**Table 1: Summary Measures of Glycemia**

|  |  |
| --- | --- |
| **CGM Variable** | **Definition** |
| percent\_cgm\_wear | The number of sensor readings as a percentage of the number of potential readings (given time worn). |
| average\_sensor | Mean of all sensor glucose values |
| estimated\_a1c | Estimated HbA1c based on the equation: (46.7 + average glucose in mg/dL) / 28.7[1] |
| gmi | Glucose management indicator based on the equation: 3.31 + (0.02392 × average glucose in mg/dL)7 |
| q1\_sensor | First quartile sensor glucose value |
| median\_sensor | Median sensor glucose value |
| q3\_sensor | Third quartile sensor glucose value |
| standard\_deviation | Standard deviation of all sensor glucose values |
| cv | Coefficient of variation of all sensor glucose values (SD/mean) |
| min\_sensor | Minimum of all sensor glucose values |
| max\_sensor | Maximum of all sensor glucose values |
| excursions\_over\_\*\*\* | The number of local glucose peaks with an amplitude greater than \*\*\* mg/dL |
| min\_spent\_over\_\*\*\* | The total length of time that sensor glucose was at or above \*\*\* mg/dL |
| percent\_time\_over\_\*\*\* | Minutes spent above \*\*\* mg/dL, as a percentage of the total time CGM was worn |
| avg\_excur\_over\_\*\*\*\_per\_day | The number of glucose peaks above \*\*\* mg/dL averaged per 24-hour period of CGM wear |
| min\_spent\_under\_\*\* | The total length of time that sensor glucose was at or below \*\* mg/dL |
| percent\_time\_under\_\*\* | Minutes spent below \*\* mg/dL, as a percentage of the total time CGM was worn |
| min\_spent\_70\_180 | Minutes spent in the range 70 – 180 mg/dL (inclusive) |
| percent\_time\_70\_180 | Minutes spent in the range 70 – 180 mg/dL (inclusive), as a percentage of the total time CGM was worn |
| daytime\_\*\*\* | \*\*\* of all sensor glucose values during specified daytime hours |
| nighttime\_\*\*\* | \*\*\* of all sensor glucose values during specified nighttime hours |
| auc | Approximate area under the sensor glucose curve, calculated using the trapezoidal rule |
| r\_mage | MAGE calculated according to Baghurst’s algorithm |
| j\_index | Calculated based on the equation: 0.324 × (average glucose in mg/dL + standard deviation of glucose levels)^211 |
| conga | Continuous overall net glycemic action, default n = 1 hour11 |
| modd | Mean of daily differences |
| lbgi | Low blood glucose index |
| hbgi | High blood glucose index |

**Table 2: Summary Variable Comparisons**

1. iPro 2 software (high excursion defined as > 140 mg/dL for 15 minutes, low defined as < 60 mg/dL for 15 minutes)

|  |  |  |
| --- | --- | --- |
|  | cgmanalysis | iPro |
| # Sensor Values | 2000 | 2000 |
| Highest | 282 | 282 |
| Lowest | 70 | 70 |
| Average | 126.874 | 127 |
| Standard Dev | 30.79367223 | 31 |
| # High Excursions | 31 | 32 |
| # Low Excursions | 0 | 0 |
| % Time Above 140 | 24.85 | 24 |
| % Time Below 60 | 0 | 0 |

1. Carelink 670G

|  |  |  |
| --- | --- | --- |
|  | cgmanalysis | Carelink 670G |
| Average | 123.6503122 | 124 |
| Standard Dev | 37.5290915 | 38 |

1. Dexcom Clarity

|  |  |  |
| --- | --- | --- |
|  | cgmanalysis | Dexcom Clarity |
| Average | 175.6790404 | 176 |
| Standard Dev | 67.09674726 | 68 |
| Time in Range | 55.65656566 | 56 |

1. Diasend

|  |  |  |
| --- | --- | --- |
|  | cgmanalysis | Diasend |
| # Sensor Values | 184 | 184 |
| Highest | 411 | 411 |
| Lowest | 54 | 54 |
| Average | 193.2282609 | 193 |
| Standard Dev | 89.66532836 | 89 |
| Values above 200 | 44.56521739 | 82/184 (44.57%) |