## INJECTABLE NON-INSULIN MEDICATION MANAGEMENT OF DIABETES



	Class	Names	Mechanism of action	Adverse effects	Teaching
	Incretin mimetics (GLP-1 receptor agonists) (SubQ)	Exenatide, dulaglutide, liraglutide, semaglutide	<ul> <li>Slow gastric emptying, stimulate release of insulin with glucose, suppress glucagon release after a meal, suppress appetite</li> <li>Type 2 only (off-label for Type 1)</li> </ul>	<ul> <li>Hypoglycemia when taken with insulin</li> <li>Gl distress</li> <li>Pancreatitis</li> <li>Renal insufficiency</li> <li>Possible risk of thyroid cancer</li> </ul>	<ul> <li>SubQ injection prior to meals (immediate release) or once weekly (extended release)</li> <li>Can affect absorption of oral medications</li> </ul>
	GIP/GLP-1 receptor co-agonists (SubQ)	Tirzepatide	<ul> <li>Slow gastric emptying, stimulate release of insulin with glucose, suppress glucagon release after a meal, suppress appetite</li> <li>Type 2 only</li> </ul>	<ul> <li>Hypoglycemia when taken with insulin</li> <li>GI distress</li> <li>Renal insufficiency</li> <li>Pancreatitis</li> <li>Possible risk of thyroid cancer</li> </ul>	<ul> <li>Once-weekly subQ injection</li> <li>Can affect absorption of oral medications</li> <li>In response to carbohydrates, GIP and GLP-1 cause insulin release and decrease glucagon secretion.</li> <li>In euglycemic or hypoglycemic states, GIP causes an increase in glucagon secretion.</li> </ul>
	Amylin mimetics (SubQ)	Pramlintide	<ul> <li>Slow gastric emptying, stimulate release of insulin with glucose, suppress glucagon release after a meal, suppress appetite</li> <li>Type 1 and 2</li> </ul>	<ul> <li>Hypoglycemia when taken with insulin</li> <li>GI distress</li> <li>Injection site reaction</li> </ul>	<ul> <li>SubQ injection prior to meals</li> <li>Used w/ mealtime insulin</li> <li>Can affect absorption of oral medications</li> </ul>
<ul> <li>Mechanism of Action</li> <li>Appetite</li> <li>Satiety</li> <li>GIP</li> <li>+ Glucagon secretion</li> <li>GLP-1</li> <li>+ Glucagon secretion</li> <li>+ Sodium excretion</li> <li>+ Insulin secretion</li> <li>+ Glucose production</li> <li>+ Sodium excretion</li> <li>+ Enzyme secretion</li> </ul>					
Do not inject in the same site as insulin.       Educate client how to use their specific device to avoid incorrect dosing. Do not double dose if missed.       Educate on risks of hypoglycemia if using insulin.         Immediate-release medications must be taken 60 minutes prior to a meal, not after.       Immediate-release medications must be taken 60 minutes prior       May interfere w/ oral contraceptives					
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