

CHAPTER 8

APPENDIX

8.1 Fluoroscopy/Radiography Program List

Fluoroscopy Program

- With SCORE PRO Advance Option 16, 12 and 8 inch system

Classification	Program	Pulse Rate	Fluo Dose	Use	Reference Air Karma Rate (mGy/min)
Head	7.5pps/Low	7.5pps	Low	Low dose mode	8.4
	7.5pps	7.5pps	-	Normal mode	15.2
	10pps/Low	10pps	-	Low dose mode	13.2
	10pps	10pps	Normal	Normal mode	23.1
	15pps/Low	15pps	-	Low dose mode	19.8
	15pps	15pps	-	Normal mode	34.6
Cardio	7.5pps/Low	7.5pps	Low	Low dose mode	8.4
	7.5pps	7.5pps	-	Normal mode	15.0
	10pps/Low	10pps	-	Low dose mode	11.2
	10pps	10pps	Normal	Normal mode	20.0
	10pps/H	10pps	-	High image quality mode	32.1
	15pps/Low	15pps	-	Low dose mode	16.8
	15pps	15pps	-	Normal mode	30.0
Abd	15pps/H	15pps	-	High image quality mode	48.2
	7.5pps/Low	7.5pps	Low	Low dose mode	8.4
	7.5pps	7.5pps	-	Normal mode	15.2
	10pps/Low	10pps	-	Low dose mode	13.2
	10pps	10pps	Normal	Normal mode	23.1
	10pps/H	10pps	-	High image quality mode	27.2
	15pps/Low	15pps	-	Low dose mode	19.8
Peri	15pps	15pps	-	Normal mode	34.6
	15pps/H	15pps	-	High image quality mode	40.8
	7.5pps/Low	7.5pps	Low	Low dose mode	8.4
	7.5pps	7.5pps	-	Normal mode	15.2
	10pps/Low	10pps	-	Low dose mode	13.2
	10pps	10pps	Normal	Normal mode	23.1
	10pps/H	10pps	-	High image quality mode	27.2
	15pps/Low	15pps	-	Low dose mode	19.8
	15pps	15pps	-	Normal mode	34.6
	15pps/H	15pps	-	High image quality mode	40.8

8.1 Fluoroscopy/Radiography Program List

Classification	Program	Pulse Rate	Fluo Dose	Use	Reference Air Kerma Rate (mGy/min)
Ablation	5pps/Lowest	5pps	Low	Low dose mode	2.1
	5pps/ExLow	5pps	Low	Low dose mode	3.7
	5pps/Low	5pps	Low	Low dose mode	5.6
	5pps	5pps	Low	Normal mode	10.0
	7.5pps/Lowest	7.5pps	Low	Low dose mode	3.2
	7.5pps/ExLow	7.5pps	Low	Low dose mode	5.6
	7.5pps/Low	7.5pps	Low	Low dose mode	8.4
	7.5pps	7.5pps	-	Normal mode	15.2
	10pps/Low	10pps	-	Low dose mode	11.2
EV	10pps	10pps	Normal	Normal mode	20.0
	7.5pps/Low	7.5pps	Low	Low dose mode	8.4
	7.5pps	7.5pps	-	Normal mode	15.2
	10pps/Low	10pps	-	Low dose mode	13.2
	10pps	10pps	Normal	Normal mode	23.1
	10pps/H	10pps	-	High image quality mode	27.2
	15pps/Low	15pps	-	Low dose mode	19.8
	15pps	15pps	-	Normal mode	34.6
Child	15pps/H	15pps	-	High image quality mode	40.8
	7.5pps/Low	7.5pps	-	Low dose mode	5.6
	7.5pps	7.5pps	-	Normal mode	8.4
	10pps/Low	10pps	-	Low dose mode	7.5
	10pps	10pps	Normal	Normal mode	11.2
	15pps/Low	15pps	-	Low dose mode	11.0
	15pps	15pps	-	Normal mode	16.8

- NOTE)

Reference Air Kerma Rate is a value at the PATIENT ENTRANCE REFERENCE POINT.

This value might be different according to the dose restriction in each country.

* Measurement geometry : refer to Ch.8.3.

* Patient entrance reference point : refer to Ch.8.4.

Radiography Program

- With SCORE PRO Advance Option 16 and 12 inch system

Classification	Program	Acquisition Mode	Acquisition Rate	Maximum Exposure Number	Reference Air Kerma (uGy/frame)
Head	DSA[30s]	Stage-DSA	6, 3, 2, 1fps	51	1045.0
	HS-DSA[15f-15s]	HS-DSA	15fps	225	519.0
	HS-DSA[7.5f-30s]	HS-DSA	7.5fps	225	519.0
	RSM[15f-20s]	RSM	15fps	300	344.4
	OneShot	SPOT	1fps	1	407.7
	SCORE 3D-DA	SCORE 3D	30fps	160	
	SCORE 3D-DSA	SCORE 3D	30fps	160	
	SCORE CT-10s	SCORE CT	30fps	350	
	SCORE CT-20s	SCORE CT	30fps	650	
	SCORE CT-HR	SCORE CT	30fps	650	
Cardio	CAG[15f-10s]	DA	15fps	150	186.9
	CAG[15f-10s]/Low	DA	15fps	150	120.0
	CAG[30f-10s]	DA	30fps	300	186.9
	LVG-Si[30f-15s]	DA	30fps	450	186.9
	LVG-Bi[30f-15s]	DA	30fps	450	186.9
	AOG[15f-30s]	DA	15fps	450	186.9
	RSM[15f-45s]	RSM	15fps	675	344.4
	HS-DSA[15f-15s]	HS-DSA	15fps	225	519.0
	OneShot	SPOT	1fps	1	407.7
Abd	DSA[30s]	Stage-DSA	3, 2, 1fps	45	1045.0
	HS-DSA[15f-15s]	HS-DSA	15fps	225	519.0
	HS-DSA[7.5f-30s]	HS-DSA	7.5fps	225	519.0
	RSM[15f-30s]	RSM	15fps	450	344.4
	DA[15f-30s]	DA	15fps	450	186.9
	OneShot	SPOT	1fps	1	407.7
	SCORE 3D-DA	SCORE 3D	30fps	160	
	SCORE CT	SCORE CT	30fps	360	
Peri	DSA[40s]	Stage-DSA	3, 2, 1fps	56	1045.0
	HS-DSA[15f-15s]	HS-DSA	15fps	225	519.0
	HS-DSA[7.5f-30s]	HS-DSA	7.5fps	225	519.0
	RSM[15f-45s]	RSM	15fps	675	344.4
	RSM[7.5f-45s]	RSM	7.5fps	338	344.4
	DA[15f-45s]	DA	15fps	675	186.9
	DA[15f-45s]/Low	DA	15fps	675	120.0
	HS-DSA-CO2[15f-15s]	HS-DSA	15fps	225	519.0
Ablation	CAG[15f-10s]	DA	15fps	150	186.9
	CAG[15f-10s]/Low	DA	15fps	150	120.0
	OneShot	SPOT	1fps	1	407.7

8.1 Fluoroscopy/Radiography Program List

Classification	Program	Acquisition Mode	Acquisition Rate	Maximum Exposure Number	Reference Air Kerma (uGy/frame)
EV	HS-DSA[15f-15s]	HS-DSA	15fps	225	519.0
	HS-DSA[7.5f-30s]	HS-DSA	7.5fps	225	519.0
	DSA[30s]	Stage-DSA	3, 2, 1fps	45	1045.0
	RSM[15f-20s]	RSM	15fps	300	344.4
	DA[15f-20s]	DA	15fps	300	186.9
Child	DA[30f-30s]Bi/Low	DA	30fps	900	59.9
	DA[30f-30s]Si/Low	DA	30fps	900	63.8
	DA[30f-30s]Bi	DA	30fps	900	118.9
	DA[30f-30s]Si	DA	30fps	900	118.9
	DA[15f-30s]/Low	DA	15fps	450	66.4
	DA[15f-30s]	DA	15fps	450	118.9

- With SCORE PRO Advance Option 8 inch system

Classification	Program	Acquisition Mode	Acquisition Rate	Maximum Exposure Number	Reference Air Kerma (uGy/frame)
Head	DSA[30s]	Stage-DSA	6、3、2、1fps	51	1045.0
	HS-DSA[15f-20s]	HS-DSA	15fps	300	519.0
	HS-DSA[7.5f-40s]	HS-DSA	7.5fps	300	519.0
	RSM[15f-20s]	RSM	15fps	300	344.4
	OneShot	SPOT	1fps	1	407.7
	SCORE 3D-DA	SCORE 3D	30fps	160	
	SCORE 3D-DSA	SCORE 3D	30fps	160	
Cardio	CAG[15f-10s]	DA	15fps	150	186.9
	CAG[15f-10s]/Low	DA	15fps	150	120.0
	CAG[30f-10s]	DA	30fps	300	186.9
	LVG-Si[30f-15s]	DA	30fps	450	186.9
	LVG-Bi[30f-15s]	DA	30fps	450	186.9
	AOG[15f-30s]	DA	15fps	450	186.9
	RSM[15f-45s]	RSM	15fps	675	344.4
	HS-DSA[15f-20s]	HS-DSA	15fps	300	519.0
	OneShot	SPOT	1fps	1	407.7
Abd	DSA[30s]	Stage-DSA	3、2、1fps	45	1045.0
	HS-DSA[15f-20s]	HS-DSA	15fps	300	519.0
	HS-DSA[7.5f-40s]	HS-DSA	7.5fps	300	519.0
	RSM[15f-30s]	RSM	15fps	450	344.4
	DA[15f-30s]	DA	15fps	450	186.9
	OneShot	SPOT	1fps	1	407.7
	SCORE 3D-DA	SCORE 3D	30fps	160	
Peri	DSA[40s]	Stage-DSA	3、2、1fps	56	1045.0
	HS-DSA[15f-20s]	HS-DSA	15fps	300	519.0
	HS-DSA[7.5f-40s]	HS-DSA	7.5fps	300	519.0
	RSM[15f-45s]	RSM	15fps	675	344.4
	RSM[7.5f-45s]	RSM	7.5fps	338	344.4
	DA[15f-45s]	DA	15fps	675	186.9
	DA[15f-45s]/Low	DA	15fps	675	120.0
	HS-DSA-CO2[15f-20s]	HS-DSA	15fps	300	519.0
Ablation	CAG[15f-10s]	DA	15fps	150	186.9
	CAG[15f-10s]/Low	DA	15fps	150	120.0
	OneShot	SPOT	1fps	1	407.7
EV	HS-DSA[15f-20s]	HS-DSA	15fps	300	519.0
	HS-DSA[7.5f-40s]	HS-DSA	7.5fps	300	519.0
	DSA[30s]	Stage-DSA	3、2、1fps	45	1045.0
	RSM[15f-20s]	RSM	15fps	300	344.4
	DA[15f-20s]	DA	15fps	300	186.9
Child	DA[30f-30s]Bi/Low	DA	30fps	900	59.9
	DA[30f-30s]Si/Low	DA	30fps	900	63.8
	DA[30f-30s]Bi	DA	30fps	900	118.9
	DA[30f-30s]Si	DA	30fps	900	118.9
	DA[15f-30s]/Low	DA	15fps	450	66.4
	DA[15f-30s]	DA	15fps	450	118.9

NOTE)

Reference Air Kerma Rate is a value at the PATIENT ENTRANCE REFERENCE POINT. This value might be different according to the dose restriction in each country.

* Measurement geometry : refer to Ch.8.3.

* Patient entrance reference point : refer to Ch.8.4.

The change in fluoroscopy and radiography program can be executed by our technical service personnel or system administrator in the institution where the system is used. Refer to the manual below about the operation.

M517-E0181 DAR-9500f Operation Manual

Chapter 11 Administration "Menus and DUP configuration"

Acquisition condition (Contents of APR) cannot be changed by user.

8.2 Angiography Condition List

Injection setting of DA/RSM/DSA mode.

		Injector Configuration				
		Delay (sec)	Flow Rate (ml/sec)	Total Volume (ml)	Rise/Fall (sec)	
Head/ Neck	Common Carotid Artery (Common-CAG)	0	7	9	0.4	
	Internal Carotid Artery (Int.-CAG)	0	4	7	0.4	
	Vertebral Artery (VAG)	0	4	5	0.4	
	External Carotid Artery (Ext.-CAG)	0	3	4	0.4	
	Subclavian Artery	0	6	9	0.4	
Breast	Pulmonary arteries angiography, Right heart system left ventricle angiography, Aortography	0	15 to 20	30 to 40	0.4	
	LV (IA approach)	0	10	25 to 35	0.4	
Abdomen	Celiac trunk	0	6	24	0.4	
	Portal Vein	0	6	30	0.4	
	Common Hepatic Artery	0	3	12 to 15	0.4	
	Renal Artery (Right or Left) (Selective)	0	5	10	0.4	
	Renal Artery (Both) (Non-Selective)	0	8 to 15	16 to 30	0.4	
	Common Iliac Artery	0	6	12	0.4	
Extremity	Common Iliac Artery	0	5	10	0.4	Each blood vessel name of lower limbs and upper limbs indicates the injection position of contrast medium.
	Lower Limbs Common Iliac Artery (for both legs)	0	10 to 15	20 to 30	0.4	
	Lower Limbs Common Iliac Artery (for right or left leg)	0	5 to 8	10 to 20	0.4	
	Lower Limbs Femoral Artery	0	4	8	0.4	
	Upper Limbs Subclavian Artery	0	7	15	0.4	
	Upper Limbs Branchial Artery	0	3	12	0.4	

Injection setting of SCORE 3D mode

Target Vessel		C-arm Speed (°/sec)	Acq. Time (sec)	Inj-ACQ Delay (sec)	Injection Configuration				
					Delay (sec)	Flow Rate (ml/sec)	Injection Time (sec)	Total Volume (ml)	Rise Fall (sec)
Head / Neck	Internal carotid artery (ICA) Anterior cerebral artery (ACA) Middle cerebral artery (MCA) In case the front edge of catheter is moved to ICA selectively.	60	3.3	2.5	0	3 to 5	5.8	17.5 to 29	0.4
		40	5	2.2	0s	3 to 5	7.2	21.5 to 36	0.4
	Internal carotid artery (ICA) Anterior cerebral artery (ACA) Middle cerebral artery (MCA) In case the front edge of catheter is positioned at common carotid (CC)	60	3.3	3	0	4 to 6	6.3	25 to 38	0.4
		40	5	2.7	0	4 to 6	7.7	31 to 46	0.4
	Vertebral artery (VA) Basilar artery (BA)	60	3.3	2.5	0	3 to 5	5.8	17.5 to 29	0.4
		40	5	2.2	0	3 to 5	7.2	21.5 to 36	0.4
	Cervical carotid artery (Anterior carotid artery origin) In case the front edge of catheter is positioned at common carotid (CC)	60	3.3	0.5	0	4 to 6	3.8	15 to 23	0.4
		40	5	0.5	0	4 to 6	5.5	22 to 33	0.4
	Common Hepatic Artery	60	3.3	2	0	3 to 4	5.3	16 to 21	0.4
		40	5	2	0	3 to 4	7	21 to 28	0.4
Abdomen	Portal Vein	60	3.3	15	0	8	6	48	0.4
		40	5	15	0	8	6	48	0.4
	Renal Artery	60	3.3	0.5	0	4	3.8	15	0.4
		40	5	0.5	0	4	5.5	22	0.4

Injection setting of SCORE CT

Vessel		C-arm Speed (°/sec)	Acq. time (sec)	Inj-ACQ delay (sec)	Injector configuration				
					Delay (sec)	Flow Rate (ml/sec)	Injection time (sec)	Total Volume (ml)	Rise Fall (sec)
Head/Neck	Selective Angiography (SCORE CT-10s)	20	10	6	0	1	16	16	0.4
	Selective Angiography (SCORE CT-20s)	10	20	6	0	0.5	26	13	0.4
	Interacranial Stent (SCORE CT-HR)	10	20	2	0	1	22	22	0.4
Abdomen	CTAP (CT during Arterial Portography)	20	10	8	0	2	18	36	0.8
	CTA/CTHA (CT during Hepatic Arteriography)	20	10	25	0	5	15	75	0.8

*Recommended contrast medium dilution magnification

To extract vessels and tumors only:

Dilute by from twice to triple

To visualize intracranial stent and vessels:

Dilute by approx 7 to 10