

Supplementary Table S1. Details of each participant

Patient No	Type	Age at diagnosis	Drug	Dosage during breastfeeding (mg/day)	Age at pregnancy	Maternal serum concentration			Delivery (W)	Baby Sex	Weight (g)	Sample date after delivery	Concentration in breast milk (µg/dL)	
						Cu & Zn (µg/dL)	Cp (mg/dL)						Cu	Zn
						Cu	Cp	Zn						
Colostrum (0–4 days after delivery)														
2	H	12	TE	1,500	29	16	7.4	-	39	F	3198	3	15	838
3	N	12	TE	1,750	32	18	4.0	-	34	F	2270	2	64	1,448
Mean ± SD in breast milk from patients treated with TE													40 ± 35	1143±431
Minimum-maximum concentrations in breast milk from patients treated with TE													15-64	838-1,448
9	H	14	Zinc	100	27	13	2.7	167	27	M	2378	2	53	394
14	H	21	PC	800	31	21	5.2	-	38	F	2660	2	51	985
Mean ± SD in control colostrum milk (n = 21)													39 ± 8	614±292
Minimum-maximum concentrations in control colostrum milk (n = 21)													16-50	218-1227

Median concentrations in control colostrum (n = 21)													41	515
Transitional breast milk (5–13 days after delivery)														
2	H	12	TE	1,500	29	16	7.4	-	39	F	3198	5	35	838
3	N	12	TE	1,750	32	18	4.0	-	34	F	2270	10	59	653
8	H	13	Zinc	100	33	37	14	175	40	F	3598	12	28	317
9	H	14	Zinc	100	27	13	2.7	167	35	M	2378	6	61	452
5	H	12	PC	500	30	22	11	-	41	M	3366	6	60	452
13	N	20	PC	300	37	19	3.7	-	38	M	3040	6	44	436
14	H	16	PC	800	31	21	5.2	-	38	F	2660	6	49	273
Mean ± SD in control transitional breast milk (n = 9) from control mothers													53 ± 10	426±162
Minimum-maximum concentrations in control transitional breast milk (n = 9)													40–69	245–781
Median concentrations in control transitional breast milk (n = 9)													53	452
Mature breast milk (14–337 days after delivery)														
1	H	9	TE	1,000	29	16	4.8	-	37	F	2733	253	15	44
2	H	12	TE	1,500	24	16	7.4	-	39	F	3198	142	29	127
3	N	12	TE	1,750	32	18	4.0	-	34	F	2270	44	37	205

9	H	14	TE	1,500	27	17	4.0	-	39	M	3019	337	28	205
15	N	14	TE	1,500	25	19	3.3	-	37	M	2940	33	39	184
Mean \pm SD in mature breast milk from patients treated with TE (n = 5)													30 \pm 9	153 \pm 69
Minimum-maximum concentrations in mature breast milk from patients treated with TE (n = 5)													15–37	44–205
Median concentrations in mature breast milk from patients treated with TE (n = 5)													29	184
4	H	12	PC	800	30	12	3.4	-	34	F	2186	92	17	59
P5	H	12	PC	500	30	22	11	-	41	M	3366	27	47	240
6	H	29	PC	600	33	-	-	-	40	M	3262	171	24	72
7	H	19	PC	600	29	16	2.0	-	41	M	3420	175	12	42
12	N	8	PC	800	36	7.0	2.0	-	37	F	2586	151	20	85
13	N	20	PC	300	37	24	4.8	-	38	M	3040	18	37	311
Mean \pm SD in mature breast milk from patients treated with PC (n = 6)													26 \pm 13	168 \pm 108
Minimum-maximum concentrations in mature breast milk from patients treated with PC (n = 6)													12–47	59–311
Median concentrations in mature breast milk from patients treated with PC (n = 6)													22	163
8	H	13	Zinc	100	33	37	14	175	40	F	3598	16	30	310
9	H	14	Zinc	100	27	18	4.0	192	35	M	2378	70	32	146

11	H	13	Zinc	50	35	36	15.0	180	40	M	3355	18	48	194
16	H	7	Zinc	150	38	17	2.0	210	36	F	3830	118	33	384
17	H	10	Zinc	150	31	5.0	2.0	198	40	M	3180	15	36	423
18	H	11	Zinc	100	37	12	1.9	215	39	F	2912	20	48	375
Mean \pm SD in mature breast milk from patients treated with zinc (n = 6)												38 \pm 8	305 \pm 112	
Minimum-maximum concentrations in mature breast milk from patients treated with zinc (n = 6)												30–48	146–423	
Median concentrations in mature breast milk from patients treated with zinc (n = 6)												35	343	
10	H	12	TE+ zinc	1,500 50	27	19	2.0	193	41	F	2744	33	39	184
Mean \pm SD in mature breast milk from control mothers (n = 25)												33 \pm 25	160 \pm 120	
Minimum-maximum concentrations in mature breast milk from control mothers (n = 25)												6–60	29–462	
Median concentrations in mature breast milk from control mothers (n = 25)												33	135	

PC, penicillamine; TE, trientine, H, Hepatic manifestations, N, neurological manifestations