### Supplemental Material. Articles relating to gluteal tendinopathy, treatment and main findings

| Lead Author (Year) | LoE | Intervention | Pathology tendinopathy (distribution) | N | Sex/FM | Age, y, mean (range) | Preop DoS, mo mean (range) | Follow-up, mo, mean (range) | Reported outcome measure | Outcome assessment | Initial / follow up mean outcome scores (range) | Complications / SAEs | Key to Symbols |
|--------------------|-----|--------------|--------------------------------------|---|--------|---------------------|--------------------------|--------------------------|--------------------------|-----------------|-----------------------------------------------|-------------------|----------------|
| Blakey (2020) | 1b | Endoscopic bursectomy and ITB release with/w/o radiofrequency microdebridement | 1-3 | 33 | 30/3 | 58 (SD ±8.3) | NR (minimum 0) | 12 | mHHS (no RF) | mHHS (RF) | PASS (no RF) at 1 y PASS (RF) at 1 y | 57.5 (±10.6) / 77.4 (±20.0)*** / 77.8 (±18.4)*** | 2 patients underwent surgery to the hip joint within follow up; no surgery-related SAEs | **P<0.01 to BL |
| Fitzpatrick (2019) | 1b | 1. US-guided PRP injection vs 2. US-guided CS injection | 2, 1, 3, 2, 1 PRP: (SONO/35/35/35) CS: (60%/35%/10%) | 204 | 167/37 | 54.8 (SD ±8.8) | 24 (8-48) | NR (minimum 12) | GRCS (success) (EDX) | GRCS (CS) | GRCS (PRM) | no / 58% / 77%** / 74%** / 74%** / 79%** | no SAEs | **P<0.01 to BL |
| Caruso (2019) | 1b | 1. ESWT vs 2. US therapy | 2-3 | 50 | 44/6 | 61.24 (SD ±9.26) | 6 (3-12) | NR | NRS (SWT) | NRS (US) | LEFS (SWT) | 5.3 (±2.2) / 2.7 (±1.1) / 3.0 (±1.3)** / 4.9 (±1.7) / 3.4 (±2.1) / 2.0 (±0.3)** | no SAEs | **P<0.01 to BL |
| Mellor (2018) | 1b | 1. US-guided CS injection | 2 | 204 | 167/37 | 54.8 (SD ±8.8) | 24 (8-48) | NR (minimum 12) | GRCS (success) (EDX) | GRCS (CS) | GRCS (PRM) | no / 58% / 77%** / 74%** / 74%** / 79%** | no SAEs | **P<0.01 to BL |
| Jacobson (2016) | 1b | 1. US-guided PRP injection vs 2. US-guided tendon tenorrhaphy | 2*** | 30 | 24/6 | 57 (±24-78) | 5 NR (3-24) | 3 | VAS (PRP) | VAS (TF) | Bl / 1w / 2w | 31.4 (±13.7) / 25.5 (±8.8)** / 19.4 (±10.3)** | no SAEs | **P<0.01 to BL |
| Saltzman (2018) | 1b | Open or endoscopic tendinopathy repair (SA: SR [small or medium tears], DR [large or massive tears]) 1. with PRFM augmentation vs 2. without PRFM augmentation | 3, 4 | 47 | 41/6 | 62.0 (±78-88.5) | 31 (2-240) | 31.3 (SD ±12) | VAS (PRFM) | VAS (Co) | HOS ADL (PRFM) | 7.2 (±2.0) / 2.5 (±2.6)** / 6.4 (±1.7) / 1.9 (±2.2)** | **P<0.01 to BL | **P<0.01 to PRFM vs Co PRFM |
| Ebert (2019) | 4 | Open augmented tendon repair (TS, SA, LARS, V-Y lengthening of ITB) | 3, 4 | 84 | 84/0* | 64.6 (±43.8-84.8) | 40.8 (6-240) | 24 | HHS | VAS frequency VAS severity SF-12 PCS SF-12 MICS SF-12 NMT (m) Strength (kg) | Bl / 24 mo | 58.6 (±17.0) / 92.5 (±9.6)** / 25.6 (±7.5) / 43.3 (±15.4)** / 6.8 (±2.1) / 14.1 (±6.1)** / 8.4 (±2.1) / 1.5 (±2.0)** / 33.7 (±7.9) / 45.3 (±9.4)** / 48.3 (±11.3) / 52.5 (±9.4)** / 416 (±91) / 508 (±94)** / 9.3 (±4.5) / 10.3 (±4.7)** | No RF, 3 re-sets, 2 superficial wound infection, 1 hematoma | **P<0.01 to BL | *male participants excluded |
| Lead Author | Year | LoE | Intervention | Pathology | N | Sex, % | Age, y, mean (range) | Preop Doh, mo, mean (range) | Follow-up, mo, mean (range) | Reported outcome measure | Outcome assessment | Initial / follow up mean outcome scores (range) | Complications / SAEs | Key to Symbols |
|-------------|------|-----|-------------|-----------|---|-------|---------------------|------------------------|-------------------------|------------------------|---------------------|---------------------|---------------------|-------------------|
| Ebert       | 2018  | 4   | Open augmented tendon repair (TS, SA, LARS), V-Y lengthening of ITB | Strain, tendinitis, bursitis, fasciitis | 3, 4 | 110 | 101/9 (range) | 63.2 (43-82) | 42 (6-216) | NR (minimum 12) | HHS | BL / 3m / 6mo / 12mo | 57.6±18.9 / 74.5±16.1 / 80.1±14.9 / 85.8±13.8 (*** ) 25.3±(8.7) / 33.6±(8.4) / 37.3±(6.7) / 39.9±(6.7) (** ) 33.2±(2.5) / 36.4±(16.5) / 40.6±(10.1) / 44.1±(9.4) (**) 49.3±(11.5) / 53.5±(11.4) / 56.2±(11.4) / 54.9±(9.8) (*) | 96% satisfied | 3 surgical failures (RTE), 1 hematoma, 2 superficial wound infection (AB), 10VT/PE | **P<0.01 to BL <0.0001 to BL | |
| Hartigan    | 2018  | 4   | Endoscopic tendon repair (SA) | Strain, tendinitis, bursitis, fasciitis | 3, 4 | 25 | 24/1 (range) | 53.5 (38-70.7) | NR | 38 (26.6-68) | mHHS, HOS ADL, HOS Sport, NAHS, VAS | BL / mean FU | 54.9 ± 76.2** / 50.2 / 40.6** / 30.9 / 67.3** / 51.9 / 82.4** | no complications | **P=0.001 to BL | |
| McInneslage | 2018  | 4   | Open tendon repair (SA), V-Y lengthening of ITB if necessary | Strain, tendinitis, bursitis, fasciitis | 3, 4 | 14 | 10/4 (35 hips) | 63 (40-82) | NR | HHS | Tendelenburg sign | BL / FU (very sat/sat/neutral /dissatisfied) | NR / 66 (35-88) | 86.7% / 50% | 26.7% / 13.3% / 26.7% / 33.3% | NR | |
| Sea         | 2018  | 4   | ESWT | Strain, tendinitis, bursitis, fasciitis | 2 (38.3%) - 3 (16.7%) | 18 | 10/8 (range) | 59 (31-78) | 33 (6-180) | 27 | NRS Success (RMS "good" or "excellent") | BL / 1w / 27mo | 5.9±1.87 / 2.5±1.57* / 2.3±1.05* | no AE | **P=0.01 to BL | |
| Thaunat     | 2018  | 4   | Endoscopic tendon repair (SA: SR [partial-thickness tears], DR [full-thickness tears]) | Strain, tendinitis, bursitis, fasciitis | 3, 4 | 20 | 22/3 (range) | 5 (12.8%) | 17/3 (50.8) | 42 (50±3.4) | VAS, mHHS, NAHS | BL / mean FU | 7.2±10.1 / 3.2±8.2* / 3.3±8.7 / 80.2±19.4** | 47.1±5.7 / 76.8±13.5** | 1 failure of repair (no RT) | **P=0.05 to BL | **P=0.001 to BL | |
| Bucher      | 2017  | 4   | Autologous tenocyte injection | Strain, tendinitis, bursitis, fasciitis | 1, 2 | 12 | 12/7 (range) | 52.6 (41-67) | 33.2 (6-144) | 8.7 | VAS | BL / 3mo / 6mo / 12mo / 24mo | 24.0 / NR / 32.3 / 38.9** / NR | 7.4 / 4.6** / NR / 3.4** / 2.2** | no SAEs, 3 donor site discomfort | **P=0.05 to BL | **P=0.001 to BL | |
| Hustak      | 2017  | 4   | Open augmented tendon repair (TS, SA, LARS), V-Y lengthening of ITB | Strain, tendinitis, bursitis, fasciitis | 3, 4 | 21 | 19/2 (range) | 62.1 (44-78) | 49.2 (12-120) | NR (minimum 12) | HHS | BL / 6mo / 12mo | 65.2±19.3 / 83.6±12.4 / 52.1±7.3 (**) | 28.8±(2.6) / 40.5±(5.5) / 41.2±(4.3)** | 1 failure of repair (no RT) | **P=0.0001 to BL | |
| Coulomb     | 2016  | 4   | Endoscopic tendon debridement and microperforation, no tendon repair | Strain, tendinitis, bursitis, fasciitis | 2, 3 | 17 | 16/1 (range) | 53.5 (17-73) | 34.8 (6-108) | 37.6 (20-82) | VAS, UCLA activity score | BL / mean FU | 7.2±11.7 / 3.3±19.9** | no major complications | **P=0.001 to BL | |
| Lee         | 2016  | 4   | US-guided PRP injection and concomitant gluteus medius tendon tenotomy | Strain, tendinitis, bursitis, fasciitis | 1, 2 | 21 | 17/4 (range) | 48 (25-68) | NR (minimum 3) | 19.7 (12.1-32.3) | mHHS, HOS ADL, HOS Sport, JOH-33 | BL / mean FU | 56.7±11.2 / 74.2±15.7 (**) | 68.6±16.5 / 84.1±12.4** | no SAEs | **P=0.0001 to BL | |
| Jacobson    | 2015  | 4   | US-guided fenestration of gluteus medius or minimus tendon | Strain, tendinitis, bursitis, fasciitis | 12 (84.6%) / 3 (15.4%) | 13 | 55.8 (26-77) | NR | 2.3 (0-3.7) | Patient satisfaction (improvement) | marked / some / no change / deterioration | 53.8% / 23.1% / 15.4% / 7.7% | NR | **P<0.05 to BL 1 tendinopathy grade 4 excluded | |
| Bucher      | 2014  | 4   | Open augmented tendon repair (TS, SA, LARS), V-Y lengthening of ITB | Strain, tendinitis, bursitis, fasciitis | 3, 4 | 22 | 19/3 (range) | 62 (40-74) | 35 (4-96) | NR (minimum 12) | VAS | BL / 3m / 6mo / 12mo | 22.4±(7.3) / 35.0±(7.7)** / 38.3±16.3** / 41.16±(5.1)** | 7.1±13.3 / NR / NR / 16.1±(4.8)** | 1 RIT for irritative screw head | **P<0.01 to BL | **P<0.001 to BL |
| Lead Author (Year) | LoE | Intervention | Pathology | N | Sex, F/M | Age, y, mean (range) | Preop DoS, mo mean (range) | Follow-up, mo, mean (range) | Reported outcome measure | Outcome assessment | Initial / follow up mean outcome scores (range) | Complications / SAEs | Key to Symbols |
|-------------------|-----|--------------|-----------|---|-----------|----------------------|--------------------------|--------------------------|------------------------|-------------------|----------------------|------------------|---------------|
| Makridis (2014)44 | 4   | Open tendon repair (SA: DR) | 3, 4 | 67 | 62/5 | 68 (25-87) | 33.6 (6-120) | 55.2 (12-96) | VAS | BL / mean FU | 8.7(±1.1) / 1.7(±2.7)** | 11 retears (16%) (all RT) | **P<0.001 to BL |
| Davies (2013)35  | 4   | Open tendon repair (SA: DR, T1) | 3, 4 | 22 | 20/2 | 67.7 (45-85) | NR | 70.8 (61-110) | HHS | BL / 12mo / 60mo | 5.8(±1.0) / 87(±14.7)** | 2 retears following falls, no other complications | **P=0.0001 to BL |
| Mautner (2013)21  | 4   | US-guided PRP injection (single or multiple) | 3-3 | 16 | NR | 48 (19-73) | 36 (6-360) | 15 (50-86) | VAS | mean FU | (18% moderate improvement to complete resolution of symptoms) | NR | *P=0.001 to BL |
| McCormick (2013)44 | 4   | Endoscopic tendon repair (SA) | 4 | 11 | 7/3 | 65.9 (60-74) | 11.7 (1.5-40.9) | 22.6 (12.6-38.7) | VAS | BL / mean FU | 84.2% | NR | NR |
| Walsh (2011)38    | 4   | Open tendon repair (TS) | 3, 4 | 72 | 67/5 | 62 (36-88) | 22.4 (6-144) | NR (minimum 12) | Marie D’Aubigne Postal score | BL / 6mo / 12 mo | 10.9(±0.3) / 16.6(±0.3**) / 16.7(±0.4)** | 6 DVT, 4 retear, 3 hematoma, 1 PE, 1 fractured GT, 1 infection, 1 pressure sore | **P<0.0001 to BL |
| Fearn (2010)44    | 4   | Open tendon repair (TS) | 3, 4 | 24 | 24/0 | 56 (38-76) | 33.8 (1-120) | 22 (12-56) | VAS | BL / mean FU | 8.5 (7.5-10) / 0.9 (0-2.5)** | **P=0.001 to BL |
| Labrosse (2010)35 | 4   | US-guided single CS injection 1 (11%), 2 (87%), 3 (12%) | 54 | 48/6 | 54.7 (35-78) | NR | 1 | VAS | BL / 1mo | 6.4 (2-9)** | **P=0.001 to BL |
| Davies (2009)35   | 4   | Open tendon repair (SA, DR) | 3, 4 | 16 | 15/1 | 63 (47-82) | 23 (6-48) | 12 | VAS | BL / mean FU | 7.0 / 2.0* | 4 retears [3RRT], 1 deep infection (RTT) | *P<0.01 to BL |
| Labrosse (2010)35 | 4   | US-guided single CS injection 1 (11%), 2 (87%), 3 (12%) | 54 | 48/6 | 54.7 (35-78) | NR | 1 | VAS | BL / 1mo | 6.4 (2-9)** | NR | **P=0.001 to BL |

LoE: Level of evidence, N: sample size, DoS: duration of symptoms, BL: baseline, NR: not reported, FU: follow-up, AE: adverse events, SAE: severe adverse events, F: female, M: male, mo: months, ns: not significant, Sig: significant, pt: point, ABD: abduction, RTT: return to theatre, TS: transosseous sutures, SA: suture anchors, DR: double row, GT: greater trochanter, DVT: deep vein thrombosis, PE: pulmonary embolism, AT: atrrophic, non-AT: non atrrophic, US: ultrasound, CS: corticosteroids, PRP: platelet rich plasma, VAS: Visual Analog Scale, SF-36: Short Form 36, PCS: Physical Component Score, MCS: Mental Component Score, mHHS: modified Harris Hip Score, OHS: Oxford Hip Score, LEAS: Lower Extremity Activity Sale, ODI: Oswestry Disability Index, HOS: Hip Outcome Score, ADL: activities of daily living.

**Notes:**
- **P<0.05** to BL
- **P<0.001** to BL
- **P<0.0001** to BL

**Key to Symbols:**
- *: P<0.05
- **: P<0.01
- ***: P<0.001
- °°: AT vs non-AT
- °: NS
- BL: Baseline