Berget ATTD Abstract

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Table 1a: Descriptive statistics for all participants with T1 data.

|  |  |
| --- | --- |
|  | Overall |
| n | 77 |
| demographics\_age (mean (sd)) | 15.31 (3.60) |
| demographics\_ethnicity (%) |  |
| 0 | 8 (10.4) |
| 1 | 65 (84.4) |
| 2 | 4 ( 5.2) |
| demographics\_race (%) |  |
| 0 | 1 ( 1.3) |
| 2 | 1 ( 1.3) |
| 4 | 65 (84.4) |
| 5 | 4 ( 5.2) |
| 6 | 6 ( 7.8) |
| demographics\_sex = 1 (%) | 40 (51.9) |
| demographics\_insurance (%) |  |
| 1 | 12 (15.6) |
| 2 | 60 (77.9) |
| 3 | 5 ( 6.5) |
| demographics\_pumphx (%) |  |
| 1 | 1 ( 1.4) |
| 2 | 2 ( 2.7) |
| 3 | 10 (13.7) |
| 4 | 8 (11.0) |
| 5 | 15 (20.5) |
| 6 | 37 (50.7) |
| demographics\_cgmhx (%) |  |
| 1 | 14 (18.7) |
| 2 | 3 ( 4.0) |
| 3 | 13 (17.3) |
| 4 | 25 (33.3) |
| 5 | 10 (13.3) |
| 6 | 10 (13.3) |
| demographicsd\_duration (mean (sd)) | 6.88 (4.06) |
| hba1c\_baseline (median [IQR]) | 8.50 [7.60, 9.70] |
| hba1c (median [IQR]) | 8.00 [7.30, 9.20] |
| am\_time (median [IQR]) | 52.00 [24.50, 77.50] |
| mm\_time (median [IQR]) | 47.00 [22.50, 75.50] |
| sensor\_wear (median [IQR]) | 70.50 [44.75, 86.75] |
| sensor\_u54 (median [IQR]) | 0.00 [0.00, 1.00] |
| sensor\_55\_69 (median [IQR]) | 1.00 [0.50, 2.00] |
| sensor\_70\_180 (mean (sd)) | 58.25 (16.42) |
| sensor\_181\_250 (mean (sd)) | 23.79 (7.15) |
| sensor\_g250 (median [IQR]) | 13.00 [6.00, 21.00] |
| mean\_sg (mean (sd)) | 174.73 (30.42) |
| sd (mean (sd)) | 64.16 (15.02) |
| bg\_checks (mean (sd)) | 4.97 (2.37) |
| calibrations (mean (sd)) | 2.64 (0.97) |
| tdd (median [IQR]) | 50.00 [35.50, 61.00] |
| basal (mean (sd)) | 49.53 (9.85) |
| bolus (mean (sd)) | 50.47 (9.85) |
| amexits (mean (sd)) | 11.94 (6.00) |
| amexit\_day (mean (sd)) | 0.86 (0.43) |
| amexit\_hyper (median [IQR]) | 4.00 [1.00, 7.00] |
| amexit\_hypo (median [IQR]) | 0.00 [0.00, 1.00] |
| amexit\_manual (median [IQR]) | 0.00 [0.00, 1.00] |
| amexit\_other (median [IQR]) | 5.50 [3.00, 8.25] |
| base.to.am.start (median [IQR]) | 40.00 [9.00, 72.00] |
| am.to.t1 (mean (sd)) | 93.32 (43.34) |
| t1.to.t2 (median [IQR]) | 98.00 [90.00, 112.00] |
| am.to.t2 (median [IQR]) | 182.00 [167.00, 203.00] |

Table 1b: Descriptive statistics at T2 for all participants with T1 and T2 data.

|  |  |
| --- | --- |
|  | Overall |
| n | 51 |
| demographics\_age (mean (sd)) | 15.68 (3.49) |
| demographics\_ethnicity (%) |  |
| 0 | 3 ( 5.9) |
| 1 | 45 (88.2) |
| 2 | 3 ( 5.9) |
| demographics\_race (%) |  |
| 0 | 1 ( 2.0) |
| 2 | 1 ( 2.0) |
| 4 | 45 (88.2) |
| 5 | 1 ( 2.0) |
| 6 | 3 ( 5.9) |
| demographics\_sex = 1 (%) | 29 (56.9) |
| demographics\_insurance (%) |  |
| 1 | 8 (15.7) |
| 2 | 40 (78.4) |
| 3 | 3 ( 5.9) |
| demographics\_pumphx (%) |  |
| 1 | 1 ( 2.0) |
| 2 | 0 ( 0.0) |
| 3 | 7 (13.7) |
| 4 | 5 ( 9.8) |
| 5 | 9 (17.6) |
| 6 | 29 (56.9) |
| demographics\_cgmhx (%) |  |
| 1 | 6 (11.8) |
| 2 | 3 ( 5.9) |
| 3 | 10 (19.6) |
| 4 | 17 (33.3) |
| 5 | 7 (13.7) |
| 6 | 8 (15.7) |
| demographicsd\_duration (mean (sd)) | 7.18 (4.13) |
| hba1c\_baseline (median [IQR]) | 8.60 [7.82, 9.78] |
| am.to.t1 (mean (sd)) | 86.22 (38.64) |
| t1.to.t2 (median [IQR]) | 98.00 [90.00, 112.00] |
| am.to.t2 (median [IQR]) | 182.00 [167.00, 203.00] |

Table 1c: Descriptive statistics at T2 for participants with AM time >= 10 at both T1 and T2.

|  |  |
| --- | --- |
|  | Overall |
| n | 32 |
| demographics\_age (mean (sd)) | 15.24 (3.70) |
| demographics\_ethnicity (%) |  |
| 0 | 2 ( 6.2) |
| 1 | 29 (90.6) |
| 2 | 1 ( 3.1) |
| demographics\_race (%) |  |
| 0 | 0 ( 0.0) |
| 2 | 0 ( 0.0) |
| 4 | 30 (93.8) |
| 5 | 0 ( 0.0) |
| 6 | 2 ( 6.2) |
| demographics\_sex = 1 (%) | 19 (59.4) |
| demographics\_insurance (%) |  |
| 1 | 4 (12.5) |
| 2 | 26 (81.2) |
| 3 | 2 ( 6.2) |
| demographics\_pumphx (%) |  |
| 1 | 1 ( 3.1) |
| 2 | 0 ( 0.0) |
| 3 | 6 (18.8) |
| 4 | 3 ( 9.4) |
| 5 | 5 (15.6) |
| 6 | 17 (53.1) |
| demographics\_cgmhx (%) |  |
| 1 | 4 (12.5) |
| 2 | 2 ( 6.2) |
| 3 | 7 (21.9) |
| 4 | 9 (28.1) |
| 5 | 5 (15.6) |
| 6 | 5 (15.6) |
| demographicsd\_duration (mean (sd)) | 6.62 (4.06) |
| hba1c\_baseline (median [IQR]) | 8.15 [7.27, 8.85] |
| am.to.t1 (mean (sd)) | 89.12 (42.46) |
| t1.to.t2 (median [IQR]) | 98.00 [87.50, 105.00] |
| am.to.t2 (median [IQR]) | 189.00 [170.50, 208.00] |

Table 1d: Descriptive statistics for participants with AM time < 10 at T2.

|  |  |  |
| --- | --- | --- |
|  | level | Overall |
| n |  | 15 |
| demographics\_age (mean (sd)) |  | 16.75 (3.21) |
| demographics\_ethnicity (%) | 0 | 0 ( 0.0) |
|  | 1 | 13 (86.7) |
|  | 2 | 2 (13.3) |
| demographics\_race (%) | 0 | 0 ( 0.0) |
|  | 2 | 1 ( 6.7) |
|  | 4 | 13 (86.7) |
|  | 5 | 0 ( 0.0) |
|  | 6 | 1 ( 6.7) |
| demographics\_sex (%) | 0 | 7 (46.7) |
|  | 1 | 8 (53.3) |
| demographics\_insurance (%) | 1 | 3 (20.0) |
|  | 2 | 11 (73.3) |
|  | 3 | 1 ( 6.7) |
| demographics\_pumphx (%) | 1 | 0 ( 0.0) |
|  | 2 | 0 ( 0.0) |
|  | 3 | 0 ( 0.0) |
|  | 4 | 2 (13.3) |
|  | 5 | 3 (20.0) |
|  | 6 | 10 (66.7) |
| demographics\_cgmhx (%) | 1 | 1 ( 6.7) |
|  | 2 | 1 ( 6.7) |
|  | 3 | 2 (13.3) |
|  | 4 | 6 (40.0) |
|  | 5 | 2 (13.3) |
|  | 6 | 3 (20.0) |
| demographicsd\_duration (mean (sd)) |  | 8.92 (3.48) |
| hba1c\_baseline (median [IQR]) |  | 9.65 [8.93, 10.25] |
| am.to.t1 (mean (sd)) |  | 73.07 (26.29) |
| t1.to.t2 (median [IQR]) |  | 112.00 [93.00, 126.00] |
| am.to.t2 (median [IQR]) |  | 182.00 [166.50, 196.00] |
| am.group (%) | 0% AM | 11 (73.3) |
|  | AM > 0 and < 10 | 4 (26.7) |

Table 2a: Comparisons between all participants with T1 and T2 data. Normality was evaluated using the Lilliefors test. Normally distributed variables were compared using a paired t-test, and non-normally distributed variables were compared using a Wilcoxon signed rank test with continuity correction.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | t1 | t2 | p | test |
| n | 51 | 51 |  |  |
| hba1c (median [IQR]) | 8.10 [7.45, 9.60] | 8.20 [7.80, 9.40] | NA | nonnorm |
| am\_time (median [IQR]) | 59.00 [26.00, 76.00] | 35.00 [3.00, 68.00] | 0.0756 | nonnorm |
| mm\_time (median [IQR]) | 41.00 [23.00, 74.00] | 65.00 [32.00, 97.00] | <0.001 | nonnorm |
| sensor\_wear (median [IQR]) | 70.50 [53.75, 82.75] | 57.00 [22.00, 80.00] | <0.001 | nonnorm |
| sensor\_u54 (median [IQR]) | 0.00 [0.00, 0.75] | 0.00 [0.00, 1.00] | <0.001 | nonnorm |
| sensor\_55\_69 (median [IQR]) | 1.00 [0.00, 2.00] | 1.00 [1.00, 2.00] | 0.644 | nonnorm |
| sensor\_70\_180 (mean (sd)) | 55.83 (15.88) | 53.55 (17.26) | 0.542 |  |
| sensor\_181\_250 (mean (sd)) | 25.28 (6.64) | 25.02 (6.57) | 0.0064 |  |
| sensor\_g250 (median [IQR]) | 13.00 [7.50, 21.00] | 16.00 [6.00, 26.75] | 0.636 | nonnorm |
| mean\_sg (mean (sd)) | 178.52 (28.96) | 183.38 (35.18) | 0.00331 |  |
| sd (mean (sd)) | 65.48 (12.85) | 68.05 (15.71) | 0.00998 |  |
| bg\_checks (mean (sd)) | 5.07 (2.44) | 4.94 (2.99) | 0.0175 |  |
| calibrations (mean (sd)) | 2.68 (0.99) | 2.05 (1.03) | 0.741 |  |
| tdd (median [IQR]) | 55.00 [39.00, 67.00] | 57.00 [44.00, 65.00] | <0.001 | nonnorm |
| basal (mean (sd)) | 48.94 (9.08) | 51.22 (10.61) | 0.681 |  |
| bolus (mean (sd)) | 51.06 (9.08) | 48.80 (10.60) | 0.126 |  |
| amexits (mean (sd)) | 12.35 (6.43) | 11.53 (6.25) | 0.131 |  |
| amexit\_day (mean (sd)) | 0.89 (0.46) | 0.82 (0.45) | 0.174 |  |
| amexit\_hyper (median [IQR]) | 4.00 [1.00, 7.00] | 3.00 [1.25, 6.75] | 0.217 | nonnorm |
| amexit\_hypo (median [IQR]) | 0.00 [0.00, 0.00] | 0.00 [0.00, 0.00] | 0.507 | nonnorm |
| amexit\_manual (median [IQR]) | 0.00 [0.00, 1.00] | 0.00 [0.00, 1.00] | 0.402 | nonnorm |
| amexit\_other (median [IQR]) | 6.00 [3.00, 9.00] | 4.50 [2.25, 9.75] | 0.182 | nonnorm |

Table 2b: Comparisons between all participants with AM time >= 10 at both T1 and T2. Normality was evaluated using the Lilliefors test. Normally distributed variables were compared using a paired t-test, and non-normally distributed variables were compared using a Wilcoxon signed rank test with continuity correction.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | t1 | t2 | p | test |
| n | 32 | 32 |  |  |
| hba1c (median [IQR]) | 7.70 [7.20, 8.20] | 7.90 [7.40, 8.35] | NA | nonnorm |
| am\_time (median [IQR]) | 70.50 [57.25, 82.00] | 60.50 [38.75, 75.50] | 0.0527 | nonnorm |
| mm\_time (median [IQR]) | 29.00 [18.00, 42.50] | 39.50 [24.25, 61.25] | 0.00368 | nonnorm |
| sensor\_wear (median [IQR]) | 80.50 [70.75, 89.00] | 72.00 [52.25, 87.25] | 0.00473 | nonnorm |
| sensor\_u54 (median [IQR]) | 0.00 [0.00, 1.00] | 0.00 [0.00, 1.00] | 0.0296 | nonnorm |
| sensor\_55\_69 (median [IQR]) | 1.00 [0.00, 2.25] | 1.00 [1.00, 2.00] | 1 | nonnorm |
| sensor\_70\_180 (mean (sd)) | 61.06 (13.84) | 56.25 (15.40) | 0.374 |  |
| sensor\_181\_250 (mean (sd)) | 23.25 (5.88) | 25.44 (6.08) | 0.0166 |  |
| sensor\_g250 (median [IQR]) | 11.00 [6.00, 17.25] | 14.00 [5.00, 23.00] | 0.15 | nonnorm |
| mean\_sg (mean (sd)) | 169.38 (26.36) | 177.56 (30.01) | 0.0282 |  |
| sd (mean (sd)) | 62.19 (12.08) | 65.69 (14.62) | 0.0228 |  |
| bg\_checks (mean (sd)) | 5.63 (2.30) | 6.06 (2.89) | 0.0682 |  |
| calibrations (mean (sd)) | 2.93 (0.81) | 2.36 (0.84) | 0.348 |  |
| tdd (median [IQR]) | 50.50 [36.00, 62.50] | 52.50 [40.75, 63.75] | <0.001 | nonnorm |
| basal (mean (sd)) | 47.28 (8.39) | 48.72 (9.13) | 0.293 |  |
| bolus (mean (sd)) | 52.72 (8.39) | 51.31 (9.11) | 0.201 |  |
| amexits (mean (sd)) | 14.31 (5.91) | 12.88 (5.82) | 0.216 |  |
| amexit\_day (mean (sd)) | 1.02 (0.42) | 0.92 (0.42) | 0.156 |  |
| amexit\_hyper (median [IQR]) | 4.00 [1.00, 8.00] | 4.00 [2.00, 7.25] | 0.211 | nonnorm |
| amexit\_hypo (median [IQR]) | 0.00 [0.00, 1.00] | 0.00 [0.00, 0.00] | 0.574 | nonnorm |
| amexit\_manual (median [IQR]) | 0.00 [0.00, 1.25] | 0.00 [0.00, 1.00] | 0.402 | nonnorm |
| amexit\_other (median [IQR]) | 7.00 [5.00, 10.00] | 6.50 [3.00, 10.00] | 0.135 | nonnorm |