



# Rates of Patient Acceptable Symptom State, Treatment Failure and associated KOOS scores following primary ACL reconstruction in Norway

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## AIM

To investigate treatment outcomes in terms of patients categorizing themselves as having achieved a Patient Acceptable Symptom State (PASS) or as Treatment Failures (TF) and the associated mean Knee injury and Osteoarthritis Outcome Score (KOOS) following anterior cruciate ligament reconstruction (ACLR).

Considering your knee function, do you feel that your current state is satisfactory?

## CONCLUSION

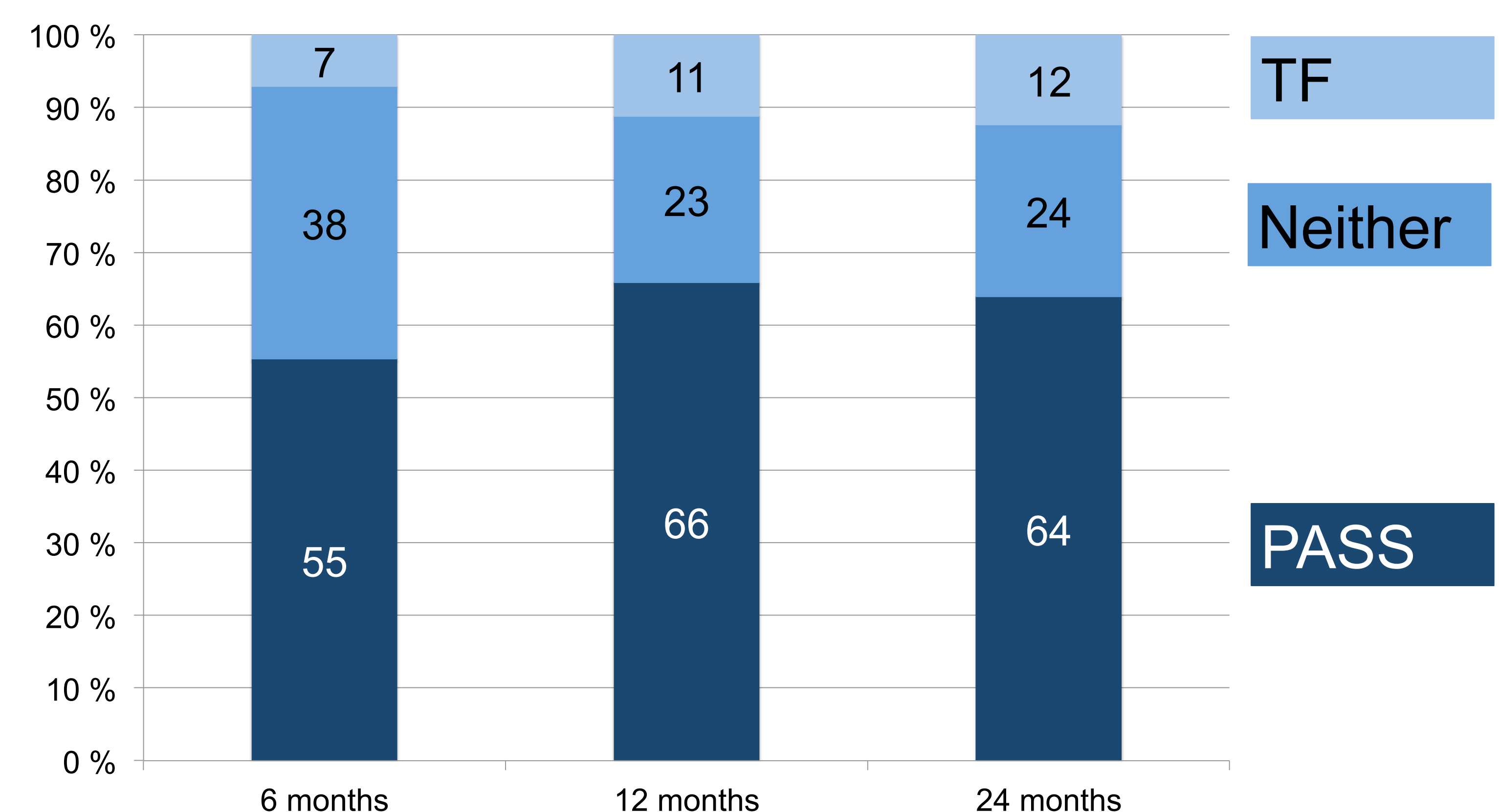
Room for improvement following ACL reconstruction: About 60% of the patients found their symptoms acceptable, while about 10% considered the treatment to have failed after 6-24 months.

Patients achieving acceptable symptoms had KOOS scores reflecting on average no to mild problems. Those considering the treatment to have failed had worse KOOS scores than pre-operatively, reflecting on average moderate to severe problems. Mean KOOS scores reflect the patients overall perception of treatment results well.

## RESULTS

744 patients (45% women, mean age 28.7) responded. For all time-points, 55-66% achieved a PASS and 7-12% considered the treatment to have failed (Figure 2).

Ranges of mean KOOS scores at 6-24 months for the patients reaching PASS were: Pain 88-91, Symptoms 82-85, ADL 94-96, Sport/Rec 69-77 and QOL 72-76. Patients considering the treatment to have failed had worse mean KOOS scores: Pain 57-58, Symptoms 55-57, ADL 69-73, Sport/Rec 25-33, QOL 24-31. The patients with not acceptable symptoms that were not severe enough to be treatment failures, had mean KOOS scores in between the groups achieving PASS and TF (Pain 68-79, Symptoms 65-73, ADL 78-89, Sport/Rec 39-51 and QOL 42-51).



**Figure 1:** The percentages of patients achieving a PASS or considering themselves as TF at 6-24 months following ACLR.

## METHODS

1197 patients were extracted from the Norwegian Knee Ligament Register at three time points: 397 at 6 months, 400 at 12 months and 400 at 24 months postoperatively. Inclusion criteria were unilateral primary surgical reconstruction of the ACL.

KOOS was sent to the patients accompanied by TF and PASS anchor questions. Patients had reached a PASS when answering "Yes" to the PASS question. Of those responding "No", those answering "Yes" to the TF question were considered treatment failures.

1197 patients randomly extracted

6 months  
397 patients

12 months  
400 patients

24 months  
400 patients

