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BU-02152 AN EVALUATION OF THE PRESCRIPTION PATTERN OF IDegAsp AND ITS CLINICAL OUTCOMES IN INDIAN CLINICAL PRACTICE

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BACKGROUND

IDegAsp, the first soluble co-formulation which contains 70% basal IDeg and 30% mealtime IAsp, has a unique pharmacodynamic profile. Postprandial and fasting hyperglycemia can be effectively controlled, without increasing the hypoglycemia risk. IDeg component provides a stable basal insulin action over a 24-h period whereas the IAsp component bestows prandial control, which is unaffected by the basal component.

AIMS

A retrospective evaluation of the prescription pattern and the clinical outcomes of IDegAsp among T2DM subjects in a real-world setting of Indian clinical practice.

METHODS

Clinical characteristics and demographics of T2DM subjects prescribed with IDegAsp and on regular follow-up were captured from our EMRs. n=291, age=53.59±11.80years, T2DM duration=11.05±6.28years, 74.14% males, IDegAsp treatment duration (as on 1st April 2018)=10.51±8.53months. Previous treatment regimen of the patients: (1) OHA only, n=87; (2) OHA+insulin, n=176; (3) OHA+Insulin+GLP1RA, n=7 [3 patients discontinued GLP1RA upon IDegAsp initiation]; (4) Treatment naïve [started on IDegAsp+OHAs, n=17; started on IDegAsp+OHAs+GLP1RA, n=4].

RESULTS

IDegAsp treatment resulted in significant improvement in the clinical profiles. Overall reduction from baseline: FBS -34.93 mg/dL, p<0.0001; PPBS -65.09, p<0.0001; HbA1c -1.470, p<0.0001. Changes in Body weight, BMI and TDD of insulin were non-significant. Negligible number of hypoglycemic episodes reported (0.007 events/ person, none severe, no nocturnal hypos). Initially, 32.88% and 67.12% of the subjects were on IDegAsp once daily(q.d) and twice daily(b.i.d.) respectively. Later, 22.92% of the subjects in the q.d regimen had to be intensified to b.i.d. and 3.57% of the subjects in the b.i.d. were shifted to q.d.

Previous treatment regimen before initiating IDegAsp(n)	Age (Years)	Males (%)	T2DM duration (Years)	IDegAsp treatment duration(Months)	FBS (mg/dL)			PPBS (mg/dL)			HbA1c (%)		
					Baseline	Recent visit	Baseline change, P value Baseline vs. Recent visit	Baseline	Recent visit	Baseline change, P value Baseline vs. Recent visit	Baseline	Recent visit	Baseline change, P value Baseline vs. Recent visit
Patients previously on OHA only (87)	51.63± 10.55	74.71	10.6± 6.99	9.27± 8.17	183.67± 61.86	138.28± 40.01	_45.39, <0.0001	303.33± 38.40	175.98± 55.99	_127.4, <0.0001	9.32± 2.05	7.34± 0.92	_1.972, <0.0001
Patients previously on OHA+Insulin (176)	54.94± 12.14	73.3	11.38± 5.83	11.31± 8.65	159.78 56.79	138.14± 38.85	_21.64, <0.0001	209.13± 89.90	167.32± 51.15	_41.81, <0.0001	8.53± 1.79	7.45± 0.95	_1.078, <0.0001
Patients previously on OHA+Insulin+GLP1RA (7)	49.29± 12.92	85.71	8.83± 5.81	13.00± 9.75	180.00± 46.46	121.14± 19.89	_58.86, 0.0095	206.57± 70.19	131.00± 40.54	_75.57, 0.0297	9.17± 2.03	7.18± 1.07	_1.991, 0.0405
Treatment naïve. Patients started on IDegAsp+OHAs (17)	51.82± 13.32	76.47	11.23± 7.77	8.53± 8.35	249.00± 87.05	150.21± 53.48	_98.79, 0.0004	354.33± 83.6	184.11± 59.56	_170.20, <0.0001	10.88± 2.88	9.63± 3.19	_1.242, 0.2425
Treatment naïve. Patients started on IDegAsp+OHAs+GLP1RA (4)	54.50± 7.78	50	9.00± 8.49	5.00± 4.24	145.00± 39.60	121.00± 41.01	_24.00, 0.4321	348.23± 56.78	215.00± 37.58	_133.20, 0.0079	10.30± 1.56	8.88± 0.65	_1.420, 0.1431
All subjects (291)	53.59± 11.80	74.14	11.05± 6.28	10.51± 8.53	173.18± 63.90	138.25± 39.61	_34.93, <0.0001	235.21± 98.63	170.12± 53.08	_65.09, <0.0001	8.97± 2.05	7.50± 1.16	_1.470, <0.0001

DISCUSSION

In this real-world study of Indian clinical practice, prescription data indicated that the IDegAsp co-formulation is effective across a range of clinical profiles including treatment naïve subjects. It significantly improved clinical outcomes, with negligible hypoglycemia and no weight gain. To a greater extent, IDegAsp could thus help eliminate the concerns regarding insulin intensification such as fear of injections and burdensome regimens, thereby overcome clinical inertia and achieve clinical outcomes in a large proportion of T2DM individuals.

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