UW Health
University of Wisconsin Hospital and Clinics

Division of Nuclear Medicine Procedure / Protocol
University Hospital and The American Center

PARATHYROID SPECT PROCESSING Tc99m **CPT CODE: N/A**
UPDATED: JUNE 2016

Recon / Reformat Processing and Screen Captures for SPECT/CT

Reconstruction Options:	**Infinia 1 (Rm E)**	**Infinia 2/3 & NM640 with Xeleris 3.x (RM A, C and TAC)**
Reconstruction Type	OSEM/MLEM	OSEM
Number of OSEM Iterations	OSEM 2 MLEM 0	2
Max Number of Subsets	10	10
Correction Options:		
Corrections		Resolutions recovery correction & Attenuation Correction
Additional Set		Resolution Recovery Correction and Attenuation Correction
Filters:		
Pre-Filter	Butterworth	
Pre Critical Frequency	0.50	
Pre Power	10	
Post-Filter	Hann	Butterworth
Critical Frequency	1.2	0.50
Power	10.0	10.0

Infinia 1 with Xeleris 2.x (Rm E)	**Infinia 2/3 & NM640 with Xeleris 3.x (RM A, C and TAC)**
1. Select the Patient and the following files	1. Select the Patient and the following files
a. **TOMOearlyHWKY**	a. **TOMOearlyHWKY**
b. **CT TOMOearlyHWKY**	b. **CT TOMOearlyHWKY**
c. **ATT MAP TOMOearlyHWKY**	c. **ATT MAP TOMOearlyHWKY**
2. Run **VOLUMETRIX FOR HAWKEYE PARATHYROID** processing icon	2. Run **Parathyroid MI** processing icon
	a. Click Original
	b. Click Proceed
	c. Click Passed
3. Select **NM Transaxials**	3. Select **NM Transaxials**
	a. Change **SUM:1** and **STEP:1**
a. Create an 8 x 8 display grid	b. Create an 8 x 8 display grid
b. Center area of interest within the grid and adjust intensity accordingly	c. Center area of interest within the grid and adjust intensity accordingly
c. Annotate **EARLY TRANS** on display screen	d. Annotate **EARLY TRANS** on display screen
d. **SCREENCAP** and save as **EARLY NM TRANSAXIALS**	e. **SCREENCAP** and save as **EARLY NM TRANSAXIALS**

4. Repeat step 3 by selecting **NM CORONALS** and **NM SAGITTALS**. Annotate appropriately	4. Repeat step 3 by selecting **NM CORONALS** and **NM SAGITTALS**. Annotate appropriately
5. Select **FUSED Transaxials**	5. Select **FUSED Transaxials**
a. Create an 8 x 8 display grid	a. Create an 8 x 8 display grid
b. Center area of interest within the grid and adjust intensity accordingly	b. Center area of interest within the grid and adjust intensity accordingly
c. Annotate **EARLY TRANS** on display screen	c. Annotate **EARLY TRANS** on display screen
d. **SCREENCAP** and save as **EARLY FUSED TRANSAXIALS**	d. **SCREENCAP** and save as **EARLY FUSED TRANSAXIALS**
6. Repeat step 5 by selecting **FUSED CORONALS** AND **FUSED SAGITTALS.** Annotate appropriately	6. Repeat step 5 by selecting **FUSED CORONALS** AND **FUSED SAGITTALS.** Annotate appropriately
7. Click **File** and **Save MIP**	7. Click **File** and **Save MIP**
8. Click **File** then **Save & Exit**	8. Click **File** then **Save & Exit**
9. Select MIP and rename to **EARLY MIP**	9. Select MIP and rename to **EARLY MIP**
10. Select **CT TOMOearlyHWKY**	10. Select **CT TOMOearlyHWKY**
11. Run **Convert CT to Hounsfield Units** processing icon	11. Run **Convert CT to Hounsfield Units** processing icon
12. Click **File** and **Exit**	12. Click **File** and **Exit**
13. Select **Tomolate**	13. Select **Tomolate**
14. Run **VOLUMETRIX FOR HAWKEYE PARATHYROID** processing icon	14. Run **VOLUMETRIX FOR HAWKEYE PARATHYROID** processing icon
15. Click **Resume**	15. Click **Resume**
16. Choose **NM Transaxial**	16. Choose **NM Transaxial**
a. Select an 8 x 8 display grid	a. Select a 8 x 8 display grid
b. Center area of interest within the grid and adjust intensity accordingly	b. Center area of interest within the grid and adjust intensity accordingly
c. Annotate **DELAY TRANS** on display screen	c. Annotate **DELAY TRANS** on display screen
d. **SCREENCAP** and save as **DELAY NM TRANSAXIALS**	d. **SCREENCAP** and save as **DELAY NM TRANSAXIALS**
17. Repeat step 16 by selecting **NM CORONALS** and **NM SAGITTALS**. Annotate appropriately	17. Repeat step 16 by selecting **NM CORONALS** and **NM SAGITTALS**. Annotate appropriately
18. Click **File** and **Save MIP**	18. Click **File** and **Save MIP**
19. Click **File** and **Save & Exit**	19. Click **File** and **Save & Exit**
20. Select MIP and rename to **LATE MIP**	20. Select MIP and rename to **LATE MIP**
21. Select **EARLY** and **LATE** statics	21. Select **EARLY** and **LATE** statics
22. Run **Parathyroid Imaging** processing icon	22. Run **Parathyroid Imaging** processing icon
23. Adjust intensity accordingly	23. Adjust intensity accordingly
24. **SCREENCAP** and save as **EARLY LATE STATICS**	24. **SCREENCAP** and save as **EARLY LATE STATICS**
PACS Send all EARLY NM and FUSED SCREENCAPS, all DELAY NM SCREENCAPS, EARLY AND LATE MIPS, CT CORRECTED, EARLY and LATE STATIC SCREENCAP, IRAC OSEM and IROSEM to PACS.	**PACS** Send all EARLY NM and FUSED SCREENCAPS, all DELAY NM SCREENCAPS, EARLY AND LATE MIPS, CT CORRECTED, EARLY and LATE STATIC SCREENCAP, TOMOEARLY_IRACRR Transaxials and TOMODELAY_IRNC_Transaxials PACS.

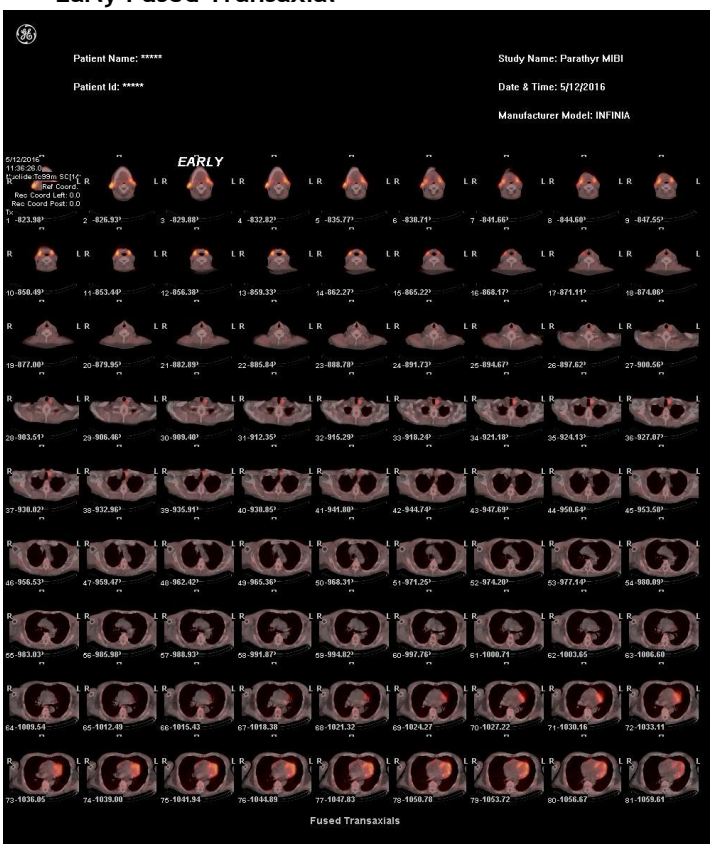
Recon / Reformat Processing and Screen Captures for SPECT ONLY (no CT)

Infinia 1 with Xeleris 2.x (Rm E)	Infinia 2/3 & NM640 with Xeleris 3.x (RM A, C and TAC)
1. Select patient and the following files	1. Select patient and the following files
a. **TOMOearlyHWKY**	a. **TOMOearlyHWKY**
2. Run **VOLUMETRIX FOR HAWKEYE PARATHYROID** processing icon	2. Run **Parathyroid MI** processing icon
	a. Click Original
	b. Click Proceed
3. Select **NM Transaxials**	3. Select **NM Transaxials**
a. Create an 8 x 8 display grid	a. Create an 8 x 8 display grid
b. Center area of interest within the grid and adjust intensity accordingly	b. Center area of interest within the grid and adjust intensity accordingly
c. Annotate **EARLY TRANS** on display screen	c. Annotate **EARLY TRANS** on display screen
d. **SCREENCAP** and save as **EARLY NM TRANSAXIALS**	d. **SCREENCAP** and save as **EARLY NM TRANSAXIALS**
4. Repeat step 3 by selecting **NM CORONALS** and **NM SAGITTALS**. Annotate appropriately	4. Repeat step 3 by selecting **NM CORONALS** and **NM SAGITTALS**. Annotate appropriately
5. Click **File** and **Save MIP**	5. Click **File** and **Save MIP**
6. Click **File** then **Save & Exit**	6. Click **File** then **Save & Exit**
7. Select MIP and rename to **EARLY MIP**	7. Select MIP and rename to **EARLY MIP**
8. Select **Tomolate**	8. Select **Tomolate**
9. Run **VOLUMETRIX FOR HAWKEYE PARATHYROID** processing icon	9. Run **VOLUMETRIX FOR HAWKEYE PARATHYROID** processing icon
10. Click **Resume**	10. Click **Resume**
11. Choose **NM Transaxial**	11. Choose **NM Transaxial**
a. Select an 8 x 8 display grid	a. Select a 8 x 8 display grid
b. Center area of interest within the grid and adjust intensity accordingly	b. Center area of interest within the grid and adjust intensity accordingly
c. Annotate **DELAY TRANS** on display screen	c. Annotate **DELAY TRANS** on display screen
d. **SCREENCAP** and save as **DELAY NM TRANSAXIALS**	d. **SCREENCAP** and save as **DELAY NM TRANSAXIALS**
12. Repeat step 11 by selecting **NM CORONALS** and **NM SAGITTALS**. Annotate appropriately	12. Repeat step 11 by selecting **NM CORONALS** and **NM SAGITTALS**. Annotate appropriately
13. Click **File** and **Save MIP**	13. Click **File** and **Save MIP**
14. Click **File** and **Save & Exit**	14. Click **File** and **Save & Exit**
15. Select MIP and rename to **LATE MIP**	15. Select MIP and rename to **LATE MIP**
16. Select **EARLY** and **LATE** statics	16. Select **EARLY** and **LATE** statics
17. Run **Parathyroid Imaging** processing icon	17. Run **Parathyroid Imaging** processing icon
18. Adjust intensity accordingly	18. Adjust intensity accordingly
19. **SCREENCAP** and save as **EARLY LATE STATICS**	19. **SCREENCAP** and save as **EARLY LATE STATICS**
PACS Send all EARLY NM and FUSED SCREENCAPS, all DELAY NM SCREENCAPS, EARLY AND LATE MIPS, CT CORRECTED, EARLY and LATE STATIC SCREENCAP, IRAC OSEM and IROSEM to PACS.	**PACS** Send all EARLY NM and FUSED SCREENCAPS, all DELAY NM SCREENCAPS, EARLY AND LATE MIPS, CT CORRECTED, EARLY and LATE STATIC SCREENCAP, TOMOEARLY_IRACRR Transaxials and TOMODELAY_IRNC_Transaxials PACS.

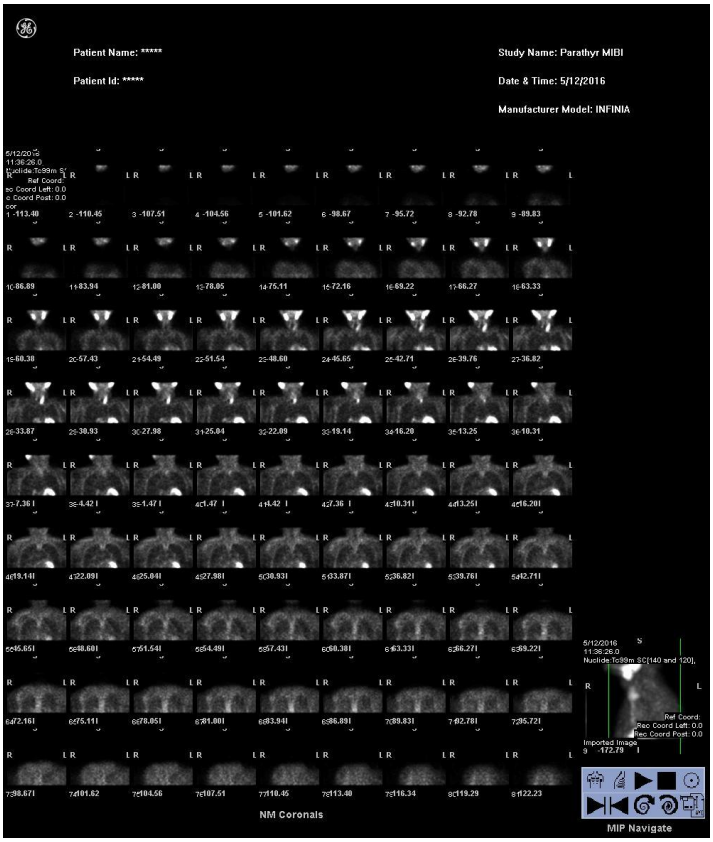
Screen Cap Samples

Early Transaxial

Early Fused Transaxial

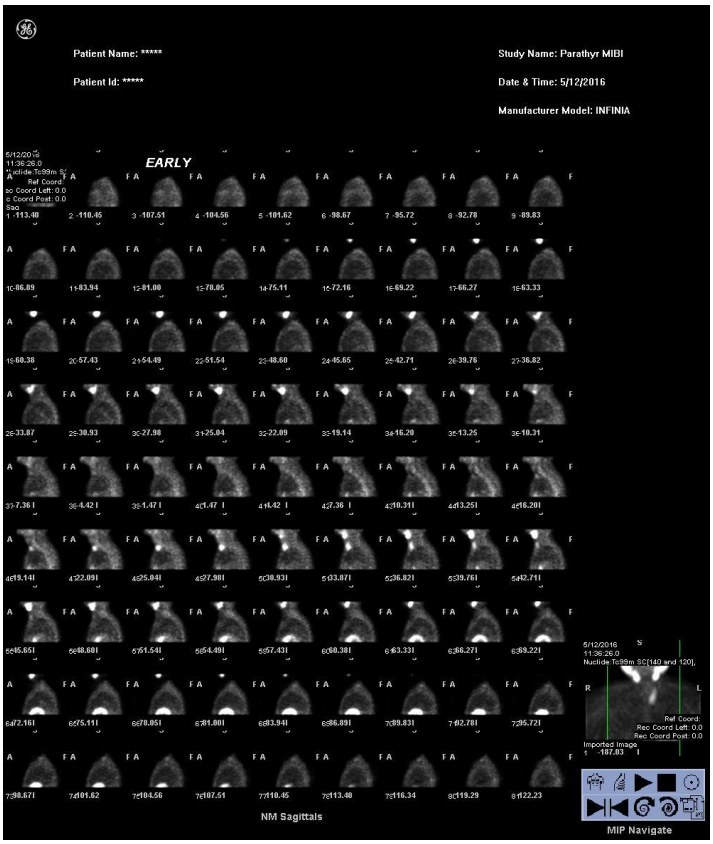


Early Coronal

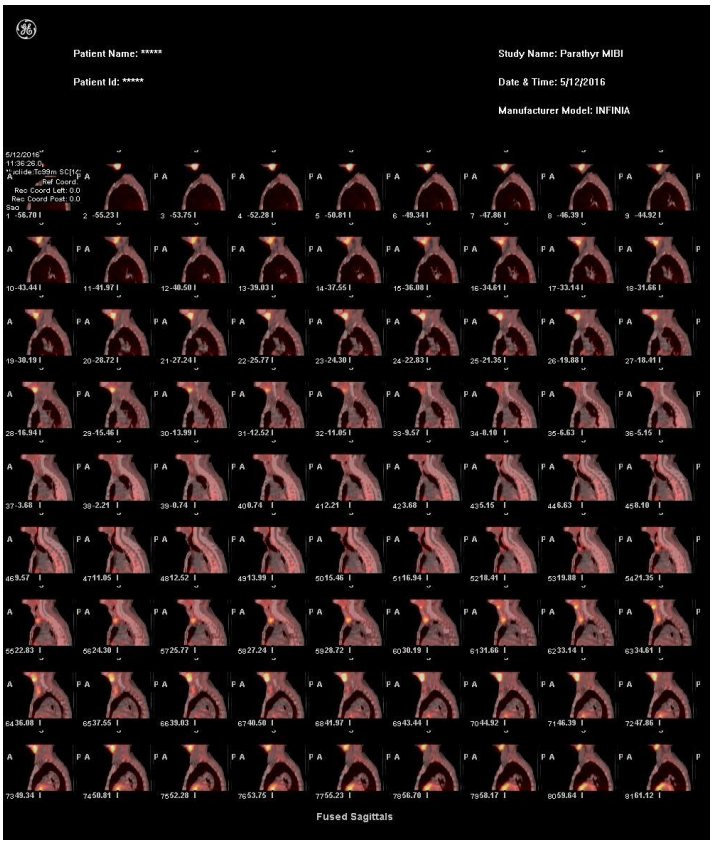


Early Fused Coronal

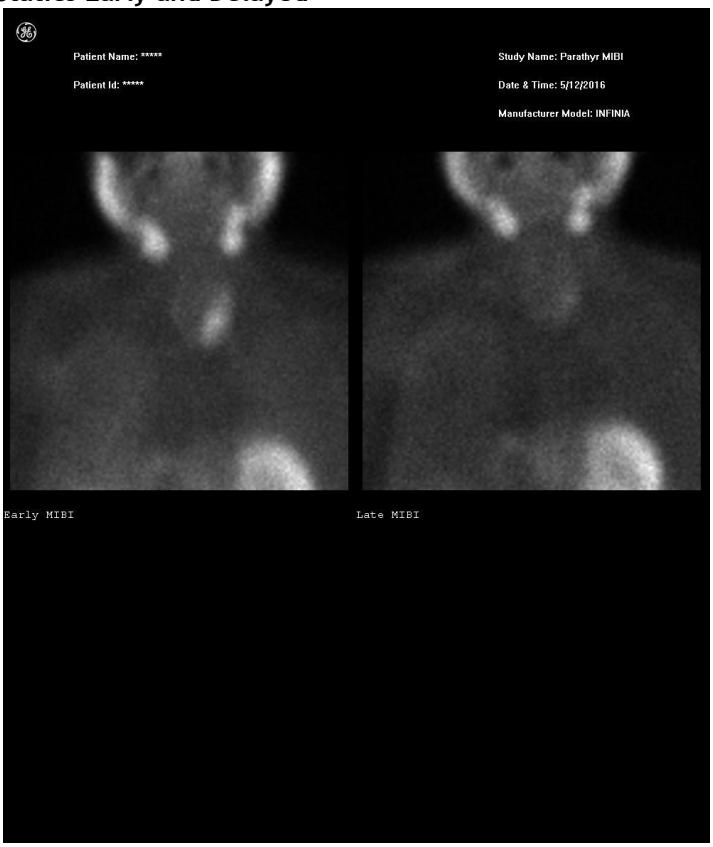
Early Sagittal



Early Fused Sagittal



Statics Early and Delayed



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