

Hemostatix Thermal Scalpel

A Scalpel that Cauterizes



ATTRIBUTE	SURGICAL DEVICE				
	Hemostatix Thermal Scalpel	Monopolar Electroscopy ^{1,2,3}	Steel Scalpel	Ultrasonic Incision ^{1,2,3,5}	PlasmaBlade
COST					
Cost	\$\$	\$	\$	\$\$\$	\$\$\$
SAFETY					
Eliminates need for smoke evacuation	✓		✓		
Eliminates airborne dispersion of viable tumor cells and virions	✓		✓		
No collateral electrical injury to tissue	✓		✓	✓	
Eliminates electrical stimulation of tissue	✓		✓	✓	
Avoids interference with pacemakers and implantable devices	✓		✓	✓	
Eliminates grounding pad	✓		✓	✓	
HEMOSTASIS EFFECTIVENESS					
Enables surgeon to set maximum temperature	✓				
Minimizes collateral thermal damage to vital structures	✓		✓	✓	✓
Seals most blood vessels as they are incised	✓	✓			✓
Enables application of tamponade to seal larger vessels	✓			✓	
Minimizes depth of necrosis at surface of incision	✓		✓	✓	✓
CUTTING EFFECTIVENESS					
Provides scalpel tactile feedback to distinguish tissue types	✓		✓		
Provides tissue incision equivalent to cold scalpel	✓		✓		
Incises with low-drag in all tissue types	✓	✓	✓		✓
Reduces operating time to both cut and coagulate tissue	✓	✓			✓
Eliminates tip-to-tissue air gap adjustment during incision	✓		✓	✓	✓

FOOTNOTES

1. Hashimoto, M., et.al, Viability of Airborne Tumor Cells during Excision by Ultrasonic Device. Hindawi Surgery Research and Practice 2017; 49075761-5
2. Barrett, W., et.al, Surgical Smoke—A Review of the Literature. Surgical Endoscopy 2003; 17:979-987
3. Sawchuck, W., et.al, Infectious Papillomavirus in the Vapor of Warts Treated with Carbon Dioxide Laser or Electrocoagulation: Detection and Protection. Journal of American Academy of Dermatology 1989; 21:41-49
4. Baggish, M., et.al, Presence of Human Immunodeficiency Virus DNA in Laser Smoke. Lasers in Surgical Medicine 1991; 11: 197-203
5. Johnson, C., et.al, Human Immunodeficiency Virus-1 (HIV-1) in Vapors of Surgical Power Instruments. Journal of Medical Virology 1991; 33:47-50
6. Fletcher, J., et.al, Dissemination of Melanoma Cells within Electroscopy Plume. American Journal of Surgery 1999; 178:57-59