Supplementary Material

Longitudinal Monitoring of Alpha-Fetoprotein by Dried Blood Spot for Hepatoblastoma Screening in Beckwith–Wiedemann Syndrome

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Table S1. Raw data of paired measurements of alpha-fetoprotein (αFP) with traditional and dried blood spot (DBS) method.

Case ID	Patient ID	Condition/Diagnosis	Sample	Age (Months)	Plasma αFP	DBS αFP
1	HE1	Hepatoblastoma	1	31.4	538.0	601.0
2	UO1	Undiagnosed Overgrowth	1	21.5	4.5	1.3
3	UO1	Undiagnosed Overgrowth	2	29.5	5.3	2.6
4	BWS1	Beckwith-Wiedemann	1	14.4	16.4	12.4
5	BWS1	Beckwith-Wiedemann	2	17.4	5.5	1.2
6	BWS1	Beckwith-Wiedemann	3	20.4	6.9	2.0
7	BWS1	Beckwith-Wiedemann	4	23.4	4.2	0.6
8	BWS1	Beckwith-Wiedemann	5	26.5	3.6	2.8
9	BWS1	Beckwith-Wiedemann	6	29.9	1.5	0.9
10	BWS1	Beckwith-Wiedemann	7	32.9	1.9	2.1
11	BWS2	Beckwith-Wiedemann	1	102.6	0.7	0.1
12	ILO1	Isolated Lateralized Overgrowth	1	141.0	0.9	0.5
13	BWS3	Beckwith-Wiedemann	1	1.5	9544.0	8945.0
14	BWS3	Beckwith-Wiedemann	2	2.5	702.0	740.0
15	BWS3	Beckwith-Wiedemann	3	4.8	28.5	15.5
16	BWS3	Beckwith-Wiedemann	4	9.0	3.9	4.1
17	BWS4	Beckwith-Wiedemann	1	5.5	137.0	133.0
18	BWS4	Beckwith-Wiedemann	2	8.3	44.9	44.6
19	BWS4	Beckwith-Wiedemann	3	11.9	7.7	9.3
20	ILO2	Isolated Lateralized Overgrowth	1	110.3	1.8	0.4

21	BWS5	Beckwith-Wiedemann	1	152.9	2.2	0.7
22	UO2	Undiagnosed Overgrowth	2	52.8	0.6	0.4
23	UO2	Undiagnosed Overgrowth	1	41.1	1.4	0.1
24	MCM1	Macrocephaly-Capillary Malformation Syndrome	1	21.5	4.2	0.9
25	MCM1	Macrocephaly-Capillary Malformation Syndrome	2	25.6	2.7	0.9
26	BWS6	Beckwith-Wiedemann	1	81.3	5.7	1.2
27	ILO3	Isolated Lateralized Overgrowth	1	39.6	1.8	1.2
28	ILO3	Isolated Lateralized Overgrowth	2	47.4	1.3	1.2
29	ILO3	Isolated Lateralized Overgrowth	3	52.9	2.0	1.8
30	UO3	Undiagnosed Overgrowth	1	79.6	1.3	0.1
31	UO3	Undiagnosed Overgrowth	2	82.6	1.8	0.1
32	UO3	Undiagnosed Overgrowth	3	87.7	2.1	0.1
33	UO3	Undiagnosed Overgrowth	4	91.9	2.6	0.3
34	ILO4	Isolated Lateralized Overgrowth	1	14.6	6.6	1.5
35	BWS7	Beckwith-Wiedemann	1	4.6	152.0	222.0
36	BWS7	Beckwith-Wiedemann	2	13.0	11.5	4.1
37	BWS7	Beckwith-Wiedemann	3	21.1	3.4	2.3
38	BWS7	Beckwith-Wiedemann	4	23.9	1.2	0.5
39	BWS7	Beckwith-Wiedemann	5	27.6	2.8	4.4
40	BWS8	Beckwith-Wiedemann	1	138.3	2.1	2.2
41	BWS9	Beckwith-Wiedemann	1	55.0	1.7	0.1
42	BWS10	Beckwith-Wiedemann	1	67.6	1.9	5.5
43	MCM2	Macrocephaly-Capillary Malformation Syndrome	1	3.0	187.1	168.0
44	UO4	Undiagnosed Overgrowth	1	23.2	0.9	0.7
45	UO4	Undiagnosed Overgrowth	2	32.2	0.8	1.0
46	UO5	Undiagnosed Overgrowth	1	140.5	0.7	1.1
47	ILO5	Isolated Lateralized Overgrowth	1	159.9	0.8	1.6
48	BWS11	Beckwith-Wiedemann	1	0.5		
49	BWS11	Beckwith-Wiedemann	2	1.1	31812.0	25568.0
50	BWS11	Beckwith-Wiedemann	3	3.4	5179.0	5521.0
51	BWS11	Beckwith-Wiedemann	4	8.5	670.0	630.0

52	BWS11	Beckwith-Wiedemann	5	10.7	166.4	321.0
53	BWS11	Beckwith-Wiedemann	6	12.0	26.0	37.5
54	BWS11	Beckwith-Wiedemann	7	17.8	26.0	29.4
55	BWS11	Beckwith-Wiedemann	8	20.8	4.6	2.6
56	BWS11	Beckwith-Wiedemann	9	24.1	4.6	5.5
57	BWS11	Beckwith-Wiedemann	10	27.7	3.2	5.5
58	BWS12	Beckwith-Wiedemann	1	6.5		
59	BWS12	Beckwith-Wiedemann	2	11.1	9.5	8.3
60	BWS12	Beckwith-Wiedemann	3	17.2	2.3	0.3
61	MCM3	Macrocephaly-Capillary Malformation Syndrome	1	191.0	1.0	0.2
62	BWS13	Beckwith-Wiedemann	1	39.0	4.3	0.8
63	BWS13	Beckwith-Wiedemann	2	48.2	2.5	2.4
64	BWS13	Beckwith-Wiedemann	3	54.6	2.5	0.4
65	BWS14	Beckwith-Wiedemann	1	60.3	1.5	0.8
66	BWS15	Beckwith-Wiedemann	1	7.4	24.9	15.4
67	BWS15	Beckwith-Wiedemann	2	29.5	1.7	2.3
68	ILO6	Isolated Lateralized Overgrowth	1	36.6	1.9	3.2
69	ILO6	Isolated Lateralized Overgrowth	2	40.5	3.8	7.3
70	BWS16	Beckwith-Wiedemann	1	38.3	2.1	0.7
71	BWS16	Beckwith-Wiedemann	2	44.3	0.8	0.1
72	ILO7	Isolated Lateralized Overgrowth	1	6.2	43.0	41.2
73	ILO7	Isolated Lateralized Overgrowth	2	10.6	9.8	9.3
74	ILO7	Isolated Lateralized Overgrowth	3	15.8	3.1	3.1
75	BWS17	Beckwith-Wiedemann	1	94.6	5.8	3.3
76	BWS17	Beckwith-Wiedemann	2	99.0	5.5	4.4
77	BWS17	Beckwith-Wiedemann	3	102.7	3.5	0.5
78	BWS17	Beckwith-Wiedemann	4	111.3	4.3	5.8
79	BWS17	Beckwith-Wiedemann	5	115.7	4.2	4.9
80	BWS17	Beckwith-Wiedemann	6	106.4	3.9	0.1
81	BWS18	Beckwith-Wiedemann	1	35.5	1.1	0.3
82	BWS18	Beckwith-Wiedemann	2	39.5	1.0	0.2

83	BWS18	Beckwith-Wiedemann	3	47.6	0.9	1.3
84	BWS18	Beckwith-Wiedemann	4	49.4	0.8	0.8
85	BWS19	Beckwith-Wiedemann	1	5.6	73.0	94.5
86	BWS19	Beckwith-Wiedemann	2	9.3	20.0	17.2
87	BWS19	Beckwith-Wiedemann	3	12.5	11.4	9.8
88	BWS19	Beckwith-Wiedemann	4	16.0	6.2	4.3
89	BWS19	Beckwith-Wiedemann	5	19.5	8.6	9.2
90	BWS19	Beckwith-Wiedemann	6	22.8	7.9	9.6
91	ILO8	Isolated Lateralized Overgrowth	1	91.0	2.3	0.9
92	ILO9	Isolated Lateralized Overgrowth	1	128.8	3.1	0.8
93	ILO9	Isolated Lateralized Overgrowth	2	136.2	2.9	0.5
94	UO6	Undiagnosed Overgrowth	1	45.7	14.2	6.2
95	BWS20	Beckwith-Wiedemann	1	125.1	1.2	0.2
96	BWS21	Beckwith-Wiedemann	1	21.8	6.1	4.6
97	BWS22	Beckwith-Wiedemann	1	7.2	27.0	21.5
98	BWS22	Beckwith-Wiedemann	2	9.0	12.0	8.3
99	BWS22	Beckwith-Wiedemann	3	18.6	5.2	5.2
100	BWS23	Beckwith-Wiedemann	1	37.1	3.9	3.2
101	BWS23	Beckwith-Wiedemann	2	49.7	2.8	1.0
102	BWS23	Beckwith-Wiedemann	3	55.4	3.4	3.3
103	BWS24	Beckwith-Wiedemann	1	3.0	609.0	610.5
104	BWS25	Beckwith-Wiedemann	1	31.6	3.2	1.1
105	BWS25	Beckwith-Wiedemann	2	164.1	1.3	2.0
106	BWS26	Beckwith-Wiedemann	1	21.2	9.1	6.8
107	BWS26	Beckwith-Wiedemann	2	25.6	3.1	1.6
108	BWS26	Beckwith-Wiedemann	3	29.6	4.9	1.6
109	BWS26	Beckwith-Wiedemann	4	33.5	2.2	1.2
110	BWS26	Beckwith-Wiedemann	5	38.9	1.6	1.0
111	BWS26	Beckwith-Wiedemann	6	42.3	2.3	2.1
112	BWS27	Beckwith-Wiedemann	1	3.9	225.0	212.0
113	BWS28	Beckwith-Wiedemann	1	153.4	1.5	0.4

114	BWS29	Beckwith-Wiedemann	1	57.2	1.4	0.4
115	BWS30	Beckwith-Wiedemann	1	11.5	18.5	20.0
116	BWS30	Beckwith-Wiedemann	2	13.0	7.9	6.2
117	C1	Control	1	8.4	7.0	1.4
118	C2	Control	1	226.0	2.4	0.8
119	C3	Control	1	6.1	27.9	33.2
120	C4	Control	1	150.5	2.3	0.6
121	C5	Control	1	148.4	1.3	0.1
122	C5	Control	2	148.4	2.3	0.1
123	C6	Control	1	5.9	51.9	64.8
124	C7	Control	1	174.4	1.4	0.1
125	C8	Control	1	65.8	1.3	0.1
126	C9	Control	1	30.7	2.9	0.2
127	C10	Control	1	28.9	2.9	0.1
128	C10	Control	2	31.0	2.9	2.2
129	C11	Control	1	149.5	1.6	0.2
130	C12	Control	1	38.5	0.8	0.1
131	C13	Control	1	85.0	0.8	0.1
132	C14	Control	1	3.0	44.3	35.0
133	C15	Control	1	11.9	2.1	0.2
134	C16	Control	1	9.2	33.4	24.8
135	C17	Control	1	8.5	6.5	5.4
136	C18	Control	1	55.4	2.0	0.2
137	C19	Control	1	162.7	0.6	0.1
138	C20	Control	1	166.4	2.5	0.2
139	C21	Control	1	6.2	19.0	26.8
140	C22	Control	1	0.4	21318.0	20540.0
141	C23	Control	1	125.5	0.8	0.5
142	C24	Control	1	109.0	1.4	2.0
143	C25	Control	1	8.9	14.3	35.0
144	C26	Control	1	36.9	2.6	1.3

145	C27	Control	1	0.8	741.0	648.0
146	C28	Control	1	0.8	3386.0	3110.0
147	C28	Control	2	16.4	21.9	16.8
148	C29	Control	1	43.0	2.5	0.7
149	C30	Control	1	96.4	0.5	0.1
150	C31	Control	1	23.9	2.6	2.5
151	C32	Control	1	22.8	1.7	0.2
152	C33	Control	1	170.1	1.5	0.1
153	C34	Control	1	93.0	1.2	0.1
154	C34	Control	2	4.3	182.0	179.0
155	C35	Control	1	8.9	7.9	3.8
156	C36	Control	1	296.3	3.1	1.1
157	C37	Control	1	103.6	1.4	0.4
158	C38	Control	1	180.0	1.5	0.1
159	C39	Control	1	6.5	16.0	19.2
160	C40	Control	1	9.5	9.8	4.1
161	C41	Control	1	9.7	19.3	21.3
162	C42	Control	1	180.4	2.4	0.2
163	C43	Control	1	9.1	23.0	20.4
164	C44	Control	1	24.5	2.8	1.8
165	C44	Control	2	30.0	0.9	0.7
166	C45	Control	1	22.3	9.1	2.1
167	C46	Control	1	32.6	1.4	0.5
168	C47	Control	1	101.8	2.2	0.3
169	C48	Control	1	164.6	1.6	0.1
170	C49	Control	1	225.9	1.6	0.1
171	C50	Control	1	2.4	202.0	198.0
172	C50	Control	2	14.9	4.7	0.1
173	C51	Control	1	157.1	0.8	2.1
174	C51	Control	2	159.1	1.0	1.6
175	C52	Control	1	20.5	6.9	7.3

176	C52	Control	2	20.8	3.5	2.5
177	C53	Control	1	21.8	5.3	5.2
178	C54	Control	1	22.9	2.6	2.4
179	C55	Control	1	49.6	0.9	0.7
180	C56	Control	1	179.2	1.8	2.5
181	C57	Control	1	132.0	2.2	0.2
182	C58	Control	1	109.9	2.7	0.5
183	C59	Control	1	157.5	2.0	0.6
184	C60	Control	1	103.3	1.8	0.5
185	C61	Control	1	16.7	3.1	1.3
186	C61	Control	2	18.0	3.2	1.3
187	C62	Control	1	18.1	9.5	8.8
188	C63	Control	1	192.6	3.7	3.2
189	C64	Control	1	15.2	5.2	6.3
190	C64	Control	2	19.4	12.2	6.7
191	C65	Control	1	91.5	2.0	0.1
192	C66	Control	1	98.3	0.3	0.1
193	C67	Control	1	124.0	0.9	0.1
194	C68	Control	1	16.3	2.1	0.3
195	C68	Control	2	3.5	98.0	75.0
196	C69	Control	1	1.9	79.0	43.5
197	C69	Control	2	2.7	79.0	64.4
198	C70	Control	1	3.8	90.0	66.5
199	C71	Control	1	10.2	11.0	10.0
200	C72	Control	1	16.7	7.9	1.9
201	C73	Control	1	99.6	2.4	0.2
202	C74	Control	1	14.0	23.4	25.6
203	C75	Control	1	3.1		
204	C75	Control	2	8.1	9.4	5.9
205	C76	Control	1	151.9	6.6	0.7
206	C77	Control	1	7.1	8.6	8.5

207	C77	Control	2	8.9	6.2	0.6
208	C78	Control	1	2.7	182.0	245.0
209	C79	Control	1	9.2	21.3	13.2
210	C79	Control	2	18.9	5.6	3.8
211	C80	Control	1	171.6	3.1	0.1
212	C81	Control	1	161.1	4.8	0.2
213	C81	Control	1	220.1	1.2	0.4
214	C83	Control	1	252.1	2.1	0.3
215	C84	Control	1	19.2	5.3	6.2
216	C84	Control	2	30.6	3.0	2.1
217	C85	Control	1	29.5	3.2	0.1
218	C86	Control	1	29.9	3.1	1.0
219	C87	Control	1	146.9	2.0	0.1
220	C88	Control	1	98.9	2.1	0.8
221	C89	Control	1	41.1	4.5	3.5
222	C90	Control	1	23.9	1.2	0.2
223	C91	Control	1	149.3	1.7	0.1
224	C92	Control	1	0.9	6.2	2.9
225	C93	Control	1	66.7	2.1	0.1
226	C94	Control	1	156.7	1.1	0.4
227	C95	Control	1	8.8	10.0	5.5
228	C96	Control	1	15.9	3.2	0.1
229	C97	Control	1	104.5	1.0	0.1
230	C98	Control	1	89.0	2.8	0.9
231	C99	Control	1	31.3	2.4	0.1
232	C100	Control	1	16.7	1.5	0.3
233	C101	Control	1	3.2	9.9	14.3
234	C101	Control	2	14.1	4.1	2.7
235	C102	Control	1	130.5	2.1	0.1
236	C103	Control	1	117.9	1.6	0.2
237	C104	Control	1	102.7	1.5	0.1

238	C105	Control	1	30.3	1.7	0.1
239	C105	Control	2	31.2	1.4	1.6
240	C106	Control	1	66.5	2.1	2.1
241	C107	Control	1	228.5	2.1	0.3
242	C108	Control	1	174.3	2.3	2.4
243	C108	Control	2	181.7	2.3	0.2
244	C109	Control	1	109.6	2.1	0.8
245	C110	Control	1	94.3	1.1	1.5
246	C111	Control	1	96.6	1.0	1.6
247	C112	Control	1	4.5	186.0	178.0
248	C113	Control	1	10.0	7.2	5.1
249	C114	Control	1	13.6	10.5	14.5
250	C114	Control	2	17.3	4.3	5.5
251	C115	Control	1	29.0	5.6	1.5
252	C116	Control	1	52.4	0.8	0.1
253	C117	Control	1	151.7	5.1	6.8
254	C118	Control	1	91.8	0.9	0.2
255	C119	Control	1	29.8	1.3	0.5
256	C120	Control	1	70.2	0.5	3.1
257	C121	Control	1	57.1	1.5	2.7
258	C122	Control	1	142.7	1.5	0.5
259	C123	Control	1	27.5	1.0	0.2