I received an e-mail on 6/18/2020 indicating that there was a “new” 0.4x low coverage Whole Genome Sequencing (lcWGS) option available from Nebula.

After ordering another lcWGS sample and receiving my results, the company confirmed this was not true (it is really the same product). However, there was a period of time after my previous FDA MedWatch report (**MW5093887**) when lcWGS data was not available from Nebula. Also, the exact points from this report are a little different than before.

This time, the coverage for my individual sample was approximately 2.5x higher, and my APOE genotype was called correctly.

Nevertheless, even if you only focus on my newer sample, you can see the table with percentiles for my new samples. So, I am not sure if some of the reports should be considered “medical”.

In general, you can see the new results and a comparison to earlier results here:

https://github.com/cwarden45/DTC_Scripts/tree/master/Nebula/Sample2

For example, the Pearson correlation coefficient between the PRS percentiles for the 2 replicates is 0.8. However, some differences were very large: for example, for the “*Bone mineral density (Kemp, 2017)*” PRS, the largest percentile difference being 2% for one replicate and 99% for the other. I double-checked to confirm that this was not a typo on my end (for the PRS with the difference in percentiles of 97% for the 2 replicates).

To be fair, Nebula describes the “Basic” lcWGS coverage as “Medium” accuracy, and the regular WGS coverage as “High” accuracy. However, I was not sure how clear this was made to customers, or how others intended to use the results.