## Kinexum ATTD 2022 report

## By Sam Collaudin, PhD, jMBA, Kinexum Business Strategy Consultant 27<sup>th</sup> – 30<sup>th</sup> April, 2022





Confidential

## **Presentation - disclaimers**

- This document has been redacted by Sam Collaudin, Kinexum Business Strategy Consultant, independently from any pharmaceutical and biotech companies.
- It synthesizes selected data presented during the ATTD 2022 conference, completed with publicly available data.
- It includes Sam's personal comments and opinions, underlined words are clickable links to other slides or external references.
- If you have comments, please contact Sam by email (samcollaudin@kinexum.com)
- Disclosure: Business strategy consultant at Kinexum, consultant for Modular Medical, CEO of Abvance Therapeutics, chairman of a non for-profit French health care insurance company (Groupe Uitsem).
- This report synthetizing external data, Sam cannot guarantee 100% accuracy of them.
- Comments are Sam's own and do not represent necessarily Kinexum positions.
- This report doesn't constitute a personal recommendation. Kinexum and Sam assume no liability for any decisions made by readers based on the analysis provided in this report.



## Table of content

- I synthetized mainly new results presented during this conference and not results already presented or published (as in the case of Tandem, for instance)
  - AID systems
    - Insulet
      - Omnipod 5 in T2D
      - Omnipod 5 in very young children
    - Medtronic 780G real-world
    - Beta Bionics insulin only pivotal trial
    - Diabeloop
    - <u>Control-IQ with SGLT-2i</u>
  - New pumps
    - <u>Terumo</u>
    - <u>Sigi</u>
  - CGMs
    - Abbott Libre 3
    - Dexcom G7
    - <u>GWave</u>
    - <u>K'Watch</u>
    - Indigo
  - Drugs
    - Zealand dasiglucagon micro-doses
    - <u>Arecor concentrated URI</u>
    - How to best use CGMs in T2D

Operating Since 2003

Confidential

# Insulet

- Among Insulet symposium, presentations & posters some new results were presented:
  - Omnipod 5 results in T2D (next slide)
  - Omnipod 5 results in very young children (next slide)
- Poster presenting meal tests in 6-14 years & 14-70 years T1D with or without bolus →
- Timelines updates:
  - Limited US commercial launch of Omnipod 5 underway
  - CE mark under review
  - US 2-6 years indication under FDA review
  - Feasibility study in T2D done



There was no significant difference in mean sensor glucose 6 hours post-meal with vs. without bolus (p≥0.05)

/let	rics o	over the 6h Postprandial Peri	od Chi	ldren	Adolescen	ts & Adults
	Pre-l	Meal Bolus?	With	Without	With	Without
	Max	CGM value (mg/dL) (mmol/L)	238 ± 64 13.2 ± 3.6	294 ± 63 16.3 ± 3.5	216 ± 50 12.0 ± 2.8	263 ± 60 14.6 ± 3.3
	CGM	at 6h post-meal (mg/dL) (mmol/L)	164 ± 61 9.1 ± 3.4	158 ± 60 8.8 ± 3.3	145 ± 49 8.1 ± 2.7	153 ± 59 8.5 ± 3.3
	Area	Under the Curve <sup>†</sup> (mg/dL*h) (mmol/L*h)	149 [50, 302] 8.3 [2.8, 16.8]	370 [193, 529] 20.6 [10.7, 29.4]	<b>134 [44, 265]</b> 7.4 [2.4, 14.7]	298 [180, 464] 16.6 [10.0, 25.8]
e,	20	% <54mg/dL (3.0mmol/L)	0.0 [0.0, 0.0]	0.0 [0.0, 0.0]	0.0 [0.0, 0.0]	0.0 [0.0, 0.0]
g	ang	% <70mg/dL (3.9mmol/L)	1.4 [0.0, 5.9]	0.0 [0.0, 0.0]	0.0 [0.0, 4.3]	0.0 [0.0, 0.0]
10	A C	% 70-180mg/dL (3.9-10.0mmol/L)	66.6 ± 25.3	46.1 ± 23.6	72.3 ± 22.7	55.3 ± 25.6
J.	le li	% >180mg/dL (10mmol/L)	29.1 ± 26.4	52.1 ± 24.3	24.1 ± 23.4	43.3 ± 26.0
USC I	<u>ا</u>	% >250mg/dL (13.9mmol/L)	0.0 [0.0, 13.4]	18.4 [0.0, 36.8]	0.0 [0.0, 0.0]	4.2 [0.0, 24.5]
S	8 1	% >300mg/dL (16.7mmol/L)	0.0 [0.0, 0.0]	0.0 [0.0, 18.6]	0.0 [0.0, 0.0]	0.0 [0.0, 2.6]
	Time	in Automated Mode (%)	97.2 [88.9, 100]	95.8 [84.7, 100]	100 [90.3, 100]	100 [93.1, 100]
	Auto	omated Insulin Delivery (U)	4.1 ± 3.0	6.5 ± 4.0	4.9 ± 2.8	7.3 ± 3.8
	Tota	l Insulin Delivery <sup>‡</sup> (U)	14.1 ± 7.7	10.5 ± 6.6	15.8 ± 6.9	14.0 ± 6.8

Data are mean + SD or median [JQR] <sup>1</sup>Defined as area below the glucose curve but above 180mg/dL (10 mmol/L) <sup>4</sup>Includes pre-meal bolus if given



# Insulet – Omnipod 5 in T2D

TDD (U/d)

- Single-arm outpatient study testing • Omnipod 5 in n=24 adults (18-75 years) T2D during 8 weeks
- Inclusion criteria: A1c 8-12%, MDI (12 . basal only, 12 basal-bolus), CGM users or naïve, max 200UI/day
  - Group A, basal bolus patients: 4 weeks \_ with optional boluses followed by 4 weeks with simplified boluses
  - Group B, basal only: 4 weeks with optional boluses followed by 4 weeks with simplified boluses if TIR  $\leq$  50%, optional boluses if > 50%
- Baselines: Age = 62 & 59 years, BMI = 35.2 & 31.9 kg/m<sup>2</sup>, 54% CGM naïve
- Results: A1c reduced from 9.4% to 8.1%. • TIR improved from 39.3% to 58.6%, time < 70mg/dl reduced from 0.13% to 0.06%, all p<0.05
- Insulin delivery satisfaction survey (IDSS), . improved from 3.5 to 4.2, p<0.05





### System Usability Scale (SUS)

Single item responses (N=14) from the SUS with scores ranging from 1.0 (strongly disagree) to 5.0



## Insulet – Omnipod 5 in very young children

- Single-arm outpatient <u>study</u> testing
   Omnipod 5 in n=80 very young T1D (≥
   2 years & < 6 years) during 8 weeks</li>
- Inclusion criteria: A1c < 10%, no severe hypos or DKA during past 6 months
- Baselines: Age = 4.7 years, 20% between 2 & 4 years, weight = 19.7 kg, 7.4% A1c, 13.7 UI/day, 15% MDI
- 35% of children mostly use the 110mg/dl target, 41% the 120mg/dl
- Results: TIR improved from 57.2% to 68.1%, time < 70mg/dl reduced from 2.2% to 1.9% (p<0.05)</li>
- All user experience index presented were significatively improved, IDSS from 3.9 to 4.3, treatment satisfaction by 23.9...









Confidential

## Medtronic - 780G real-world data

- Medtronic presented **real-world data** based on data gathered through CareLink
- Previous data with lower number of patients (and possibly highly motivated ones) were slightly better than pivotal trials. Recent one on a larger population show results that correspond almost exactly to the pivotal trial
- Disparities are seen in between countries (as previously presented with the 670G, probably diet, culture & education impacts)
- TIR results depends on parameters with higher time in range with aggressive parameters (up to 80.7%) but with higher time below 70 mg/dl (2.9%)



lle	lisers n		Active Insulin Time (≥95% of the time)						
03		2 Hours	2-3 Hours	3-4 Hours	>4 Hours	Total			
	100 mg/dL	1,482	1,448	177	7	3,316			
Target	110 mg/dL	306	707	120	2	1,183			
(≥95% of	120 mg/dL	289	764	129	3	1,254			
the time)	Total	4,507	6,172	954	32	12,870			

TIR (70-	180 ma/dL), %	Active Insulin Time (≥95% of the time)						
		2 Hours	2-3 Hours	3-4 Hours	>4 Hours	Total		
C1	100 mg/dL	80.7	78.2	75.0	76.8	79.3		
Target	110 mg/dL	77.4	75.3	75.3	64.4	75.9		
(≥95% of	120 mg/dL	74.6	73.2	69.9	68.7	73.2		
the time)	Total	77.8	74.8	72.4	70.1	75.8		

G	VII %	Active Insulin Time (≥95% of the time)					
	m, 70	2 Hours	2-3 Hours	3-4 Hours	>4 Hours	Total	
Glucose	100 mg/dL	6.6	6.7	6.8	6.8	6.6	
Target	110 mg/dL	6.8	6.8	6.8	7.2	6.8	
(≥95% of the time)	120 mg/dL	6.9	7.0	7.1	6.8	7.0	
	Total	6.7	6.8	6.9	7.0	6.8	

TBR (	:70 mg/dL), %	Active Insulin Time (≥95% of the time)						
I BIC()	i o mgranji ja	2 Hours	2-3 Hours	3-4 Hours	>4 Hours	Total		
	100 mg/dL	2.9	2.6	2.6	1.7	2.8		
Target	110 mg/dL	2.2	2.1	2.0	1.4	2.1		
(≥95% of	120 mg/dL	1.9	1.7	1.5	6.1	1.8		
une ume)	Total	2.7	2.3	2.2	2.5	2.5		



#### ACHIEVEMENTS FROM IN SILICO TO REAL WORLD

## Beta bionics - insulin only pivotal trial

- <u>Pivotal trial</u> testing the iLet with either Lispro/Aspart (BP A/L) either Fiasp (BP F) compared to standard of care (SC, current treatment that can be insulin pump, HCL or MDI), in n=440 children (6-18 years) or adults with T1D during 13 weeks
- Inclusion criteria: use of CGM or at least 3 BGM tests/day
- Baselines:
  - 89% using CGM
  - 34% MDI
  - 31% with HCL (23% with control-IQ)

Long awaited results of BB single hormones. Results are similar to other HCL system Dual-hormone pivotal ongoing.

## Mean Glucose by Hour of the Day



Solid dots represent medians, colored bands represent interquartile ranges

	All population		Children (6-18 ye	ars)	Adults			Patients with A1c	> 7%
Treatment	SC n=107	BP A/L n=219	SC n=53	BP A/L n=112	SC n=54	BP A/L n=107	BP F n=114	SC n=76	BP A/L n=164
Baseline A1c	7.7%	7.9%	7.7%	7.9%	7.6%	7.6%		8.2%	8.3%
A1c at 13 weeks	7.7%	7.3%	7.7%	7.3%	7.5%	7.1%		8.1%	7.5%
Baseline adjusted group difference		-0.5%*		-0.5%*		-0.5%*			-0.7%*
Baseline median time < 54 mg/dl	0.20%	0.21%							
median time < 54 mg/dl at week 13	0.24%	0.33%							
Baseline adjusted group difference		0.00%		0.02% p=0.33		-0.04% p=0.24%			
Mean TIR at week 13	54%	65%*	50%	60%*	58%	69%*	71%*		
Severe hypo events per 100 person years	10.8	17.7			14.2	10.2			

## Diabeloop

- First real-world data showing better glucose control than during the pivotal trial (+18.4% TIR vs 12%) →
  - These data correspond to the first users, usually highly motivated by using this new technology, that could be an explanation for these better results, could be less good in the future
- Ongoing projects
  - algorithm improvements (unannounced meals, self-learning...
  - indication extension (underserved population, children, teens, other insulins, T2D with a fully automated mode...)
  - integration with smart pen
  - integration of smart watch data (heart rate, accelerometer) in their algorithm
- They currently have 7,000 users in Europe
- Poster with positive reduction of time in hypo for T1D patients with more than 5% of time in hypos at baseline  $\rightarrow \rightarrow \rightarrow$



YourLoops data from 974 patients equipped in Germany from September 1, 2021, to December 31, 2021.

DBLG1

Baseline

16

8

WP7 (n=9)		WP8 (	n=28)	WP9	(n=8)	Total	(n=45)
OL	CL	OL	CL	OL	CL	OL	CL
Diff CL - OL		Diff C	L - OL	Diff C	L - OL	Diff C	L - OL
p-value		p-va	alue	p-va	alue	p-Vi	alue
			Time Below R	ange 70 mg/o	iL		
8.30	3.31	7.9	3.08	7.43	3.46	7.9	3.2
±2.34	±1.62	±2.53	±1.67	±2.12	±1.7	±2.39	±1.63
-5.88 [-6.83, -3.14]		-4.85 [-5.59, -4.04]		-3.99 [-5.29, -2.66]		- <b>4.73</b> [-5.3, -4.1]	
0.0003		<10 <sup>-4</sup>		0.0002		<10 <sup>-4</sup>	
			Time Below R	ange 54 mg/o	iL		
2.1	0.78	1.9	0.73	1.59	0.88	1.89	0.77
±1.05	±0.49	±1.5	±0.84	±0.85	±0.62	±1.31	±0.74
-1.27 [-2	2.1, -0.54]	-0.88 [-1.:	55, -0.79]	-0.6 [-1.	12, -0.3]	- <b>0.89</b> [-1.	39, -0.84]
0.0	1044	<1	0 <sup>-4</sup>	0.0	047	<1	0 <sup>-4</sup>
			Time In Range	e 70-180 mg/e	dL		
65.38	71.95	62.48	67.38	63.56	66.76	63.25	68.19
±9.35	±10.63	±10.27	±8.17	±6.78	±3.76	±9.45	±8.21
6 [2.4, 10.74]		4.71 [1.8	34, 7.96]	4.24 [-0.	72, 7.12]	5.11 [2.3	85, 7.02]
0.0066		0.00	028	0.0	944	<1	0 <sup>-4</sup>



# Control-IQ and SGLT-2i in T1D

- Crossover <u>trial</u> testing Control-IQ 4 weeks followed by Basal-IQ 2 weeks and Basal-IQ 2 weeks + Control-IQ 4 weeks with or without 5mg empagliflozin in n=35 T1D
- Inclusion: 18-65 years, using insulin pump, A1c ≤ 9%, no history of DKA or severe hypo in the past 12 months
- Baselines: 41 years, BMI=29 kg/m<sup>2</sup>, A1c=6.8%
- Results:
  - 81% TIR vs 71% (p=0.04)
  - 1.1% vs 1.9% time < 70mg/dl (p=0.2)</p>
  - 1 episode of DKA leading to discontinuation
- <u>Corresponding publication</u>





## Terumo Patch pump accuracy

Terumo presented results (own data) with similar accuracy as Medtronic pumps and with lower accuracy at low volumes (Data published and previously presented). They presented additional data on accuracy depending on speed of injection vs the 640G (similar results) and on periodic patterns.





Confidential

## Sigi Patch pump

 Short presentation at the FAIR of new technologies and some accuracy data presented in a poster



FIGURE 1: Mean basal rate delivery of 1-h-windows (colored squares) for a basal rate of 1.0 U/h (n=430). Dashed blue lines:  $\pm 15\%$ -range; solid blue lines:  $\pm 5\%$ -range.



FIGURE 2: Bolus accuracy for 0.2 U (left) and 1.0 U (right) boluses. Horizontal lines, boxes and antennae indicate median, 50% and 95% of values, respectively (n=150). Dashed blue lines:  $\pm 15\%$ -range; solid blue lines:  $\pm 5\%$ -range.



# Abbott – Libre freestyle 3 accuracy trial

- Abbott presented the results of their <u>accuracy trial</u> with the Libre Freestyle 3 in n=100 4 years and older T1D or T2D
- MARD of 7.8%
- 93.4% of readings within ± 20% if ≥ 70 mg/dl, 93.3% of readings within ± 20 mg/dl if < 70 mg/dl</li>

### FREESTYLE LIBRE 3 ACCURACY STUDY FreeStyle Libre 3 performance



## FreeStyle Libre 3 performance with glucose level

Glucose level	MAD	MARD
<54 mg/dL (3.0 mmol/L)	16.5 mg/dL (0.9 mmol/L)	
54-69 mg/dL (3.0-3.8 mmol/L)	8.0 mg/dL (0.4 mmol/L)	
70-180 mg/dL (3.9-10.0 mmol/L)		8.4%
181-250 mg/dL (10.0- 13.9 mmol/L)		6.3%
251-350 mg/dL (13.9-19.4 mmol/L))		4.9%
>350 mg/dL (19.4 mmol/L)		4.1%

MAD, Mean absolute difference is provided for glucose levels <70 mg/dL; MARD, mean absolute relative difference is provided for glucose levels ≥70 mg/dL.

Proprietary and confidential — do not distribute



## Dexcom – G7 accuracy data

- Dexcom presented the results of their <u>accuracy trial</u> testing their G7 CGM in n=316 T1D & T2D adults & n=164 T1D pediatrics (2-17 years)
- Results synthetized in the tables  $\rightarrow$
- Adults publication
- Paediatrics publication

G7 Accuracy Across CGM Glucose Ranges: Adult Arm Wear (N=308)

Glucose Range mg/dL (mmol/L)	Matched Pairs (N)	%15/15 mg/dL	%20/20 mg/dL	MARD (%)	MAD (mg/dL)	
40-60 (2.2-3.3)	2,444	85.1	91.9	NA	8.5	
61-80 (3.4-4.4)	5,485	92.6	96.5	NA	6.3	
81-180 (4.5-10)	15,319	86.2	93.6	8.9	N.A.	
181-300 (10.1-16.7)	10,465	90.3	96.0	7.2	N.A.	
301-400 (16.8-22.2)	5,480	96.8	99.1	5.4	N.A.	

MARD: presented for CGM values > 80 mg/dL (4.4 mmol/L)

MAD: presented for CGM values s 80 mg/dL (4.4 mmol/L)

Percent 15/15: proportion of CGM values that were within 15% of paired YSI values >100 mg/dL (6.6 mmolL) or 15 mg/dL (0.8 mmolL) or YSI values \$100 mg/dL (6.6 mmolL) Percent 2020; proportion of CGM values that were within 25% of paired YSI values >100 mg/dL (6.6 mmolL) or 20 mg/dL (1.1 mmolL) of YSI values \$100 mg/dL (6.6 mmolL) Garg, Set al. Diabetes Technickings. Thresporters. Area of print. Ithis/caling/10/108/48/48/22/202011.

## Dexcom G7 Provided Accurate Sensor Glucose Readings in Pediatric Participants with T1D

Pediatric Arm Wear Accuracy across CGM Glucose Ranges in 7-17 year olds (N=122) Matched Pairs MADO MAD In 7-17 year olds (mg/dL) g/dL (mm mg/dL mg/dL Arm-placed sensors 40-60 85.3 11.3 402 74.4 NA Overall MARD: 8.1% (2, 2 - 3, 3)Overall %20/20: 95.3% 61-80 1,089 93.0 95.5 NA 6.4 (3.4-4.4)Abdomen-placed sensors Overall MARD: 9.0% 81-180 86.5 94.1 3.386 8.4 N.A. (4.5-10)Overall %20/20: 92.9% 181-300 7.6 N.A. 88.5 97.0 2.029 In 2-6 year olds (10.1 - 16.6)Overall MARD: 9.3% 301-400 1,162 98.9 99.4 5.4N.A. Overall %20/20: 91.5% (16.7 - 22.2)

MARD: presented for CGM values > 80 mg/dL (4.4 mmol/L)

MAD: presented for CGM values < 80 mg/dL (4.4 mmol/L)

Percent 15/15: proportion of CGM values that were within 15% of paired YSI values >100 mg/dL (5.6 mmal/L) or 15 mg/dL (0.8 mmal/L) of YSI values s100 mg/dL (5.6 mmal/L) Percent 20/20: proportion of CGM values that were within 20% of paired YSI values >100 mg/dL (5.6 mmal/L) or 20 mg/dL (1.1 mmal/L) of YSI values s 100 mg/dL (5.6 mmal/L)



## Gwave CGM

- Non-invasive CGM that should be integrated into a watch, have FDA breakthrough status
- Clinical trial in n=23 subjects, 100% of readings in the A zone on a Clark Error Grid
- Ongoing clinical trial in n=250 T1D & T2D
- Aggregate clinical data to date (68 comparisons to reference lab and/or standard glucometer readings during either a glucose tolerance test or fruit juice challenge) →





97% A Zone

Gwave-Venous correlation Overlayed on a Clarke Error Grid



96% A Zone



## K'Watch from PKVitality

- Watch with a sensor with microneedles (painless). The sensor part (K'apsul) needs to be changed every week.
- Feasibility clinical trial ongoing with 35 patients, first patients show a MARD of 18% with calibration.



BGM

PK K'Watch ---- Commercial CGM



# Indigo implantable mutlibiomarker

## sensor

- Indigo is an implantable multibiomarker sensor that is under development and that can measure blood glucose, ketones, lactate & alcohol
- Results of the <u>GLOW study</u> testing Indigo device in 4 T1D & 3 healthy volunteers
- 1 giant cell foreign body reaction and 1 sensor failure
- Overall glucose MARD of 7.1%, 98.9% in A of the Parkes Error Grid
- MAD of 0.12mM for ketones
- MAD of 0.16mM for lactate





## Zealand – dasiglucagon micro-doses

- Results of a crossover, partially blinded, <u>Phase 2 trial</u> testing **80 & 120µg micro-doses** of dasiglucagon vs oral 15g carbohydrates in **n=20 adults T1D** (10 MDI, 10 CSII) with A1c ≤ 8%
- Rescue after an insulin dose aimed to bring PG to 54 mg/dL, intervention when this target is reached
- Results:

Kinexum

Operating Since 2003

- Faster glucose increase with dasiglucagon than with carb →
- Results of other trials were presented
- They presented potential limitations of the use of glucagon →





- YES Low-carbohydrate diet
- NO Exercise
- YES · Alcohol

?? • Cost

- NO Influence on CGM accuracy
  - Short term side effects

## Arecor – AT278 URI concentrated (500UI/ml)

- Single-dose, crossover, doubleblind, glucose clamp, <u>FIH trial</u> testing AT278 (500UI/ml URI) vs Novorapid in n=38 adults T1D
- Baselines: 38.8 years, 86.4 kg, A1c=7%
- Main results:

	<b>AT278</b> n = 38	<b>IAsp</b> n = 38	Treatment difference / ratio (95% CI)	<i>p</i> -value
nsulin exposure				
Onset of appearance (min)	3 (3; 4)	9.5 (8; 14)	-6 (-8; -6)	<0.0001
t <sub>Early50%Cmax</sub> (min)	7.5 (6; 10)	32 (27; 35)	-23 (-26; -22)	<0.0001
AUC <sub>IAsp,0-30min</sub>	4 920 (3 160; 7 062)	1 299 (630; 1 975)	4.02 * (3.29; 4.90)	
AUC <sub>IAsp,0-60min</sub>	10 576 (7 766; 14 735)	6 942 (4 369; 9 237)	1.54 * (1.35; 1.76)	
Glucose-lowering effect				
Onset of action (min)	11.5 (9; 16)	21.5 (14; 27)	-9.5 (-13; -6)	<0.0001
t <sub>Early50%GIRmax</sub> (min)	30 (25; 45)	60 (45; 75)	-20 (-30; -15)	<0.0001
AUC <sub>GIR,0-30min</sub>	45 ± 42	5 ± 9	8.91 * (5.96; 17.46)	
AUC <sub>GIR,0-60min</sub>	241 ± 157	102 ± 117	2.36 * (1.92; 3.22)	

Data are presented as median (25%; 75%) or mean ± SD; \* Treatment ratio (95% CI) is calculated for AUC variables only

Confidential



### Pharmacodynamics - Glucose infusion rate





## How to best use CGMs to treat T2D

- Talk from Richard Bergenstal on how to use CGMs as a tool to make easy decisions on how to treat T2D patients
- Presented an algorithm based on TIR and TBR →
- Suggest that targeted TIR should be ≥ 70% and TBR ≤ 2% in T2D

Very High (355 mg/d) Bin 3 High (55.250) 28 m EX.01 Target 10.250 Leve (6.63) 4m ( Very Leve (54.2 m)	s. CGM Clinic Step 1: Deter inhibitor sho Step 2: Find is time Step 3 Find	ian Guided Background (Basal) Insulin Adjustment for Type 2 Di rmine if patient has comorbidities (e.g. ASCVD, CHF, CKD) where GLP-1 receptor agonist or SGLT, uld be considered the %TIR and %TBR from the AGP Report (see example to left). in range (TIR) [70-180 mg/dL] >70%2 holow congo (TPR) [< 70 mg/dL (\$2%7) TIR/TBR category on table and adjust background insulin regimen; consider referral to diabetes en-	abetes
TIR/TBR Category	Action	Medication Adjustment Considerations	Follow-up
Time in range >70% and Time below rang 52%	Continue regimen	<ul> <li>Continue to optimize current therapy and reinforce lifestyle changes and taking insulin as prescribed</li> </ul>	3-4 months
Time in range >70% and Time below rang >2%	Address hypoglycemia	<ul> <li>Stop sulfonylurea if present and reduce background insulin by 10% if TBR is 8-12% or 15% if TBR is &gt;12%</li> <li>If not on sulfonylurea decrease total background insulin dose by 10% if TBR &gt;2-7%; 15% if TBR 8-12%; 20% if TBR &gt;12%</li> </ul>	2 weeks
Time in range \$70% and Time below range \$2%	Address hyperglycemia	<ul> <li>Consider adding or adjusting GLP-1 RA, otherwise increase background insulin dose by 10% if TIR 51-70%; 15% if TIR 30-50%; 20% if TIR &lt;30%</li> <li>If overnight hypoglycemia, consider smaller increase in insulin dose</li> </ul>	2 weeks
Time in range ≤70% and Time below rang >2%	Address hypoglycemia today; consider referral to diabetes educator	<ul> <li>Stop sulfonylurea if present and reduce background insulin dose by 10% if TBR is 8-12% or 15% if TBR is &gt;12%</li> <li>If not on sulfonylurea, decrease background insulin dose by 10% if TBR &gt;2-7%; 15% if TBR 8-12%; 20% if TBR &gt;12%</li> <li>Refer to diabetes educator for options to treat hyperglycemia including:         <ul> <li>Add or adjust GLP-1 RA (preferred) or add mealtime insulin before one or all meals; consider premixed insulin twice per day if cost or concern over insulin regimen complexity</li> </ul> </li> </ul>	2 weeks



# Analysis provided by Sam Collaudin

- Consultant at Kinexum in business strategy and business analysis in diabetes and other metabolic diseases
- PhD in Bio-mathematics and biology (ENS of Lyon and Univ. of Heidelberg)
- Junior MBA in biotech management (Grenoble Ecole de Management)
- Contacts:
  - <u>samcollaudin@kinexum.com</u>
  - <u>LinkedIn</u>
- Don't hesitate to contact me for feedbacks, comments, or questions



