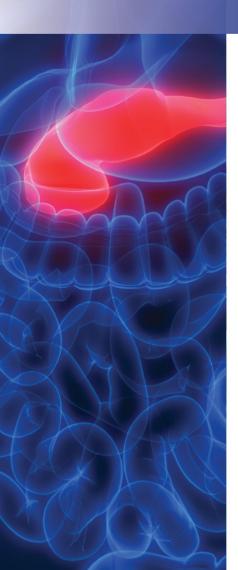


Diabetes Management with GLP-1 Receptor Agonists

Patient Perspectives and Pharmacist Insights

These slides are meant to be used as an accompaniment to the presentation for note taking purposes, they are not intended as a standalone reference.

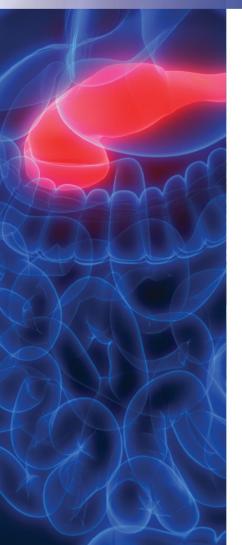




This educational activity is sponsored by Postgraduate Healthcare Education, LLC, and is supported by an educational grant from Novo Nordisk, Inc.



Faculty



Jennifer Trujillo, PharmD, FCCP, BCPS, CDCES, BC-ADM

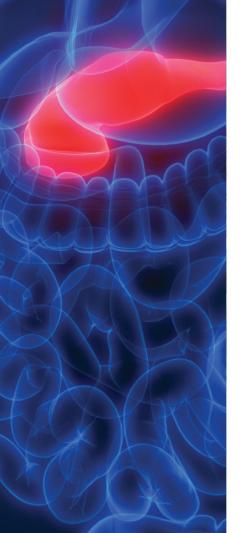
Professor, Department of Clinical Pharmacy Skaggs School of Pharmacy and Pharmaceutical Sciences University of Colorado Anschutz Medical Campus Aurora, CO

Dr Trujillo is a professor at the University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences in Aurora, CO. She received her Doctor of Pharmacy at the University of Arizona and completed her pharmacy practice residency at Boston Medical Center. Dr Trujillo currently practices as

a clinical pharmacist and certified diabetes care and education specialist at the UCHealth Diabetes and Endocrinology Clinic on the University of Colorado Anschutz Medical Campus. She is an active member of the American Diabetes Association's Primary Care Advisory Group and "Diabetes Is Primary" program planning committee. She has published several book chapters and has authored more than 50 peer-reviewed journal articles in the field of diabetes.



Faculty



Heather P. Whitley, PharmD, BCPS, CDCES

Clinical Professor of Pharmacy Practice Auburn University Harrison School of Pharmacy Auburn, AL

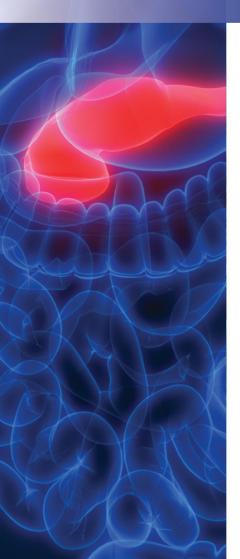
Dr Whitley is a Clinical Professor of Pharmacy Practice at Auburn University Harrison School of Pharmacy. She completed her Doctor of Pharmacy degree from the Medical University of South Carolina, and ASHP-accredited residency programs in Pharmacy Practice and Primary Care. She is also a Board-Certified Pharmacotherapy Specialist (BCPS) and a Certified Diabetes Care and Education Specialist (CDCES). She has practiced in



multiple locations in Alabama as a Clinical Pharmacy Diabetes Specialist, including family medicine practices in the rural Black Belt, FQHC facilities, and, since 2014, a family medicine residency program in Montgomery, AL. She has published nearly 40 manuscripts and presented at the national and international arena predominantly on her diabetes-related research.



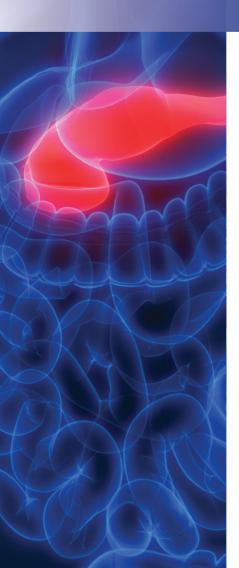
Patient Faculty



- David Constantine
- Carrie Parker
- Terrence Salter



Disclosures



Dr Trujillo has disclosed that she has served as a consultant for Sanofi and Novo Nordisk, Inc.

Dr Whitley has disclosed that she has served as a consultant for the Medication Information Institute.

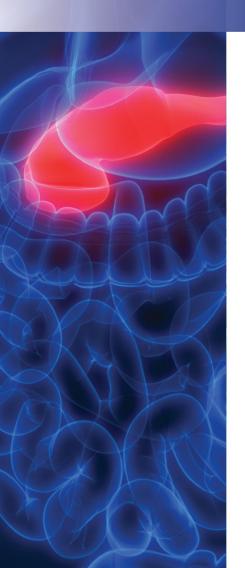
The patients participating in this program have no relevant financial relationships to disclose.

The clinical reviewer, Susan Cornell, BS, PharmD, CDCES, FAPhA, FADCES, has disclosed that she has received fees for consulting and non-CME services from Novo Nordisk, Inc.

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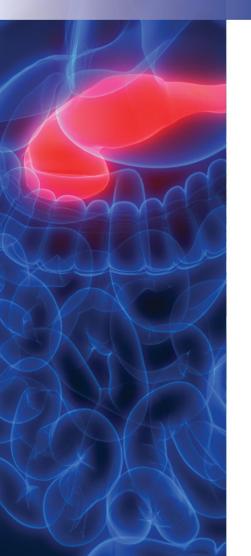
UAN: 0430-0000-21-073-H01-P

Credits: 1.5 hour (0.15 CEU)

Type of Activity: Application



Learning Objectives



- Discuss current clinical practice recommendations concerning use of glucagon-like peptide receptor agonists (GLP-1 RAs) in patients with type 2 diabetes (T2D) to improve glycemia and/or mitigate cardiovascular (CV) and kidney risk
- Assess patient-specific considerations when deciding between a GLP-1 RA or other treatment options in a patient with T2D
- Apply an understanding of the patient experience with GLP-1 RAs to inform shared decision-making thus leading to optimized patient-centered care

GLP-1360 The GLP-1 RA Class

Short-acting		Long-acting					
Agent	Exenatide (Byetta)	Lixisenatide (Adlyxin)	Liraglutide (Victoza)	Exenatide XR (Bydureon)	Dulaglutide (Trulicity)	Semaglutide (Ozempic)	Oral Semaglutide (Rybelsus)
Glucose profile target	PPG		FPG and PPG				
Dosing duration	Twice daily	Once daily	Once daily	Once weekly	Once weekly	Once weekly	Once daily
Phase 3 Clinical Program	AMIGO	GetGoal	LEAD	DURATION	AWARD	SUSTAIN	PIONEER
A1C lowering	-0.4 to -1.1	-0.46 to -0.99	-0.84 to -1.5	-1.48 to -1.9	-0.71 to -1.9	-1.1 to -2.2	-0.6 to -1.4
Weight lowering	-0.3 to -2.8	+0.3 to -2.96	+0.3 to -3.24	-2.0 to -4.0	+0.2 to -4.7	-1.4 to -6.5	-1.2 to -4.4

FPG, fasting plasma glucose; PPG, post-prandial glucose.

Trujillo JM. Glucagon-like peptide-1 receptor agonists. In: White JR, ed. 2019 Guide to Medications for the Treatment of Diabetes Mellitus. Arlington, VA: American Diabetes Association; 2019:190-210.

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GLP-1 360 GLP-1 RA CV Outcome Trials (CVOTs)

	ELIXA (n = 6068)	LEADER (n = 9340)	SUSTAIN-6 (n = 3297)	EXSCEL (n = 14,752)	REWIND (n = 9901)	PIONEER-6 (n = 3183)
Agent	Lixisenatide	Liraglutide	Semaglutide	Exenatide XR	Dulaglutide	Oral Semaglutide
Median follow-up (years)	2.1	3.8	2.1	3.2	5.4	1.3
Metformin use (%)	66	76	73	77	81	77
Prior CV disease (%)	100	81	60	73.1	32	84.7
Mean baseline A1C (%)	7.7	8.7	8.7	8.0	7.4	8.2
Primary outcome major adverse CV event (MACE)	4-point MACE 1.02 (0.89-1.17)	3-point MACE 0.87 (0.78-0.97)	3-point MACE 0.74 (0.58-0.95)	3-point MACE 0.91 (0.83-1.00)	3-point MACE 0.88 (0.79-0.99)	3-point MACE 0.79 (0.57-1.11)
Cardiovascular death	0.98 (0.78-1.22)	0.78 (0.66-0.93)	0.98 (0.65-1.48)	0.88 (0.76-1.02)	0.91 (0.78-1.06)	0.49 (0.27-0.92)
Myocardial infarction	1.03 (0.87-1.22)	0.86 (0.73-1.00)	0.74 (0.51-1.08)	0.97 (0.85-1.10)	0.96 (0.79-1.15)	1.18 (0.73-1.90)
Stroke	1.12 (0.79-1.58)	0.86 (0.71-1.06)	0.61 (0.38-0.99)	0.85 (0.70-1.03)	0.76 (0.61-0.95)	0.74 (0.35-1.57)
Heart failure hospitalizations	0.96 (0.75-1.23)	0.87 (0.73-1.05)	1.11 (0.77-1.61)	0.94 (0.78-1.13)	0.93 (0.77-1.12)	0.86 (0.48-1.55)
All-cause mortality	0.94 (0.78-1.13)	0.85 (0.74-0.97)	1.05 (0.74-1.50)	0.86 (0.77-0.97)	0.90 (0.80-1.01)	0.51 (0.31-0.84)
Worsening nephropathy	-	0.78 (0.67-0.92)	0.64 (0.46-0.88)	-	0.85 (0.77-0.93)	-

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GLP-1 360 Expanded FDA-Approved Indications

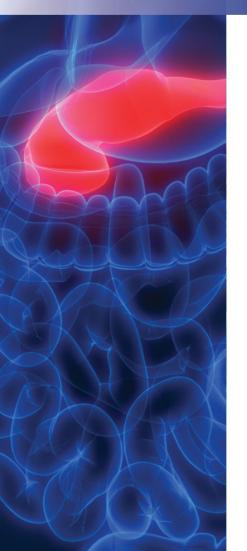
Medication	Expanded CV FDA Indication
Liraglutide (Victoza)	"reduce the risk of <u>major adverse CV events</u> in adults with T2D and <u>established CVD</u> "
Semaglutide (Ozempic)	"to reduce the risk of <u>major adverse CV events</u> in adults with T2D and <u>established CVD</u> "
Semaglutide (Rybelsus)	None
Exenatide XR (Bydureon, Bydureon BCise)	None
Dulaglutide (Trulicity)	"to reduce the risk of <u>major adverse CV events</u> in adults with T2D who have <u>established CVD</u> <u>or multiple CV risk factors</u> ."

Bydureon BCise [package insert]. AstraZeneca; 2020; Ozempic [package insert]. Novo Nordisk; 2020; Rybelsus [package insert]. Novo Nordisk; 2020; Trulicity [package insert]. Lilly; 2020; Victoza [package insert]. Novo Nordisk; 2020.

CVD, cardiovascular disease; XR, extended release.



Select Ongoing GLP-1 RA Trials Examining Kidney Outcomes

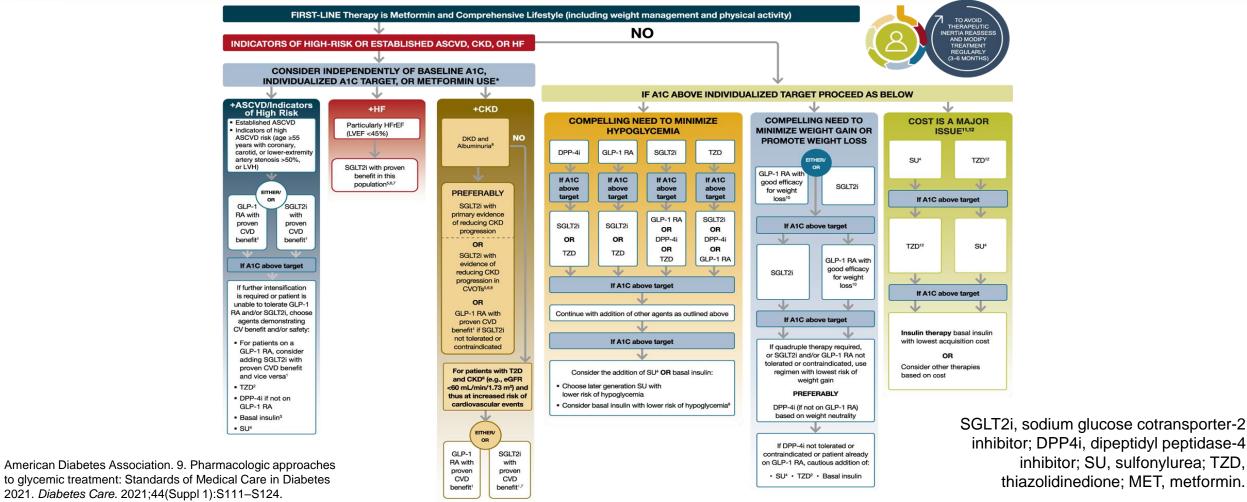


Drug Under Study	Trial	Cey kidney-related outcomes	
Semaglutide	FLOW	 Primary Outcome: Time to first occurrence of a composite of: eGFR decline of ≥ 50% from baseline, ESRD, or death from kidney or cardiovascular disease Secondary Outcome Measures:	
Semaglutide (in combination with empagliflozin)	EmpaSema	 Primary Outcome: Change in albuminuria (from randomization to week 52) Secondary Outcome Measures: Change in GFR (from randomization to week 52) Change in inflammatory and endothelial biomarkers 	

eGFR, estimated glomerular filtration rate; ESRD, end-stage renal disease; UACR, urinary albumin-to-creatinine ratio. www.clinicaltrials.gov. Accessed October 26, 2020.

GLP-1 360
PHARMACISTS -- PATIENTS

Glucose Lowering Medications in Type 2 Diabetes: Overall Approach





Indicators of High-Risk or Established ASCVD, CKD, or HF

Step 1: Does the patient have established atherosclerotic cardiovascular disease (ASCVD), chronic kidney disease (CKD), or heart failure (HF) or do they have indicators for these?

If the answer is "Yes"

FIRST-LINE therapy is metformin and comprehensive lifestyle (including weight management and physical activity) INDICATORS OF HIGH-RISK OR ESTABLISHED ASCVD, CKD, OR Yes

American Diabetes Association. 9. Pharmacologic approaches to glycemic treatment: Standards of Medical Care in Diabetes 2021. *Diabetes Care*. 2021;44(Suppl 1):S111–S124.



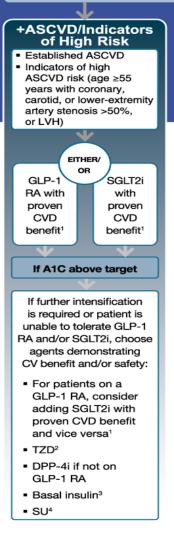
Indicators of high-risk or established ASCVD, CKD, or HF

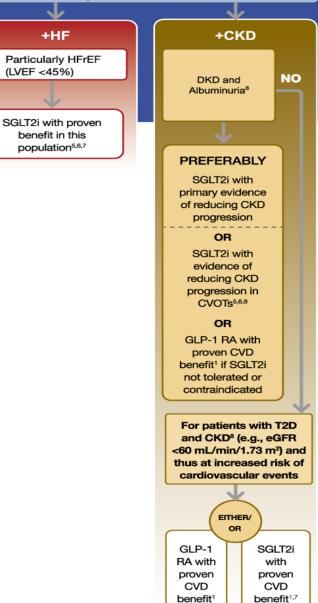
Consider independently of baseline A1C, individualized A1C target, or metformin use

CONSIDER INDEPENDENTLY OF BASELINE A1C, INDIVIDUALIZED A1C TARGET, OR METFORMIN USE*

+HF

(LVEF <45%)





American Diabetes Association. 9. Pharmacologic approaches to glycemic treatment: Standards of Medical Care in Diabetes 2021. Diabetes Care. 2021;44(Suppl 1):S111-S124.

GLP-1360 If ASCVD Predominates:

- GLP-1 RA with proven cardiovascular benefit
 - Liraglutide
 - Semaglutide
 - Dulaglutide
- SGLT2i with proven cardiovascular benefit
 - Empagliflozin
 - Canagliflozin

+ASCVD/Indicators of High Risk

- Established ASCVD
- Indicators of high ASCVD risk (age ≥55 years with coronary, carotid or lower -extremity artery stenosis >50%, or LVH)

EITHER/

GLP-1 RA with proven CVD benefit¹

SGLT2i with proven CVD benefit¹

If A1C above target

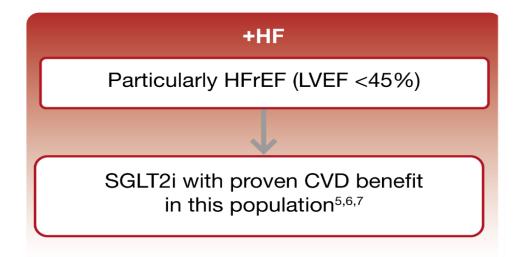
If further intensification is required or patient is now unable to tolerate GLP-1 RA and/or SGLT2i, choose agents demonstrating CV safety:

- For patients on a GLP-1 RA, consider adding SGLT2i with proven CVD benefit and vice versa¹
- TZD²
- DPP-4i if not on GI P-1 BA
- Basal insulin³
- SU⁴

American Diabetes Association. 9. Pharmacologic approaches to glycemic treatment: Standards of Medical Care in Diabetes 2021. *Diabetes Care*. 2021;44(Suppl 1):S111–S124.

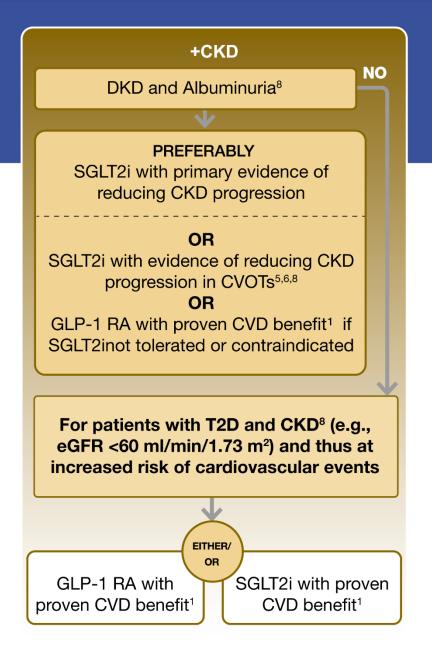
GLP-1 360 If HF Predominates:

- Empagliflozin
- Canagliflozin
- Dapagliflozin
- Ertugliflozin
 - Dapagliflozin and empagliflozin have primary and secondary benefit to reduce HF
 - Canagliflozin and ertugliflozin have secondary benefit to reduce HF
 - Dapagliflozin has specific HF FDA indication



GLP-1 360 If CKD Predominates:

- Canagliflozin
- Dapagliflozin
- Empagliflozin
- Benefit seen in CVOTs
- FDA-approved for CKD indicationcanagliflozin and dapagliflozin
- Empagliflozin primary renal trial is ongoing



American Diabetes Association. 9. Pharmacologic approaches to glycemic treatment: Standards of Medical Care in Diabetes 2021. *Diabetes Care*. 2021;44(Suppl 1):S111–S124.

GLP-1 360
PHARMACISTS -- PATIENTS

No Indicators of High-Risk or Established ASCVD, CKD, or HF

Step 1: Does the patient have established ASCVD, CKD, or HF or do they have indicators for these?

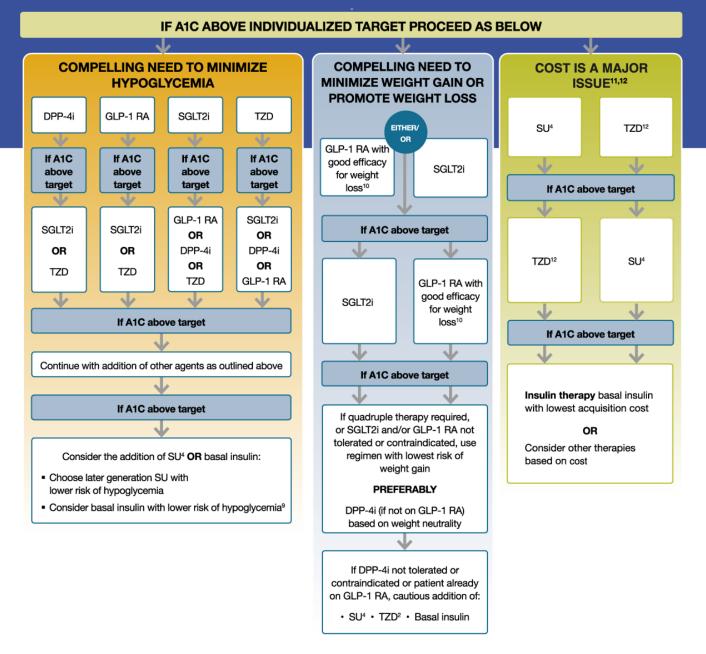
If the answer is "No"

FIRST-LINE therapy is metformin and comprehensive lifestyle (including weight management and physical activity) INDICATORS OF HIGH-RISK OR ESTABLISHED ASCVD, CKD. OR Yes

American Diabetes Association. 9. Pharmacologic approaches to glycemic treatment: Standards of Medical Care in Diabetes 2021. *Diabetes Care*. 2021;44(Suppl 1):S111–S124.



Step 2: If A1C is above the individualized target, consider patient-specific factors when selecting add-on medications.

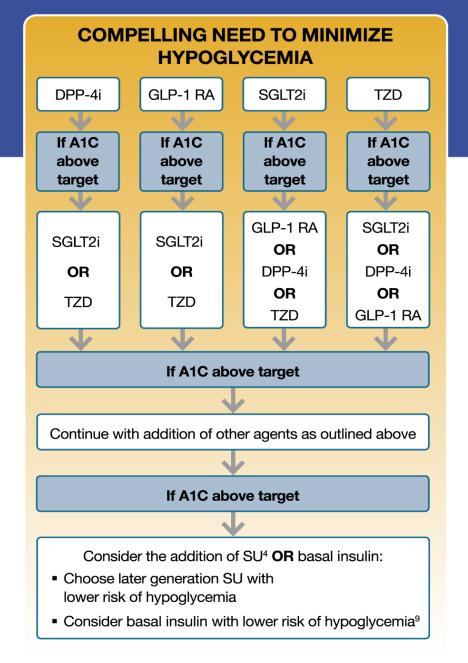


American Diabetes Association. 9. Pharmacologic approaches to glycemic treatment: Standards of Medical Care in Diabetes 2021. *Diabetes Care*. 2021;44(Suppl. 1):S111–S124.

GLP-1 360
PHARMACISTS -- PATIENTS

Compelling Need to Minimize Hypoglycemia

- DPP-4 inhibitors
- GLP-1 receptor agonists
- SGLT2 inhibitors
- Thiazolidinediones

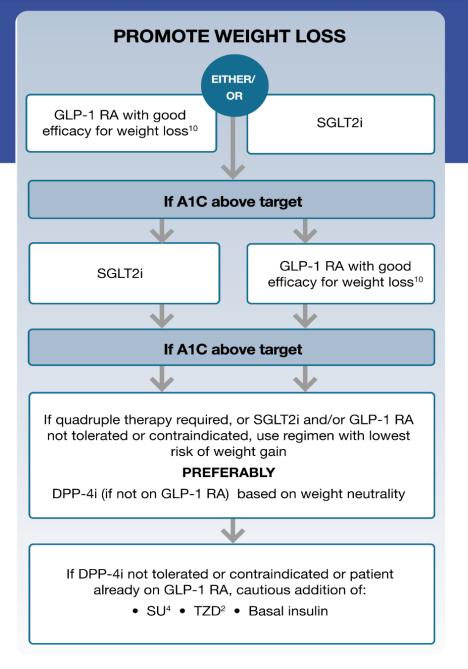


American Diabetes Association. 9. Pharmacologic approaches to glycemic treatment: Standards of Medical Care in Diabetes 2021. *Diabetes Care*. 2021;44(Suppl 1):S111–S124.

GLP-1 360 Promote Weight Loss

If choosing a GLP-1 RA with good efficacy for weight loss:

 Semaglutide > liraglutide > dulaglutide > exenatide > lixisenatide



American Diabetes Association. 9. Pharmacologic approaches to glycemic treatment: Standards of Medical Care in Diabetes 2021. *Diabetes Care*. 2021;44(Suppl 1):S111–S124.

GLP-1 360 PHARMACISTS -- PATIENTS

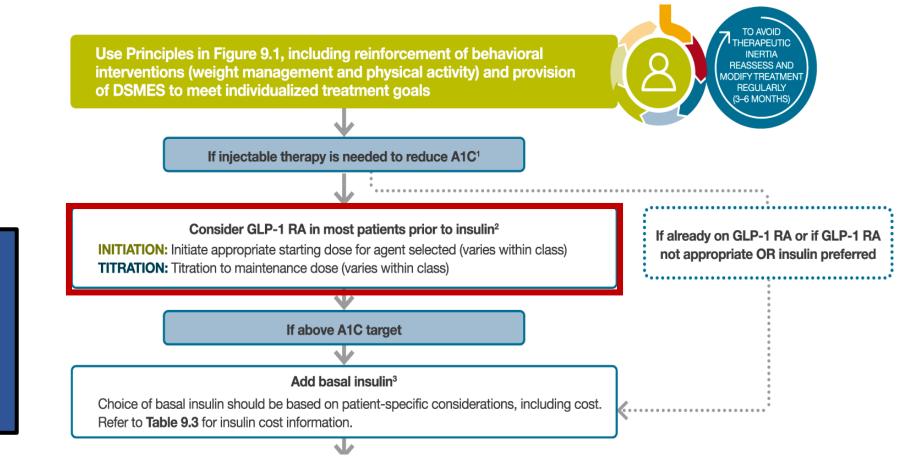
Intensifying to Injectable Therapies

- Injectable antihyperglycemic medications
 - GLP-1 RA
 - Basal insulin
 - Prandial coverage
 - Pre-mixed insulin
 - Intensive basal-bolus

Use Principles in Figure 9.1, including reinforcement of behavioral interventions (weight management and physical activity) and provision of DSMES to meet individualized treatment goals If injectable therapy is needed to reduce A1C1 Consider GLP-1 RA in most patients prior to insulin² If already on GLP-1 RA or if GLP-1 RA INITIATION: Initiate appropriate starting dose for agent selected (varies within class) not appropriate OR insulin preferred TITRATION: Titration to maintenance dose (varies within class) If above A1C targe Add basal insulin³ Choice of basal insulin should be based on patient-specific considerations, including cost. Refer to Table 9.3 for insulin cost information. Add basal analog or bedtime NPH insulin INITIATION: Start 10 IU a day OR 0.1-0.2 IU/kg a day Set FPG target (see Section 6: Glycemic Targets) · Choose evidence-based titration algorithm, e.g., increase 2 units every 3 days to reach FPG target without hypoglycemia ■ For hypoglycemia determine cause, if no clear reason lower dose by 10-20% Assess adequacy of basal insulin dose Consider clinical signals to evaluate for overbasalization and need to consider adjunctive therapies (e.g., basal dose >0.5 IU/kg, elevated bedtime-morning and/or post-preprandial differential, hypoglycemia [aware or unaware], high variability) If above A1C target If on bedtime NPH, consider converting to twice-daily NPH regimen Consider GLP-1 RA Add prandial insuling Usually one dose with the largest meal or meal with greatest PPG excursion; prandial Conversion based on individual needs and current if not already in insulin can be dosed individually or mixed with NPH as appropriate glycemic control. The following is one possible approach regimen INITIATION For addition of GLP-1 RA, consider 4 IU a day or 10% of basal Increase dose by 1-2 IU or Total dose = 80% of current bedtime NPH dose insulin dose 10-15% twice weekly lowering insulin dose 2/3 given in the morning dependent on current • If A1C <8% (64 mmol/mol) consider · For hypoglycemia determine 1/3 given at bedtime glycemic assessment lowering the basal dose by 4 IU a cause, if no clear reason lower and patient factors day or 10% of basal dose corresponding dose by 10-20% Titrate based on individualized needs If above A1C target If above A1C target Consider self-mixed/split insulin regimen Consider twice daily premix injections of insulin regimen Can adjust NPH and short/rapid-acting insulins prandial insulin separately INITIATION (i.e., two, then three INITIATION . Usually unit per unit additional injections) at the same total ■ Total NPH dose = 80% of current NPH dose insulin dose, but may 2/3 given before breakfast require adjustment to 1/3 given before dinner individual needs Proceed to full Add 4 IU of short/rapid-acting insulin to each TITRATION: basal-bolus regimen injection or 10% of reduced NPH dose Titrate based on (i.e., basal insulin and individualized needs prandial insulin with . Titrate each component of the regimen based on individualized needs

American Diabetes Association. 9. Pharmacologic approaches to glycemic treatment: Standards of Medical Care in Diabetes 2021. *Diabetes Care*. 2021;44(Suppl. 1):S111–S124.

GLP-1 360 What Injectable Should I Use First?



Meta-analyses of GLP-1 RAs compared to insulin:

- ✓ Similar reductions in A1C
- ✓ Weight loss instead of weight gain
- ✓ Lower risk of hypoglycemia

Diabetes Care. 2021;44(Suppl 1):S111-S124.

GLP-1 360 Patient-specific Considerations

- Glycemic level
- Other disease states (ASCVD, HF, CKD)
- Weight
- Concern for hypoglycemia
- Risk of possible side effects
- Concern for side effects
- Contraindications
- Treatment burden / cost
- Ease of use / ability to adhere
- Cultural beliefs about medications
- What is most important to the patient?

GLP-1 360
PHARMACISTS -- PATIENTS

Patient-specific Considerations GLP-1 RA vs SGLT-2 inhibitor

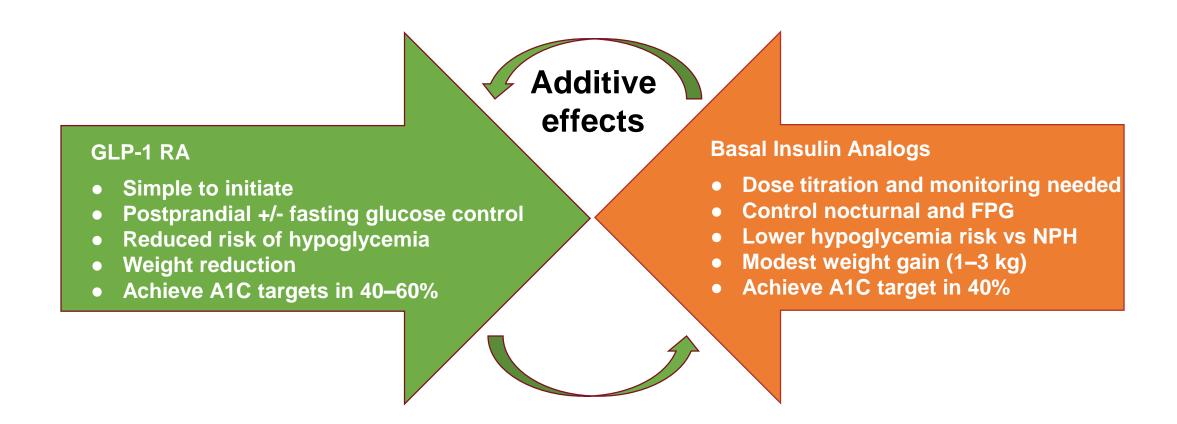
	GLP-1 RA	SGLT-2i		
Glucose lowering	High	Intermediate		
Effect on weight	Loss	Loss		
CV benefit	Benefit	Benefit		
HF benefit	Neutral	Benefit		
CKD benefit	Benefit (secondary outcomes)	Benefit (primary outcomes)		
Other benefits	Nonalcoholic fatty liver disease (NAFLD)			
Side effects and precautions	 Nausea, vomiting, diarrhea Injection site reaction Black box: thyroid c-cell tumor in rodents Potential risk of pancreatitis 	 Genitourinary infections Risk of volume depletion, hypotension Risk of diabetic ketoacidosis (DKA) (discontinue before any scheduled surgery) Risk of bone fracture (canagliflozin) Risk of Fournier's gangrene 		
Use in renal disease	 exenatide, lixisenatide – avoid if eGFR < 30 No dose adjustments for dulaglutide, liraglutide, semaglutide 	 Renal dose adjustment required Avoid if eGFR is low (varies between agents < 25-45) 		
Administration	 Injection, daily/weekly; (semaglutide – oral daily option) 	Oral, once daily Diabetes Care. 2021;44(Suppl 1):S111–S124.		

GLP-1 360
PHARMACISTS -- PATIENTS

Patient-specific Considerations GLP-1 RA vs Insulin

	GLP-1 RA	Insulin		
Glucose lowering	High	High		
Effect on weight	Loss	Gain		
CV benefit	Benefit	Neutral		
HF benefit	Neutral	Neutral		
CKD benefit	Benefit (secondary outcomes)	Neutral		
Side effects and precautions	 Nausea, vomiting, diarrhea Injection site reaction Black box: thyroid c-cell tumor in rodents Potential risk of pancreatitis 	 Hypoglycemia (higher risk with NPH, premixed, or rapid compared to basal analogs) Injection site reactions 		
Use in renal disease	 exenatide, lixisenatide – avoid if eGFR < 30 No dose adjustments for dulaglutide, liraglutide, semaglutide 	 Renal dose adjustment required Avoid if eGFR is low (varies between agents < 25-45) 		
Administration Diabetes Care. 2021;44(Suppl 1):S11	 Injection, daily/weekly; (semaglutide – oral daily option) 	SC, schedule depends on insulin type/regimen Most require self-monitored blood glucose (SMBG) for dosing or titration		

GLP-1360 GLP-1 RA vs (or with) Basal Insulin





GLP-1 360 Considerations When Adding a GLP-1 RA

- Practical patient education on administration, storage, missed doses
- Anticipatory guidance to set expectations
 - Time to full effect
 - Dosing titration
 - Timing and side effects
 - How to mitigate side effects
- Adjusting background therapies
- Switching from one GLP-1 RA to another

GLP-1 360 Comparing Injection Devices

- Dosing
- Single-use vs multi-use
- Needles
- Preparation
- Accuracy
- Ease of use
- Storage requirements
- Patient preference
- Time required for training

GLP-1 360 Oral Semaglutide: Administration

- Take at least 30 minutes before the first food, beverage, or other oral medication of the day
- Take with no more than 4 oz of plain water only
- Swallow tablets whole: do not crush or chew
- Start with 3 mg once daily for 30 days (starting dose; not therapeutic); increase to 7 mg once daily for 30 days; increase to 14 mg once daily if needed
- Drug interactions
 - Levothyroxine
 - Oral bisphosphonates



Mitigation of Gastrointestinal (GI) Adverse Effects

- Educate the patient that it is usually mild and usually transient
- Resolves in ~ 90% of cases
- Educate patients to decrease portions and eat slowly

- Start at a low dose
- Consider agent with lower rates of GI adverse effects
- Consider slower titration if possible
- Consider fixed-ratio combination

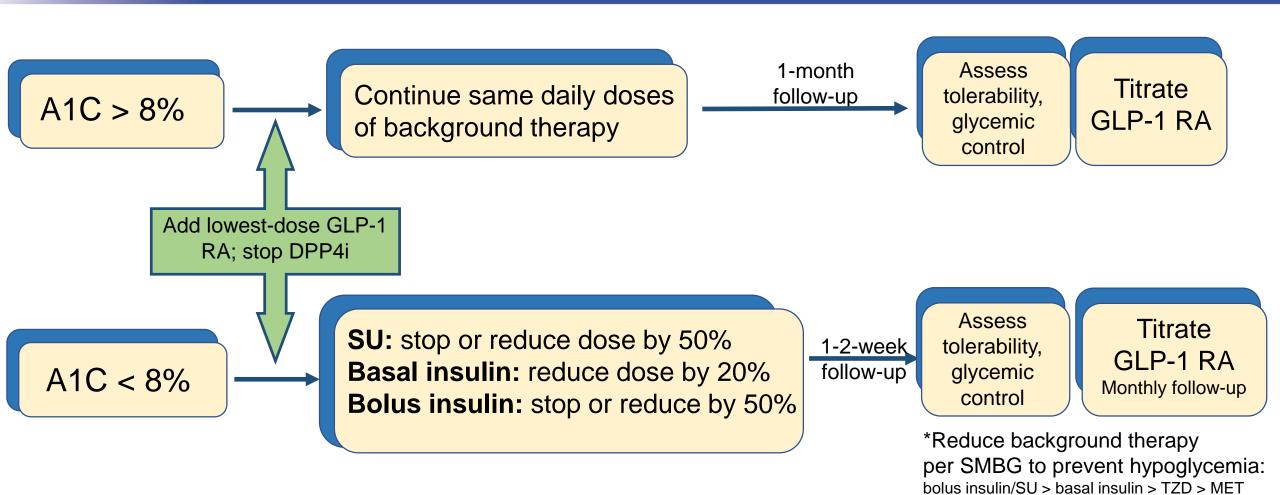


Considerations when Initiating GLP-1 RAs

- Background therapy
 - Continue, reduce, or discontinue
 - Redundant incretin therapies
- Current glycemic control
 - Risk of hypoglycemia
- Rationale for GLP1-RA addition
 - Efficacy: glucose control, weight reduction, cardioprotection

GLP-1 360 PHARMACISTS ← PATIENTS

Adjusting Background Antihyperglycemic Therapy



GLP-1 360 Rationale for Switching GLP-1 RA

- Enhanced efficacy
 - Glycemic control
 - Weight reduction
 - Added cardioprotection
- Improved safety or tolerability
 - GI
 - Injection site reactions
- Dosing and convenience
 - Alternative dosing frequency
 - Patient preferred delivery device
 - Alternative route of administration
 - Replace more cumbersome therapies
- Formulary restrictions and cost



Switching GLP-1 RAs

Prompted by GI Side Effects

- Discontinue first GLP-1 RA
- Wait for symptoms to resolve
- Select GLP-1 RA with lower rates of GI side effects
- Initiate new GLP-1 RA at lowest dose
- Consider slower dose titration

Prompted for Other Reasons

- Discontinue first GLP-1 RA
- Select GLP-1 RA with desired aspect
- Start with equivalent (or lower) dose
- Titrate accordingly

Almandoz JP, et al. Clin Diabetes. 2020;38(4):390-402.

GLP-1 360 Patient-Centered Decision Cycle

REVIEW AND AGREE ON MANAGEMENT PLAN

- Review management plan
- Mutual agreement on changes
- Ensure agreed modification of therapy is implemented in a timely fashion to avoid clinical inertia
- Decision cycle undertaken regularly (at least once/twice a year)

GOALS OF CARE

- Prevent complications
- Optimize quality of life

ONGOING MONITORING AND SUPPORT INCLUDING:

- Emotional well-being
- Check tolerability of medication
- Monitor glycemic status
- Biofeedback including SMBG, weight, step count, HbA., blood pressure, lipids

IMPLEMENT MANAGEMENT PLAN

Patients not meeting goals generally should be seen at least every 3 months as long as progress is being made; more frequent contact initially is often desirable for DSMES

ASCVD = Atherosclerotic Cardiovascular Disease CKD = Chronic Kidney Disease HF = Heart Failure DSMES = Diabetes Self-Management Education and Support SMBG = Self-Monitored Blood Glucose

AGREE ON MANAGEMENT PLAN

- Specify SMART goals:
 - Specific
 - Measurable
 - Achievable
 - Realistic Time limited

ASSESS KEY PATIENT CHARACTERISTICS

- **Current lifestyle**
- Comorbidities, i.e., ASCVD, CKD, HF
- Clinical characteristics, i.e., age, HbA,, weight
- Issues such as motivation and depression
- Cultural and socioeconomic context

CONSIDER SPECIFIC FACTORS THAT IMPACT CHOICE OF TREATMENT

- Individualized HbA, target
- Impact on weight and hypoglycemia
- Side effect profile of medication
- Complexity of regimen, i.e., frequency, mode of administration
- Choose regimen to optimize adherence and persistence
- Access, cost, and availability of medication

SHARED DECISION MAKING TO CREATE A **MANAGEMENT PLAN**

- Involves an educated and informed patient (and their family/caregiver)
- Seeks patient preferences
- Effective consultation includes motivational interviewing, goal setting, and shared decision making
- **Empowers the patient**
- Ensures access to DSMES

American Diabetes Association. Diabetes Care. 2021;44(Suppl 1):S40-S52.

GLP-1360 Use of Empowering Language

- Five key consensus recommendations for language use:
 - Use language that is neutral, nonjudgmental, and based on facts, actions, or physiology/biology;
 - Use language that is free from stigma;
 - Use language that is strength based, respectful, inclusive, and imparts hope;
 - Use language that fosters collaboration between patients and providers;
 - Use language that is person centered (eg, "person with diabetes" is preferred over "diabetic").

American Diabetes Association. *Diabetes Care*. 2021;44(Suppl 1):S40–S52. Dickinson JK, et al. *Diabetes Care*. 2017;40:1790-1799.



Key Elements of Motivational Interviewing

- Open-ended questions
- Active listening
- Reflective empathetic responses
- Roll with resistance (resist the righting reflex)
- Ask for permission
- Ask rather than tell; listen rather than advise

GLP-1 360 PWD #1: David

- 61-year-old man with T2D, diagnosed at age 49 in 2009
- Complications of T2D: albuminuria
- Other medical problems: hypertension, dyslipidemia, NAFLD, prolactinoma
- Current medications for T2D
 - Semaglutide 1 mg SC once weekly
 - Metformin 1000 mg twice daily
- Past medications for T2D
 - Exenatide
 - Liraglutide
 - Exenatide XR
 - Dulaglutide
- A1C at last visit was 6.8%; prior 9.2% (past 5.8-6.8%)

GLP-1 360 Patient Perspectives: David

- What has been your general experience with the GLP-1 RA class?
 - Can you give us a summary of your diabetes journey?
 - What has been your general experience with self-managing your diabetes?
 - What has been your general experience with diabetes medications?

GLP-1 360 Patient Perspectives: David

 How would you compare the different devices in terms of effect, ease of use, side effects?

- Can you describe what those side effects were like?
- What are the logistical challenges of switching from one medication to another?

GLP-1360 PWD #2: Terrence

- 44-year-old man with T2D, diagnosed at age 31 in 2008
- Complications of T2D: none
- Other medical problems: dyslipidemia, hypertension
- Current medications for T2D
 - Dulaglutide 1.5 mg SC once weekly
- Past medications for T2D
 - Metformin
 - Sitagliptin/metformin
 - Glipizide ER
 - Humalog 75/25: 12 U twice daily
 - Albiglutide 30 mg once weekly
 - Empagliflozin
- A1C at last visit was 7.1% (prior ranged 10.4 14.2%)



GLP-1 360 Patient Perspective: Terrence

 How would you compare your experience with Trulicity compared to your experience with insulin?

 When you are considering taking a new medication for diabetes, what is most important to you?

GLP-1 360 PWD #3: Carrie

- 74-year-old woman with T2D diagnosed in the 1990s
- Complications of T2D: CKD stage 4
- Other medical problems: dyslipidemia, hypertension, hypothyroid, gout, insomnia, carpal tunnel syndrome
- Current medications for T2D
 - NPH 46 U QAM and 30 U QPM
 - Dulaglutide 4.5 mg weekly
 - Kidney function has stabilized, improved slightly
- Past medications for T2D
 - Metformin, glipizide, pioglitazone, linagliptin, empagliflozin
 - Insulin glargine U-300, insulin lispro
 - Kidney function decline limited use of many medications
- A1C at last visit 6.2% (baseline 8.6%)

GLP-1 360 Patient Perspective: Carrie

- Who explained to you how to take your diabetes medications?
- Who explained the possible side effects? Particularly low blood sugars? How comfortable did you feel about how to take your diabetes medications and what to do if you had a side effect like hypoglycemia?

GLP-1 360 Patient Perspectives

 What are your thoughts about this idea of "shared-decision" making"? Do you feel like you have a collaborative relationship with your diabetes provider?

- How have you interacted with pharmacists?
 - in your diabetes clinic?
 - In your community pharmacy?
- How would you describe the role of the pharmacist in helping people manage their diabetes?

GLP-1 360 Patient Perspectives

- Given that you are speaking with several hundred pharmacists today, what is the most important thing you want them to know about the role of the pharmacist in health care?
- What is the most important topic a pharmacist should share with a person with diabetes before they start a GLP-1 RA?

GLP-1360 Patient Perspectives

What is the most challenging aspects of having diabetes?

 What are the best things your health care providers/team can do to support you?



Questions & Answers



Thank You!