**Effectiveness of HypoPAST, a fully-online, psycho-educational program for reducing fear of hypoglycaemia among adults with type 1 diabetes: results of a 24-week randomised controlled trial**

**Aim and background:** HypoPAST (Hypoglycaemia Prevention, Awareness of Symptoms, and Treatment) is a fully-online, self-guided, psycho-educational program designed to support adults with type 1 diabetes (T1D) experiencing hypoglycaemia-related problems (i.e. fear, severe and frequent episodes). Our aim was to assess the effectiveness of HypoPAST for reducing fear of hypoglycaemia.

**Methods:** A 24-week, two-arm, parallel-group, hybrid type 1 randomised controlled trial compared HypoPAST (intervention) to usual care (control) (ACTRN12623000894695). Adults (≥18 years) with T1D, fear of hypoglycaemia (PAID item 9: score ≥2), and access to an internet-enabled device were recruited primarily via the National Diabetes Services Scheme. They completed Qualtrics surveys at baseline and 24 weeks post-randomisation (January 2024–March 2025). Randomisation (1:1) used computer-generated permuted blocks, stratified by gender (women/men) and glucose monitoring (continuous/finger prick). Researchers were blind to group allocation (except one researcher with no Qualtrics data access to maintain blinding). The primary outcome was between-group difference at 24 weeks in fear of hypoglycaemia (HFS-W score, range: 0-72; higher score=higher fear). Data collection was completed end-March 2025.

**Results:** 219 adults participated(intervention: n=108; control: n=111). Their mean+SD age was 45±15 and median [IQR] T1D duration 17 [5, 27] years. At 24 weeks, HFS-W data were available for 41% (n=44) intervention and 44% (n=49) control group participants. Mean HFS-W score at 24 weeks (95% CI) was 26.6 (22.8–30.4) and 27.3 (23.8–30.9) for intervention and control group participants, respectively; there was no significant between-group difference (–0.9, 95% CI –4.2 to 2.5; p=0.61). Four participants (1 intervention, 3 control) reported serious adverse events (severe hypoglycaemia requiring medical assistance for recovery).

**Conclusion:** HypoPAST did not reduce fear of hypoglycaemia. Mixed-method process evaluation findings will provide insights into uptake and real-world implementation of HypoPAST and its effects. Analysis of secondary outcomes will also provide insight into program effectiveness.