Irrigation Systems, At a Glance Comparison

	Double-sided vented needles	NiTiSonic	Irrisafe	EndoActivator	ProUltra PiezoFlow	EndoVac	EdgePro Er, Cr:YSGG Laser	iVac
Activation process	None	Ultrasonic	Ultrasonic	Sonic	Ultrasonic	None	Laser	Ultrasonic
Constant irrigation/ renewal of the fluid	Yes	No	No	No	Yes	Yes	No	Yes
Concomitant evactuation	No	No	No	No	No	Yes	No	Yes
Positive*/Negative Pressure system	Positive	Positive	Only activation	Only activation	Positive	Negative	Only activation	Negative
Extrusion risk with the tip at the working length level	High	High	High	High	High	Low	High	Low
Activation source equipment	None	Piezo Ultrasonic (Type-S) Unit	Piezo Ultrasonic (Type-S) Unit	EndoActivator handpiece	Piezo Ultrasonic (Type-S) Unit	None	EdgePro laser	Piezo Ultrasonic (Type-E) Unit

^{*}Positive pressure irrigation systems can lead to extrusion when located close to the working length.

^{**} Initial investment in equipment not included.