# **Alphabetical Code For Calculating Toxicity of Your Batch**

# **By Craig Paardekooper**

This system only applies to Pfizer, since we only have batch sizes (number of doses administered) for Pfizer.

All the Pfizer batch codes were ordered alphabetically. For each Pfizer batch the number of adverse reports in VAERS was divided by the size of the batch in doses, in order to get adverse reactions per dose.

Here are the results

| code    | adr  | size    | tox      | ordinal |
|---------|------|---------|----------|---------|
| Eh9899  | 2069 | 810225  | 25.53612 | 1       |
| Ej1685  | 1679 | 773175  | 21.71565 | 2       |
| EJ1686  | 1587 | 620100  | 25.59265 | 3       |
| EK4176  | 1213 | 322725  | 37.58618 | 4       |
| Ek5730  | 2512 | 875550  | 28.69054 | 5       |
| EK9231  | 3443 | 1089075 | 31.61398 | 6       |
| EL0140  | 1235 | 726375  | 17.00224 | 7       |
| EL0142  | 1790 | 632775  | 28.2881  | 8       |
| EL1283  | 2262 | 1159275 | 19.5122  | 9       |
| EL1284  | 2300 | 1010295 | 22.76563 | 10      |
| El324?  | 1    | 1121250 | 0.008919 | 11      |
| EL3246  | 2164 | 995475  | 21.73837 | 12      |
| EL3247  | 2506 | 1077375 | 23.26024 | 13      |
| EL3248  | 1930 | 993525  | 19.42578 | 14      |
| EL3249  | 1987 | 1121250 | 17.72129 | 15      |
| EL3302  | 1475 | 1083225 | 13.61675 | 16      |
| EL8982  | 1917 | 1274325 | 15.04326 | 17      |
| EL9261  | 1782 | 1210950 | 14.71572 | 18      |
| EL9262  | 1929 | 1303575 | 14.79777 | 19      |
| EL9263  | 666  | 568425  | 11.71659 | 20      |
| EL9263* | 2    | 568425  | 0.035185 | 21      |
| EL9264  | 1423 | 1269450 | 11.20958 | 22      |
| EL9265  | 1186 | 961350  | 12.33682 | 23      |
| EL9266  | 1132 | 1219725 | 9.280781 | 24      |
| EL9267  | 1104 | 992550  | 11.12287 | 25      |
| EL9269  | 1438 | 1374750 | 10.46008 | 26      |
| EM9809  | 1173 | 1101750 | 10.6467  | 27      |
| EM9810  | 1110 | 1014975 | 10.93623 | 28      |
| EN????  | 1    | 544050  | 0.018381 | 29      |
| EN?208  | 1    | 3149640 | 0.003175 | 30      |
| EN5318  | 2619 | 2644200 | 9.904697 | 31      |
| EN6198  | 2253 | 2589210 | 8.701496 | 32      |
| EN6199  | 2129 | 2696850 | 7.894395 | 33      |
| EN6200  | 2337 | 2388555 | 9.784158 | 34      |
| EN6201  | 2686 | 2620800 | 10.24878 | 35      |
| EN6202  | 2279 | 2615145 | 8.714622 | 36      |
| EN6203  | 2069 | 2218125 | 9.327698 | 37      |
| EN6204  | 2057 | 2697240 | 7.626314 | 38      |
| EN6205  | 2626 | 3224130 | 8.144833 | 39      |

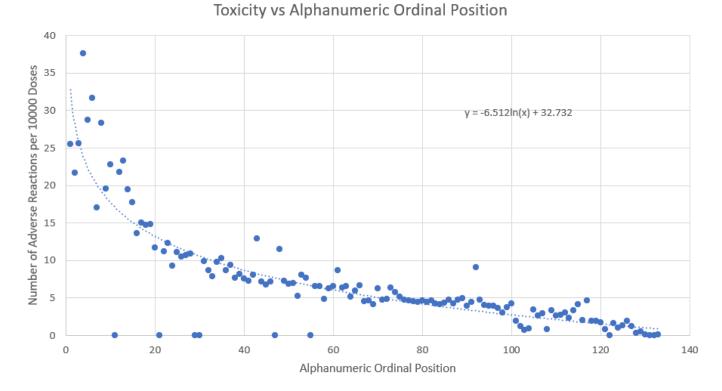
| EN6206   | 2224 | 2960100 | 7.51326  | 40 |
|----------|------|---------|----------|----|
| EN6207   | 2436 | 3334500 | 7.305443 | 41 |
| EN6208   | 2537 | 3149640 | 8.054889 | 42 |
| EN9581   | 702  | 544050  | 12.90323 | 43 |
| EP6955   | 2460 | 3443310 | 7.144288 | 44 |
| Ep7533   | 1996 | 2935530 | 6.799454 | 45 |
| ep7534   | 2106 | 2930850 | 7.185629 | 46 |
| ER????   | 1    | 2764710 | 0.003617 | 47 |
| ER2613   | 3177 | 2764710 | 11.49126 | 48 |
| ER8727   | 2153 | 2950740 | 7.296475 | 49 |
| ER8729   | 2213 | 3216330 | 6.880513 | 50 |
| ER8730   | 2023 | 2896920 | 6.983279 | 51 |
| ER8731   | 1653 | 3140280 | 5.263862 | 52 |
| er8732   | 2554 | 3180060 | 8.031295 | 53 |
| ER8733   | 2562 | 3335670 | 7.680616 | 54 |
| Er8733** | 1    | 3335670 | 0.002998 | 55 |
| ER8734   | 1964 | 3017430 | 6.50885  | 56 |
| ER8735   | 1876 | 2877030 | 6.520613 | 57 |
| ER8736   | 1519 | 3140280 | 4.837148 | 58 |
| ER8737   | 1941 | 3081780 | 6.298308 | 59 |
| EW0150   | 2322 | 3539250 | 6.560712 | 60 |
| EW0151   | 2248 | 2606760 | 8.623732 | 61 |
| ew0153   | 1783 | 2808000 | 6.349715 | 62 |
| Ew0158   | 1724 | 2645370 | 6.517047 | 63 |
| EW0161   | 1579 | 3100500 | 5.092727 | 64 |
| EW0162   | 1832 | 3060720 | 5.98552  | 65 |
| EW0164   | 1753 | 2638350 | 6.644304 | 66 |
| EW0165   | 277  | 611910  | 4.526809 | 67 |
| ew0167   | 1415 | 3079440 | 4.594991 | 68 |
| EW0168   | 1222 | 2946060 | 4.147913 | 69 |
| EW0169   | 1645 | 2652390 | 6.201954 | 70 |
| EW0170   | 1403 | 2953080 | 4.750972 | 71 |
| EW0171   | 1706 | 3545100 | 4.812276 | 72 |
| EW0172   | 2019 | 3182400 | 6.344268 | 73 |
| EW0173   | 1806 | 3140280 | 5.75108  | 74 |
| EW0175   | 1357 | 2638350 | 5.143366 | 75 |
| EW0176   | 1417 | 3022110 | 4.688777 | 76 |
| EW0177   | 1486 | 3189420 | 4.659154 | 77 |
| EW0178   | 1267 | 2822040 | 4.48966  | 78 |
| EW0179   | 1692 | 3837600 | 4.409006 | 79 |
| EW0180   | 1417 | 3078270 | 4.603235 | 80 |
| EW0181   | 1327 | 2984670 | 4.446053 | 81 |
| ew0182   | 1330 | 2885220 | 4.6097   | 82 |
| EW0183   | 1243 | 2965950 | 4.1909   | 83 |
| EW0185   | 1437 | 3492450 | 4.11459  | 84 |
| EW0186   | 1311 | 3033810 | 4.321299 | 85 |
| EW0187   | 1442 | 3065400 | 4.704117 | 86 |
| ew0191   | 1380 | 3281850 | 4.204945 | 87 |
| EW0196   | 1384 | 2922660 | 4.735412 | 88 |
| EW0198   | 1181 | 2373930 | 4.974873 | 89 |
| ew0202   | 257  | 650520  | 3.950686 | 90 |
| ,        | _3,  |         |          | 50 |

| EW0217 | 1271 | 2857140  | 4.448504 | 91  |
|--------|------|----------|----------|-----|
| EY0584 | 374  | 413010   | 9.055471 | 92  |
| FA6780 | 1437 | 3032550  | 4.738586 | 93  |
| FA7484 | 883  | 2182500  | 4.045819 | 94  |
| FA7485 | 1187 | 2993850  | 3.964794 | 95  |
| FC3180 | 1195 | 3046950  | 3.921955 | 96  |
| FC3181 | 1125 | 3129750  | 3.594536 | 97  |
| FC3182 | 991  | 3254400  | 3.045108 | 98  |
| FC3183 | 1191 | 3179250  | 3.746167 | 99  |
| FC3184 | 1374 | 3209400  | 4.281174 | 100 |
| FD0809 | 639  | 3357750  | 1.90306  | 101 |
| FD0810 | 68   | 542400   | 1.253687 | 102 |
| FD7218 | 180  | 2720250  | 0.661704 | 103 |
| FD7220 | 1    | 10530    | 0.949668 | 104 |
| FD8448 | 955  | 2771550  | 3.445725 | 105 |
| FE3590 | 851  | 3309930  | 2.571051 | 106 |
| FE3592 | 897  | 3085290  | 2.907344 | 107 |
| FE3594 | 292  | 3548610  | 0.822857 | 108 |
| FF2587 | 954  | 2889900  | 3.301152 | 109 |
| FF2588 | 784  | 3015090  | 2.600254 | 110 |
| FF2589 | 829  | 3045510  | 2.72204  | 111 |
| ff2590 | 976  | 3213990  | 3.036724 | 112 |
| FF2593 | 764  | 3338010  | 2.288789 | 113 |
| FF8839 | 927  | 2783430  | 3.330423 | 114 |
| FF8841 | 1230 | 2961270  | 4.153623 | 115 |
| fg3527 | 654  | 3287700  | 1.989233 | 116 |
| FH8020 | 1325 | 2868840  | 4.618591 | 117 |
| FH8027 | 570  | 2992860  | 1.904533 | 118 |
| FH8028 | 560  | 2944890  | 1.901599 | 119 |
| fh8030 | 501  | 2996370  | 1.672023 | 120 |
| fj1611 | 216  | 2757690  | 0.783264 | 121 |
| FJ1614 | 1    | 2808000  | 0.003561 | 122 |
| FJ1620 | 514  | 3252600  | 1.580274 | 123 |
| FJ8757 | 342  | 3368430  | 1.01531  | 124 |
| FJ8762 | 402  | 2989350  | 1.344774 | 125 |
| FK5127 | 2006 | 10556600 | 1.900233 | 126 |
| FK5618 | 1095 | 8891300  | 1.231541 | 127 |
| FL0007 | 331  | 11777900 | 0.281035 | 128 |
| fl3197 | 134  | 2928510  | 0.457571 | 129 |
| fl3198 | 40   | 3086460  | 0.129598 | 130 |
| fl3209 | 2    | 2812680  | 0.007111 | 131 |
| FL8094 | 5    | 5447200  | 0.009179 | 132 |
| FL8095 | 30   | 5468800  | 0.054857 | 133 |
|        |      |          |          |     |

This dataset was reduced to 127 records after removing records with batch codes containing  $\ast$  or ?

Remember, that this is simply an ordering by alphabet from A to Z for the first column.

So I then plotted the fourth column on a chart to see how the adverse reactions per dose varied. Here is the result –



The chart shows a very clear logarithmic reduction in toxicity over the entire series of batches listed opposite.

## How to Use This Chart to calculate the Toxicity of Your Batch

This will give you an idea of the relative toxicity of your batch compared to others.

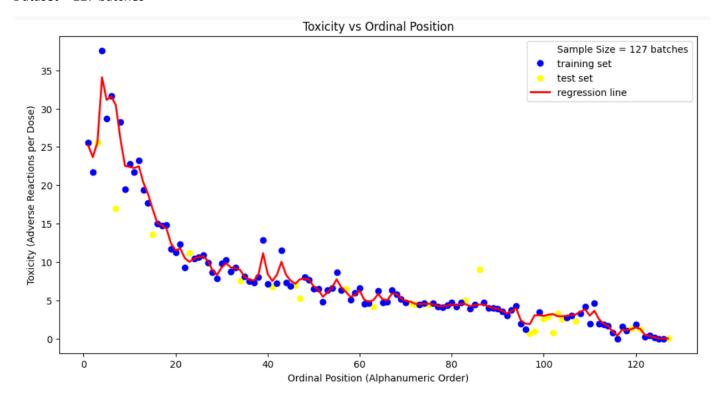
- 1. If your jab was a Pfizer jab, then look at the first two alphabet letters of the batch code. The higher up in the alphabet your code is  $(A \rightarrow Z)$ , the less toxic it is.
- 2. Find the code in the table printed above, and you can read off the adverse reactions per 10,000 doses.

# Using Machine Learning to Get a Read-out on Toxicity

# **Random Forest Regression**

Accuracy = 86.46% (tested against 127 random samples)

Dataset = 127 batches



#### Predicted Adverse Events per 10,000 Doses

```
Ordinal Position = 0
                                        Toxicity = 25.2 Adverse reactions per 10,000 Doses
                                        Toxicity = 25.2 Adverse reactions per 10,000 Doses
Ordinal Position = 1
                                    Toxicity = 23.67 Adverse reactions per 10,000 Doses
Ordinal Position = 2
Ordinal Position = 3 Toxicity = 25.6 Adverse reactions per 10,000 Doses
Ordinal Position = 4 Toxicity = 34.09 Adverse reactions per 10,000 Doses
Ordinal Position = 4

Ordinal Position = 4

Ordinal Position = 5

Ordinal Position = 5

Ordinal Position = 6

Ordinal Position = 6

Ordinal Position = 6

Ordinal Position = 7

Ordinal Position = 7

Ordinal Position = 8

Ordinal Position = 8

Ordinal Position = 9

Ordinal Position = 9

Ordinal Position = 10

Ordinal Position = 10

Ordinal Position = 11

Ordicity = 22.53

Ordinal Position = 11

Ordicity = 22.53

Ordinal Position = 11

Ordicity = 22.26

Ordinal Position = 12

Ordinal Position = 12

Ordinal Position = 13

Ordinal Position = 14

Ordinal Position = 15

Ordinal Position = 15

Ordinal Position = 16

Ordinal Position = 17

Ordinal Position = 16

Ordinal Position = 17

Ordinal Position = 16

Ordinal Position = 17

Ordinal Position = 17

Ordinal Position = 17

Ordinal Position = 18

Ordinal Position = 19

Ordinal Position = 20

Ordinal Position = 20

Ordinal Position = 21

Ordinal Position = 21

Ordinal Position = 22

Ordinal Position = 23

Ordinal Position = 24

Ordinal Position = 25

Ordinal Position = 27

Ordinal Position = 28

Ordinal Position = 29

Ordinal Position = 20

Ordinal Position = 20

Ordinal Position = 20

Ordinal Position = 21

Ordinal Position = 21

Ordicity = 10.00

Ordinal Position = 20

Ordinal Position = 21

Ordicity = 10.00

Ordicity = 10.0
Ordinal Position = 23 Toxicity = 10.02 Adverse reactions per 10,000 Doses
Ordinal Position = 24 Toxicity = 10.46 Adverse reactions per 10,000 Doses
Ordinal Position = 25 Toxicity = 10.61 Adverse reactions per 10,000 Doses
Ordinal Position = 26 Toxicity = 10.79 Adverse reactions per 10,000 Doses
Ordinal Position = 27 Toxicity = 10.14 Adverse reactions per 10,000 Doses
Ordinal Position = 28 Toxicity = 8.94 Adverse reactions per 10,000 Doses
Ordinal Position = 29 Toxicity = 8.33 Adverse reactions per 10,000 Doses
Ordinal Position = 30 Toxicity = 9.29 Adverse reactions per 10,000 Doses
Ordinal Position = 31 Toxicity = 9.85 Adverse reactions per 10,000 Doses
Ordinal Position = 32 Toxicity = 9.29 Adverse reactions per 10,000 Doses
Ordinal Position = 33 Toxicity = 9.21 Adverse reactions per 10,000 Doses
Ordinal Position = 34 Toxicity = 8.97 Adverse reactions per 10,000 Doses
Ordinal Position = 35 Toxicity = 8.06 Adverse reactions per 10,000 Doses
Ordinal Position = 36 Toxicity = 7.71 Adverse reactions per 10,000 Doses
Ordinal Position = 37 Toxicity = 7.59 Adverse reactions per 10,000 Doses
Ordinal Position = 38 Toxicity = 8.37 Adverse reactions per 10,000 Doses
Ordinal Position = 39 Toxicity = 11.16 Adverse reactions per 10,000 Doses
Ordinal Position = 40 Toxicity = 8.47 Adverse reactions per 10,000 Doses
Ordinal Position = 41 Toxicity = 7.53 Adverse reactions per 10,000 Doses
Ordinal Position = 42 Toxicity = 8.33 Adverse reactions per 10,000 Doses
Ordinal Position = 43 Toxicity = 10.02 Adverse reactions per 10,000 Doses
Ordinal Position = 44 Toxicity = 8.32 Adverse reactions per 10,000 Doses
Ordinal Position = 45 Toxicity = 7.57 Adverse reactions per 10,000 Doses
Ordinal Position = 46 Toxicity = 7.16 Adverse reactions per 10,000 Doses
Ordinal Position = 47 Toxicity = 7.75 Adverse reactions per 10,000 Doses
Ordinal Position = 48 Toxicity = 7.84 Adverse reactions per 10,000 Doses
Ordinal Position = 49 Toxicity = 7.67 Adverse reactions per 10,000 Doses
Ordinal Position = 50 Toxicity = 6.82 Adverse reactions per 10,000 Doses
Ordinal Position = 51 Toxicity = 6.4 Adverse reactions per 10,000 Doses
Ordinal Position = 52 Toxicity = 5.47 Adverse reactions per 10,000 Doses
Ordinal Position = 53 Toxicity = 6.03 Adverse reactions per 10,000 Doses
Ordinal Position = 54 Toxicity = 6.71 Adverse reactions per 10,000 Doses
Ordinal Position = 55 Toxicity = 7.73 Adverse reactions per 10,000 Doses
Ordinal Position = 56 Toxicity = 6.68 Adverse reactions per 10,000 Doses
Ordinal Position = 57 Toxicity = 6.1 Adverse reactions per 10,000 Doses
Ordinal Position = 58 Toxicity = 5.46 Adverse reactions per 10,000 Doses
Ordinal Position = 59 Toxicity = 5.71 Adverse reactions per 10,000 Doses
Ordinal Position = 60 Toxicity = 6.26 Adverse reactions per 10,000 Doses
Ordinal Position = 61 Toxicity = 5.07 Adverse reactions per 10,000 Doses
Ordinal Position = 62 Toxicity = 4.83 Adverse reactions per 10,000 Doses Ordinal Position = 63 Toxicity = 5.04 Adverse reactions per 10,000 Doses Ordinal Position = 64 Toxicity = 5.83 Adverse reactions per 10,000 Doses
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Ordinal Position = 65 Toxicity = 5.14 Adverse reactions per 10,000 Doses
 Ordinal Position = 66 Toxicity = 5.02 Adverse reactions per 10,000 Doses
 Ordinal Position = 67 Toxicity = 5.88 Adverse reactions per 10,000 Doses
 Ordinal Position = 68 Toxicity = 5.82 Adverse reactions per 10,000 Doses
 Ordinal Position = 69 Toxicity = 5.25 Adverse reactions per 10,000 Doses
 Ordinal Position = 70 Toxicity = 4.91 Adverse reactions per 10,000 Doses
 Ordinal Position = 71 Toxicity = 4.84 Adverse reactions per 10,000 Doses
 Ordinal Position = 72 Toxicity = 4.56 Adverse reactions per 10,000 Doses
 Ordinal Position = 73 Toxicity = 4.52 Adverse reactions per 10,000 Doses
 Ordinal Position = 74 Toxicity = 4.54 Adverse reactions per 10,000 Doses
 Ordinal Position = 75 Toxicity = 4.56 Adverse reactions per 10,000 Doses
 Ordinal Position = 76 Toxicity = 4.49 Adverse reactions per 10,000 Doses
Ordinal Position = 77 Toxicity = 4.28 Adverse reactions per 10,000 Doses
Ordinal Position = 78 Toxicity = 4.19 Adverse reactions per 10,000 Doses
Ordinal Position = 79 Toxicity = 4.31 Adverse reactions per 10,000 Doses
Ordinal Position = 80 Toxicity = 4.51 Adverse reactions per 10,000 Doses
Ordinal Position = 81 Toxicity = 4.34 Adverse reactions per 10,000 Doses
Ordinal Position = 82 Toxicity = 4.57 Adverse reactions per 10,000 Doses
Ordinal Position = 83 Toxicity = 4.51 Adverse reactions per 10,000 Doses
Ordinal Position = 84 Toxicity = 4.23 Adverse reactions per 10,000 Doses
 Ordinal Position = 85 Toxicity = 4.39 Adverse reactions per 10,000 Doses
 Ordinal Position = 86 Toxicity = 4.46 Adverse reactions per 10,000 Doses
 Ordinal Position = 87 Toxicity = 4.48 Adverse reactions per 10,000 Doses
 Ordinal Position = 88 Toxicity = 4.18 Adverse reactions per 10,000 Doses
 Ordinal Position = 89 Toxicity = 3.98 Adverse reactions per 10,000 Doses
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Ordinal Position = 93 Toxicity = 3.61 Adverse reactions per 10,000 Doses
Ordinal Position = 112 Toxicity = 2.56 Adverse reactions per 10,000 Doses
Ordinal Position = 113 Toxicity = 1.95 Adverse reactions per 10,000 Doses
Ordinal Position = 114 Toxicity = 1.64 Adverse reactions per 10,000 Doses
Ordinal Position = 115 Toxicity = 0.96 Adverse reactions per 10,000 Doses
 Ordinal Position = 116 Toxicity = 0.39 Adverse reactions per 10,000 Doses
 Ordinal Position = 117 Toxicity = 1.16 Adverse reactions per 10,000 Doses
 Ordinal Position = 118 Toxicity = 1.12 Adverse reactions per 10,000 Doses
 Ordinal Position = 119 Toxicity = 1.24 Adverse reactions per 10,000 Doses
 Ordinal Position = 120 Toxicity = 1.47 Adverse reactions per 10,000 Doses
 Ordinal Position = 121 Toxicity = 1.26 Adverse reactions per 10,000 Doses
 Ordinal Position = 122 Toxicity = 0.49 Adverse reactions per 10,000 Doses
 Ordinal Position = 123 Toxicity = 0.36 Adverse reactions per 10,000 Doses
 Ordinal Position = 124 Toxicity = 0.19 Adverse reactions per 10,000 Doses
 Ordinal Position = 125 Toxicity = 0.06 Adverse reactions per 10,000 Doses
 Ordinal Position = 126 Toxicity = 0.03 Adverse reactions per 10,000
```

#### Discussion

#### What Can Explain This?

The toxicities do not step down, but rather they appear to decline continuously over the whole of 2021. If this is what happened, then it would require the constant reformulation of every new batch in tiny incremental steps. However, this would be extremely expensive and laborious for the government to do. It also does not make any logical sense, because if reduction of toxicity was the aim, then I would expect them to drop the toxicity in abrupt, discrete steps which would require far less frequent adjustment of ingredients.

So, what is going on?

The curve looks very much like a decay curve – with a half-life.

It's possible that the graph depicts a continuous decay of an active ingredient. In other words, the contents of all batches were manufactured in 2020 and decayed continually from that time on. The batch codes merely indicate the dates when various portions of this stock were distributed. In this case the decay will have a half-life with which we should be able to predict the number of adverse reactions in 2022. The half-life may also help us identify the toxin being used.

#### Conclusion

As you can see from the results above, there is a steady and constant decline in toxicity. It is unlikely that the manufacturers adjusted the vaccine ingredients or dosage to produce each of these incremental changes. They would have had to change the ingredients or dosages 120 times during 2021?

Rather, it is more likely that all batches were manufactured in 2020, and that the ingredient responsible for adverse reactions progressively decayed over time.

## **Further Analysis Needed**

I will have to repeat this for looking at SERIOUS reactions – those with an outcome of death, disability, ER, hospitalization.

I will also have to combine this chart with one for 2022 batches. Then people will be able to see the toxicity of every batch compared to the others.

If the decay is a function of time from a hypothetical "ground-zero" in 2020, then an even clearer graph should be obtained when Y is plotted against time of distribution.