MPC-studie 11.06.2026

Project-title and REK nr:
2011/133-2 En sammenlignende studie av to prinsipper ved hofteprotesekirurgi (MPC-studien). (A comparison of two principles in THA surgery).

Project-period: 2012-2029

Introduction:
A randomised, comparative, prospective, single-blinded trial of two hip prostheses.

1. Marathon cemented all-poly acetabular cup (DePuy, Warsaw, Indiana), Corail uncemented femoral stem (DePuy, Warsaw, Indiana), 32mm Alumine Biolox forte femoral head (DePuy, Warsaw, Indiana)

2. Pinnacle / Marathon uncemented cup (DePuy, Warsaw, Indiana), Corail uncemented femoral stem (DePuy, Warsaw, Indiana), 32mm Alumine Biolox forte femoral head (DePuy, Warsaw, Indiana)

Material and method:
In each group, 17 patients will receive the Corail stem without a collar and 17 with a collar.

Radiostereometric analysis (RSA) will be used to measure polyethylene wear and component migration. Dual-energy x-ray absorptiometry (DXA) measurements will be used to measure bone mineral density. Furthermore the outcome will be systematically measured by clinical scoring and plain x-rays.

The aims of the study are:
- to compare polyethylene wear and migration of the moderately cross-linked Marathon polyethylene in a cemented version (Marathon) and in an uncemented cup (Pinnacle / Marathon)

- to evaluate micromigration and periacetabular bone mineral density of the two cups.

- to evaluate the migration patterns and proximal femoral bone density changes around Corail stems with and without a collar.

Results:
The two versions of the Corail stem both are sufficiently stable in the femur, but some cases with the collarless version have more initial migration.

Time horizon:
Status 11.06.2026: Two manuscripts are under preparation with 5 year RSA and DXA results.

Contact information:
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