**Supplemental digital content 3 – Individual data showing the spread of the data**

a) Peak knee flexion moments

Fig. S3.1: Peak knee flexion moments of the injured and uninjured leg of the ACL patients during the 5 exercises. Every line represents an ACL patient. Patients who have a lower peak knee flexion moment in their injured leg compared to their uninjured leg are represented by a red line, those who have a higher peak knee flexion moment in their injured leg are represented by a black line.
b) Time evolution coefficients of PM 4 and PM 12 of the single leg hop for distance

Fig. S3.2: Time evolution coefficients of PM 4 (left) and PM 12 (right) of the injured and uninjured leg of ACL patients during the single leg hop for distance. The time evolution coefficient represents the level of expression of that PM at a given time point. The same time points as in figure 3A (e.g. t2) and figure 3B (e.g. t1) were used to make these graphs as these time points indicate the largest difference in expression between both legs of the ACL patients. Every line represents an ACL patient. Left: patients who have a higher expression of PM 4 (e.g. posterior movement of the pelvis) in their injured leg are represented by a red line. Right: patients who have less expression of PM 12 (e.g. whole-body anterior displacement) in their injured leg are represented by a red line.