Concentrations of the 21 JKP proteins at baseline did not differ over 52 weeks (study outcome).

Dulaglutide (Trulicity®) is a once-weekly GLP-1 receptor agonist approved for the management of type 2 diabetes mellitus.

Results of Dulaglutide treatment compared to insulin glargine treatment in this study:
- **OR (CI)**: OR = 0.88 (OR = 0.09) for the risk of fast eGFR decline
- **P value**: P = 0.007

**Associations of fast eGFR decline with change in protein concentration from baseline to 26 weeks**

**Table 1. Associations of fast eGFR decline with change in protein concentration from baseline to 26 weeks.**

<table>
<thead>
<tr>
<th>Protein</th>
<th>Treatment</th>
<th>Frequency [%]</th>
<th>OR (95% CI)</th>
<th>Frequency [%]</th>
<th>OR (95% CI)</th>
<th>P [Fisher]</th>
</tr>
</thead>
<tbody>
<tr>
<td>TNF-RI</td>
<td>Glargine</td>
<td>6, 62 (10)</td>
<td>3, 62 (5)</td>
<td>0.59 (0.18, 1.92)</td>
<td>0.25 (0.09, 0.67)</td>
<td>0.27</td>
</tr>
<tr>
<td>WIF1</td>
<td>Glargine</td>
<td>7, 62 (11)</td>
<td>7, 62 (11)</td>
<td>0.56 (0.21, 1.46)</td>
<td>0.18 (0.05, 0.66)</td>
<td>0.11</td>
</tr>
<tr>
<td>SYND1</td>
<td>Glargine</td>
<td>9, 62 (15)</td>
<td>9, 62 (15)</td>
<td>0.56 (0.21, 1.46)</td>
<td>0.18 (0.05, 0.66)</td>
<td>0.11</td>
</tr>
<tr>
<td>IL1RT1</td>
<td>Glargine</td>
<td>9, 62 (15)</td>
<td>9, 62 (15)</td>
<td>0.56 (0.21, 1.46)</td>
<td>0.18 (0.05, 0.66)</td>
<td>0.11</td>
</tr>
</tbody>
</table>

**METHODS**
- **Plasma samples** from participants who received DULA 1.5 mg (n=124) and insulin glargine (n=125) for 52 weeks.
- **The JKP was employed for targeted analysis of 21 circulating proteins**.
- **eGFR slopes were calculated using linear mixed effects models with fixed and random effects. Fast eGFR decline was defined as a decline in eGFR slope of ≥5 ml/min/1.73m² over 52 weeks (study outcome).**

**OBJECTIVE**
- Determine whether temporal changes in 21 JKP proteins predicts kidney function, and risk of fast eGFR decline.

**RESULTS**
- **Dulaglutide reduces occurrence and risk of fast eGFR decline**.
- **Frequency of eGFR decline of ≥5 ml/min/1.73m² over 52 weeks was lower with Dulaglutide treatment (P=0.006).**
- **Dula treatment was associated with 65% lower odds of fast eGFR decline (≥5 ml/min/1.73m²/year) compared to insulin glargine (P<0.01).**
- **In the study, the risk of fast eGFR decline was reduced in all 21 JKP proteins.**

**SUMMARY**
- Participants with DELTA above median, DULA lowered the risk of fast eGFR decline. DULA significantly reduced risk of fast eGFR decline in participants who had DELTA above median of six JKP proteins. TNF-RI, TNF-RII, NF-kB, G0A1, SYND1, and DULA glargine.
- **Conclusions**: Participants with DELTA above median (e.g., EFNA4, SYND1) show stronger response to DULA treatment. Participants with DELTA above median (e.g., EFNA4, SYND1) show poorer response to DULA treatment.
- **Further studies are necessary to validate the utility of these JKP proteins to identify treatment responders in insulin-treated diabetes.**

**ACKNOWLEDGEMENTS**
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**REFERENCES**
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