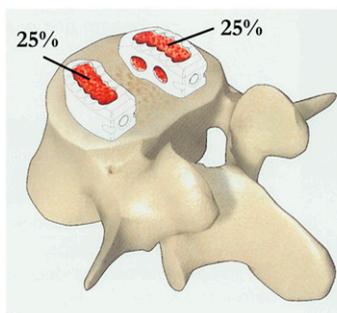


Bridging Trabecular Bone Scale



grade	percentage	Bony bridging
5	100%	total
4	76-99%	subtotal
3	51-75%	partial
2	26-50%	moderate
1	1-25%	minimal
0	0%	none

Fig. E-1

Each contact surface of autologous bone in the cages accounted for 25% of the fusion area (upper surface of left cage = 25%, lower surface of left cage = 25%, upper surface of right cage = 25%, and lower surface of right cage = 25%). The bridging trabecular bone scale was scored according to the percentage of the contact surface that was crossed by trabecular bone.

TABLE E-1 Sample Size Calculation			
Score	Clinically Important Difference*	Standard Deviation	No. of Subjects Needed in Each Group
Visual analog scale pain score	2	1.5	10
Oswestry Disability Index	10	11	20
Short Form-36	7	6.5	15

*The study by Hägg et al.¹³ indicates the minimal clinically important difference for the visual analog pain scale score and the Oswestry Disability Index, and the study by Patrick et al.¹⁴ indicates the minimal clinically important difference for the Short Form-36.

TABLE E-2 Patient Demographics			
	RhBMP-2 Group* (no. of patients)	Autograft Group (no. of patients)	P Value†
Sex			0.189
Male	6	10	
Female	13	9	
Smoking habits			0.097
Smoker	5	10	
Nonsmoker	14	9	
Previous discectomy			0.721
Discectomy	6	5	
No discectomy	13	14	

*RhBMP-2 = recombinant human bone morphogenetic protein-2. †Chi-square test.

TABLE E-3 Patient Demographic and Intraoperative Data*							
	Mean	95% CI	Stand. Dev.	Min.	Median	Max.	P Value†
Age (yr)							0.742
rhBMP-2	43.2	39.3-47.2	8.8	27.4	45.3	56.1	
Autograft	42.2	37.7-46.7	9.7	23.9	41.6	63.3	
Height (cm)							0.629
rhBMP-2	170.4	166.7-174.2	8.3	160.0	170.0	187.0	
Autograft	171.6	168.5-174.7	6.9	160.0	170.0	187.0	
Weight (kg)							0.158
rhBMP-2	78.4	73.1-83.7	11.8	61.0	79.0	95.0	
Autograft	72.7	67.0-78.4	12.6	51.0	75.0	98.0	
BMI (kg/m ²)							0.032
rhBMP-2	27.0	25.5-28.4	3.2	20.2	27.0	32.7	
Autograft	24.6	23.1-26.1	3.4	18.7	24.2	30.9	
Duration of op. (min)							0.010
rhBMP-2	97.9	88.9-107.0	20.1	61	90	140	
Autograft	116.1	106.7-125.4	20.8	75	120	150	
Blood loss (mL)							0.008
rhBMP-2	94.2	69.2-119.2	55.6	20	100	250	
Autograft	133.9	111.1-156.6	49.2	50	135	250	

*Data were available for all nineteen patients in both groups, except for one patient in the autograft group who was missing data on blood loss. rhBMP-2 = recombinant human bone morphogenetic protein-2, BMI = body mass index, and CI = confidence interval. †Student t test or Wilcoxon signed-rank test if normality not accepted (Shapiro-Wilk test).