PaQ® (CeQur SA) is a simple to use patch-on device which provides set basal and bolus insulin on demand. PaQ® was designed to minimize barriers to insulin therapy. In addition to feasibility of use, safety and efficacy (reported elsewhere), this study analyzed the impact of the use of PaQ® on patients reported outcomes (PRO) including barriers against insulin treatment, diabetes related distress and negative attitudes towards insulin therapy (T2D patients with MDI).  

**Methods**: This single center, open label, single arm study was comprised of three 2-week periods: baseline (MDI), transition from MDI to PaQ®, and PaQ® treatment periods. Three validated questionnaires were completed at the end of the baseline and PaQ® treatment periods: Barriers to Insulin Treatment – Questionnaire (BIT), Problem Areas in Diabetes – Scale (PAID) and Insulin Treatment Appraisal Scale (ITAS). Nineteen patients (age 59±5 y, T2D duration 15±7 y, 21% female, A1C 7.3±1.7, BMI 32±5 kg/m²) completed the questionnaires at the two measurement points. The study was a strong and a significant effect of PaQ® on the mean ITAS total score (t(2.1; difference 31.9±0.5), p<0.05, effect size (ES) 0.6). Patients perceived flourishing from insulin therapy (journal improvement (0.3); less derogation from others (0.6); less feelings of stigmatization (0.8); less fear about hypoglycemia (0.8). The Insulin Treatment Appraisal Scale (ITAS) consists of 16 negative and 4 positive statements which form six dimensions of the scale (positive and negative appraisal). For calculating the total score, the coding of the positive items was reversed. The scale ranges from 0 to 100, where higher scores indicate a higher appraisal of insulin treatment, without increasing other diabetes related distress.  

**Results**: The results of PaQ® treatment were compared to those of the control group (baseline, transition from MDI to PaQ®, PaQ® treatment). PaQ® significantly reduced the three subscales of diabetes related distress as measured by the PAID (0.29), suggesting that PaQ® use was not associated with an increased burden of living with diabetes. The study is limited by both, the uncontrolled design and small sample size. Moreover, the moderate to large effect sizes suggested that the use of PaQ® has beneficial and clinically relevant effects to overcome barriers to and reappraisal of insulin treatment, without increasing other diabetes related distress.

**Conclusion**: PaQ® was designed to reduce the barriers to insulin therapy. The data from this study suggest limitations in the use of PaQ®: 1) less feelings of stigmatization and “less fear about hypoglycemia” might be explained by the fact that the use of PaQ® did not change over the whole range of insulin therapy; 2) negative attitude towards insulin treatment and “feeling of stigmatization” might be explained by the fact that the use of PaQ® did not change over the whole range of insulin therapy; 3) as the effect sizes show the improvement of the total ITAS score was rather small. This study suggests that PaQ® use was not associated with an increased burden of living with diabetes. However, the study is limited by both, the uncontrolled design and small sample size. The results of PaQ® treatment were compared to those of the control group (baseline, transition from MDI to PaQ®, PaQ® treatment). PaQ® significantly reduced the three subscales of diabetes related distress as measured by the PAID (0.29), suggesting that PaQ® use was not associated with an increased burden of living with diabetes. The study is limited by both, the uncontrolled design and small sample size. Moreover, the moderate to large effect sizes suggested that the use of PaQ® has beneficial and clinically relevant effects to overcome barriers to and reappraisal of insulin treatment, without increasing other diabetes related distress.