



# SCATTER GUARD

**SCATTERGUARD DRAPE GUIDE**

by Protech Medical

# SCATTERGUARD<sup>ActiV</sup> PATIENT DRAPES

ScatterGuard Patient Drapes protect surgeons and technicians from the harmful effects of scatter radiation during surgical procedures without any added weight.

Our lead-free, latex-free drapes are uniquely designed to provide tailored coverage for a variety of procedures. Scatterguard drapes are made from our Prolite core material which is specially formulated to provide over 20% more protection at higher exposures than the competition. The drape exterior features our highly-absorbant ActiV material with a plastic, laminated inner layer. In addition, high quality 3M adhesive ensures secure positioning of the drape.

## ABSORBANCY

Fabric Type	Weight	Absorbancy Rate (sec/ml)	Absorbant Capacity
Leading Competitor 1	109 gsm	1.9 sec/ml	526%
Leading Competitor 2	130 gsm	2.5 sec/ml	600%
<b>ActiV Absorbant</b>	<b>120 gsm</b>	<b>1.2 sec/ml</b>	<b>620%</b>

## PROTECTION PROPERTIES

Lead Equivalence	0.060mm	0.125mm	0.25mm*	0.375mm
Attenuation at 90kVp	50%	75%	90%	95%+

\*Certified to ASTM 2547-18 and IEC 61331-1:2014 Standards [CE 2895]



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3M ADHESIVE



ECO-FRIENDLY



ABSORBANT



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# SCATTER RADIATION

## SCATTER VERSUS DIRECT BEAM RADIATION

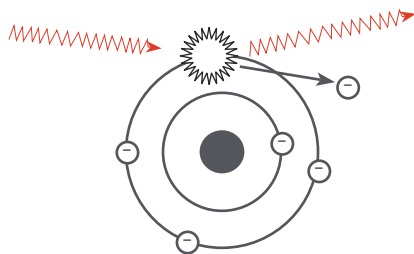
Image intensifiers have enabled surgeons to become technically more proficient and decrease the morbidity of the patient by minimizing area of operative field and decreasing operative time. Some over-use fluoroscopy, forgetting the principles of radiation protection, while others under-use it due to unfounded fears. In general, surgeons lack awareness about the radiation exposure they are getting and its effects on health.

### SCATTER RADIATION

These X-ray photons remove an outer shell electron from its orbit, thereby ionizing the atom. Low energy radiation interacts with body tissue then scatters in different directions.

#### LOW ENERGY - SCATTERED

Compton Effect

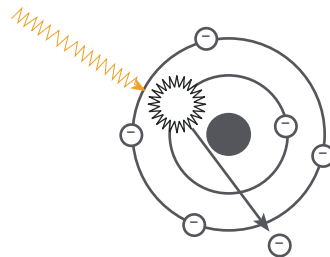


### DIRECT BEAM RADIATION

These X-ray photons carry enough energy to eject an inner shell electron from its orbit. The High energy radiation penetrates and passes through the patient for imaging.

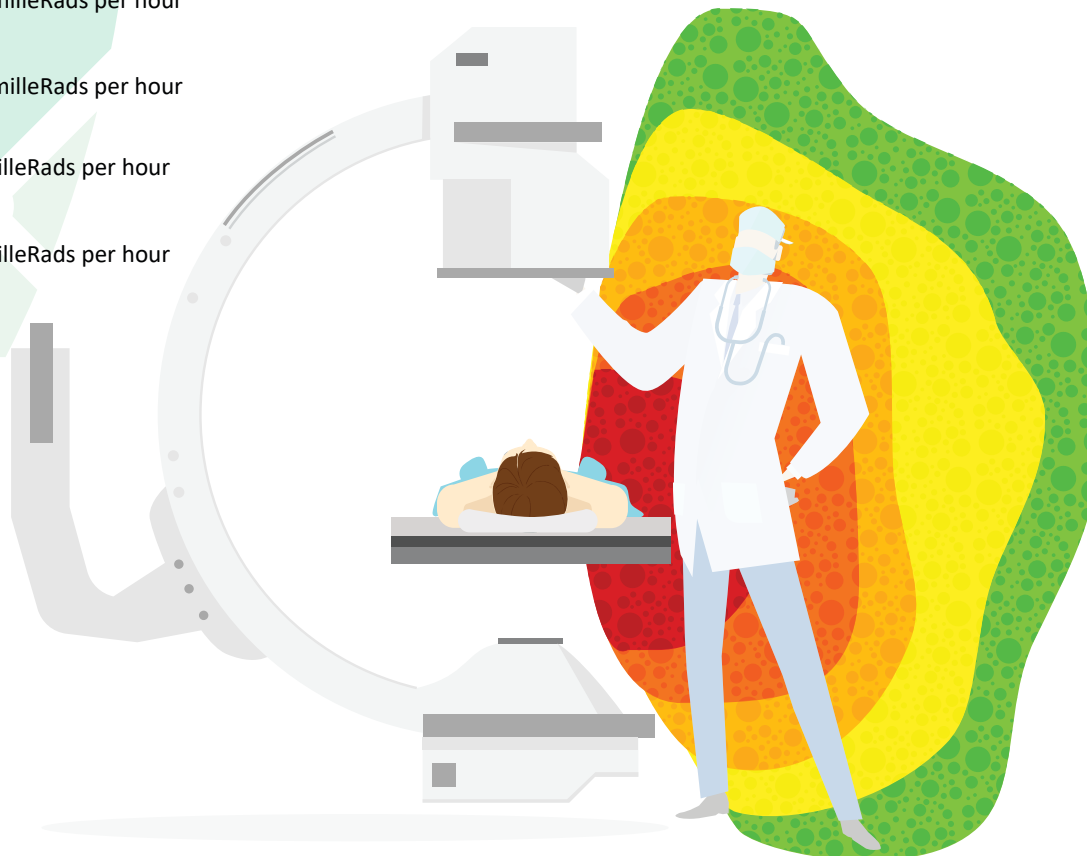
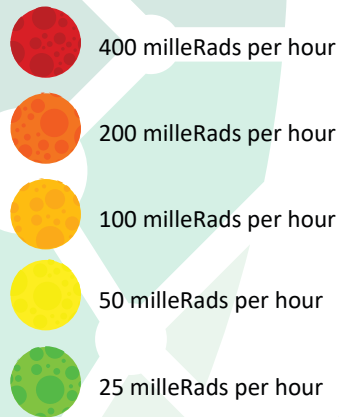
#### HIGH ENERGY - ABSORBED

Photoelectric Effect



# THE DANGERS OF SCATTER RADIATION

During procedures requiring fluoroscopy, direct beam radiation contacts a patient and “scatters” towards the surgeon and other personnel. This means surgeons and assistants are at maximum risk due to proximity to exposure area. **“The scattered radiation from the patient comprises the main source of radiation dose to staff.”** [1]



According to the National & International Conferences on Radiation Protection (ICRP & NCRP), “Lens/Eye Dose should be limited to 15 RADs per year.” Based on an average Lens/Eye Dose of 62 milleRads per hour and an average of 576 hours of Fluoroscopy per year some clinicians are receiving doses of 35.7 RADs per year. In a 30 year career this amounts to 1,071 RADs, if the operator is standing upright; far more if crouched or seated (about 5,184 RADs).

The energy absorbed from ionizing radiation can cause cataracts, tumors, skin dermatitis, hair loss and germ cell mutations. In fact, “Cataracts occur with cumulative dose between 200 to 500 RADs.” [2].

## LONG STORY SHORT...

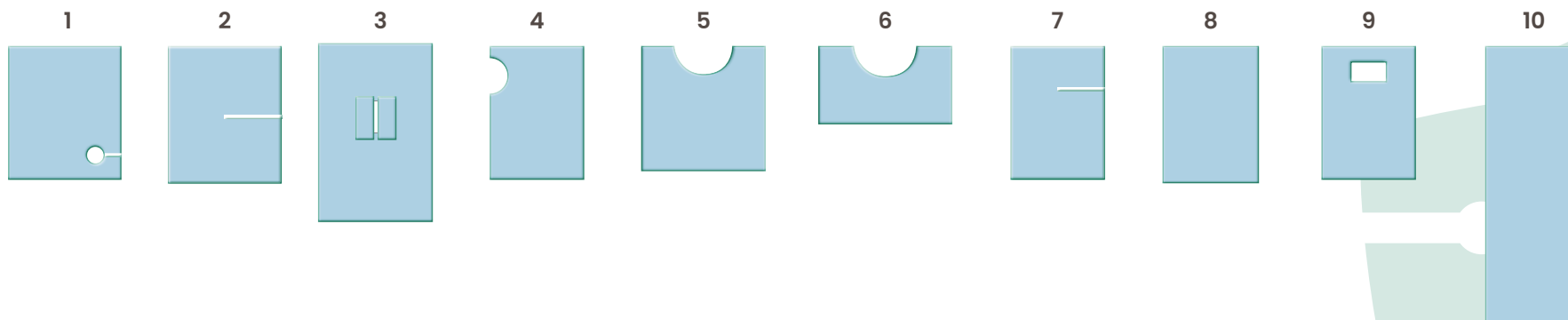
A SIR published study concluded “...lead glasses and scatter-draping drapes substantially reduced lens dose by factors of 9.5 and 12 respectively. Maximal eye draping was achieved by the use of both lead glasses and scatter-draping drapes.” [3]

[1] – International Atomic Energy Agency

[2] – National & International Conferences on Radiation Protection

[3] – Drs. Dauer & Thorton, Memorial Sloan Kettering Medical Center, Society of Interventional Radiology 2009

# SCATTERGUARD DRAPE MODELS

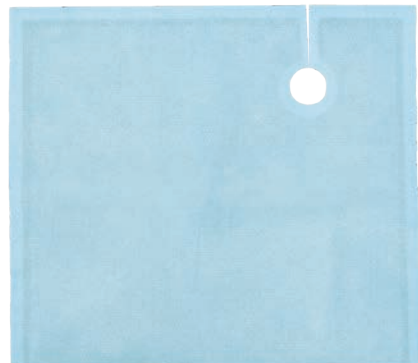


Product	Model	Dimensions	Fenestration	UOM
(1) Angiography Drape with Circular Fenestration	SG-AD-060/125/250/375	14.5" x 16.5"	2" Circle	10/BX
(2) Biliary Split Access Drape with Center Slit Fenestration	SG-BD-125/250/375	14.5" x 16.5"	5" Center Slit	10/BX
(3) Dialysis Drape	SG-DSD-125/250/375	32" x 50"	4.5" x 9" Box	10/BX
(4) EP Left Subclavian Drape with Scoop Fenestration	SG-EPD-125/250/375	13.5" x 17.5"	3.25" x 2.25" Scoop	10/BX
(5) EP Drape - Large with Center Scoop Fenestration	SG-EPDC-LG-250	16" x 16"	5.75" x 3" Scoop	10/BX
(6) EP Drape - Small with Center Scoop Fenestration	SG-EPDC-SM-250	11" x 16"	5.75" x 3" Scoop	10/BX
(7) Jugular Access / TIPS Drape	SG-JUG-125/250/375	13.5" x 17.5"	5" Slit	10/BX
(8) Multipurpose Drape	SG-MPD-060/125/250/375	13.5" x 17.5"	None	10/BX
(9) Multipurpose Drape with Box Fenestration	SG-MPD-F-060/125/250/375	13.5" x 17.5"	3.5" x 2" Box	10/BX
(10) Peripheral Drape	SG-PPD-125/250/375	12" x 35"	None	10/BX



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## ANGIOGRAPHY DRAPE



<b>Model #</b>	SG - AD
<b>Dimensions</b>	14.5" x 16.5"
<b>Fenestration</b>	2" Circle Fenestration
<b>Attenuation</b>	See protection properties chart
<b>Lead Equivalence</b>	0.06, 0.125, 0.25, or 0.375mm LE
<b>Core material</b>	Prolite Max
<b>Quantity</b>	10 per box



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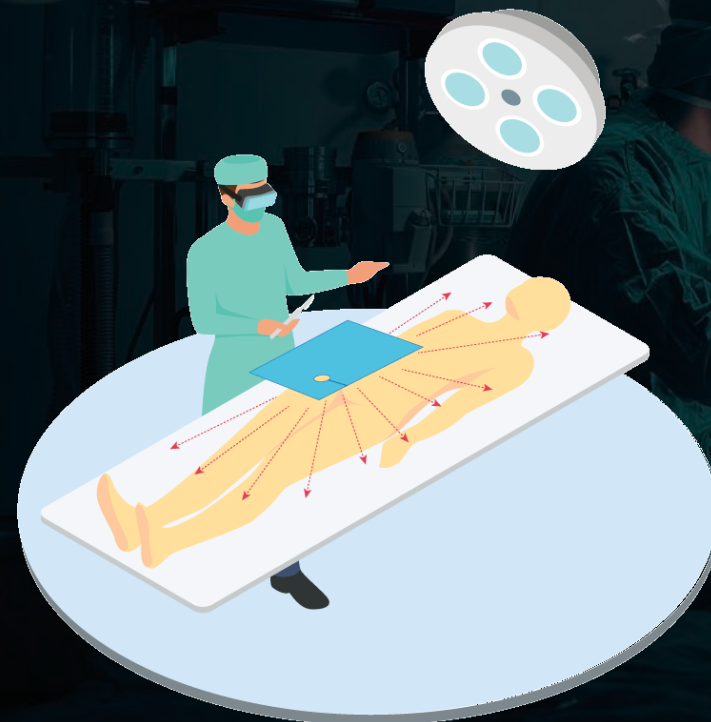
ECO-FRIENDLY



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## PROCEDURES FOR ANGIOGRAPHY DRAPE

Angiography, Coronary  
Catheterization, UFE,  
Pelvic Surgery and TACE



# PROCEDURES FOR BILIARY SPLIT ACCESS DRAPE

Transjugular intrahepatic  
portosystemic shunt (TIPS)



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## BILIARY SPLIT ACCESS DRAPE



<b>Model #</b>	SG - BD
<b>Dimensions</b>	14.5" x 16.5"
<b>Fenestration</b>	5" Center Slit Fenestration
<b>Attenuation</b>	See protection properties chart
<b>Lead Equivalence</b>	0.125, 0.25, or 0.375mm LE
<b>Core material</b>	Prolite Max
<b>Quantity</b>	10 per box



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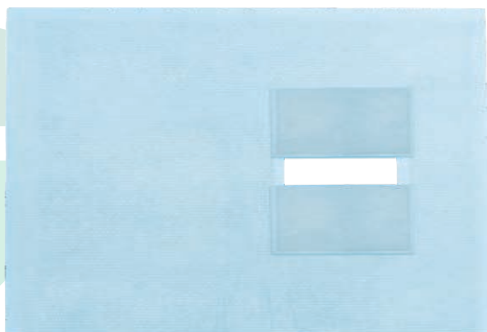
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## DIALYSIS DRAPE



<b>Model #</b>	SG - DSD
<b>Dimensions</b>	32" x 50"
<b>Fenestration</b>	4.5" x 9" Fenestration
<b>Attenuation</b>	See protection properties chart
<b>Lead Equivalence</b>	0.125, 0.25, or 0.375mm LE
<b>Core material</b>	Prolite Max
<b>Quantity</b>	10 per box



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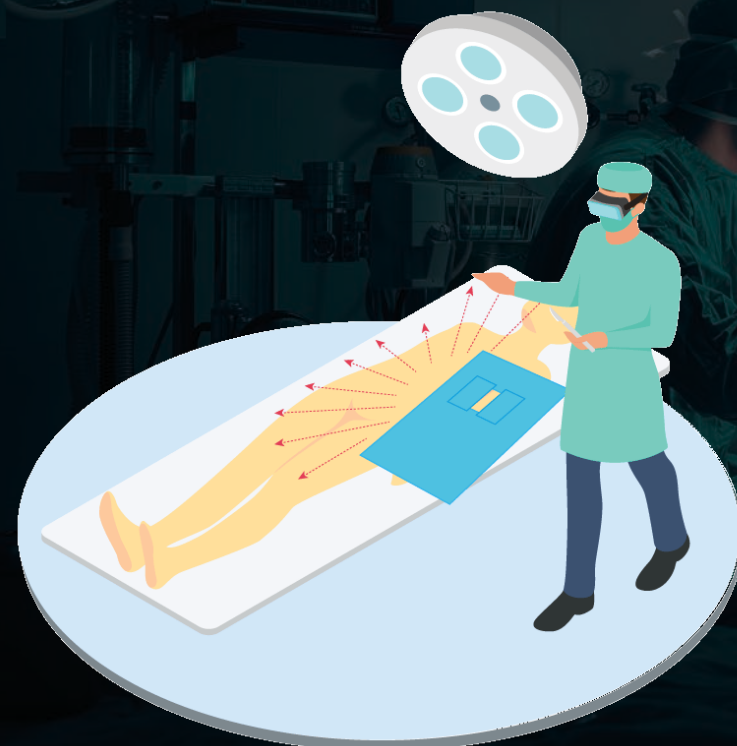
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## PROCEDURES FOR DIALYSIS DRAPE

**Dialysis access and declotting,  
Fistulagram**





## PROCEDURES FOR EP LEFT SUBCLAVIAN DRAPE

Bi-ventricular pacemaker implants,  
Bi-ventricular pacing and ICS  
procedures



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## EP LEFT SUBCLAVIAN DRAPE



<b>Model #</b>	SG – EPD
<b>Dimensions</b>	13.5" x 17.5"
<b>Fenestration</b>	3.5" x 2.5" Scoop Fenestration
<b>Attenuation</b>	See protection properties chart
<b>Lead Equivalence</b>	0.125, 0.25, or 0.375mm LE
<b>Core material</b>	Prolite Max
<b>Quantity</b>	10 per box



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## EP DRAPE (LARGE) WITH SCOOP FENESTRATION



<b>Model #</b>	SG - EPDC-LG
<b>Dimensions</b>	16" x 16"
<b>Fenestration</b>	5.75" x 3" Scoop Fenestration
<b>Attenuation</b>	See protection properties chart
<b>Lead Equivalence</b>	0.25mm LE
<b>Core material</b>	Prolite Max
<b>Quantity</b>	10 per box



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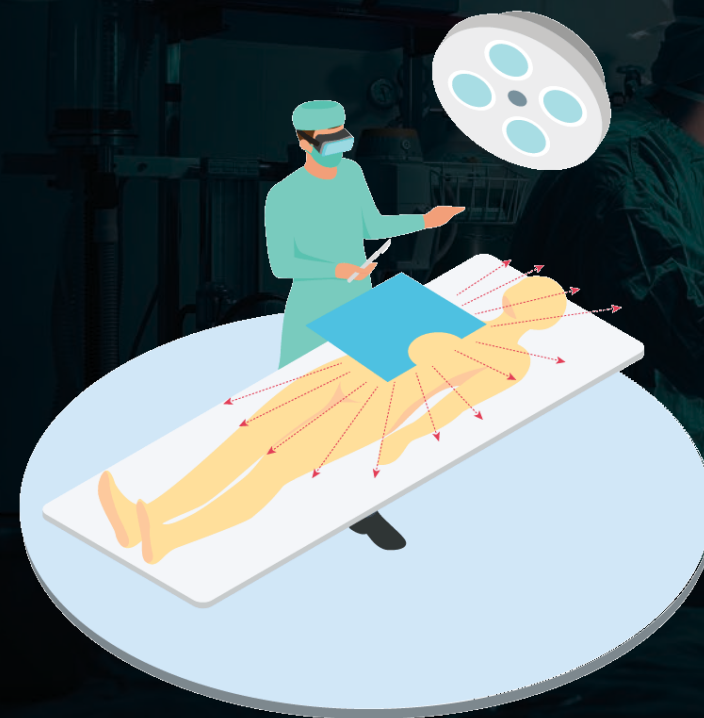
ECO-FRIENDLY



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## PROCEDURES FOR EP DRAPE (LARGE) WITH SCOOP FENESTRATION

Bi-ventricular pacemaker implants,  
ICS procedures and bi-ventricular  
pacing



## PROCEDURES FOR EP DRAPE (SMALL) WITH SCOOP FENESTRATION

Bi-ventricular pacemaker implants,  
Bi-ventricular pacing and ICS  
procedures



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## EP DRAPE (SMALL) WITH SCOOP FENESTRATION



<b>Model #</b>	SG - EPDC-SM
<b>Dimensions</b>	11" x 16"
<b>Fenestration</b>	5.75" x 3" Scoop Fenestration
<b>Attenuation</b>	See protection properties chart
<b>Lead Equivalence</b>	0.25mm LE
<b>Core material</b>	Prolite Max
<b>Quantity</b>	10 per box



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## JUGULAR ACCESS/TIPS DRAPE



<b>Model #</b>	SG - JUG
<b>Dimensions</b>	13.5" x 17.5"
<b>Fenestration</b>	5" Slit Fenestration
<b>Attenuation</b>	See protection properties chart
<b>Lead Equivalence</b>	0.125, 0.25, or 0.375mm LE
<b>Core material</b>	Prolite Max
<b>Quantity</b>	10 per box



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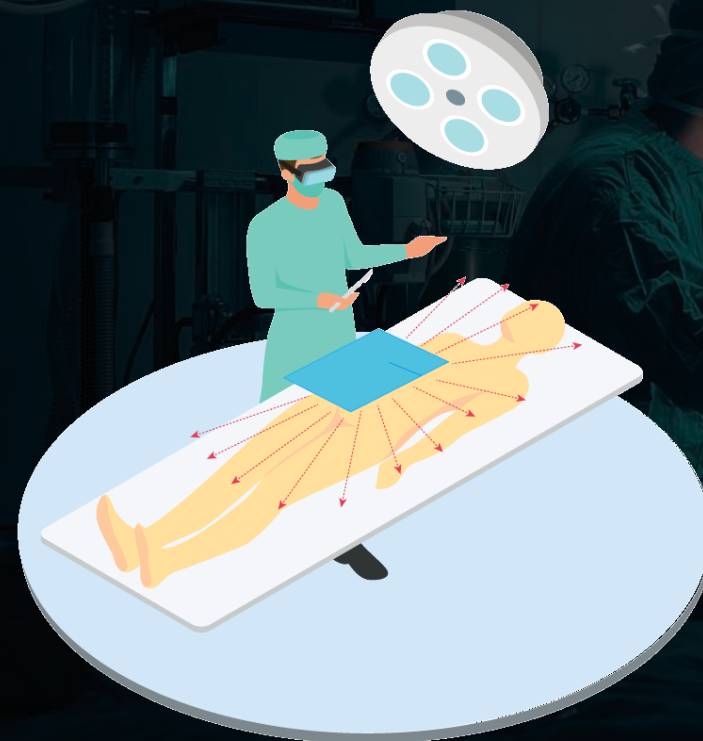
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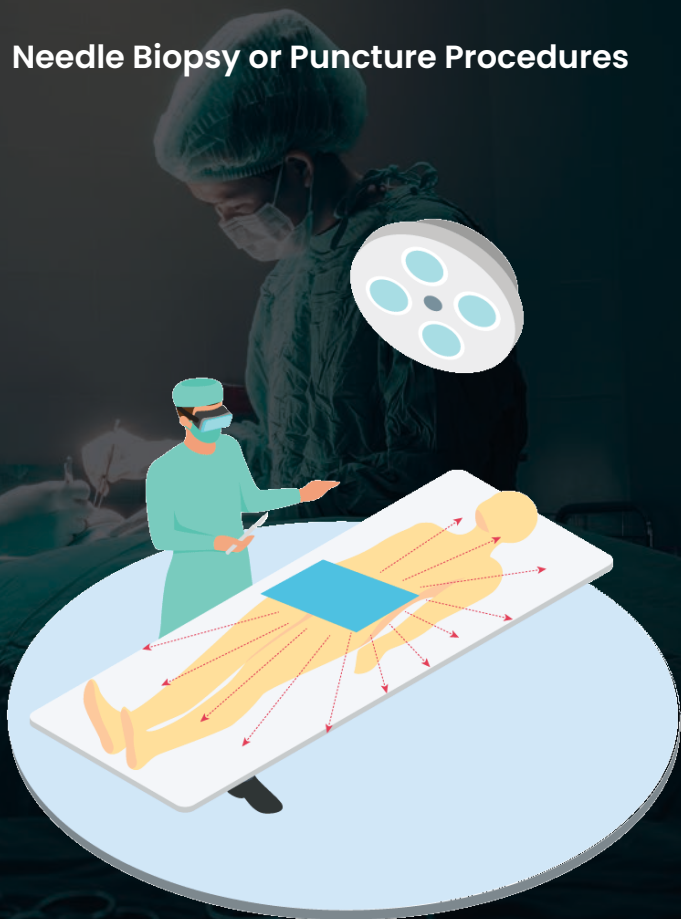
## PROCEDURES FOR EP JUGULAR ACCESS/TIPS DRAPE

Transjugular intrahepatic portosystemic  
shunt



## PROCEDURES FOR MULTIPURPOSE DRAPE

### Needle Biopsy or Puncture Procedures



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## MULTIPURPOSE DRAPE



<b>Model #</b>	SG - MPD
<b>Dimensions</b>	13.5" x 17.5"
<b>Fenestration</b>	None
<b>Attenuation</b>	See protection properties chart
<b>Lead Equivalence</b>	0.06, 0.125, 0.25, or 0.375mm LE
<b>Core material</b>	Prolite Max
<b>Quantity</b>	10 per box



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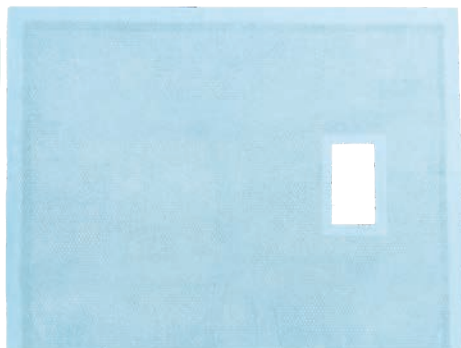


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## MULTIPURPOSE DRAPE WITH FENESTRATION



<b>Model #</b>	SG - MPDF
<b>Dimensions</b>	13.5" x 17.5"
<b>Fenestration</b>	3.5" x 2" Box Fenestration
<b>Attenuation</b>	See protection properties chart
<b>Lead Equivalence</b>	0.06, 0.125, 0.25, or 0.375mm LE
<b>Core material</b>	Prolite Max
<b>Quantity</b>	10 per box



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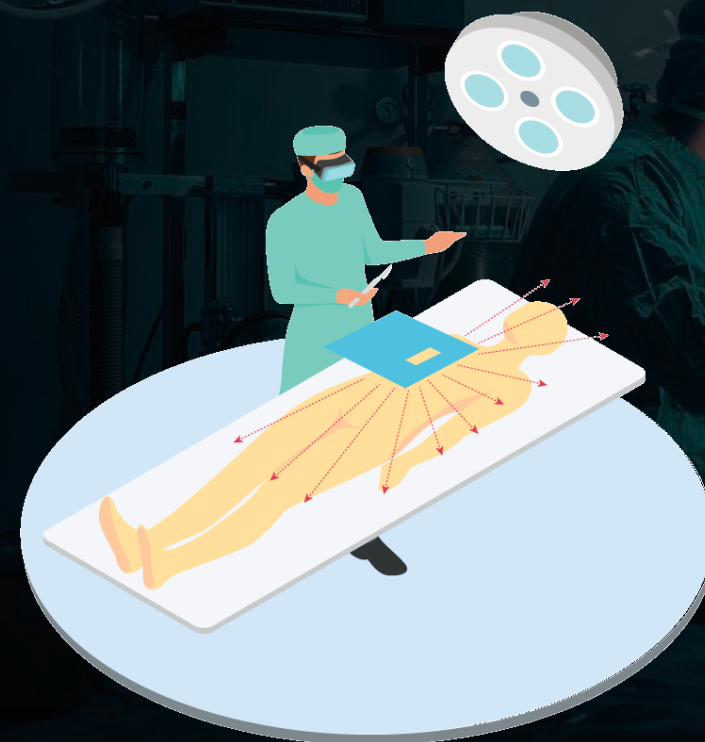
ECO-FRIENDLY



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## PROCEDURES FOR MULTIPURPOSE DRAPE WITH FENESTRATION

**Needle Biopsy or Puncture Procedures**





## PROCEDURES FOR PERIPHERAL DRAPE

Peripheral procedures where access is  
through the femoral artery



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## PERIPHERAL DRAPE



<b>Model #</b>	SG - PPD
<b>Dimensions</b>	12" x 35"
<b>Fenestration</b>	None
<b>Attenuation</b>	See protection properties chart
<b>Lead Equivalence</b>	0.125, 0.25, or 0.375mm LE
<b>Core material</b>	Prolite Max
<b>Quantity</b>	10 per box



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