

## CHROMATOGRAPHY UPDATED: SEPTEMBER 2006

CPT CODE: N/A

## SOLID PHASE EXTRACTION:

<u>Media</u> Alumina Sen-Pak	<u>Pharmaceutical</u> Tetrofosmin	<u>Solvent</u> 70% Methanol
Alumina Sep-Pak	Sestamibi	70% Methanol
Prepare Sep Pak by pushing Add 0.05 mL of sample into Gently push 10 mL of 70% M Measure tubes in dose calik % Tagged = Sep-Pak/Sep-Pa	g 5cc of Saline through Pak b longer neck of Sep-Pak, e Methanol through Sep-Pak i brator: ak + Eluate	in SLOW, drop-wise manner
0.22 um Millipore Filter Push 0.6 mL (0.1 cc MAA ar Push 2 mL of saline through Cap end of filter and measu % Tagged = Activity of Filter	MAA nd 0.5cc of Saline) into Filf n filter into test tube ure filter in dose calibrato er/Filter + Eluate	Saline ter r
C18 Sep-Pak Prepare Sep-Pak by wetting Add 0.1 mL sample to long Run 10 mL of 0.001 HCL th Run 10 mL of 1:1 ethanol/s Place Sep Pak into test tub % Tagged = Tube #2 / sum	Mag-3 g with 10 mL or ethanol fo end of sep Pak, ensuring s rough Sep-Pak into test tul saline through Sep-Pak into e labeled "3" of activity of tubes 1+2+3	Ethanol/ 0.001N/1:1 Ethanol/Saline llowed by 10 mL of 0.001 HCl sample is in contact with paper be labeled "1" test tube labeled "2"
C18 Sep-Pak Prepare Sep-Pak by wetting Add 0.1 mL sample to long	OctreoScan g with 5 mL of Methanol, f end of Sep Pak, ensuring s	Methanol/H2O ollowed by 5mL of Water sample is in contact with paper

Run 10 mL of Methanol through Sep Pak into test tube labeled "1" Run 10 mL of Methanol through Sep Pak into test tube labeled "2" Place Sep Pak into test tube labeled "#"

% Tagged = Tube #2/ sum of activity of tubes 1+2+3

CHROMATOGRAPHY STRIPS: Strips are made as follows:

<u>Media</u>	<b>Pharmaceutical</b>	<u>Solvent</u>
ITLC-SG	TcO4	Acetone
ITLC-SG	DTPA	Acetone
ITLC-SG	DTPA	Saline
ITLC-SG	MDP	Acetone
ITLC-SG	MDP	Saline
ITLC-SG	Mebrofenin	4:1 Acetonitrile/H <sub>2</sub> O
SA	Mebrofenin	20% NaCI/H <sub>2</sub> O
ITLC-SG	Sulfur Colloid	Saline

- A small amount of radiopharmaceutical is placed on the origin of the chromatography paper via the needle directly onto the origin line.
- The strip is placed into the solvent and allowed to migrate to the top of the strip. **NOTE**: The solvent must be allowed to migrate to the very top of the strip for the chromatography protocol to run.
- The strips are placed in the appropriate slot in the phantom.

## CHROMATOGRAPHY PROCEDURE:

- A. Prepare strips as defined by Chromatography Strips Protocol.
- B. Place strips on phantom and phantom on camera. The LEGP and LEHR collimators can be used.
- C. To acquire: Chrom\_ACQ.

To process: Chromatography

## CHROMATOGRAPHY

TcO4 Acetone	·	DTPA Acetone	
SG	*В	SG	*В
DTPA Saline		MDP Acetone	
SG	*B	SG	*В
MDP Saline	Mebrofenin 4:1 Acetonitrile/Water		
SG	*В	SG	*В
Mebrofenin 20% N	laCI/Water	Sulfur Colloid or Sa	aline
SA	*В	SG	*В

Quality Control done by the recommended method in the product package insert may be used for any unlisted products.

Reviewed By: S. Perlman, J. Schott

Scott B. Perlman, MD, MS Chief, Nuclear Medicine Joni Schott, MBA, RT(R) Nuclear Medicine Manager