



GOVERNMENT PROCUREMENT PRICES OF INSULIN

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Insulin Procurements

Country 1:

	Insulin type	Vials	Prefilled Pen	Cartridges
Human	Regular	Indar		Novo Nordisk
	Isophane	Indar		Novo Nordisk
	Mixed	Indar		Indar
Analogue	Aspart		Novo Nordisk	
	Lispro		Lilly	
	Glulisine		Sanofi	
	Glargine			Farmak
	Determir			Novo Nordisk
	Mixed			Novo Nordisk

Overall, purchases from the 3 originator companies and 2 biosimilar companies

Insulin Procurements

Country 2:

	Insulin type	Vials	Prefilled Pen	Cartridges
Human	Regular	Novo Nordisk		
	Isophane	Novo Nordisk		
	Mixed	Novo Nordisk		
Analogue	Aspart			Novo Nordisk
	Determir			Novo Nordisk

All purchases from one originator company

Insulin Procurements

Country 3:

	Insulin type	Vials	Prefilled Pen	Cartridges
Human	Regular	Novo Nordisk, Lilly, Bioton, Belmedpreparaty		Novo Nordisk, Lilly, Sanofi, Bioton
	Isophane	Novo Nordisk, Lilly, Bioton, Belmedpreparaty		Novo Nordisk, Lilly, Sanofi, Bioton
Analogue	Aspart		Novo Nordisk	
	Glulisine		Sanofi	
	Glargine	Gan&Lee	Sanofi	
	Determir		Novo Nordisk	

Overall, purchases from the 3 originator companies and 3 biosimilar companies

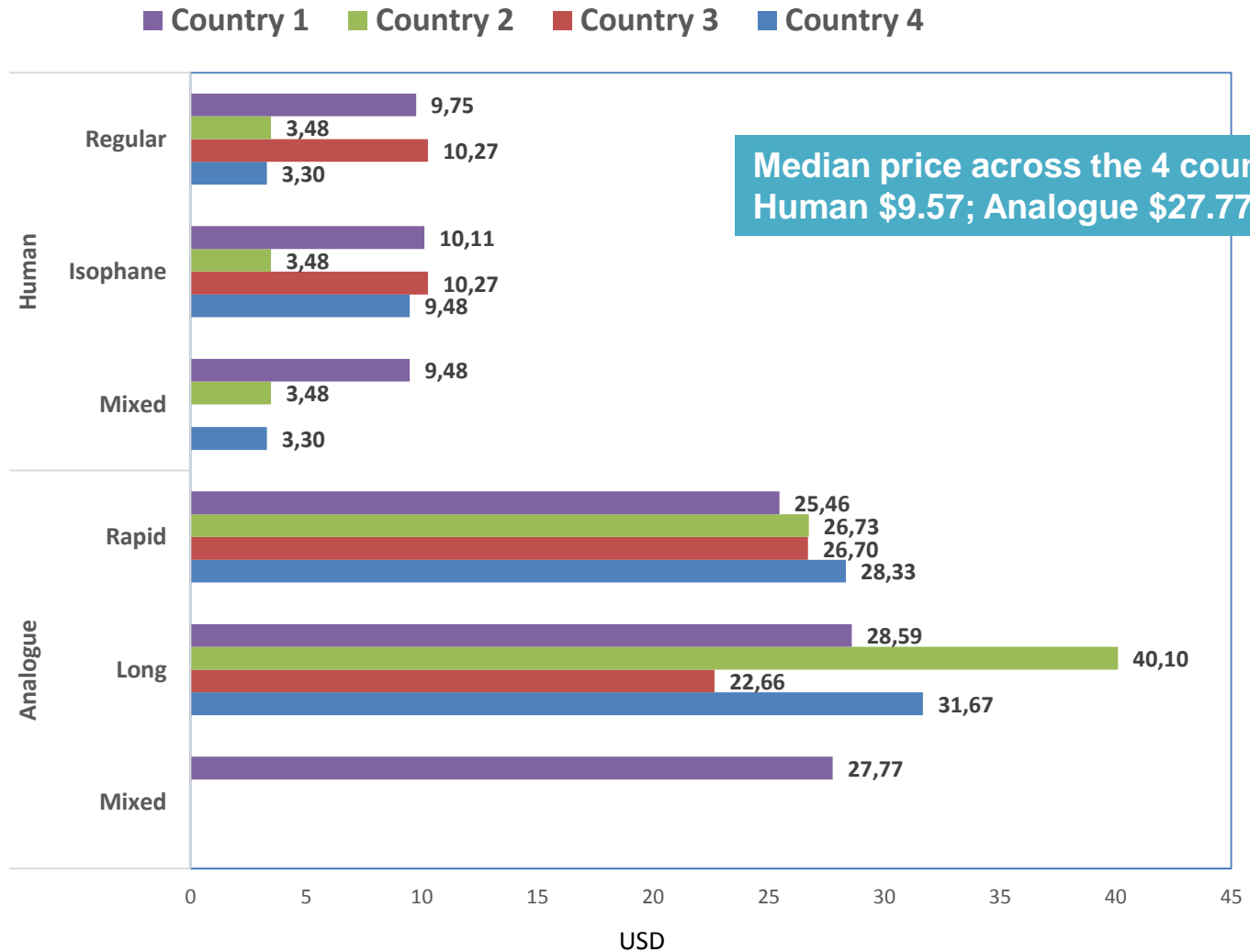
Insulin Procurements

Country 4:

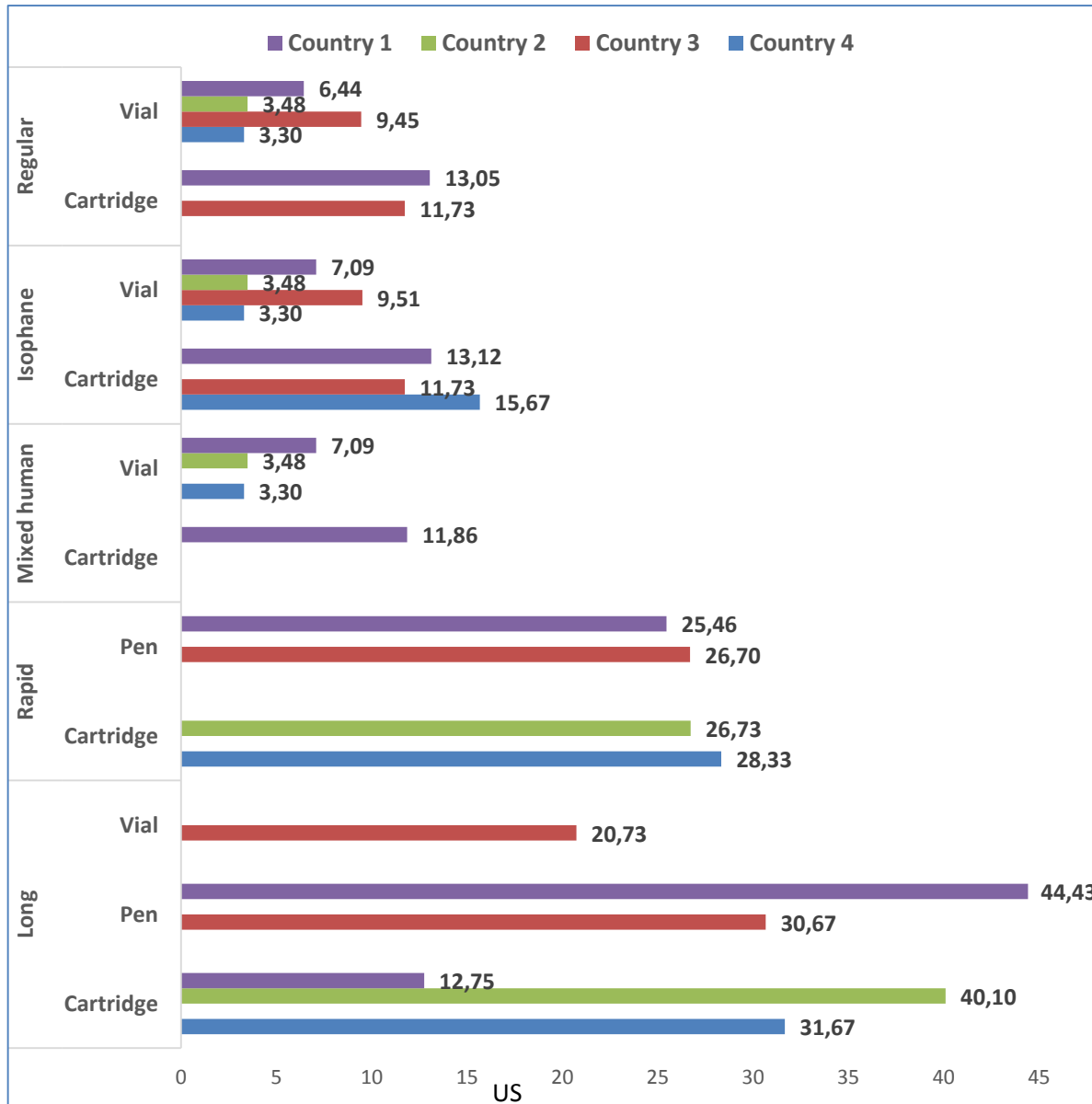
	Insulin type	Vials	Prefilled Pen	Cartridges
Human	Regular	Novo Nordisk		
	Isophane	Novo Nordisk		Lilly
	30/70	Novo Nordisk		
Analogue	Lispro			Lilly
	Glargine			Lilly

Overall purchases from the 2 originator companies, one of which makes a biosimilar (Lilly)

Median insulin prices, 10ml 100IU/ml in USD any presentation or brand



Median insulin prices, 10ml 100IU/ml in USD vials, prefilled pens & cartridges



Insulin prices, 10ml 100IU/ml in USD, originators & biosimilars

Country 3

Insulin	Originator Price 10ml	Biosimilar Price 10ml	% Biosimilar price to Originator price
Regular, vial	\$9.86 N; \$9.43 L	\$9.46 Bt; \$8.31 Be;	15.7% ↓ - 0.3% ↑
Regular, cartridge	\$14.66 L; \$11.88 N; \$10.68 S	\$11.58 Bt	21% ↓ - 8.4% ↑
Isophane, vial	\$9.86 N; \$9.57 L	\$9.46 Bt; \$8.31 Be;	15.7% - 1.1% ↓
Isophane, cartridge	\$14.66 L; \$11.88 N; \$10.68 S	\$11.58 Bt	21% ↓ - 8.4% ↑

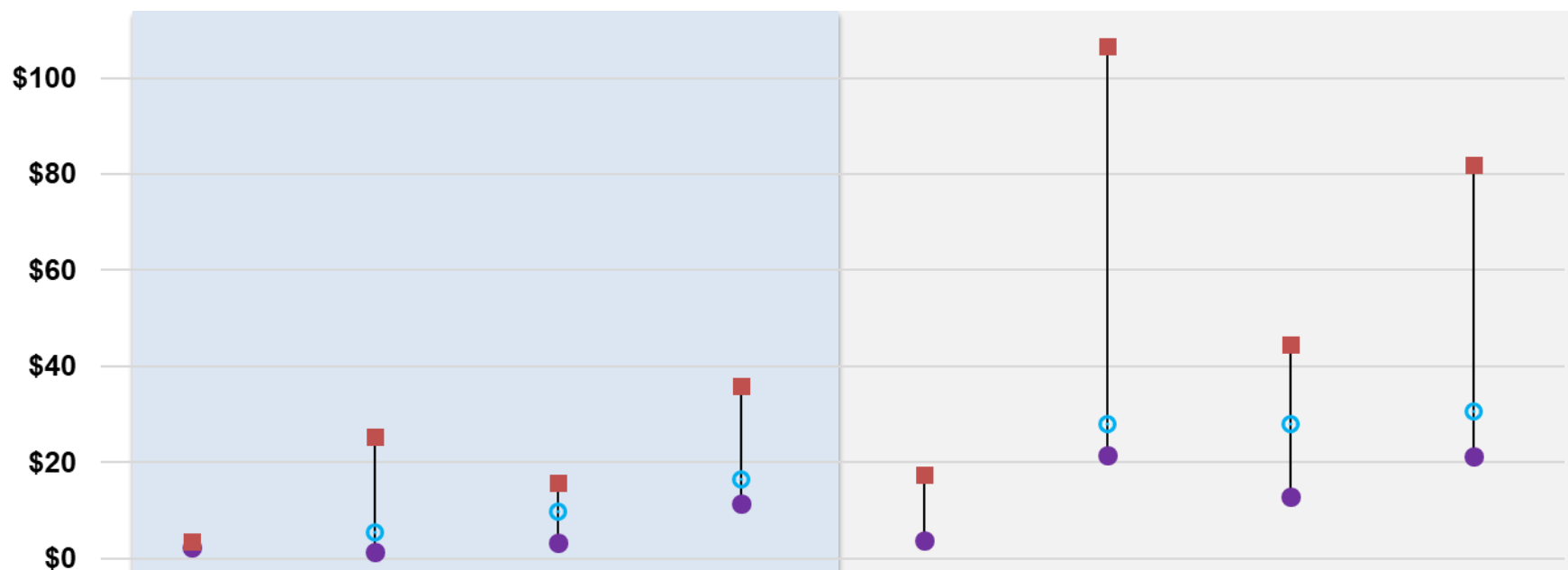
Originator companies: N Novo Nordisk; L Lilly; S Sanofi

Biosimilar companies: Bt Bioton; Be Belmedpreparaty

Examples of Brand Prices and Quantities

Country	Country	Price	Quantity
Actrapid® 10ml vial	2	\$3.48	89,500 vials
	3	\$9.86	26,030 vials
	4	\$3.30	66,000 vials
Actrapid® 3ml x5 cartridges	1	\$19.58	52 packs
	3	\$17.81	43,160 packs
Protophane® 10ml vial	1	\$3.48	165,750 vials
	3	\$9.86	30,680 vials
Protophane® 3ml x 5 cartridges	1	\$19.69	11 packs
	3	\$17.81	29,140 packs
NovoRapid® 3ml x 5 prefilled pens	1	\$42.10	27,120 packs
	3	\$43.74	17,712 packs
Levemir® 3ml x 5 prefilled pens	1	\$66.64	9,610 packs
	3	\$58.03	7,120 packs

Estimated Cost of Production & Prices



	Human Insulin				Analogue Insulin			
	Cost of production	Government procurement price	Government procurement price	Reimbursement price (full) private sector	Cost of production	Government procurement price	Government procurement price	Reimbursement price (full) private sector
		13 LMICs	Countries 1-4	Country 5		13 LMICs	Countries 1-4	Country 5
Minimum	\$2.28	\$1.45	\$3.30	\$11.40	\$3.69	\$21.56	\$12.75	\$21.15
Maximum	\$3.42	\$25.21	\$15.67	\$35.77	\$17.35	\$106.52	\$44.42	\$81.67
Median		\$5.30	\$9.57	\$16.42		\$27.90	\$27.77	\$30.39

Conclusions

In general:

- One product procured per insulin type and presentation
- Procurement prices of human insulins were lower than analogues
- Insulin in vials were cheaper than insulin in pens and cartridges
- Biosimilars were similar or lower priced than originators (maximum 21% lower), but not as low as often seen for generic chemical medicines
- Buying larger quantities did not always result in lower prices
- Procurement prices generally far higher than estimated cost of production, particularly for analogues

To improve access to insulin, low government procurement prices need to be passed on to people that have to pay out-of-pocket