Surgical treatment was done using fixed blocks of 20 following a computer generated randomization table. 20 patients (5 females) were randomized to non-surgical treatment and 32 (8 females) to surgical treatment. There were no differences between the two groups in patient characteristics such as age, gender, activity level, etc.

In an RCT of surgical vs. non-surgical treatment of acute ACL injuries (KANON study) we recruited and screened patients aged 18-35 years, having a high to moderate physical activity level and a not more than four weeks old ACL rupture in a previously uninjured knee (n=120). 52 consecutive patients (13 females) with increased antero-posterior (A-P) laxity (Lachmann grade 2-3) and a fresh ACL rupture as visualized on MRI were included in the present study. In addition, 4 healthy previously uninjured controls were examined. Randomization to either surgical reconstruction or non-surgical treatment was done using fixed blocks of 20 following a computer generated randomization table. 20 patients (5 females) were randomized to non-surgical treatment and 32 (8 females) to surgical treatment. There were no differences between the two groups in patient characteristics such as age, gender, activity level, etc.

RESULTS: There were no differences in joint fluid volume or BML volume for any anatomical region between the two groups at baseline. At 16 weeks, the surgically treated group had significantly more joint fluid (p<0.001) and larger BML volume in the medial tibial condyle (p=0.020) and these differences persisted at 30 weeks (p<0.001 and p=0.012, respectively) (Fig. 2). There were no differences between the two groups at the 1 year follow up.