

Glycemic Control Following GLP-1 RA or Basal Insulin Initiation in Real-World Practice: A Retrospective, Observational, Longitudinal Cohort Study

OPEN ACCESS

PEER-REVIEWED INFOGRAPHIC

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WHY CARRY OUT THIS STUDY?



There is a need for real-world evidence of effectiveness of these injectable agents to complement the randomized controlled trial evidence



This study was conducted to investigate the effectiveness of initiating therapy with either GLP-1 RA or BI in real-world clinical practice

STUDY DETAILS

STUDY DESIGN

Retrospective, observational, longitudinal cohort study of real-world data

PATIENTS

People with T2D inadequately controlled on OADs

DATABASES USED

- US Optum Humedica®
- UK Clinical Practice Research Datalink

INCLUSION CRITERIA

- **≥18 years of age** at index date (date of first prescription of either injectable)
- **Diagnosis of T2D** or unspecified diabetes
- Initiated GLP-1 RA or BI **Jan 1, 2010 – Jun 30, 2016**
- **≥180 days before to 720 days after** recorded medical history from index date

- **≥1 OAD** during the 180-day baseline period
- **≥7% most recent HbA1c** within 90 days before and 14 days after the index date
- **≥1 valid HbA1c record** within 15 and 720 days after GLP-1 RA or BI initiation

EXCLUSION CRITERIA



Diagnosis of type 1 diabetes at any time



Gestational diabetes within 180 days before the index date



Polycystic ovary syndrome at any time before the index date

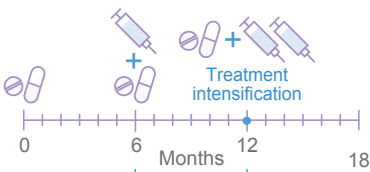
WHAT WAS LEARNED FROM THE STUDY?



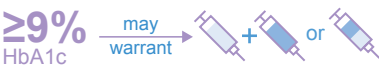
In clinical practice in both countries, injectable therapies are generally reserved for those with relatively advanced disease



Only about 25% of people achieve control with a single injectable medication added to oral therapy once HbA1c is ≥9%



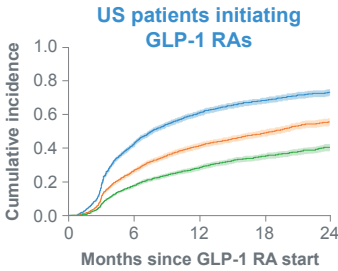
Treatment intensification should be considered if HbA1c is not well controlled after 6–12 months on either injectable



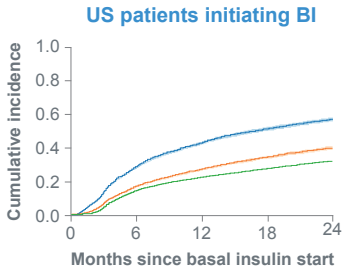
Regimens with greater antihyperglycemic efficacy including combination injectable therapy may be warranted for those people with HbA1c ≥9%

Proportion of all patients achieving HbA1c <7% by baseline HbA1c categories

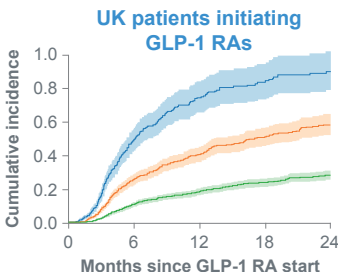
— ≥7–<8% — ≥8–<9% — ≥9%



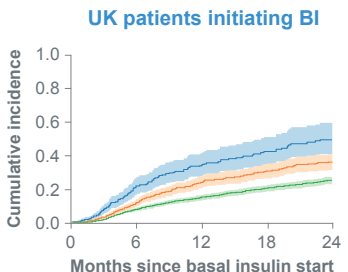
At risk	≥7–<8%	≥8–<9%	≥9%
0	6844	3126	911
6	6411	3544	1283
12	5781	4488	1783
18	5011	4729	1011
24	274	439	617



At risk	≥7–<8%	≥8–<9%	≥9%
0	14,323	6378	3837
6	14,025	8115	5624
12	13,840	6242	4228
18	10,489	4228	3231
24	1984	4228	3231



At risk	≥7–<8%	≥8–<9%	≥9%
0	709	305	179
6	1480	815	507
12	3394	2209	1487
18	1028	247	763
24	85	247	763



At risk	≥7–<8%	≥8–<9%	≥9%
0	478	275	185
6	1114	785	563
12	4014	3001	2347
18	151	460	1940
24	124	389	1647