

Table 1 Principal features of available inhalers (Adopted from Bonini and Usmani, 2015)

Device	Type	Advantages	Disadvantages
Pressurised metered-dose inhalers (pMDI's)	CFC driven (obsolete)	Portable and compact	Ozone-depleting properties (CFC driven)
	HFA driven	Independent of inspiratory flow	Better perform with spacers (CFC driven)
	Breath-actuated	Reproducible dosing	Need to be shaken prior use (CFC driven)
		No contamination risk	Require coordination between actuation and inspiration (CFC and HFA driven)
Dry powder inhalers (DPI's)	Single-dose	Quick and easy to use	High oropharyngeal deposition
		Wide variety of drugs available	Cold Freon effect
	Multi-dose	Low cost	
		Portable and compact	Inspiratory flow dependent
		Do not require coordination	Poor dose reproducibility
Power-assisted	Quick and easy to use	Affected by environmental factors (i.e. humidity)	
Soft-mist inhaler		No spacer required	
		Portable	Dose loading into device
		Slow velocity aerosol	
		Long plume duration	
		Does not require coordination	
Nebulisers	Jet	No propellant	
		No spacer required	
	Vibrating mesh	Propellant free	Bulky equipment
	Ultrasonic	High patient's adherence	More complex use
		Slow velocity aerosol	Power source
			Requires frequent cleaning