

## Supplementary Material

ESM Table 1: Inclusion exclusion criteria

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| <b>Key eligibility criteria:</b> | <ul style="list-style-type: none"> <li>• Age 18–75 years</li> <li>• Type 1 diabetes of at least 1-year duration or insulin requiring type 2 diabetes</li> <li>• HbA1c &lt;91 mmol/mol (10.5%)</li> <li>• Managed with multiple daily injections (MDI [ie separate rapid acting and basal insulin injections, or <math>\geq 2</math> mixed insulin injections daily]) or insulin pump therapy (IPT)</li> <li>• Renal function meets criteria: eGFR&lt;45mL/min/1.73m<sup>2</sup>, ESKD on peritoneal dialysis or ESKD on hemodialysis)</li> <li>• Total daily dose of insulin &lt;200 Units</li> <li>• Participant (and carer where applicable) should be able to speak and understand English (at Australian sites) or Danish (at Danish site)</li> <li>• Willing and able to implement the study requirements.</li> <li>• Have internet or mobile phone access enabling upload of the AID system data</li> </ul> |
| <b>Key exclusion criteria:</b>   | <ul style="list-style-type: none"> <li>• Sulphonylureas are not permitted. Metformin, SGLT2inh and GLP-1 analogues permitted within regulatory guidelines (pre-dialysis).</li> <li>• Systemic glucocorticoid therapy within the last 4weeks (stable doses [<math>&gt;8</math> weeks] are permitted)</li> <li>• DKA within past 4-weeks</li> <li>• Pregnancy or planned pregnancy</li> <li>• Major allergy to tape/ adhesives</li> <li>• Active major life- threatening illness limiting life-expectancy to &lt;6 months</li> <li>• Major psychiatric history.</li> </ul>                                                                                                                                                                                                                                                                                                                                          |