	No	0	none
DMD patient 2	6.53	Yes	3	multivitamins
DMD patient 2	6.79	Yes	6	vitamin D/multivitamins

DMD patient 2	7.02	Yes	9	vitamin D/multivitamins
DMD patient 2	7.29	Yes	12	vitamin D/multivitamins
DMD patient 3	4.9	No	0	none
DMD patient 3	5.4	No	0	none
DMD patient 3	5.95	Yes	12	Acetaminophen
DMD patient 3	6.35	Yes	18	vitamin D/Non-steroidal anti-inflammatory medication
DMD patient 4	5.7	No	0	none
DMD patient 4	5.8	No	0	none
DMD patient 4	6.8	No	0	vitamin D
DMD patient 5	5.8	No	0	vitamin D/Amoxicillin
DMD patient 5	6.48	Yes	6	vitamin D
DMD patient 6	4.27	No	0	vitamin D/Calcium
DMD patient 6	4.30	No	0	vitamin D/Calcium
DMD patient 6	4.96	Yes	12	vitamin D
DMD patient 6	5.53	Yes	18	vitamin D
DMD patient 7	5.4	No	0	vitamin D/calcium
DMD patient 7	6.2	No	9	vitamin D/Calcium
DMD patient 7	6.92	Yes	12	vitamin D
DDM patient 8	5.0	No	0	vitamin D
DMD patient 8	5.81	Yes	12	vitamin D
DMD patient 8	6.25	Yes	18	vitamin D
DMD patient 9	7.7	No	0	vitamin D
DMD patient 9	8.36	Yes	9	vitamin D
DMD patient 9	8.74	Yes	12	vitamin D/Calcium

**Supplemental Table S2: Demographic of pre and post glucocorticoids treated IBD patients**

<b>Patient ID</b>	<b>Age</b>	<b>Gender</b>	<b>Length on CS treatment (in weeks)</b>	<b>other medications</b>
3	12	F	11	none
4	11	M	12	mesalamine
17	9	M	15	mesalamine, lansoprazole
26	9	M	5	mesalamine
27	10	M	6	mesalamine, lansoprazole
33	13	M	5	6MP, mesalamine, lansoprazole
54	12	M	10	mesalamine, lansoprazole
92	10	F	8	mesalamine
108	15	F	12	omeprazole, 6MP, mesalamine, propranolol, amytryptiline
21	15	F	3	mesalamine, lansoprazole
28	15	F	18	mesalamine, lansoprazole