| Variable                          | Univariate regression coefficient (95 % CI) | p-value |
|----------------------------------|---------------------------------------------|---------|
| Baseline IKDC                   | -0.93 (-0.99 – 0.88)                       | <0.001  |
| Baseline Marx                    | 0.22 (0.05 – 0.40)                         | 0.014   |
| Age                              | -0.03 (-1.11 – 0.041)                      | 0.4     |
| Sex                              |                                             |         |
| Male (ref)                       | REF                                         |         |
| Female                           | -1.36 (-3.12 – 0.40)                       | 0.13    |
| BMI                              | -0.21 (-0.45 – 0.029)                      | 0.085   |
| Smoker                           |                                             |         |
| No (ref)                         | REF                                         |         |
| Yes                              | -3.13 (-6.42 – 0.15)                       | 0.061   |
| Level of Education               |                                             |         |
| High School or less              | REF                                         |         |
| College or more                  | 2.07 (0.16 – 3.99)                         | 0.034   |
| Race                             |                                             |         |
| White                            | REF                                         |         |
| Non-White                        | -0.62 (-2.80 – 1.57)                       | 0.58    |
| Level of Activity                |                                             |         |
| Recreational                     | REF                                         |         |
| High School                      | -0.37 (-3.04 – 2.30)                       | 0.79    |
| College                          | -1.16 (-5.22 – 2.90)                       | 0.58    |
| Professional                     | -2.83 (-13.27 – 7.61)                      | 0.59    |
| Non-Contact Sport                |                                             |         |
| Contact Sport                    | REF                                         |         |
| Low-Risk sport                   | 0.086 (-2.45 – 2.63)                       | 0.95    |
| High-Risk Sport*                 |                                             |         |
| Meniscus Injury                  |                                             |         |
| No                               | REF                                         |         |
| Yes                              | 0.017 (-1.74 – 1.78)                       | 0.99    |
| Meniscal treatment               |                                             |         |
| Repair                           | REF                                         |         |
| Meniscectomy                     | 2.12 (-0.77 – 5.01)                        | 0.15    |
| Cartilage Injury                 |                                             |         |
| No                               | REF                                         |         |
| Yes                              | -0.38 (-2.50 – 1.74)                       | 0.73    |
| Cartilage lesion size            |                                             |         |
| <2 cm²                           | REF                                         |         |
| ≥2 cm²                           | -15.0 (-24.45 - -5.65)                     | 0.02    |
| Autograft                        |                                             |         |
| Allograft                        | REF                                         |         |
|                                   | -1.69 (-3.83 – 0.46)                       | 0.12    |

**Appendix Table A1**: Univariate Regression analysis to identify predictors for change in IKDC score from baseline to final follow-up. Each predictor is adjusted for baseline IKDC only.

CI Confidence Interval, BMI Body Mass Index, IKDC International Knee Documentation Committee subjective knee evaluation form, REF reference variable. *Basketball, Soccer, Football, LaCrosse, Ski, Volleyball
### Appendix Table A2: Percentage of patients that underwent subsequent ipsilateral non-revision knee surgery within 9 (range 8-11) years of primary Anterior Cruciate Ligament reconstruction. MUA Manipulation Under Anesthesia.

| Subsequent non-revision ipsilateral knee surgery | First subsequent surgery | Second subsequent surgery | Third subsequent surgery |
|--------------------------------------------------|--------------------------|---------------------------|--------------------------|
| Overall                                          | 270 (13.2 %)             | 30 (1.5 %)                | 8 (0.4 %)                |
| Meniscal surgery                                | 141 (6.9 %)              | 14 (0.7 %)                | 2 (0.1 %)                |
| Debridement/lose bodies                         | 79 (3.9 %)               | 11 (0.5 %)                | 3 (0.1 %)                |
| Removal of hardware                             | 29 (1.4 %)               | 1 (0.05 %)                | 1 (0.05 %)               |
| Cartilage surgery                               | 8 (0.4 %)                | 3 (0.1 %)                 | 1 (0.05 %)               |
| Other ligament surgery                          | 4 (0.2 %)                | -                         | -                        |
| Arthroplasty                                     | 4 (0.2 %)                | -                         | -                        |
| MUA                                              | 1 (0.05 %)               | 1 (0.05 %)                | 1 (0.05 %)               |
| Other                                            | 4 (0.2 %)                | -                         | -                        |