

UPDATES to the GLP1-RA Dose Comparisons Chart

Why? After crafting an “indications table” for the different GLP1-RA products last month, I noted it was also time to update approximate equivalent doses based on data and clinical experience with tirzepatide, which was new to the market the first time we created this chart.

Of note:

- **Exenatide (Byetta® and Bydureon BCise®) was removed from the chart**
 - Pen production was discontinued 10/28/24.
 - For more information: <https://medicalinformation.astrazeneca-us.com/> - search “press releases”
 - If you still have patients on it, it’s time to transition to a different GLP1-RA
- **Lixisenatide (Adlyxin®) was also removed from the chart**
 - The brand name was discontinued, and it is now only available in combination with insulin glargine (Soliqua®).
- Tirzepatide is more efficacious than the highest comparative dosages of other medications, although does not yet have FDA indications for CVD benefits to-date. Studies are ongoing

Glucagon-Like-Peptide-1-Receptor Agonist (GLP-1RA) DOSE COMPARISONS

Drug	Indication by Brand Name:	Frequency	Approximate Equivalent Doses						
Dulaglutide	Trulicity® - T2DM, ASCVD	Weekly		0.75 mg*	1.5 mg- 3mg	4.5 mg			
Liraglutide	Saxenda® – Obesity Victoza® – T2DM, ASCVD	Daily	0.6 mg*	1.2 mg	1.8 mg	2.4 mg	3 mg		
Semaglutide	Ozempic®-T2DM,ASCVD, & CKD Wegovy®- Obesity, ASCVD	Weekly		0.25 mg*	0.5 mg	1 mg	2 mg 1.7 -2.4 mg		
Semaglutide	Rybelsus® - T2DM ORAL FORMULATION	Daily oral	3 mg*	7 mg	14 mg				
Tirzepatide (GIP/GLP-1RA)	Mounjaro® - T2DM Zepbound® - Obesity, & OSA	Weekly			2.5 mg*	5 mg	7.5mg	10mg– 15 mg	

* Indicates starting dose, subtherapeutic for glycemic control, and meant to be titrated

Overall Weight Loss Comparisons for different GLP-1RA Formulations: **Tirzepatide > semaglutide > liraglutide daily > dulaglutide weekly**

Guidelines on how to switch between agents:

- Dose: Start with equivalent, or 1 dose lower and titrate up as tolerated
- Discontinue current GLP-1RA
 - If switching from a daily to a weekly: the first dose can be the next day
 - If switching from weekly to another agent: wait 7 days after administration before initiating new agent

- Reason for switch:
 - If due to GI side effects:
 - Wait for symptoms to resolve
 - Start at lowest possible dose
 - Consider slower titration and lower maintenance dose
 - Consider holding metformin if appropriate

References:

1. Heather P. Whitley, Jennifer M. Trujillo, Joshua J. Neumiller; Special Report: Potential Strategies for Addressing GLP-1 and Dual GLP-1/GIP Receptor Agonist Shortages. *Clin Diabetes* 1 July 2023; 41 (3): 467–473. <https://doi.org/10.2337/cd23-0023>
2. Zoler Mitchel. Obesity Obstacles: Weight-loss drug shortage triggers frustrations, workarounds. *Clinical Endocrinology News*. 17(9);September 2022. MDedge/Endocrinology.
3. Almandoz J et al. Switching Between Glucagon-Like Peptide-1 Receptor Agonists: Rationale and Practical Guidance. *Clinical Diabetes*. 38(4);October 2020. Accessed Oct 11 2022: <https://diabetesjournals.org/clinical/article/38/4/390/35426/Switching-Between-Glucagon-Like-Peptide-1-Receptor>
<https://www.bilhpn.org/wp-content/uploads/2022/12/BILH-GLP1RA-Conversion-Guide.pdf>