

# Optimizing Patient Dose in Coronary Procedures using Allia™ with AutoRight™

*“We have achieved a drastic and sustainable reduction in radiation with comparable image quality using the GE HealthCare Allia AI-based low-dose protocol. This is much appreciated by our patients and cath lab personnel.”*

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**Objective:**

Measure the effectiveness and impact of a newly installed cath lab (Allia IGS 730 with image chain leveraging AI), compared to a prior-generation GE HealthCare cath lab.

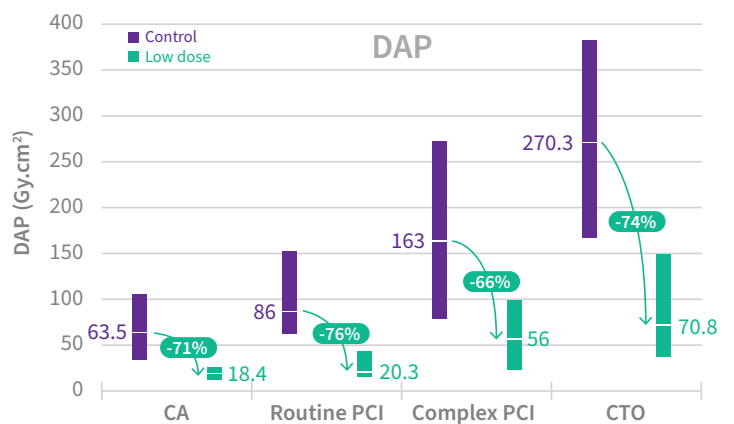
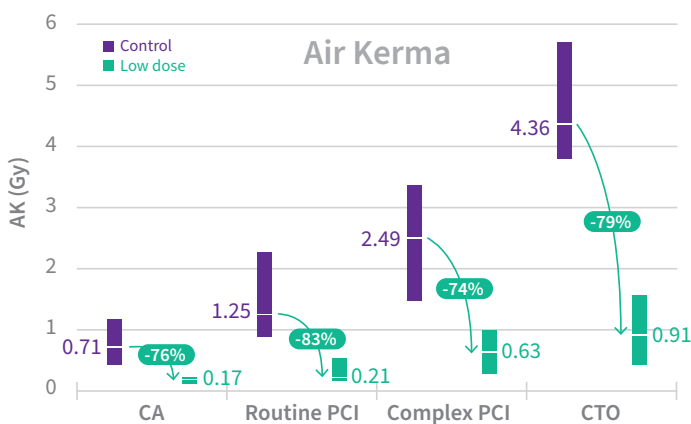
**Results: Patient-dose analysis**

Cohort of 334 patients (209 in control group vs 125 in low-dose group).

**Methods:**

Control group: Retrospective exams performed on GE HealthCare Innova™ IGS 520 from 09/21 to 06/22. Default protocol included 7.5 frames per second (fps) fluoroscopy and 15 fps cine.

Low-dose group: Exams performed on GE HealthCare Allia IGS 730 from 07/22 to 05/23. Default protocol included 3.75 fps fluoroscopy and 7.5 fps cine, with optimized exposure management and the ability to change fps and imaging parameters at operator discretion using AutoRight cockpit.



Dose reductions are statistically significant (p<0.001)\*.

BMI median values: Control=30.8, LDP=29.6 (p>0.05).

	Number of exams		Median fluoro time (min)	
	Control	Low dose	Control	Low dose
Coronary angiography (CA)	131	29	9.6	7.2
Routine PCI	43	35	19.8	21.1
Complex PCI	31	32	34.7	39.4
CTO	4	29	76.3	69.1

**GE HealthCare Allia IGS 730 with AutoRight technology reduced:**

Median patient Air Kerma by **74-83%**

Median dose Area Product by **66-76%**

\*Except for CTO: AK (p<0.01) and DAP (p=0.061)



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Dr. C. Patel is a paid consultant for GE HealthCare. The statements by Dr. Patel cited here are based on his own opinions and on results that were achieved in his unique setting. Since there is no “typical” hospital setting and many variables exist, i.e. hospital size, case mix, staff expertise, etc., there can be no guarantee that others will achieve the same results.