INSULIN ANALOGUES	Ultra short acting: Lispro,Aspart,Glulisine (RAPID)	Shot acting: Regular insulins.	Intermediate acting: NPH.	Intermediate acting: LENTE. (Humulin, Novilin)	Long acting: Glargine (lantus), detemer (levemir)
Physical Characteristics	Clear solution	Clear solution	Turbid suspension	Turbid suspension	Clear solution BUT precipitates at site of injection.
Chemistry	-Monomer -When mixed with other insulins, it must be used immediately	Hexamer	Combination of protamine & crystalline Zinc	30% semilente 70% ultralente	Should not be mixed with other insulins in same syringe.
ROUTE	S.C (before meal 5-15min) I.V for emergency DKA	S.C (before meal 30-45min) I.V for emergency DKA	S.C ONLY	S.C ONLY	S.C ONLY
Onset of action	5-15 MIN	30-45 MIN	1-2 HOURS	1-3 HOURS	2 HOURS
Peak level	30-90 MIN	2-4 HOURS	5-7 HOURS	4-8 HOURS	Peakless profile, max effect: 4-5h
Duration of action	3-5 HOURS	6-8 HOURS	13-18 HOURS	13-20 HOURS	24 HOURS
Uses	Postprandial hyperglycemia & emergency DKA.	Postprandial hyperglycemia & emergency DKA.	Combined with lispro, aspart or regular insulin	-	-Produce plasma conc. Plateau (low continuous insulin level) -Used with rapid or short acting regimens