

REDUCED OCCURRENCES OF PJI

Periprosthetic Joint Infection (PJI) was reduced from 1.9% to 0% by the use of intraoperative air decontamination system

	Number (%)		
	OR A ^a	OR B ^b	p=value ^c
Males	98 (35.6)	78 (33.5)	0.09
Mean age	62.7	63.1	0.63
Mean BMI	33.4	33.2	0.70
Revision surgery	34 (12.8)	39 (16.8)	0.15
Diabetes dx	58 (21.1)	61 (26.2)	0.69
Smoker	48 (17.5)	36 (15.1)	0.32
Mean operative time (min)	63.5	60.4	0.11

^a Operating Room A = Standard HEPA-Filter HVAC
^b Operating Room B = Standard HEPA-Filter HVAC plus Supplemental UV-decontamination
^c Two-sample unpaired t-test

Table 1. Patient demographic and comorbid risk factors of retrospective cohort analysis of patient undergoing total joint arthroplasty

Reference:

Cook TM¹, Piatt CJ¹, Barnes S², Edmiston CE Jr³. The Impact of Supplemental Intraoperative Air Decontamination on the Outcome of Total Joint Arthroplasty: A Pilot Analysis. J Arthroplasty. 2019 Mar;34(3):549-553.

	Number (%)			
	OR A ^a	PJI	OR B ^b	PJI
Arthroplasty Procedure				
Primary hip	65 (24.6)	2	69 (29.9)	0
Primary Knees	132 (49.9)	0	91 (39.5)	0
Primary shoulder	5 (1.8)	0	19 (8.4)	0
Revision hip	9 (3.4)	2	9 (3.9)	0
Revision knee	24 (9.1)	1	30 (12.9)	0
Revision shoulder	1 (0.3)	0	0 (0)	0
Bilateral hip	3 (1.1)	0	0 (0)	0
Bilateral knee	26 (9.8)	0	12 (5.4)	0
*Total N	265	5	231	0

^a Operating Room A = Standard HEPA-Filter HVAC

^b Operating Room B = Standard HEPA-Filter HVAC plus Supplemental UV-decontamination

^c Fisher's Exact test

Table 2. Distribution of total joint arthroplasty procedures and periprosthetic joint infections (PJI)

***Control Group: 5/256, 1.9%. ABX Group: 0/231, 0%**