INSTITUTE OF PHYSICS AND ENGINEERING IN MEDICINE

Nuclear Medicine Software Working Party

Quality Assurance of Renography II

RESULT FORM (Please use a separate form for each operator)

Name of Site: …… **Operator Identifier (e.g. 1,2, etc): ……**

Computer System

Manufacturer: …… **Make and Model of computer: ……..……**

General information

Matrix size used:

128x128 ☐ **64x64** ☐ **Other (specify)** ☐ **……..……**

Which parameters do you quote on the clinical report:

Relative function ☐ **Time-to-peak** ☐

If quoted, what is your normal range for these parameters:

Relative function (left) (%) ….…… **Time-to-peak (secs) ……..……**

Operator experience (Please tick appropriate box in each case)

How long have you been routinely processing DTPA/MAG3 scans?

< 6 months ☐ **6 months – 1 year** ☐ **> 1 year** ☐

How many DTPA/MAG3 scans do you process per month?

1-10 ☐ **11-30** ☐ **>30** ☐

Relative function

Method used:

Inspection ☐ **Calculation** ☐ **Software** ☐

Software used (if software specified or as display aid to inspection or calculation):

Commercial ☐ **Written to user specification** ☐

Written in-house ☐ **Obtained from external source** ☐

Name and version of program used: ……..……

Algorithm:

Integral (with limits) ☐ **……..…** **Patlak** ☐

Slope ☐ **Peak counts** ☐

Deconvolution ☐ **Other (specify)** ☐

……..…

Background subtraction method (if combination, please tick all that apply):

None ☐ **Area normalised (factor)** ☐ **……**

Interpolated ☐ **Patlak** ☐

Deconvolution ☐ **Other (specify)**

☐ **……**

If background subtraction done **(if 2 methods used treat separately)**
(if >2 methods used, use separate sheet)

Method 1 (as ticked above): ……..… **Type of background:**
……..…

Background region (for complex region shape, please tick all that apply):

Inferior ☐ **Superior** ☐ **Lateral**

☐

Between ☐ **Around** ☐

Was same background region used for each kidney: Yes ☐ **No** ☐

Background region shape:

Polygon ☐ **Peri** ☐ **Semilunar** ☐

Rectangle ☐ **Triangle** ☐ **Other (specify)**

☐ **……**

Method 2 (if used; as ticked above): ……..…… Type of background: ……..……

Background region (for complex region shape, please tick all that apply):

Inferior ☐ **Superior** ☐ **Lateral**

☐

Between ☐ **Around** ☐

Was same background region used for each kidney: Yes ☐ **No** ☐

Background region shape:

Polygon ☐ **Peri** ☐ **Semilunar** ☐

Rectangle ☐ **Triangle** ☐ **Other (specify)**

☐ **……**

Curve shift:

None ☐ **Blood peak** ☐ **Other (specify)**

☐ **……**

Curve smoothing:

None ☐ **Once** ☐

>Once (specify no.) ☐ **…… Variable no.** ☐

If curve smoothing done, please specify smoothing function, e.g. 1-2-1 ……..……

For users of Patlak plot or deconvolution

Input function region (if combination, e.g. heart/liver, please tick all that apply):

Heart ☐ **Aorta** ☐ **Spleen** ☐

Liver ☐ **Other (specify)** ☐ **……..……**

Is input function background subtracted?

No ☐ **Yes (specify method)** ☐ **……..……**

Time-to-peak

Method used:

Inspection ☐ **Calculation** ☐ **Software** ☐

Software used (if software specified or as display aid to inspection or calculation):

Commercial ☐ **Written to user specification** ☐

Written in-house ☐ **Obtained from external source** ☐

Name and version of program used: ……..……

Algorithm:

Zero gradient ☐ **Maximum in whole curve** ☐

Time constraint (specify) ☐ **……** **Other (specify)**

☐ **…..**

Background subtraction same as before: Yes (go to 'Curve Shift') ☐ **No** ☐

Background subtraction method (if combination, please tick all that apply):

None ☐ **Area normalised (factor)** ☐ **……**

Interpolated ☐ **Patlak** ☐

Deconvolution ☐ **Other (specify)**

☐ **……**

If background subtraction done **(if 2 methods used treat separately)**
(if >2 methods used, use separate sheet)

Method 1 (as ticked above): ……..…… **Type of background: ……..……**

Background region (for complex region shape, please tick all that apply):

Inferior ☐ **Superior** ☐ **Lateral** ☐

Between ☐ **Around** ☐

Was same background region used for each kidney: Yes ☐ No ☐

Background region shape:

Polygon ☐ Peri ☐ Semilunar ☐

Rectangle ☐ Triangle ☐ Other (specify) ☐ ……

Method 2 (if used; as ticked above): ……..…… Type of background: ……..……

Background region (for complex region shape, please tick all that apply):

Inferior ☐ Superior ☐ Lateral ☐

Between ☐ Around ☐

Was same background region used for each kidney: Yes ☐ No ☐

Background region shape:

Polygon ☐ Peri ☐ Semilunar ☐

Rectangle ☐ Triangle ☐ Other (specify) ☐ ……

Curve shift:

None ☐ Blood peak ☐ Other (specify) ☐ ……

Curve smoothing:

None ☐ Once ☐

>Once (specify no.) ☐ …… Variable no. ☐

If curve smoothing done, please specify smoothing function, e.g. 1-2-1 ……..……

Time range constraint

No ☐ **Yes (limits)** ☐ **…..……**

Results

Please estimate the following parameters in the twelve studies:

Patient No:	Relative function (left)	Time-to-peak of renogram curve (left)	Time-to-peak of renogram curve (right)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

PLEASE RETURN THIS FORM TO YOUR REGIONAL AUDIT CO-ORDINATOR