**ESM Table 2**: Longitudinal Mixed Model Exploring the Effect of Demographic and Clinical Characteristics on Log-FCP Levels over Time among DA Positive Participants, Including the Effect of Double versus Single DA: Parameter Estimates and 95% Confidence Limits

<table>
<thead>
<tr>
<th>Effect</th>
<th>Estimate</th>
<th>Lower 95% Confidence limit</th>
<th>Upper 95% Confidence limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onset age &lt;10</td>
<td>-0.5835</td>
<td>-0.6694</td>
<td>-0.4977</td>
</tr>
<tr>
<td>Female sex</td>
<td>0.1094</td>
<td>0.02408</td>
<td>0.1946</td>
</tr>
<tr>
<td>Non-White race</td>
<td>0.2387</td>
<td>0.1255</td>
<td>0.3519</td>
</tr>
<tr>
<td>HLA susceptible</td>
<td>-0.01534</td>
<td>-0.1013</td>
<td>0.07065</td>
</tr>
<tr>
<td>Baseline HbA1c (%)</td>
<td>-0.1996</td>
<td>-0.2324</td>
<td>-0.1668</td>
</tr>
<tr>
<td>Baseline BMI-Z</td>
<td>0.1699</td>
<td>0.1251</td>
<td>0.2146</td>
</tr>
<tr>
<td>DM duration (months)</td>
<td>-0.03789</td>
<td>-0.04116</td>
<td>-0.03463</td>
</tr>
<tr>
<td>Double DA at baseline</td>
<td>0.06880</td>
<td>-0.04025</td>
<td>0.1779</td>
</tr>
<tr>
<td>DM Duration * Baseline DA</td>
<td>-0.00726</td>
<td>-0.01176</td>
<td>-0.00276</td>
</tr>
</tbody>
</table>

Models also adjusted for time varying FPG and site

FCP=fasting C peptide, DA=diabetes autoantibodies; NHW=Non-Hispanic white; HLA=human leucocyte antigen; A1c= Hemoglobin HbA1c; BMI=body mass index; DM=diabetes

This model shows that presence of double (versus single) DA positivity at baseline is associated with faster FCP decline over time, because there is a significant interaction between presence of double DA at baseline and DM duration on FCP levels.

Model fit statistics: -2 Res. Log Likelihood = 4636.2; AIC =4644.2; AICC=4644.2; BIC=4663.2