Online supplementary material for

**Performance of Dexcom G5 and Freestyle Libre tested simultaneously in persons with type 1 or 2 diabetes and advanced chronic kidney disease.**

A.F. Ólafsdóttir\(^{1,2}\), M. Andelin\(^1\), A. Saeed\(^3\), S. Sofizadeh\(^1\), H. Hamoodi\(^4\), P.-A. Jansson\(^5\), M. Lind\(^{1,2}\)

1. NU-Hospital Group, Department of Medicine, Uddevalla, Sweden

2. University of Gothenburg, Department of Molecular and Clinical Medicine, Institute of Medicine. The Sahlgrenska Academy, Göteborg, Sweden

3. University of Gothenburg, Department of Molecular and Clinical Medicine/Nephrology, Institute of Medicine. The Sahlgrenska Academy, Gothenburg, Sweden

4. Statistiska Konsultgruppen, Gothenburg, Sweden

5. Wallenberg laboratory, University of Gothenburg, Department of Molecular and Clinical Medicine, Institute of Medicine. The Sahlgrenska Academy, Göteborg, Sweden
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Power analysis

From a previous also paired study from the current research group the SD of difference between the Dexcom G4 and Enlite Sensor for the MARD was 6%. Assuming a mean difference in MARD in the current study (also a paired study) between Abbot Freestyle Libre sensor and the Dexcom G5 sensor of 4% and the same SD for difference as observed previously, 22 patients would be needed to reach the power of 80% with an alpha significance level of 0.05. Taking into account a dropout rate of 10%, 25 patients would be needed. Using a more conservative SD of 8% 36 patients would be needed to reach the same power, alpha significance level and difference in MARD, 40 patients when taking drop-out rate of 10% into account. For the corresponding example but with 90% power 51 patients would be needed. The sample size calculations are performed by using two-sided Wilcoxon Signed Rank test.
Table S1 Bland-Altman analyses with limits of agreement, distributions of the differences test of systematic differences between the methods and Intraclass correlation coefficient

<table>
<thead>
<tr>
<th>Variable</th>
<th>HemoCue Mean (SD) Median (Min; Max)</th>
<th>New Method Mean (SD) Median (Min; Max)</th>
<th>Mean (95% CI Limits of Agreement) (SD) Median (Min; Max)</th>
<th>Systematic changes p-value</th>
<th>Shrout-Fleiss reliability: random set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freestyle libre</td>
<td>9.19 (2.05) 9.42 (5.63; 15.87) n=33</td>
<td>8.08 (1.79) 8.33 (4.38; 11.39) n=33</td>
<td>-1.10 (-3.54; 1.34) (1.24) -1.46 (-4.48; 1.63) n=33</td>
<td>&lt;.0001</td>
<td>0.68</td>
</tr>
<tr>
<td>Dexcom G5</td>
<td>9.19 (5.17; 13.21) (2.05) 9.42 (5.63; 15.87) n=33</td>
<td>9.08 (5.67; 12.49) (1.74) 9.39 (5.48; 13.40) n=33</td>
<td>-0.11 (-1.94; 1.73) (0.94) -0.23 (-2.47; 3.01) n=33</td>
<td>0.0521</td>
<td>0.88</td>
</tr>
</tbody>
</table>

Wilcoxon Signed Rank test is used to test the difference.
For continuous variables Mean (95% CI, Limits of Agreement) / (SD) / Median (Min; Max) / n= is presented.
Figure S1 Bland-Altman plot, scatterplot difference vs mean 
a) all mean measurements (FAS): Freestyle Libre vs HemoCue 
b) all mean measurements (FAS): Dexcom G5 vs HemoCue
Figure S2 Correlations between devices. All Individual measurements a) Libre values versus HemoCue values b) Dexcom G5 values versus HemoCue values c) Libre values versus Dexcom G5 values. - The line in the figure is the identity y=x.

a

b

c