## CORRECTION



## Correction to: Patient and surgical characteristics that affect revision risk in dynamic intraligamentary stabilization of the anterior cruciate ligament

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## **Correction to:**

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The original version of this article unfortunately contained a mistake. The numbers given for the relative risk are replaced with correct values. The corrected Table 3 and the sentences related to the Table 3 are given below:

Under the "Exposure variables and risk for revision ACL surgery" section of the result section, the paragraph should read as follows:

The risk analysis of patient characteristics showed an increased risk for revision ACL surgeries for younger patients. The ROC analysis identified the age of 24 years as the optimal cut-off separating the study's high and low risk groups. The risk increased by a factor of 11.2 below this cut-off. Other studies analysing ACL reconstruction have reported similar results [27, 33]. However, young age is correlated with high activity level [29]. In our study, the Tegner score may be not precise enough to separate this interaction. Even with scores equal to older patients, younger patients may experience a higher risk for rerupture because

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their physical activity occurs more often and at a higher intensity. For patients regularly participating in game sports with abrupt start/stop activity or downhill skiing (Tegner score > 5), the risk for revision ACL surgery was 2.3 times higher compared with less demanding activities (Tegner score  $\le 5$ ). Several other studies report significantly more graft failures among patients with higher activity scores [4, 18] and increased competitive levels [20], and in soccer players compared with other sports [1, 20]. Return to high-demand activity levels is recognized as an independent risk factor for traumatic reinjury and subsequent revision surgery [4, 6, 20, 26, 29, 34]. This sustains the assumption that a return to the preinjury activity levels is the reason why young age and high baseline activity are associated with revision risk.

Side-to-side difference in AP knee joint laxity is widely used to measure the success of the reconstructed ACL graft [21]. In general, a side-to-side difference of > 2 mm

**Table 3** Relative risk of revision ACL surgery in age,  $\Delta$  AP translation, and Tegner score subgroups

	No. of patients with a revision ACL surgery/ total	Incidence (%)	Relative risk (95% CI)
Overall	30/381	7.9	
Age			
>24 years	6/281	2.1	
≤24 years	24/100	24.0	11.2 (4.7–26.7)
$\Delta$ AP translation			
≤2.0 mm	11/267	7.3	
> 2.0 mm	19/114	16.7	4.1 (2.0-8.2)
Tegner score			
≤ Score 5	13/242	5.4	
> Score 5	17/139	12.2	2.3 (1.1–4.5)



is defined as failure [3, 5, 8, 9]. In our study, an increased postoperative side-to-side difference was associated with revision ACL surgery. The ROC analysis resulted in a cut-off of 2 mm with a 4.1 times higher risk of a revision surgery for patients with higher knee laxity. Other studies have reported similar findings [12, 24]. However, increased postoperative knee laxity measured as AP translation was not correlated with subjective symptoms and function after ACL

reconstruction. Factors that predict increased postoperative AP translation have not yet been identified. It is assumed that a biomechanical deficit may exist in these patients despite a high level of functional performance and return to sports activities [17, 28].

