



Abnormal Data in 10.1038/s41565-025-02082-0

Recently, the 5GH Team received a message alleging the data reported in article [1] may be manipulated. After the investigation, we found some anomalous data in the article.

Fig. 1H: The data table for Fig. 1H contains the value "15.57" four times, which is highly unlikely.

Fig.1h						
Day	4°C			37°C		
0	15.41	15.51	15.47	16.16	16.17	16.19
1	15.47	15.53	15.66	16.34	16.42	16.38
2	15.55	15.57	15.58	16.35	16.3	16.32
3	15.57	15.57	15.6	16.47	16.54	16.49
4	15.67	15.57	15.58	16.24	16.68	15.67
5	17.16	15.73	16.26	17.72	17.67	17.63
6	16.61	16.53	16.58	16.99	17.04	17.03
7	16.2	16.09	16.28	17.39	16.91	18.22

Fig. 1I: The data highlighted in the same colour all share the same decimal part, which is highly unlikely.

O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
Fig 1i	Time (h)	Free IOX4 (%)			CM-Ms@IOX4(%)			C-Ms@IOX4(%)			M-Ms@IOX4(%)			Ms@IOX4(%)			
	0.5	16.65	16.48	20.12	16.9	10.15	11.79	12.78	10.15	16.89	10.78	10.15	16.89	6.15	15.18	24.96	
	1	21.7	28.09	36.42	21.09	21.13	20.23	21.09	21.13	21.8	31.09	11.13	21.8	10.97	26.77	24.34	
	3	40.36	36.29	53.32	22	30.31	30.11	22	28.32	30.11	21.18	23.32	28.11	15.98	23.49	34.48	
	5	55.29	52.44	61.93	23.98	25.89	44.19	30.33	25.89	40.19	20.33	25.89	40.19	33.42	37.43	38.32	
	12	75.02	65.19	68.45	44.32	31	44.29	40	31	47.29	30	31	47.29	36	43.21	50.25	
	24	76.84	74.62	80.99	42.52	51.63	33.32	45.55	50.68	37.29	45.55	40.68	37.29	41.46	51.65	53.59	
	36	78.64	84.75	88.91	51.78	44.94	52.99	51.27	48.94	58.78	41.27	48.94	45.78	46.79	53.79	53.53	
	48	95.79	93.11	99.84	58.84	54.1	45.29	58.84	54.1	53.29	58.84	54.1	53.29	47.66	53.73	61.63	
	60				51.24	57.78	65.78	53.24	60.78	65.21	53.24	55.78	45.25	55	58.23	60.3	
	72				42.28	55.6	60.12	42.71	59.6	66.12	42.71	59.6	61.13	58.99	55.91	64.95	
	84				50.19	66.7	64.29	50.19	66.7	67.29	50.19	66.7	67.29	63.69	61.92	66.51	
	96				60.45	56.76	60.18	65.45	70.76	60.18	55.45	71	60.18	69.71	64.09	72.03	
	120				60.12	75.89	71.3	70.12	60.89	61.3	66.62	70.89	70.3	78	71.89	75	

Fig. 1F: The extended data for Fig. 1F are expected to end in .25, .50, .75, or .00. However, the table also contains two instances of "0.8", which is highly unlikely.

Extended data Fig.1f					
Control	Saline	HA	IOX4	CM-Ms@IOX4	
	4	1	1.25	1	4
	4.5	1.25	1.5	0.8	5
	3.5	0.8	1.75	0.5	5.5

Fig. 3B: In the table for Fig. 3B, nineteen data points end in .21, and thirteen end in .1, which is highly unlikely.

Time (days)	Free@DIR					Ms@DIR					MMS@DIR					C-Ms@DIR					CMMS@DIR				
0	26.39	18.94	9.32	34.56	18.25	36.23	39.59	41.13	43.16	46.02	54.62	35.26	50.28	47.06	44.38	52.10	37.71	38.16	44.24	56.07	33.04	41.4	59.18	50.21	55.32
2	9.19	3.24	4.98	2.1	5.1	13.69	11.87	7.53	4.58	9.91	17.11	10.29	9.98	6.31	14.01	15.79	12.31	18.93	11.24	22.31	26.55	30.71	26.88	19.21	20.11
4	2.8	2.63	3.04	3.37	2.01	6.04	2.1	4.81	4.3	6.65	10.06	7.13	1.39	2.1	4.2	19.43	19.09	5.71	11.41	25.84	15.17	13.97	8.42	12.49	
7	2.25	3.13	2.1	1.8	1.8	2.12	1.41	3.27	2.22	6.23	6.85	5.8	4.43	5.91	9.31	18.5	6.2	7.04	17.85	11.94	3.84	8.28	10.57		
10	2.87	2.06	1.91	2.25	2.98	4.34	2.23	1.11	3.1	1.48	4.42	5.4	3.1	2.3	4.4	6.44	12.53	5.94	8.38	9.23	11.18	11.83	8.63	7.07	
14	1.68	2.99	1.91	1.84	1.42	3.24	1.23	4.23	2.41	2.42	4.17	4.37	2.44	3.41	3.84	7.89	7.023	2.94	9.32	7.07	4.84	7.92	7.4	14.91	
20	2.54	2.2	2.11	2.4	1.88	3.25	2.83	3.11	2.19	1.9	3.41	4.39	4.1	2.38	3.85	3.28	3.9	4.23	6.44	5.98	4.13	9.75	12.86	4.5	6.3
26	1.8	1.91	2.49	2.31	2.53	2.01	3.86	1.29	2.45	2.1	2.7	3.58	2.52	2.68	3.2	5.09	2.99	3.4	3.88	4.45	6.07	7.66	11.51	5.1	6.79
32	1.89	2.94	2.19	2.45	1.49	2.32	1.11	2.2	3.1	2.56	2.75	2.87	2.12	3.44	4.05	3.64	1.78	4.51	4.18	2.41	4.03	6.11	7.47	4.47	3.59
38	1.41	2.48	2.32	2.39	2.42	2.34	1.8	2.04	2.34	1.92	3.42	2.31	2.92	1.42	3.54	3.3	4.87	1.93	6.31	6.34	3.07	5.17	9.24		

Fig. 5: The proportion of data points ending in 0 in the third decimal place is highly unlikely.

H	I	J	K	L	M	N	O	P
Fig. 5d								
4w	sham	PBS	IOX4	Ms@IOX4	C-Ms@IOX4	CM-Ms@IOX4		
		75.686	9.363	34.319	43.434	50.34	72.269	
		82.482	11.302	30.291	40.839	68.757	70.389	
		84.211	13.58	28.498	44.298	54.875	81.294	
		74.109	16.73	36.23	48.21	56.475	66.489	
		72.091	7.093	34.892	42.294	46.582	74.284	
8w	sham	PBS	IOX4	Ms@IOX4	C-Ms@IOX4	CM-Ms@IOX4		
		72.719	1.073	19.216	31.88	44.43	63.025	
		77.291	2.45	15.903	25.681	23.56	73.342	
		71.489	3.21	17.893	29.34	34.5	64.124	
		68.213	2.193	20.501	30.891	40.31	66.596	
		70.893	1.14	21.09	33.201	45.63	69.384	

P	Q	R	S	T	U	V	W	X
	Fig. 5f							
	4w	Sham	PBS	IOX4	Ms@IOX4	C-Ms@IOX4	CM-Ms@IOX4	
		4.855	43.14	23.26	20.403	10.23	5.954	
		2.49	40.534	20.458	16.5	15	2.343	
		2.301	44.349	24.509	22.56	9.34	7.392	
		5.09	41.312	23.495	21.03	11.34	8.91	
		3.09	45.543	27.496	18.39	10.43	4.698	
	8w	Sham	PBS	IOX4	Ms@IOX4	C-Ms@IOX4	CM-Ms@IOX4	
		4.793	47.07	35.436	27.95	19.16	16.102	
		8.02	41.49	30.49	20.485	18.54	11.093	
		4.53	50.39	44.302	29.49	27.53	14.069	
		6.39	42.01	34.55	30.42	20.23	19.31	
		6.09	51.39	32.094	25.305	25.44	13.53	

X	Y	Z	AA	AB	AC	AD	AE	AF
	Fig.5h							
	4w	Sham	PBS	IOX4	Ms@IOX4	C-Ms@IOX4	CM-Ms@IOX4	
		43.065	10.957	12.186	23.485	35.44	46.587	
		49.637	14.596	13.186	20.139	42.34	44.239	
		53.495	11.304	12.569	18.95	40.16	40.592	
		42.563	9.593	15.684	24.596	37.43	38.384	
		46.832	7.453	10.495	26.392	30.21	48.32	
	8w	Sham	PBS	IOX4	Ms@IOX4	C-Ms@IOX4	CM-Ms@IOX4	
		45.841	9.522	11.74	10.717	33.42	36.872	
		39.001	6.78	14.032	19.543	22.89	35.697	
		44.203	10.596	9.495	15.304	24.39	40.056	
		40.535	7.394	10.304	18.305	28.47	42.642	
		48.956	6.304	8.349	14.506	30.29	34.56	

AF	AG	AH	AI	AJ	AK	AL	AM	AN
	Fig.5j							
	4w	sham	PBS	IOX4	Ms@IOX4	C-Ms@IOX4	CM-Ms@IOX4	
		2.609	42.48	36.143	33.506	20.23	13.31	
		4.032	53.56	33.459	30.495	15.49	7.733	
		6.894	48.593	44.965	34.596	25.43	6.983	
		4.392	44.498	43.103	33.943	22.12	8.99	
		8.645	40.394	38.943	28.495	18.34	4.852	
	8w	sham	PBS	IOX4	Ms	C-Ms@IOX4	CM-Ms@IOX4	
		2.733	56.871	49.459	36.481	23.45	12.952	
		3.56	42.259	44.764	44.345	25.66	4.65	
		7.893	45.39	40.345	33.953	34.21	11.985	
		3.1	49.539	36.503	38.575	19.76	9.983	
		4.506	46.94	44.532	34.32	27.87	18.495	

