<table>
<thead>
<tr>
<th>Study design</th>
<th>Author, year</th>
<th>G1: Type of surgery (N participants enrolled)</th>
<th>G2: Type of surgery (N participants enrolled)</th>
<th>Followup duration</th>
<th>Age (yr), mean±SD (range) / Males, N (%)</th>
<th>Other characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early vs. Delayed Surgery</td>
<td>Moosmayer S, 2010</td>
<td>PT (51)</td>
<td>Open / mini-open RCR (early) (52) Secondary surgery (late) (9)*</td>
<td>12 mo</td>
<td>G1: 61±7.6 yr / Males: 36 (71)</td>
<td>FTT; Sm, Med</td>
</tr>
<tr>
<td>RCT</td>
<td>Baker CL, 1995</td>
<td>Open RCR (20)</td>
<td>Mini-open RCR (16)</td>
<td>3.3 yr</td>
<td>G1: 62 yr (38–81) / Males: 12 (60) Athletes: 4 (20); Manual laborers: 6 (30)</td>
<td>FTT; Sm, Med, Lg</td>
</tr>
<tr>
<td>Retrospective cohort</td>
<td>Hata, Y, 2004</td>
<td>Open RCR (43)</td>
<td>Mini-open RCR (35)</td>
<td>4 yr (2–6.8)</td>
<td>G1: 58.1 yr (31–78) / Males: 25 (58) WCB: 0</td>
<td>NR; Sm, Med, Lg</td>
</tr>
<tr>
<td>Retrospective cohort</td>
<td>Mohtadi NG, 2008</td>
<td>Open RCR (37)</td>
<td>Mini-open RCR (36)</td>
<td>2 yr</td>
<td>G1: 56.2 yr (44–77) / Males: 22 (60)</td>
<td>FTT; Sm, Med, Lg, Mass</td>
</tr>
<tr>
<td>Operative Approach: Open vs. Mini-open</td>
<td>Colegate-Stone T, 2009</td>
<td>Mini-open RCR (31)</td>
<td>Arthroscopic RCR (92)</td>
<td>2 yr</td>
<td>G1: 62 yr / Males: 16 (52) G2: 57 yr / Males: 44 (48)</td>
<td>NR; G1: &gt;30 mm, G2: &lt;30 mm</td>
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<tr>
<td>Prospective cohort</td>
<td>Kim SH, 2003</td>
<td>Mini-open RCR (34)</td>
<td>Arthroscopic RCR (42)</td>
<td>3.3 yr (2.0–5.3)</td>
<td>G1: 58±9 yr (42–68) / Males: 22 (65) G2: 55±10.5 yr (42–75) / Males: 27 (64)</td>
<td>FTT; Med, Lg</td>
</tr>
<tr>
<td>CCT</td>
<td>Kose KC, 2008</td>
<td>Mini-open RCR (25)</td>
<td>Arthroscopic RCR (25)</td>
<td>2.2 yr (12 mo–6.8 yr)</td>
<td>G1: 62±10 yr (32–75) / Males: 4 (16) G2: 55±7.6 yr (34–72) / Males: 7 (28)</td>
<td>NR; Sm, Med, Lg</td>
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<tr>
<td>Retrospective cohort</td>
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</table>
### Appendix Table 3-1. Study and Patient Characteristics for Included Comparative Studies (continued)

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<tr>
<th>Author, year</th>
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<th>Intervention (N participants enrolled)*</th>
<th>Age (yr), mean±SD (range) / Males, N (%)</th>
<th>Followup duration</th>
<th>Type of tear; Size of tear</th>
<th>Duration of symptoms (mo), mean±SD (range)</th>
</tr>
</thead>
</table>
| Liem, D, 2007 | Retrospective cohort | G1: Mini-open RCR (24)  
G2: Arthroscopic RCR (53) | G1: 62.9±6.7 yr / Males: 16 (67)  
G2: 61.9±6.6 yr / Males: 16 (30) | 12 mo (minimum) | NR; Sm, Med, Lg | G1:10.6±7.9 mo, G2: 9.6±5.2 mo |
| Pearsall AW, 2007 | Prospective cohort | G1: Mini-open RCR (25)  
G2: Arthroscopic RCR (27) | G1: 58 yr (41–76) / Males: 10 (40)  
WCB: 0; Smokers: 8 (32)  
G2: 55 yr (38–78) / Males: 11 (41)  
WCB: 0; Smokers: 3 (11) | 4.2 yr (2.3–7) | FTT; Med, Lg | |
| Sauerbrey AM, 2005 | Retrospective cohort | G1: Mini-open RCR (26)  
G2: Arthroscopic RCR (28) | G1: 57 yr (40–84) / Males: 16 (62)  
Athletes: 16 (62)  
WCB: 0; Smokers: 8 (32)  
G2: 56 yr (38–86) / Males: 16 (57)  
Athletes: 9 (32) | 2.1 yr (13 mo–4 yr) | FTT; Med, Lg, Mass | |
| Severud EL, 2003 | Retrospective cohort | G1: Mini-open RCR (29 shoulders)  
G2: Arthroscopic RCR (35 shoulders) | G1: 63.3 yr / Males: 18 (62)  
WCB: 3 (10) | 3.7 yr (2–6.8) | FTT / PTT; Sm, Med, Lg | G1: 10.8 mo, G2: 15.7 mo |
| Verma NN, 2006 | Retrospective cohort | G1: Mini-open RCR (58)  
G2: Arthroscopic RCR (69) | G1: 60.7±10.4 yr / Males: 23 (40)  
G2: 59.5±8.6 yr / Males: 22 (32) | 3.2 yr (2–8.1) | FTT; Sm, Med, Lg, Mass | |
| Warner JJ, 2005 | Retrospective cohort | G1: Mini-open RCR (12)  
G2: Arthroscopic RCR (9) | G1: 55±8 yr / Males: 8 (67)  
WCB: 1 (8)  
G2: 53±10 yr / Males: 5 (56)  
WCB: 0 | 4.2±1.3 yr (2.3–7.1) | FTT; NR | G1: 9±4 mo, G2: 12±4 mo |
| Youm T, 2005 | Retrospective cohort | G1: Mini-open RCR (42)  
G2: Arthroscopic RCR (42) | G1: 60 yr / NR  
WCB: 0  
G2: 57.9 yr / NR  
WCB: 0 | 3.0 yr (2.0–5.8) | NR | |

### Operative Approach: Open vs. Arthroscopy

<table>
<thead>
<tr>
<th>Author, year</th>
<th>Study design</th>
<th>Intervention (N participants enrolled)*</th>
<th>Age (yr), mean±SD (range) / Males, N (%)</th>
<th>Followup duration</th>
<th>Type of tear; Size of tear</th>
<th>Duration of symptoms (mo), mean±SD (range)</th>
</tr>
</thead>
</table>
| Costouros JG, 2006 | Retrospective cohort | G1: Open RCR (19)  
G2: Arthroscopic RCR (18) | G1: 57 yr (40–75) / Males: 14 (74)  
G2: 54 yr (34–65) / Males: 12 (67) | 21.1 mo (12 mo–4 yr) | FTT; NR | |

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### Appendix Table 3-1. Study and Patient Characteristics for Included Comparative Studies (continued)

<table>
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<tr>
<th>Author, year</th>
<th>Study design</th>
<th>Intervention (N participants enrolled)</th>
<th>Age (yr), mean±SD (range) / Males, N (%)</th>
<th>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>4.1 yr (2.1–6.9)</td>
<td>G1: 57.1 yr (24–72) / Males: 39 (78) Athletes: 2 (4) G2: 57 yr (25–78) / Males: 41 (82) Athletes: 3 (6)</td>
<td></td>
</tr>
<tr>
<td>Millar NL, 2009</td>
<td>Retrospective cohort</td>
<td>G1: Open RCR (49) G2: Arthroscopic knotted RCR (53) G3: Arthroscopic knotless RCR (57)</td>
<td>G1: 58 yr (28–87) / Males: 21 (43) G2: 64 yr (40–90) / Males: 24 (45) G3: 69 yr (34–86) / Males: 28 (49)</td>
<td>FTT; Sm, Med, Lg, Mass</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 yr</td>
<td>G1: 58 yr (28–87) / Males: 21 (43) G2: 64 yr (40–90) / Males: 24 (45) G3: 69 yr (34–86) / Males: 28 (49)</td>
<td>G1: 15 mo (0.71 mo–6.8 yr), G2: 7.2 mo (1 mo–3.3 yr), G3: 6.6 mo (0.5 mo–2.6 yr)</td>
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</tbody>
</table>

#### Operative Approach: Open or Mini-open vs. Arthroscopy

<table>
<thead>
<tr>
<th>Author, year</th>
<th>Study design</th>
<th>Intervention (N participants enrolled)</th>
<th>Age (yr), mean±SD (range) / Males, N (%)</th>
<th>Type of tear</th>
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</thead>
<tbody>
<tr>
<td>Bishop J, 2006</td>
<td>Prospective cohort</td>
<td>G1: Open or mini-open RCR (47) G2: Arthroscopic RCR (55)</td>
<td>G1: 64 yr / NR G2: 64 yr / NR</td>
<td>FTT; Sm, Lg, Mass</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>12 mo</td>
<td>G1: 64 yr / NR G2: 64 yr / NR</td>
<td>NR</td>
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</table>

#### Operative Approach: Open RCR vs. Debridement

<table>
<thead>
<tr>
<th>Author, year</th>
<th>Study design</th>
<th>Intervention (N participants enrolled)</th>
<th>Age (yr), mean±SD (range) / Males, N (%)</th>
<th>Type of tear</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Montgomery TJ, 1994</td>
<td>CCT</td>
<td>G1: Open RCR (58 shoulders) G2: Arthroscopic debridement (49 shoulders)</td>
<td>G1: 58±11.6 yr (32–79) / NR G2: 60±12.2 yr (36–79) / NR</td>
<td>FTT; Sm, Med, Lg, Mass</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2–5 yr</td>
<td>G1: 58±11.6 yr (32–79) / NR G2: 60±12.2 yr (36–79) / NR</td>
<td>NR</td>
<td></td>
</tr>
<tr>
<td>Motycka T, 2004</td>
<td>Retrospective cohort</td>
<td>G1: Open RCR (33) G2: Open or arthroscopic debridement (31)</td>
<td>G1: NR / NR G2: NR / NR</td>
<td>NR; Lg, Mass</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>5.7 yr (2.1–14.2)</td>
<td>G1: NR / NR G2: NR / NR</td>
<td>NR</td>
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<tr>
<td></td>
<td></td>
<td>2–5 yr</td>
<td>G1: NR / NR G2: NR / NR</td>
<td>NR</td>
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<td></td>
<td></td>
<td>3.2 yr (2–7)</td>
<td>G3: 59.4 yr / NR G4: 62.9 yr / NR</td>
<td>6.3 mo (1–17)</td>
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### Appendix Table 3-1. Study and Patient Characteristics for Included Comparative Studies (continued)

<table>
<thead>
<tr>
<th>Author, year Study design</th>
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<th>Age (yr), mean±SD (range) / Males, N (%) Other characteristics</th>
<th>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</th>
</tr>
</thead>
</table>
| Gartsman GM, 2004         | G1: Arthroscopic RCR & acromioplasty (47) G2: Arthroscopic RCR (46) 15±3.3 mo | G1: 59.3 yr (39–81) / Males: 27 (57) WCB: 0  
G2: 60 yr (37–79) / Males: 24 (52) WCB: 0 | FTT; **G1**: 2.1 cm, **G2**: 2.3 cm |
| Milano G, 2007            | G1: Arthroscopic RCR & acromioplasty (40) G2: Arthroscopic RCR (40) 2 yr | G1: 61±7 yr / Males: 20 (50) WCB: 0  
G2: 59.7±9.7 yr / Males: 19 (48) WCB: 0 | FTT; **NR** |
| Mullett H, 2006           | G1: Arthroscopic acromioplasty (114) G2: Arthroscopic RCR (96) 3 yr | G1: NR / Males: NR  
G2: NR / Males: NR | **NR**; Sm, Med |
| Boileau P, 2007 Retrospective cohort | G1: Biceps tenotomy (39 shoulders) G2: Biceps tenodesis (33 shoulders) 2.9±0.6 yr (2–6.3) | G1 & **G2**: 68 yr (52–85) / Males: 26 (38) | FTT; **Mass** |
| Favard L, 2009 Retrospective cohort | G1: Watertight anatomical RCR (103) G2: Palliative treatment (89) | G1: 55.2±6.2 yr / Males: NR  
G2: 57.1±5.5 yr / Males: NR | FTT; **Mass** |
G2: 64.7 yr (53–81) / Males: 15 (47) | **NR**; Sm, Med, Lg  
21 mo |
| Franceschi F, 2007a RCT   | G1: Tenodesis without detachment (11) G2: Tenodesis with detachment (tenotomy) (11) 3.9 yr (3.4–9.9) | G1: 60.3±12.4 yr (41–79) / Males: 6 (55)  
Manual laborers: 3 (27)  
G2: 58.1±14.5 yr (40–81) / Males: 5 (46)  
Manual laborers: 3 (27) | FTT; **Mass** |

**Operative Approach: Arthroscopic RCR vs. Acromioplasty**

**Operative approach: Other**
### Appendix Table 3-1. Study and Patient Characteristics for Included Comparative Studies (continued)

<table>
<thead>
<tr>
<th>Author, year Study design</th>
<th>Intervention (N participants enrolled)*</th>
<th>Age (yr), mean±SD (range) / Males, N (%)</th>
<th>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</th>
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<tbody>
<tr>
<td></td>
<td>Followup duration</td>
<td>Other characteristics</td>
<td></td>
</tr>
<tr>
<td>Klinger HM, 2005a</td>
<td>G1: Arthroscopic debridement (24)</td>
<td>G1: 66 yr (61–79) / Males: 15 (63)</td>
<td>FTT; Mass</td>
</tr>
<tr>
<td>Retrospective cohort</td>
<td>G2: Arthroscopic debridement &amp; biceps tenotomy (17)</td>
<td>G2: 68 (63–82) / Males: 10 (59)</td>
<td>G1: 11 mo (6–23), G2: 10 mo (6–18)</td>
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<tr>
<td>Moser M, 2007</td>
<td>G1: Complete RCR (21)</td>
<td>G1 &amp; G2: 62.5 yr (33–81) / Males: 28 (74)</td>
<td>NR; Mass</td>
</tr>
<tr>
<td>Retrospective cohort</td>
<td>G2: Partial RCR (11)</td>
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<td></td>
<td>G3: Debridement (6)</td>
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<tr>
<td>Torrens C, 2003</td>
<td>G1: Classical open acromioplasty (20)</td>
<td>G1: 55.9 yr / Males: 4 (20)</td>
<td>NR; Sm, Med, Lg, Mass</td>
</tr>
<tr>
<td>CCT</td>
<td>G2: Modified open acromioplasty (22)</td>
<td>G2: 63.8 yr / Males: 4 (18)</td>
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<tr>
<td>Burks RT, 2009</td>
<td>G1: Double-row anchor RCR (20)</td>
<td>G1: 57 (41–81) / Males: NR</td>
<td>FTT; G1: 18 mm, G2: 19 mm</td>
</tr>
<tr>
<td>RCT</td>
<td>G2: Single-row anchor RCR (20)</td>
<td>Smokers: 0</td>
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<td></td>
<td>G2: 56 (43–74) / Males: NR</td>
<td>NR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Smokers: 0</td>
<td></td>
</tr>
<tr>
<td>Charousset C, 2007</td>
<td>G1: Double-row anchor RCR (31)</td>
<td>G1: 60 yr (37–62) / Males: 16 (52)</td>
<td>NR; NR</td>
</tr>
<tr>
<td>RCT</td>
<td>G2: Single-row anchor RCR (35)</td>
<td>Athletes: competitive 2 (6.5), recreational 2 (7); Manual labourers: 6 (19); WCB: 2 (7)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>G2: 58 yr (32–74) / Males: 15 (43)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Athletes: competitive 1 (3), recreational 5 (14); Manual labourers: 10 (29); WCB: 4 (11)</td>
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</tr>
<tr>
<td>Franceschi F, 2007b</td>
<td>G1: Double-row anchor RCR (30)</td>
<td>G1: 59.6 yr (45–80) / Males: 16 (53)</td>
<td>FTT; Lg, Mass</td>
</tr>
<tr>
<td>RCT</td>
<td>G2: Single-row anchor RCR (30)</td>
<td>G2: 63.5 yr (43–76) / Males: 12 (40)</td>
<td>≥ 3 mo</td>
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<tr>
<td>Grasso A, 2009</td>
<td>G1: Double-row anchor RCR (40)</td>
<td>G1: 55.2±6.5 / Males: 18 (45)</td>
<td>FTT; NR</td>
</tr>
<tr>
<td>RCT</td>
<td>G2: Single-row anchor RCR (40)</td>
<td>G2: 58.3±10.3 / Males: 16 (40)</td>
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<tr>
<td>Park JY, 2008</td>
<td>G1: Double-row anchor RCR (42)</td>
<td>G1: 54.4 yr (28–76) / Males : 22 (52)</td>
<td>FTT; Sm, Med, Lg, Mass</td>
</tr>
<tr>
<td>Prospective cohort</td>
<td>G2: Single-row anchor RCR (43)</td>
<td>G2 : 57 yr (39–78) / Males : 20 (47)</td>
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<tr>
<td></td>
<td></td>
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<td>NR</td>
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</tbody>
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<th>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</th>
</tr>
</thead>
</table>
| Sugaya H, 2005 Retrospective cohort | **G1:** Double-row anchor RCR (55 shoulders)  
**G2:** Single-row anchor RCR (51 shoulders) | **G1:** 58.1 yr (36–73) / Males : 28 (51)  
**G2:** 57.7 yr (34–72) / Males : 28 (55) | FTT; Sm, Med, Lg, Mass |
| Ko SH, 2009 CCT | **G1:** Massive cuff stitch (38)  
**G2:** Simple stitch (39) | **G1:** 53.6 (40–68) / Males: 18 (47)  
**G2:** 52.4 (15–68) / Males: 17 (44) | FTT; 0.5−1.5 cm  
NR |
| Ko SH, 2008 Prospective cohort | **G1:** Modified mattress locking stitch (39)  
**G2:** Simple stitch (39) | **Total:** 53.4 yr (39–68) | FTT; 1.5−3 cm  
NR |
| Bennett WF, 2003c Prospective cohort | **G1:** Bioabsorbable tacs (9)  
**G2:** Suture tying (10) | **G1:** 58 yr / Males: 5 (56)  
**G2:** 64 yr / Males: 7 (70) | FTT; NR  
NR |
| Bigoni M, 2009 RCT | **G1:** Side-to-side repair (25)  
**G2:** Tendon-to-bone fixation (25) | **G1:** NR / Males: 10 (40)  
WCB: 0  
**G2:** NR / Males: 14 (56)  
WCB: 0 | FTT; Sm, Med, Lg  
NR |
| Boehm TD, 2005 RCT | **G1:** Nonabsorbable sutures (Mason-Allen technique) (50)  
**G2:** Absorbable sutures (Kessler technique) (50) | **G1:** 56 yr (38–69) / Males: 36 (72)  
WCB: 5 (10)  
**G2:** 57 yr (41–71) / Males: 32 (64)  
WCB: 4 (8) | FTT; Sm, Med, Lg  
NR |
| Cummins CA, 2003 Prospective cohort | **G1:** Metal suture anchors (18)  
**G2:** Headed bio-corkscrews (9) | **G1:** 63±8 yr / Males: 12 (67)  
**G2:** 58±10 yr / Males: 7 (78) | NR; **G1:** 1.9 cm²,  
**G2:** 1.1 cm²  
NR |
| Matis N, 2006 Prospective cohort | **G1:** Transosseous single suture (75)  
**G2:** Transosseous mattress suture (24) | **G1:** 58.2 yr (35–75) / Males: 51 (68)  
**G2:** 58.0 yr (35–75) / Males: 16 (67) | FTT / PTT; Sm, Med  
**G1:** 2.2 yr (5 mo–4.9 yr),  
**G2:** 14.3 mo (5 mo–2.8 yr) |
### Appendix Table 3-1. Study and Patient Characteristics for Included Comparative Studies (continued)

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<th>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>McIntyre LF, 2006 Retrospective cohort</td>
<td>G1: Suture welding (50) G2: Hand-tied knots (55) 2.3 yr (18 mo–3.3 yr)</td>
<td>G1: 55.7 yr (37–78) / Males: 29 (58) G2: 54.7 yr (17–78) / Males: 38 (69)</td>
<td>NR; G1: 3.4 cm (1–6), G2: 3.0 cm (1–6) G1: 9.9 mo (1–3 yr), G2: 10.4 mo (1 mo–3 yr)</td>
</tr>
<tr>
<td>Wilson F, 2002 Retrospective cohort</td>
<td>G1: Staple fixation (35) G2: Side-to-side suture &amp; anchor (65) 5 yr (2–14)</td>
<td>G1: 49 yr (20–69) / Males: 27 (77) G2: 52 yr (32–70) / Males: 38 (59)</td>
<td>FTT; Sm, Med, Lg G1: 11 mo (1 wk–6 yr), G2: 10.6 mo (2 wk–6 yr)</td>
</tr>
<tr>
<td>Iannotti JP, 2006 RCT</td>
<td>G1: Porcine small intestine submucosa augmentation (16) 14 mo (12 mo–2.2 yr)</td>
<td>G1: 58 yr / Males: 11 (73) WCB: 3 (20) G2: 57 yr / Males: 6 (40) WCB: 0 (0)</td>
<td>≥ 3 mo</td>
</tr>
<tr>
<td>Ito J, 2003 Retrospective cohort</td>
<td>G1: Patch graft (9) G2: No augmentation (12) 3 yr (2–8.4)</td>
<td>G1: 62.8±6.9 (49–70) yr / Males: 6 (67) G2: 52.3±8.6 (36–66) yr / Males: 10 (83)</td>
<td>FTT; Lg, Mass G1: 4.1±2.9 mo, G2: 5.8±4.7 mo</td>
</tr>
<tr>
<td>Walton JR, 2007 Retrospective cohort</td>
<td>G1: Porcine small intestine submucosa augmentation (15) G2: No augmentation (16) 2 yr</td>
<td>G1: 60.2±3.5 yr / Males: 10 (67) G2: 59.6±3.1 yr / Males: 11 (69)</td>
<td>FTT; Lg, Mass NR</td>
</tr>
<tr>
<td>LaStayo PC, 1998 RCT</td>
<td>G1: CPM (17 shoulders) G2: Manual passive ROM exercises (15 shoulders) 22±9.8 mo (6 mo–3.8 yr)</td>
<td>G1: 62.8 yr (30–80) / Males: 8 (47) G2: 63.7 yr (45–75) / Males: 6 (40)</td>
<td>NR; Sm, Med, Lg NR</td>
</tr>
</tbody>
</table>

**Operative Augmentation**

<table>
<thead>
<tr>
<th>Author, year Study design</th>
<th>Intervention (N participants enrolled)* Followup duration</th>
<th>Age (yr), mean±SD (range) / Males, N (%) Other characteristics</th>
<th>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</th>
</tr>
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<tbody>
<tr>
<td>Iannotti JP, 2006 RCT</td>
<td>G1: Porcine small intestine submucosa augmentation (16) 14 mo (12 mo–2.2 yr)</td>
<td>G1: 58 yr / Males: 11 (73) WCB: 3 (20) G2: 57 yr / Males: 6 (40) WCB: 0 (0)</td>
<td>≥ 3 mo</td>
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**Postoperative Rehabilitation: Continuous Passive Motion**

<table>
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<th>Author, year Study design</th>
<th>Intervention (N participants enrolled)* Followup duration</th>
<th>Age (yr), mean±SD (range) / Males, N (%) Other characteristics</th>
<th>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</th>
</tr>
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<tbody>
<tr>
<td>LaStayo PC, 1998 RCT</td>
<td>G1: CPM (17 shoulders) G2: Manual passive ROM exercises (15 shoulders) 22±9.8 mo (6 mo–3.8 yr)</td>
<td>G1: 62.8 yr (30–80) / Males: 8 (47) G2: 63.7 yr (45–75) / Males: 6 (40)</td>
<td>NR; Sm, Med, Lg NR</td>
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### Appendix Table 3-1. Study and Patient Characteristics for Included Comparative Studies (continued)

<table>
<thead>
<tr>
<th>Author, year Study design</th>
<th>Intervention (N participants enrolled)*</th>
<th>Age (yr), mean±SD (range) / Males, N (%)</th>
<th>Other characteristics</th>
<th>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raab MG, 1996 RCT</td>
<td>G1: CPM &amp; PT (14) G2: PT only (12)</td>
<td>G1: 54 yr / Males: 9 (64) G2: 58 yr / Males: 9 (75)</td>
<td></td>
<td>PTT, FTT; Sm, Med, Lg, Mass</td>
</tr>
<tr>
<td>Brady B, 2008 CCT</td>
<td>G1: Land-based &amp; aquatic program (12) G2: Land-based program (6)</td>
<td>G1: 56.3±9 yr (41–67) / Males: 8 (67) G2: 53.5±16 yr (26–69) / Males: 3 (50)</td>
<td></td>
<td>NR; Sm, Med, Lg, Mass</td>
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<tr>
<td>Delbrouck C, 2003 Prospective cohort</td>
<td>G1: Inpatient rehabilitation (53) G2: Day patient rehabilitation (23)</td>
<td>G1: 52.7±8 yr / Males: 25 (47) G2: 55±5 yr / Males: 16 (70)</td>
<td></td>
<td>PTT; Sm, Med, Lg, Mass</td>
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<tr>
<td>Klintberg IH, 2009 RCT</td>
<td>G1: Progressive loading (9) G2: Traditional loading (9)</td>
<td>G1: NR / Males: NR G2: NR / Males: NR</td>
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<td>FTT; Med, Lg, Mass</td>
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</table>

**Postoperative Rehabilitation:** Other

<table>
<thead>
<tr>
<th>Brady B, 2008 CCT</th>
<th>12 wk</th>
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<tbody>
<tr>
<td>Delbrouck C, 2003 Prospective cohort</td>
<td>60 days</td>
</tr>
<tr>
<td>Hayes K, 2004 RCT</td>
<td>24 wk</td>
</tr>
<tr>
<td>Klintberg IH, 2009 RCT</td>
<td>2 yr</td>
</tr>
<tr>
<td>Marc T, 2009 Retrospective cohort</td>
<td>2 yr (minimum)</td>
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</table>
### Appendix Table 3-1. Study and Patient Characteristics for Included Comparative Studies (continued)

<table>
<thead>
<tr>
<th>Author, year</th>
<th>Study design</th>
<th>Intervention (N participants enrolled)* Followup duration</th>
<th>Age (yr), mean±SD (range) / Males, N (%) Other characteristics</th>
<th>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</th>
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<tbody>
<tr>
<td>Milroy DR, 2008</td>
<td>Retrospective cohort</td>
<td>G1: Standardized PT (28) G2: Non-standardized PT (39)</td>
<td>G1: 57±10.9 yr / Males: 16 (57) G2: 57.8±9.81 yr / Males: 27 (69)</td>
<td>NR; NR</td>
</tr>
<tr>
<td>Roddey TS, 2002</td>
<td>RCT</td>
<td>G1: Videotape instruction (54) G2: PT instruction (54)</td>
<td>G1: 58.7±10.6 yr (34.6–78.0) / Males: 36 (67) G2: 57.2±9.1 yr (40.0–75.8) / Males: 33 (61)</td>
<td>FTT; G1: 2.5 cm (1–5 cm), G2: 2.6 cm (1.5–4.0 cm)</td>
</tr>
<tr>
<td>Leroux JL, 1993</td>
<td>Retrospective cohort</td>
<td>G1: No rehabilitation (18) G2: Rehabilitation (42)</td>
<td>G1 &amp; G2: 61.5 yr (36–85) / Males: (61)</td>
<td>FTT; NR</td>
</tr>
<tr>
<td>Lunn JV, 2008</td>
<td>Prospective cohort</td>
<td>G1: Steroid injection, PT &amp; activity modification (14)</td>
<td>G1: 47.1 yr (30–66) / Males: 1 (7) G2: 46.2 yr (38–59) / Males: 3 (60)</td>
<td>FTT; NR</td>
</tr>
</tbody>
</table>
Appendix Table 3-1. Study and Patient Characteristics for Included Comparative Studies (continued)

<table>
<thead>
<tr>
<th>Author, year</th>
<th>Study design</th>
<th>Intervention (N participants enrolled)*</th>
<th>Followup duration</th>
<th>Age (yr), mean±SD (range) / Males, N (%)</th>
<th>Other characteristics</th>
<th>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moosmayer S, 2010</td>
<td>RCT</td>
<td>G1: PT (51)</td>
<td>12 mo</td>
<td>G1: 61±7.6 yr / Males: 36 (71)</td>
<td>FTT; Sm, Med</td>
<td>G1: 9.8±9.8 mo, G2: 12.3±18.7 mo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G2: Open / mini-open repair (52)</td>
<td></td>
<td>G2: 59±7.5 yr / Males: 37 (71)</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>G3: Secondary surgery (9)§</td>
<td></td>
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</tr>
<tr>
<td>Vad VB, 2002</td>
<td>Retrospective cohort</td>
<td>G1: PT &amp; oral medication (28)</td>
<td></td>
<td>G1 &amp; G2: 63.2 yr / NR</td>
<td>FTT; Mass</td>
<td>6.3 mo (1–17 mo)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G2: PT, oral medication &amp; steroid injection (12)</td>
<td></td>
<td>G3: 59.4 yr / NR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>G3: Open RCR (36)</td>
<td></td>
<td>G4: 62.9 yr / NR</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>G4: Arthroscopic debridement (32)</td>
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</tr>
<tr>
<td>Yamada N, 2000</td>
<td>Retrospective cohort</td>
<td>G1: Steroid injection, stretching, strengthening (14)</td>
<td>3.2 yr (2–7)</td>
<td>G1: 70 yr (55–81) / Males: 9 (64)</td>
<td>FTT; Mass</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>G2: Open RCR (26)</td>
<td></td>
<td>G2: 62 yr (47–82) / Males: 24 (92)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 yr (12 mo–23 yr)</td>
<td></td>
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</tbody>
</table>

CCT = controlled clinical trial; CPM = continuous passive motion; FTT = full-thickness tear; Lg = large; Mass = massive; Med = medium; mo = month; NR = not reported; PT = physical therapy; PTT = partial-thickness tears; RCR = rotator cuff repair; RCT = rotator cuff tear; ROM = range of motion; Sm = small; WCB = workers’ compensation board; wk = week; yr = year

*number analyzed is reported when number enrolled was not provided

Refer to Appendix Table 2 for full citations.
Appendix Table 3.2. Study and Patient Characteristics for Included Uncontrolled Studies

<table>
<thead>
<tr>
<th>Author, year</th>
<th>Intervention (N participants enrolled)*</th>
<th>Age (yr), mean±SD (range) / Males, N (%)</th>
<th>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</th>
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<tbody>
<tr>
<td></td>
<td>Followup duration</td>
<td>Other characteristics</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Operative Approach: <em>Open RCR</em></td>
</tr>
<tr>
<td>Caniggia M, 1995</td>
<td>G1: Open RCR (34)</td>
<td>G1: 41.2 yr (22–56) / Males: 20 (58.8)</td>
<td>NR; all sizes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G1: 17.5 mo (6 mo–2 yr)</td>
<td>10.7 mo (1 mo–3 yr)</td>
</tr>
<tr>
<td>Cofield RH, 2001</td>
<td>G1: Open RCR (97: 105 shoulders)</td>
<td>G1: 58 yr (38–75) / Males: 72 (74.2)</td>
<td>FTT; all sizes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Athletes: 32 (33)</td>
<td>2.5 yr (1 mo–15 yr)</td>
</tr>
<tr>
<td>Cools A, 2006†</td>
<td>G1: Open RCR (24)</td>
<td>G1: 57.2±9.8 yr / Males: 11 (45.8)</td>
<td>FTT; Sm, Med, Lg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G2: 56.4±9.8 yr / Males: 13 (44.8)</td>
<td>NR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18 mo (12–20 mo)</td>
<td></td>
</tr>
<tr>
<td>Gazielly DF, 1994</td>
<td>G1: Open RCR (98)</td>
<td>G1: 57 yr (35–77) / Males: 62 (63.3)</td>
<td>FTT; NR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Athletes: 0; Manual laborers: 45 (45.9)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 yr (2–6)</td>
</tr>
<tr>
<td>Hsu SL, 2007†</td>
<td>G1: Open RCR: PTT (27 shoulders)</td>
<td>G1: 54±7 yr / Males: NR</td>
<td>FTT (20), PTT (27); NR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G2: 52±10 yr / Males: NR</td>
<td>NR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G3: 62±11 yr / Males: NR</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.05 yr (2–7.1)</td>
</tr>
<tr>
<td>Iannotti JP, 1996† (10 yr F/U in Galatz)</td>
<td>G1: Open RCR (46)</td>
<td>G1: 55±11 yr (39–71) / Males: 31 (77.5)</td>
<td>FTT; all sizes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sport &amp; work activity (moderate, strenuous, light/sedentary): 14 (30.4), 7 (15.2), 19 (41.3); WCB: 24 (11)</td>
<td>8.9±7.4 mo (3 mo–3 yr)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10 yr</td>
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<tr>
<td>Kirschenbaum D, 1993</td>
<td>G1: Open RCR (25)</td>
<td>G1: 62 yr (27–76) / Males: 16 (64)</td>
<td>NR; all sizes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12 mo</td>
</tr>
<tr>
<td>Mallon WJ, 2004†</td>
<td>G1: Open RCR: smokers (95)</td>
<td>G1: 51.8±6.4 yr / Males: NR</td>
<td>FTT; NR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Smokers: 95</td>
<td>NR</td>
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<tr>
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<td></td>
<td>G2: 53.1±9 yr / Males: NR</td>
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<tr>
<td></td>
<td></td>
<td>Smokers: 0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12 mo</td>
</tr>
<tr>
<td>McCallister WV, 2005</td>
<td>G1: Open RCR (96)</td>
<td>G1: 61±11 yr (30–84) / Males: 42 (43.8)</td>
<td>FTT; NR</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>5.5±2.2 yr (2–10)</td>
</tr>
<tr>
<td>Author, year</td>
<td>Intervention (N participants enrolled)* Followup duration</td>
<td>Age (yr), mean±SD (range) / Males, N (%) Other characteristics</td>
<td>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</td>
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<tr>
<td>Misamore GW, 1995†</td>
<td>G1: Open RCR: WCB (24) 3.8 yr (2–5.7)</td>
<td>G1: 53 yr (22–67) / Males: 18 (75) Athletes: 0; Manual laborers (moderate, strenuous): 17 (54.2), 10 (41.7); WCB: 24</td>
<td>NR; all sizes</td>
</tr>
<tr>
<td></td>
<td>G2: Open RCR: non-WCB (79: 83 shoulders)</td>
<td></td>
<td>NR</td>
</tr>
<tr>
<td>Pai VS, 2001</td>
<td>G1: Open RCR (60) 2.8 yr</td>
<td>G1: 65 yr (32–82) / Males: 34 (56.7)</td>
<td>FTT; all sizes</td>
</tr>
<tr>
<td>Prasad N, 2005</td>
<td>G1: Open RCR (42) 1.2 yr (12 mo–4.2 yr)</td>
<td>G1: 63 yr (22–82) / Males: 30 (71.4)</td>
<td>FTT; all sizes</td>
</tr>
<tr>
<td>Rokito AS, 1999</td>
<td>G1: Open RCR (30) 5.4 yr (3.8–7.8)</td>
<td>G1: 57 yr (39–78) / Males: 21 (70)</td>
<td>NR; Lg Mass</td>
</tr>
<tr>
<td>Trenerry K, 2005†</td>
<td>G1: Open RCR: early motion recovery (39) G1: Open RCR: shoulder stiffness (36) 17.5 mo (15.6–19.3)</td>
<td>G1: 60 yr (56–64) / Males: 27 (69.2) WCB: 9 (23.1) G2: 63 yr (60-66) / Males: 19 (52.8) WCB: 9 (25)</td>
<td>FTT (67), PTT (8); mean (range): G1: 4 cm² (2–6), G2: 5 cm² (3-7)</td>
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<td></td>
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<td></td>
<td>G1: 22 mo (13 mo–2.6 yr), G2: 13 mo (6–20)</td>
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<tr>
<td>Baysal D, 2005</td>
<td>G1: Mini-open RCR (84) 1–5 yr</td>
<td>G1: 53.2±9.9 yr (22–82) / Males: 61 (72.6) WCB: 20 (23.8)</td>
<td>FTT; all sizes</td>
</tr>
<tr>
<td>Boszotta H, 2004</td>
<td>G1: Mini-open RCR (84) 2.9 yr (2.3–3.7)</td>
<td>G1: 54.8 yr (32–74) / Males: NR</td>
<td>NR; NR</td>
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<td>NR</td>
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<tr>
<td>Operative Approach: Mini-open RCR</td>
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</tr>
<tr>
<td>Bennett WF, 2003a†</td>
<td>G1: Arthroscopic RCR: AS tears (29) 3.2 yr (2–4)</td>
<td>G1: 68.2 yr / Males: 17 (58.6)</td>
<td>FTT; Mass</td>
</tr>
<tr>
<td></td>
<td>G2: Arthroscopic RCR: PS tears (8)</td>
<td></td>
<td>NR</td>
</tr>
<tr>
<td>Bennett WF, 2003b</td>
<td>G1: Arthroscopic RCR (24) 2–4 yr</td>
<td>G1: 59.9 yr / Males: 14 (58.3)</td>
<td>FTT; Sm, Med</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NR</td>
</tr>
<tr>
<td>Author, year</td>
<td>Intervention (N participants enrolled)* Followup duration</td>
<td>Age (yr), mean±SD (range) / Males, N (%)</td>
<td>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</td>
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<tr>
<td>Boileau P, 2005</td>
<td>G1: Arthroscopic RCR (65) 2.4 yr (2–3.8)</td>
<td>G1: 60 yr (29–79) / Males: 32 (49.2) Manual laborers: 17 (26.2); WCB: 8 (12.3)</td>
<td>FTT; Sm, Med, Lg 2.2 yr (7 mo–20 yr)</td>
</tr>
<tr>
<td>Charousset C, 2008</td>
<td>G1: Arthroscopic RCR (114) 2 yr</td>
<td>G1: 59.4 yr (32–78) / Males: 53 (46.5) Manual laborers (upper limb heavy, manual light, sedentary, unemployed: 31 (27.2), 27 (23.7), 33 (28.9), 23 (20.2); WCB: 12 (10.5)</td>
<td>FTT; NR 15.2 mo (1 mo–10.2 yr)</td>
</tr>
<tr>
<td>Cole BJ, 2007</td>
<td>G1: Arthroscopic RCR (47: 49 shoulders) 2.7 yr (2–3.8)</td>
<td>G1: 57 yr (34–80) / Males: 28 (59.6) Smokers: 6 (20); WCB: 22 (46.8)</td>
<td>FTT; all sizes 17 mo (2 mo–16.4 yr)</td>
</tr>
<tr>
<td>DeFranco MJ, 2007</td>
<td>G1: Arthroscopic RCR (30) 22.3 mo (12 mo–3 yr)</td>
<td>G1: 56.3±12.3 yr (30–78) / Males: 19 (63.3)</td>
<td>FTT; Sm, Med, mean: 2.3 cm NR</td>
</tr>
<tr>
<td>Deutsch A, 2008†</td>
<td>G1: Arthroscopic RCR: single tendon tear (21) G2: Arthroscopic RCR: double tendon tear (18) 3.2 yr (2–5)</td>
<td>G1: 54±9.7 yr (32–71) / Males: 15 (71.4)</td>
<td>FTT; mean (range): G1: 2.3 cm (2.5–4.0), G2: 2.0 cm (1.8–2.2) 15 mo (3 mo–5 yr)</td>
</tr>
<tr>
<td>Deutsch A, 2007</td>
<td>G1: Arthroscopic RCR (46) 3.2 yr (2–5)</td>
<td>G1: 59 yr (23–70) / Males: 26 (56.5) Athletes (throwing, weight-lifting): 3 (6.5), 2 (4.3); WCB: 1 (2.2)</td>
<td>PTT; mean: 0.9 cm 10 mo (6 mo–3 yr)</td>
</tr>
<tr>
<td>Gartsman GM, 1998</td>
<td>G1: Arthroscopic RCR (50) 12.7 mo (11–21)</td>
<td>G1: 61 yr (37–78) / Males: 26 (52)</td>
<td>FTT; mean size (range): length: 28.2 mm (0–55 mm), width: 12.5 mm, (5–30 mm); area: 406 mm² (50–1500 mm²) 20.4 mo (6 mo–12 yr)</td>
</tr>
<tr>
<td>Ide J, 2007</td>
<td>G1: Arthroscopic RCR (20) 3 yr (2-5)</td>
<td>G1: 61.7 yr (45–79) / Males: 17 (85) WCB: 0</td>
<td>FTT; Med 2.7 mo (1-6)</td>
</tr>
<tr>
<td>Ide J, 2005a</td>
<td>G1: Arthroscopic RCR (21) 3.3 yr (2.1–4.8)</td>
<td>G1: 42 yr (17–51) / Males: 14 (66.7) Athletes: 6 (28.6); WCB: 0</td>
<td>PTT; NR 11 mo (7 mo–2 yr)</td>
</tr>
<tr>
<td>Kreuz PC, 2005</td>
<td>G1: Arthroscopic RCR (16) 3 yr (2.3–4)</td>
<td>G1: 46 yr (27–64) / Males: 14 (87.5) Athletes: 14 (87.5)</td>
<td>FTT (9), PTT (7); NR NR</td>
</tr>
<tr>
<td>Author, year</td>
<td>Intervention (N participants enrolled)*</td>
<td>Followup duration</td>
<td>Age (yr), mean±SD (range) / Males, N (%)</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------------</td>
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<td>----------------------------------------</td>
</tr>
<tr>
<td>Lafosse L, 2007a</td>
<td>G1: Arthroscopic RCR (95: 105 shoulders)</td>
<td>3 yr (2–4.8)</td>
<td>G1: 52 yr (37–79) / Males: 47 (49.5)</td>
</tr>
<tr>
<td>Lafosse L, 2007b</td>
<td>G1: Arthroscopic RCR (17)</td>
<td>2.4 yr (2–3.3)</td>
<td>G1: 47 yr (29–59) / Males: 13 (76.5)</td>
</tr>
<tr>
<td>Levy O, 2008b</td>
<td>G1: Arthroscopic RCR (115)</td>
<td>3 yr (2–6.1)</td>
<td>G1: 57.3 yr (29–59) / Males: 13 (76.5)</td>
</tr>
<tr>
<td>Lichtenberg S, 2006</td>
<td>G1: Arthroscopic RCR (53)</td>
<td>2.2 yr</td>
<td>G1: 60.9 yr (46–74) / Males: 34 (64.2)</td>
</tr>
<tr>
<td>McBirnie JM, 2005</td>
<td>G1: Arthroscopic RCR (53)</td>
<td>2.4 yr (2–5)</td>
<td>G1: 51 yr (23–74) / Males: 38 (71.7) WCB: 11 (20.8)</td>
</tr>
<tr>
<td>Nam SC, 2008†</td>
<td>G1: Arthroscopic RCR: stiffness (15)</td>
<td>2.6 yr (16 mo–6.2 yr)</td>
<td>G1: 59.8 yr (43–73) / Males: 13 (86.7)</td>
</tr>
<tr>
<td></td>
<td>G2: Arthroscopic RCR: no stiffness (30)</td>
<td></td>
<td>G2: 56.1 yr (40–65) / Males: 18 (60)</td>
</tr>
<tr>
<td>Nho SJ, 2009</td>
<td>G1: Arthroscopic RCR (193)</td>
<td>2.4 yr</td>
<td>G1: 58.6 yr / Males: 77 (39.9) Smokers: 34 (17.6)</td>
</tr>
<tr>
<td>Park JY, 2004†</td>
<td>G1: Arthroscopic RCR: PTT (22)</td>
<td>2.8 yr (2–5.2 yr)</td>
<td>G1: 55 yr / Males: NR</td>
</tr>
<tr>
<td></td>
<td>G2: Arthroscopic RCR: FTT (20)</td>
<td></td>
<td>G2: 55 yr / Males: NR</td>
</tr>
<tr>
<td>Pillay R, 1994†</td>
<td>G1: Arthroscopic RCR: PTT/impingement (26)</td>
<td>2.8 yr (2–5.2 yr)</td>
<td>G1: 50.2 yr (33–75) / Males: 13 (50) WCB: 6 (23.1)</td>
</tr>
<tr>
<td></td>
<td>G2: Arthroscopic RCR: FTT (8: 10 shoulders)</td>
<td></td>
<td>G2: 52 yr (51–71) / Males: 5 (62.5) WCB: 1 (12.5)</td>
</tr>
<tr>
<td>Porcellini G, 2006†</td>
<td>G1: Arthroscopic RCR: FTT (50)</td>
<td>3 yr (2–4.3)</td>
<td>G1: 47.5±6.36 yr / Males: 32 (64)</td>
</tr>
<tr>
<td></td>
<td>G2: Arthroscopic RCR: FTT/instability (50)</td>
<td></td>
<td>G2: 48.1±6.4 yr / Males: 41 (82)</td>
</tr>
<tr>
<td>Author, year</td>
<td>Intervention (N participants enrolled)*</td>
<td>Age (yr), mean±SD (range) / Males, N (%)</td>
<td>Followup duration</td>
</tr>
<tr>
<td>--------------</td>
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</tr>
<tr>
<td>Sugaya H, 2007</td>
<td><strong>G1</strong>: Arthroscopic RCR (106)</td>
<td>G1: 60.5 yr (41–77) / Males: 52 (49.1)</td>
<td>2.6 yr (2–4.1)</td>
</tr>
<tr>
<td>Tauro JC, 2006†</td>
<td><strong>G1</strong>: Arthroscopic RCR: 0-20 TROMD (42) <strong>G2</strong>: Arthroscopic RCR: 25-70 TROMD (24) <strong>G3</strong>: Arthroscopic RCR: &gt;70 TROMD (6)</td>
<td>G1: 70 yr / Males: NR</td>
<td>NR</td>
</tr>
<tr>
<td>Tauro JC, 2004</td>
<td><strong>G1</strong>: Arthroscopic RCR (42: 43 shoulders)</td>
<td>G1: 70 (46-86) yr / Males: NR</td>
<td>2 yr (2–4)</td>
</tr>
<tr>
<td>Waibl B, 2005</td>
<td><strong>G1</strong>: Arthroscopic RCR (22)</td>
<td>G1: 45 yr (20–63) / Males: 12 (54.5)</td>
<td>16 mo (11–22)</td>
</tr>
</tbody>
</table>

**Operative Approach: RCR combination approaches**

<table>
<thead>
<tr>
<th>Author, year</th>
<th>Intervention (N participants enrolled)*</th>
<th>Age (yr), mean±SD (range) / Males, N (%)</th>
<th>Followup duration</th>
<th>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davidson PA, 2000</td>
<td><strong>G1</strong>: Open (Lg, Mass); arthroscopic (Sm, Med) RCR (63: 67 shoulders)</td>
<td>G1: 62.5 yr (41–83) / Males: 39 (61.9)</td>
<td>2 yr</td>
<td>FTT; all sizes, mean: 6.6 cm² (0.6–25 cm²)</td>
</tr>
<tr>
<td>Gladstone JN, 2007</td>
<td><strong>G1</strong>: Open or mini-open (15); arthroscopic RCR (23)</td>
<td>G1: 62 yr (36–78) / Males: NR</td>
<td>NR</td>
<td>FTT; NR</td>
</tr>
<tr>
<td>Henn RF III, 2008†</td>
<td><strong>G1</strong>: Open (7); mini-open (19); arthroscopic (13) RCR: WCB <strong>G2</strong>: Open (19); mini-open (43); arthroscopic (24) RCR: no WCB</td>
<td>G1: 52.5±1.6 yr (32–71) / Males: 24 (61.5) Smokers: 12 (30.8); Manual laborers: 16 (41); WCB: 39</td>
<td>12–15 mo</td>
<td>10.5 mo (2 wk–4.3 yr)</td>
</tr>
<tr>
<td>Kiepp S, 2004</td>
<td><strong>G1</strong>: Open (24); mini-open (8) RCR</td>
<td>G1: 64 yr / Males: NR</td>
<td>12 mo</td>
<td>FTT; all sizes</td>
</tr>
</tbody>
</table>

NR
<table>
<thead>
<tr>
<th>Author, year</th>
<th>Intervention (N participants enrolled)*</th>
<th>Age (yr), mean±SD (range) / Males, N (%)</th>
<th>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</th>
</tr>
</thead>
</table>
| Oh JH, 2008† | G1: Open (21); arthroscopic (9) RCR and debridement  
G2: Open (62); arthroscopic (35) RCR and debridement | G1: 60.9±8.7 yr / Males: 15 (50)  
G2: 58.8±9.3 yr / Males: 44 (45.4) | FTT; all sizes  
G1: 28.5±52.2 mo,  
G2: 41.2±52 mo |
| Tashjian RZ, 2006 | G1: Open (26); mini-open (62); arthroscopic (37) RCR  
12 mo | G1: 56 yr (32–80) / Males: 72 (57.6)  
WCB: 39 (31.2) | FTT; mean: 2.2 cm (1–4)  
16±25.9 mo (3 mo–18 yr) |
| Vitale MA, 2007 | G1: Open or mini-open RCR (87)  
12 mo | G1: 62.5±9.5 yr (40.4–83.3) / Males: 47 (54) | NR; NR |
| Checchia SL, 2005 | G1: Arthroscopic RCR & biceps tenodesis (15)  
2.7 yr (20 mo–5.6 yr) | G1: 62 yr (41–80) / Males: 9 (60)  
Athletes: 8 (33.3) | FTT; NR  
7 mo |
| Ellman H, 1993† | G1: ASD & debridement: Sm tears (10)  
G2: ASD & debridement: Med tears (8)  
G3: ASD & debridement: Mass tears (22)  
3.6 yr (2.7–3) | G1: 63 yr (41–89) / Males: 6 (60)  
G2: 66.7 yr (41–89) / Males: 7 (87.5)  
G3: 73.9 yr (41–89) / Males:11 (50) | FTT; G1: Sm, Med; G2: Med, Lg; G3: Lg, Mass  
G1: 4.5 yr, G2: 16.8 yr, G3: 3.7 yr |
| Fenlin JM Jr, 2002 | G1: Open RCR & bursectomy/tuberooplasty (20)  
3.4 yr (7 mo–4.8 yr) | G1: 63 yr (44–82) / Males: 15 (75)  
Manual laborers: 6 (30); WCB: 5 (25) | FTT; Mass  
15 mo (2 mo–6 yr) |
| Gartsman GM, 1997 | G1: Open debridement & subacromial decompression (33)  
5.3 yr (4–9.8) | G1: 62 yr (42–77) / Males: 30 (90.9)  
WCB: 13 (39.4) | FTT; Mass  
17 mo (6 mo–8 yr) |
| Klinger HM, 2005b | G1: Arthroscopic debridement (33)  
2.6 yr (2–3.8) | G1: 69 yr (62-79) / Males: 23 (69.7) | FTT; Lg  
11 mo (6–23) |
<table>
<thead>
<tr>
<th>Author, year</th>
<th>Intervention (N participants enrolled)*</th>
<th>Followup duration</th>
<th>Age (yr), mean±SD (range) / Males, N (%)</th>
<th>Other characteristics</th>
<th>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lim JTK, 2005†</td>
<td>G1: Arthroscopic decompression: positive injection test (19) G2: Arthroscopic decompression: negative injection test (4)</td>
<td>14 mo (3 mo–2 yr)</td>
<td>G1: NR / Males: NR G2: NR / Males: NR</td>
<td>FTT; NR</td>
<td>6 mo</td>
</tr>
<tr>
<td>Maier D, 2007</td>
<td>G1: Stabilization of LHB &amp; open RCR (21)</td>
<td>2.4 yr (2–4.5)</td>
<td>G1: 51 yr (30–70) / Males: 16 (76.2)</td>
<td>NR; Sm</td>
<td>6.2 wk (3–9)</td>
</tr>
<tr>
<td>Scheibel M, 2004</td>
<td>G1: Arthroscopic decompression (23)</td>
<td>3.3 yr (20 mo–4.8 yr)</td>
<td>G1: 69 yr (60–81) / Males: 18 (78.3)</td>
<td>FTT; Mass</td>
<td>12 mo (3 mo–4 yr)</td>
</tr>
<tr>
<td>Vaz S, 2000</td>
<td>G1: Arthroscopic decompression (14)</td>
<td>3.1 yr (12 mo–4 yr)</td>
<td>G1: NR / Males: NR</td>
<td>FTT (8), PTT (6); NR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NR</td>
<td></td>
</tr>
<tr>
<td>Audenaert E, 2006</td>
<td>G1: Open RCR &amp; augmentation (41)</td>
<td>3.6 yr (2–7.2)</td>
<td>G1: 67 yr (51–80) / Males: 23 (56.1)</td>
<td>FTT; Lg</td>
<td>NR</td>
</tr>
<tr>
<td>Fuchs B, 2006</td>
<td>G1: Open RCR &amp; augmentation (32)</td>
<td>3.2 yr (2–4.4)</td>
<td>G1: 59 yr (40–75) / Males: 21 (65.6)</td>
<td>FTT; NR</td>
<td>11.5 mo (3 mo–4.5 yr)</td>
</tr>
<tr>
<td>Randelli PS, 2008</td>
<td>G1: Arthroscopic RCR &amp; platelet-rich plasma augmentation (14)</td>
<td>2 yr</td>
<td>G1: 66.6±9 yr / Males: 8 (57.1)</td>
<td>FTT; NR</td>
<td>NR</td>
</tr>
<tr>
<td>Scheibel M, 2007</td>
<td>G1: Open RCR &amp; augmentation (14)</td>
<td>14.4 mo (12–21)</td>
<td>G1: 59.7 yr (44–71) / Males: 8 (69.6) Smokers: 1 (7.1)</td>
<td>FTT; Med, Lg, Mass</td>
<td>NR</td>
</tr>
<tr>
<td>Zumstein MA, 2008</td>
<td>G1: Open RCR &amp; augmentation (27)</td>
<td>9.9 yr (6.7–12.8)</td>
<td>G1: 54 yr (42–67) / Males: 15 (55.6)</td>
<td>FTT; Mass</td>
<td>NR</td>
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<td></td>
<td>NR</td>
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</tr>
<tr>
<td>Boissonnault WG, 2007</td>
<td>G1: Rehabilitation protocol (118)</td>
<td>13±5.1 wk (3–28 wk)</td>
<td>G1: 67±8.6 yr (49–82) / Males: 37 (31.4) Smokers: 14 (11.9)</td>
<td>NR; NR</td>
<td>NR</td>
</tr>
</tbody>
</table>

**Operative Augmentation**

**Postoperative Rehabilitation**
### Appendix Table 3-2. Study and Patient Characteristics for Included Uncontrolled Studies (continued)

<table>
<thead>
<tr>
<th>Author, year</th>
<th>Intervention (N participants enrolled)*</th>
<th>Age (yr), mean±SD (range) / Males, N (%)</th>
<th>Type of tear; Size of tear Duration of symptoms (mo), mean±SD (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Followup duration</strong></td>
<td></td>
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<tr>
<td><strong>Nonoperative</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghroubi S, 2008</td>
<td><strong>G1</strong>: Analgesic, NSAID, steroid injection, reeducation program (59)</td>
<td><strong>G1</strong>: 61 yr (41–75) / Males: 21 (35.6) Manual laborers: 18 (30.5)</td>
<td>FTT (39), PTT (20); NR</td>
</tr>
<tr>
<td></td>
<td>7 yr (4–12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawkins RH, 1995</td>
<td><strong>G1</strong>: Exercise protocol (50)</td>
<td><strong>G1</strong>: 59.6±10.5 yr / Males: 27 (54) WCB: 7 (14)</td>
<td>FTT; all sizes</td>
</tr>
<tr>
<td></td>
<td>3.5 yr (2.6–4.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heers G, 2005†</td>
<td><strong>G1</strong>: Home exercise program: PTT (14)</td>
<td><strong>G1 &amp; G2 &amp; G3</strong>: 60.4 yr (44–69) / Males: NR</td>
<td>FTT (24), PTT (14); NR</td>
</tr>
<tr>
<td></td>
<td><strong>G2</strong>: Home exercise program: FTT (14)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>G3</strong>: Home exercise program: Mass (10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12 wk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kane TP, 2008</td>
<td><strong>G1</strong>: Pulsed radio frequency ablation (12)</td>
<td><strong>G1</strong>: 68 yr (60–83) / Males: 3 (25)</td>
<td>FTT; NR</td>
</tr>
<tr>
<td></td>
<td>6 mo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Koubaa S, 2006</td>
<td><strong>G1</strong>: Analgesic, NSAID, steroid injection, reeducation program (24)</td>
<td><strong>G1</strong>: 59.2±10 yr (44–83) / Males: 9 (37.5)</td>
<td>FTT; mean: 13.2 mm²</td>
</tr>
<tr>
<td></td>
<td>6 mo</td>
<td></td>
<td>9.1±12.3 mo (3 mo–2.7 yr)</td>
</tr>
<tr>
<td>Levy O, 2008a</td>
<td><strong>G1</strong>: Anterior deltoid reeducation program (115)</td>
<td><strong>G1</strong>: 57.3 yr (23–78) / Males: 64 (55.7)</td>
<td>NR; all sizes</td>
</tr>
<tr>
<td></td>
<td>3 yr (2–6.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scheuermann R, 1991</td>
<td><strong>G1</strong>: Early functional PT and active shoulder support (29)</td>
<td><strong>G1</strong>: NR / Males: NR</td>
<td>NR; NR</td>
</tr>
<tr>
<td></td>
<td>25 days</td>
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</tbody>
</table>

ASD = arthroscopic subacromial decompression; AS = anterosuperior; FTT = full-thickness tear; Lg = large; Mass = massive; Med = medium; mo = month; NR = not reported; NSAID = non-steroidal anti-inflammatory drug; PS = posterosuperior; PT = physical therapy; PTT = partial-thickness tears; RCR = rotator cuff repair; RCT = rotator cuff tear; Sm = small; TROMD = total range of motion deficit; WCB = workers’ compensation board; wk = week; yr = year.

*number analyzed is reported when number enrolled was not provided
†cohort/case-control studies that compared the effectiveness of only one intervention across two patient populations were considered to be uncontrolled studies for the purposes of this review.

Refer to Appendix Table 2 for full citations.