Supporting Information for

Rapid Determination and Conversion Study of
5-Hydroxymethylfurfural and Its Derivatives in Glucose Injection

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Figure S1. Comparison of typical IR spectra for Compounds I-III.

Chemical Formula: C₈H₈O₃
Exact Mass: 126.03
Molecular Weight: 126.11
m/z: 126.03 (100.0%), 127.04 (6.5%)
Elemental Analysis: C, 57.14; H, 4.80; O, 38.06

Figure S2. GC-MS data of compound I

Chemical Formula: C₁₂H₁₀O₅
Exact Mass: 234.05
Molecular Weight: 234.21
m/z: 234.05 (100.0%), 236.06 (13.0%), 238.06 (1.0%)
Elemental Analysis: C, 61.54; H, 4.30; O, 34.16

Figure S3. ESI-MS data of compound II
Figure S4. ESI-HRMS data of compound III

Figure S5. $^1$H NMR of compound I
Figure S6. $^{13}$C NMR of compound I

Figure S7. $^1$H NMR of compound II
Figure S8. $^{13}$C NMR of compound II

Figure S9. $^1$H NMR of compound III
Figure S10. $^{13}$C NMR of compound III

Figure S11. HPLC for sample, control and standard (a: HPLC for glucose injection; b: HPLC for control; c: HPLC for standard compounds.)