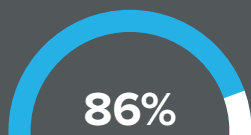


# Predictive Healing Score for Decision-Making

Primary Rotator Cuff Repair Augmentation

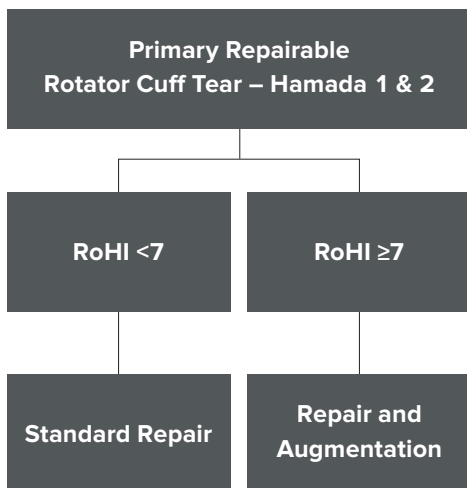


Almost 1 in 5 people failed to heal their rotator cuff after primary repair<sup>1</sup>



Rotator cuffs failed at suture-tendon interface<sup>2</sup>

## Primary Rotator Cuff Repair Treatment Algorithm<sup>3</sup>



## Factors influencing the risk of failure in tendon healing after primary rotator cuff repair<sup>1</sup>:

- AP tear size
- Grade of infraspinatus fatty infiltration
- Bone mineral density
- Tear retraction
- Increasing age >70 years
- Level of work activity

Kwon et al created a 15-point scoring index (RoHI) based on the above patient risk factors to predict healing of the rotator cuff.<sup>1</sup>

## Rotator Cuff Healing Index (RoHI) Score Ranges<sup>1</sup>

	High chance of healing	At risk for failure	High chance of failure	
<b>Score</b>	0-4	5-6	7-9	10-15
<b>Healing rate</b>	94%	68%	38%	14%

## RoHI Case Example

Factors of RoHI	Input	Score
Age	71	2
AP tear size (cm)	3.5	2
Retraction (cm)	2.5	2
Infraspinatus fatty infiltration grade	3	3
Bone mineral density	0	0
Level of work activity	<b>Patient Value</b>	<b>0</b>
	<b>RoHI Score</b>	<b>9</b>
	<b>% Chance of Healing</b>	<b>38%</b>

## [Click to calculate](#) Rotator Cuff Healing Index (RoHI) score

- Several studies show the use of graft augmentation in rotator cuff repairs may improve biomechanical strength and tendon healing, and increase healing rates.<sup>4-7</sup>
- Specifically, acellular dermal allograft may have the ability to vascularize and remodel into tendon-like tissue and increase the biomechanical strength of a rotator cuff repair by over 60%.<sup>6</sup> Additionally, it may improve postoperative healing compared to standard repairs.<sup>4</sup>
- In large rotator cuff tears (>3 cm), postoperative healing rates increased to 85% with dermal augmentation, compared to 40% with a standard repair.<sup>4</sup>

### References

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6. Omae H, et al. *Clin Biomech* (Bristol, Avon). 2012;27(8):789-792.
7. Gilot GJ, et al. *Arthroscopy.* 2015;31(8):1459-1465.

