

Northside Forsyth Gamma Knife  
Treatment Planning Protocol  
for  
Leksell Gamma Knife® Icon™  
Leksell GammaPlan® 11.3.2

Patient: Coleman, Keri-Lyn  
Patient ID: 03207055  
Diagnosis: Metastases - multiple  
Diagnosis Code: R1802  
Plan ID: 20250219-001  
Approval Version: 11.3.2  
Approval Time: 2025-02-19 12:11:45  
Print Date: 2025-02-19  
Operator: JK  
Gamma Knife: 6240 (6240)

**Previously Delivered Dose**

Previously delivered dose from the following plan(s) is available as imported dose for dose evaluation:  
20220111-002, 20231119-001.

Dose already delivered in previous plans must be taken into account when prescribing dose.

**Approved for Treatment**

*[Signature]* Zhang Feb 19, 2025 @ 12:08 pm  
*[Signature]* Josh Kessel 2/19/25 12:08 pm

NSH F 0757351 DOB: 11/06/1976 48Y  
COLEMAN, KERILYN  
ZHANG, BINGCHAN 70314  
2504105249 H 02/14/25 0800  


**Gamma Knife Data**

Calibration dose	3.364 Gy/min at 2020-10-22
Days since calibration at approval date	1581
Treatment dose rate (2025-02-19)	1.902 Gy/min
Effective output factors (4, 8, 16)	0.814, 0.9, 1
Ring 1 output factors (4, 8, 16)	0.812, 0.934, 0.961
Ring 2 output factors (4, 8, 16)	0.823, 0.919, 1.000
Ring 3 output factors (4, 8, 16)	0.795, 0.874, 0.981
Ring 4 output factors (4, 8, 16)	0.726, 0.782, 0.914
Ring 5 output factors (4, 8, 16)	0.664, 0.708, 0.847

**Fixation Configuration**

Mask

**Treatment Data**

Target	Shots	Prescription	100% [Gy]	Max [Gy]	X [mm]	Y [mm]	Z [mm]	Width [mm]
B:L ant frontal 2.12.25 PTV	1	20.0 Gy @ 74% I2	27.0	27.0	133.2	161.3	49.3	21

**Treatment Data (Continued)**

Target	Shots	Prescription	100% [Gy]	Max [Gy]	X [mm]	Y [mm]	Z [mm]	Width [mm]
A:R forntoparietal 2.12.25 PTV	1	20.0 Gy @ 50% <i>Dr</i>	40.0	40.0	65.4	78.8	40.6	22
C:L post temporal 2.12.25 PTV	1	20.0 Gy @ 60% <i>Dr</i>	33.3	33.3	132.0	68.3	70.7	22

Number of fractions: 1

Total number of shots: 3

Treatment plan name: Plan1

Dose algorithm: TMR 10

Dose grid resolution in targets: standard

**Treatment Data Per Fraction**

Target	Shots	Prescription	100% [Gy]	Max [Gy]	X [mm]	Y [mm]	Z [mm]	Width [mm]
B:L ant frontal 2.12.25 PTV	1	20.0 Gy @ 74%	27.0	27.0	133.2	161.3	49.3	21
A:R forntoparietal 2.12.25 PTV	1	20.0 Gy @ 50%	40.0	40.0	65.4	78.8	40.6	22
C:L post temporal 2.12.25 PTV	1	20.0 Gy @ 60%	33.3	33.3	132.0	68.3	70.7	22

Total number of shots: 3

Treatment plan name: Plan1

Dose algorithm: TMR 10

Beam-on time: 58.4 min

Dose grid resolution in targets: standard

**Run 1 (90 degrees)**

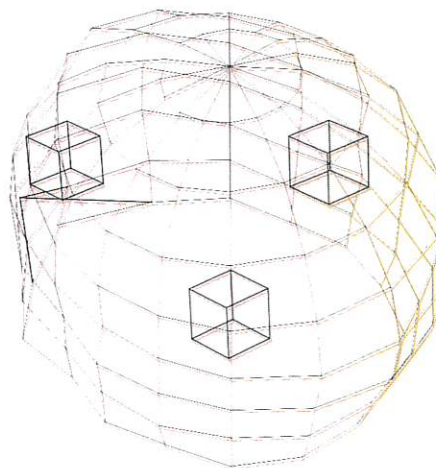
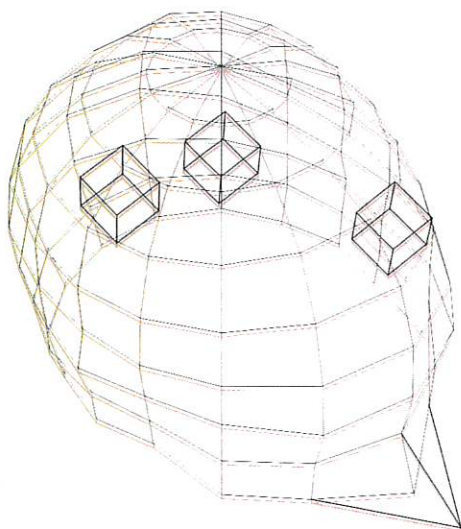
Run-Step	Shot	X [mm]	Y [mm]	Z [mm]	Collimator [sectors 1-8]	Time [min]	Notes
1-1	B1	132.9	161.6	49.0	4 4 8 4 4 4 4 4	14.72	
1-2	A1	65.6	78.9	40.6	8 4 4 4 4 4 4 4	23.19	
1-3	C1	131.9	68.2	70.8	4 4 8 4 4 4 8 4	20.45	



**Skull Geometry**

Anterior right view

Posterior left view

**Shot Dose Data**

Shot	Weight	Dose Rate at focus [Gy/min]	Extrapolated Skull Radii
B1	1.00	1.84	0
A1	1.00	1.73	0
C1	1.00	1.65	0

Region of interest: **AS-10m spatial 21-22.5 PTV**  
**AS-10m spatial 21-22.5 PTV**  
**C-10m temporal 21-22.5 PTV**

Prescription dose: **20.0 Gy @ 20fx**  
**20.0 Gy @ 20fx**  
**20.0 Gy @ 20fx**

Region of interest: **AS-10m spatial 21-22.5 PTV**  
**AS-10m spatial 21-22.5 PTV**  
**C-10m temporal 21-22.5 PTV**

Reviewed regions of interest: **AS-10m spatial 21-22.5 PTV**  
**AS-10m spatial 21-22.5 PTV**  
**C-10m temporal 21-22.5 PTV**

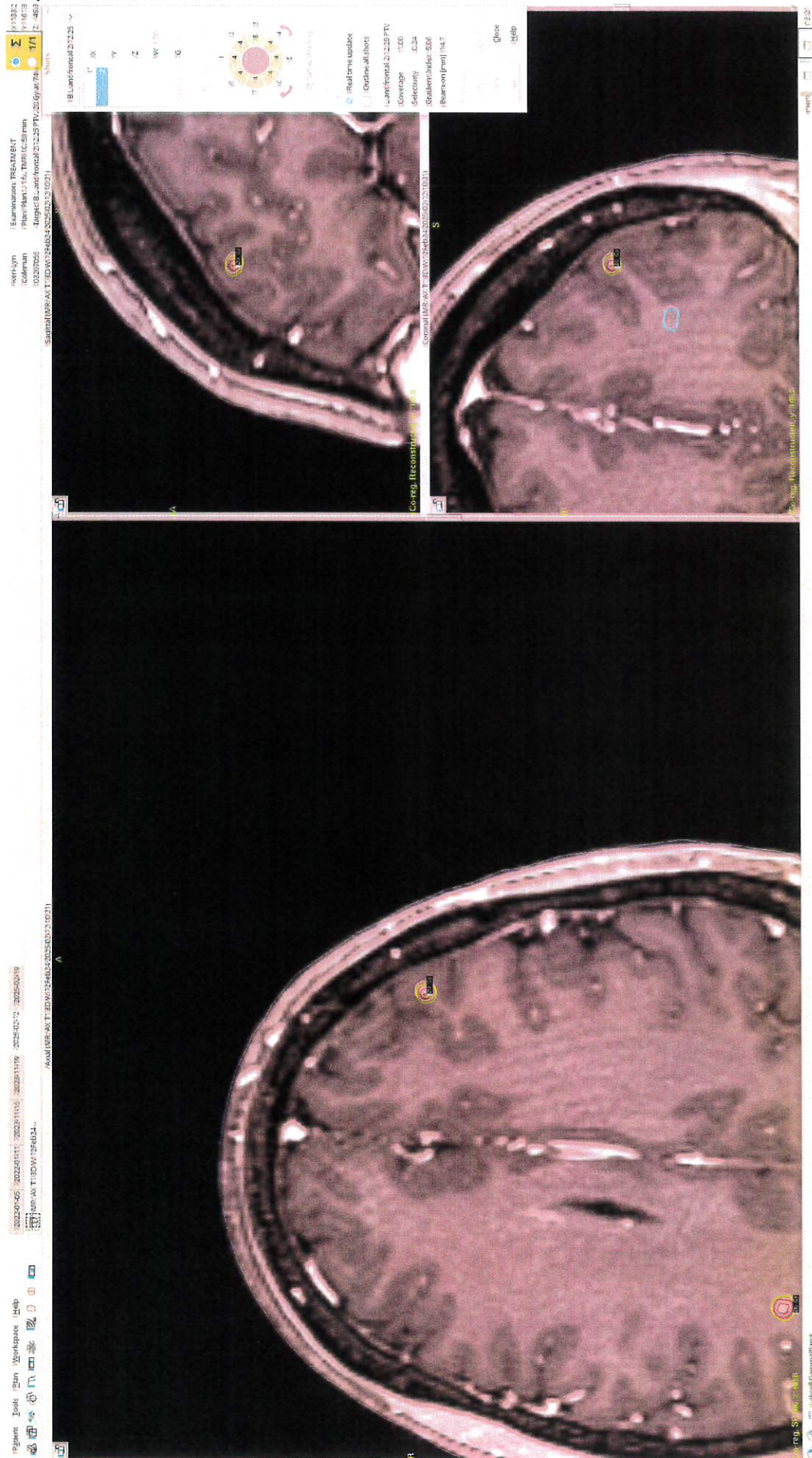
Planned dose: **AS-10m spatial 21-22.5 PTV**  
**AS-10m spatial 21-22.5 PTV**  
**C-10m temporal 21-22.5 PTV**

Done Evaluation

Planned Dose [Gy]	Volume [L]	AS-10m spatial 21-22.5 PTV	AS-10m spatial 21-22.5 PTV	C-10m temporal 21-22.5 PTV
0.0	95.0	95.0	95.0	95.0
10.0	85.0	85.0	85.0	85.0
20.0	75.0	75.0	75.0	75.0
30.0	65.0	65.0	65.0	65.0
40.0	55.0	55.0	55.0	55.0
50.0	45.0	45.0	45.0	45.0



Snapshot: 2025-02-19 13:21:56

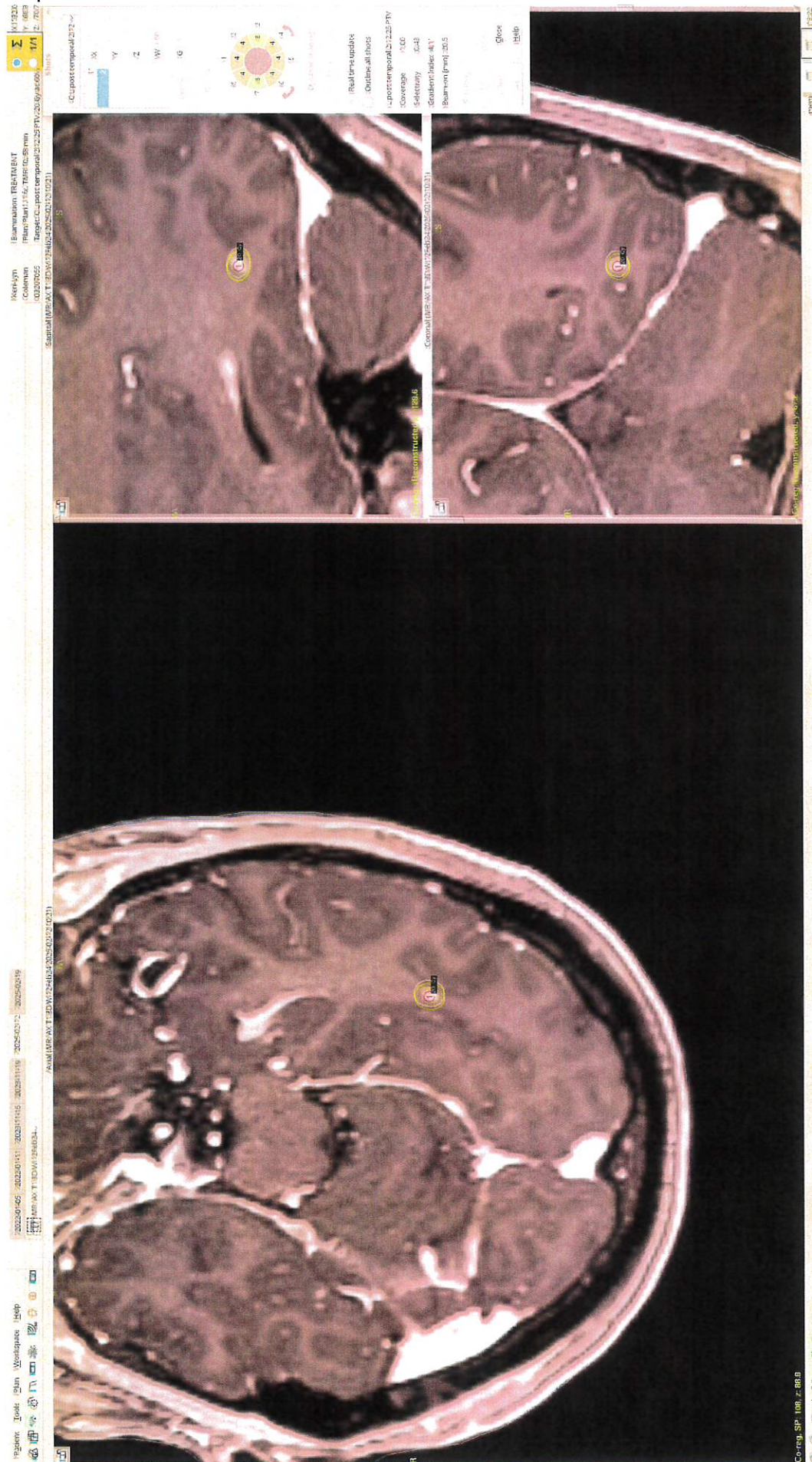








Snapshot: 2025-02-19 13:22:09



# Leksell Gamma Knife® Icon™

## Operator's report

### Clinical CBCT request

*Patient name:* Keri-Lyn Coleman  
*Patient ID:* 03207055  
*Diagnosis:* Metastases - multiple, R1802  
*Scan date:* 2025-02-19 [yyyy-mm-dd]  
*Operator:* SJ  
*LGK ID:* 6240

### CBCT scans

Time [hh:mm:ss]	CBCT setting	CTDI [mGy]
11:54:02	CTDI 6.3	6.3

### CBCT settings

CBCT setting	CTDI [mGy]	Voltage [kV]	Current [mA]	Pulse length [ms]	Number of projections
CTDI 6.3	6.3	90	2.5	40	332



# Leksell Gamma Knife® Icon™

## Operator's report

### Clinical treatment

*Patient name:* Keri-Lyn Coleman  
*Patient ID:* 03207055  
*Diagnosis:* Metastases - multiple, R1802  
*Plan ID:* 20250219-001  
*Treatment date:* 2025-02-19 [yyyy-mm-dd]  
*Plan approval date:* 2025-02-19 [yyyy-mm-dd]  
*Plan operator:* JK  
*Fraction max dose [Gy]:* 40.0  
*Fraction:* 1 (1)  
*LGK ID:* 6240

### Overview

*Treatment status:* Completed  
*Number of runs:* 1  
*Number of shots:* 3  
*Start time:* 2025-02-19 12:14:24  
*End time:* 2025-02-19 13:13:21

*Comment:*

Run index	Fixation	Gamma	Number of shots
1	Mask	90	3

### Treatment results

*Run index: 1*

Shot	X [mm]	Y [mm]	Z [mm]	Planned [min]	Elapsed [min]	Collimators	Clearance
B1	132.9	161.6	49.0	14.72	14.72	4,4,8,4,4,4,4,4	-
A1	65.6	78.9	40.6	23.19	23.19	8,4,4,4,4,4,4,4	-
C1	131.9	68.2	70.8	20.45	20.45	4,4,8,4,4,4,8,4	-

### CBCT scans

Time [hh:mm:ss]	CBCT setting	CTDI [mGy]
12:09:02	CTDI 2.5	2.5

### CBCT settings

CBCT setting	CTDI [mGy]	Voltage [kV]	Current [mA]	Pulse length [ms]	Number of projections
CTDI 2.5	2.5	90	10	40	332

*User name:* op

*Plan ID:* 20250219-001  
*Treatment date:* 2025-02-19 [yyyy-mm-dd]

# Leksell Gamma Knife® Icon™

## Patient position

Time [hh:mm:ss]	Correction applied	Completed shots	Rotation [degrees]			Translation [mm]		
			X	Y	Z	X	Y	Z
12:12:15	Yes	B1 A1 C1	-0.03	0.04	0.21	-0.02	-0.02	0.30

## Events

Time [hh:mm:ss]	Type
12:04:59	HDMM system: Active
12:04:59	HDMM alarm level: 1,5
12:12:37	HDMM reference set
12:14:24	Treatment started
13:13:21	Treatment completed



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*Scan date:* 2025-02-19 [yyyy-mm-dd]  
*Operator:* SJ  
*LGK ID:* 6240

### CBCT scans

Time [hh:mm:ss]	CBCT setting	CTDI [mGy]
11:54:02	CTDI 6.3	6.3

### CBCT settings

CBCT setting	CTDI [mGy]	Voltage [kV]	Current [mA]	Pulse length [ms]	Number of projections
CTDI 6.3	6.3	90	25	40	332