Reaching Individualized FPG Targets Without Nocturnal Hypoglycemia With IDegAsp BID vs BIAsp 30: a Meta-analysis

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ADA/EASD 2015 guidelines recommend personalized glycemic targets to balance benefits and risks (e.g. hypoglycemia) in individual patients. Assessing the likelihood of reaching glycemic targets without nocturnal hypoglycemia with different therapies may aid achievement of individualized targets.

The proportion of patients reaching fasting plasma glucose (FPG) targets (<90 mg/dL, <108 mg/dL or <126 mg/dL) without nocturnal hypoglycemia (00:01–05:59h inclusive) during the maintenance period (last 12 weeks of treatment) was assessed using data pooled from three 26-week, treat-to-target phase 3a/b trials of IDegAsp (a novel co-formulation of 70% insulin degludec [IDeg] and 30% insulin aspart [IAsp]) twice daily (BID) vs biphasic IAsp 30/70 (BIAsp 30) BID in the IDegAsp clinical development program (BOOST). Patients were insulin naïve (BOOST START TWICE DAILY) or switched from basal or pre-mix (BOOST INTENSIFY PREMIX I or INTENSIFY ALL).

End-of-trial A1C did not differ between IDegAsp and BIAsp 30 in the 3 trials. Patients were significantly more likely to reach all FPG targets without nocturnal hypoglycemia with IDegAsp vs BIAsp 30: the odds ratio ranged from 2.92 to 2.98 for all 3 FPG targets (p<0.0001 for all analyses)

Treatment with IDegAsp BID vs BIAsp 30 BID may help achieve personalized FPG targets without nocturnal hypoglycaemia for a wide range of patients with T2D.