**Supplementary Digital Content 5**

The tables below show the counts of patients identified by our algorithm as aspirin exposure positive/negative stratified against manual chart review of patients identified as aspirin exposure positive/negative for various strategies (e.g. structured data, unstructured data, combined data) for ascertainment of aspirin exposure.

Table 1: CDW Pharmacy Data Only

|  |  |  |  |
| --- | --- | --- | --- |
| *Structured Dose* | *CR +* | *CR -* | *Total* |
| *Alg +* | *101* | *6* | *107* |
| *Alg -* | *21* | *82* | *103* |
| *Total* | *122* | *88* | *210* |

Table 2: Free-Text No Dose Only

|  |  |  |  |
| --- | --- | --- | --- |
| *Unstructured Exposure* | *CR +* | *CR -* | *Total* |
| *Alg +* | *98* | *5* | *103* |
| *Alg -* | *3* | *122* | *125* |
| *Total* | *101* | *127* | *228* |

Table 3: Free-Text Dose Only

|  |  |  |  |
| --- | --- | --- | --- |
| *Unstructured Dose* | *CR +* | *CR -* | *Total* |
| *Alg +* | *96* | *4* | *100* |
| *Alg -* | *2* | *98* | *100* |
| *Total* | *98* | *102* | *200* |

Table 4: Combined CDW Pharmacy + Free-Text No Dose Only

|  |  |  |  |
| --- | --- | --- | --- |
| *Combined Aspirin Exposure* | *CR +* | *CR -* | *Total* |
| *Alg +* | *119* | *1* | *120* |
| *Alg -* | *3* | *117* | *120* |
| *Total* | *122* | *118* | *240* |

Table 5: Combined CDW Pharmacy + Free-Text Dose Only

|  |  |  |  |
| --- | --- | --- | --- |
| *Combined Aspirin Dose* | *CR +* | *CR -* | *Total* |
| *Alg +* | *100* | *8* | *108* |
| *Alg -* | *2* | *115* | *117* |
| *Total* | *102* | *123* | *225* |

*Alg + = subjects defined as having an aspirin exposure according to our algorithm
Alg - = subjects defined as non-exposure to aspirin according to our algorithm
CR + = subjects found to have an aspirin exposure according to chart review
CR - = subjects found to not have an aspirin exposure according to chart review*