

Multimedia Appendix 9

Sentiment	Year	genome	baby	disease	embryo	treatment	mutation
negative	2013	8	0	0	0	0	0
	2014	24	0	0	1	0	1
	2015	1407	58	18	418	16	40
	2016	1678	72	149	69	151	58
	2017	6392	137	289	1092	35	3647
	2018	18,340	8363	484	986	970	1598
	2019*	8431	6586	425	1382	154	871
	2019	3513	2744	177	576	64	363
neutral	2013	516	0	10	3	5	45
	2014	2019	7	41	17	15	89
	2015	17,894	1376	331	2798	124	110
	2016	36,039	575	403	3579	361	294
	2017	40,272	3178	1111	12,293	380	1353
	2018	53,096	19,705	1967	6551	932	2485
	2019*	40,241	15,794	1572	2755	785	898
	2019	16,767	6581	655	1148	327	374
positive	2013	1176	2	492	7	41	31
	2014	4347	5	429	15	60	349
	2015	22,036	544	1402	570	933	469
	2016	40,402	320	5748	1643	5868	3019
	2017	68,733	1218	15,754	10,762	6994	8510
	2018	81,303	4869	17,358	2828	7757	6450
	2019*	82,258	5460	16,198	1315	10,284	4567
	2019	34,274	2275	6749	548	4285	1903

Table : Top themes found in tweets. List of top 6 themes with highest overall occurrence across sentiment. The table shows the number of occurrences in tweets for every sentiment and year. The year 2019 was extrapolated to determine the top themes, indicated by the star (*), based on the first five months of 2019. These counts were used in Figure 5.