

## Summary of research proposal LROI



### Title:

Anterosuperior versus Deltopectoral Approach for Primary Reverse Total Shoulder Arthroplasty: A Study from the Dutch National Arthroplasty Registry

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### Abstract:

Reverse total shoulder arthroplasty (RTSA) is used as a treatment option for irreparable rotator cuff tears, cuff tear arthropathy, severe osteoarthritis and complex proximal humerus fractures. The two most common surgical approaches for RTSA are the anterosuperior and deltopectoral approach. However, the current evidence comparing the two techniques relies on separate prospective cohort studies or retrospective comparative studies, which are relatively small and are susceptible to selection and publication bias. There is currently no conclusive evidence supporting the superiority of one of the two techniques. Using data from the national registry, we would be able to compare the outcomes in a larger cohort, which could allow for identification of specific complications associated with each surgical approach and provide more externally generalisable outcomes. Therefore, the primary aim of this study is to compare the specific complications leading to a revision between the two surgical approaches. The secondary aims are to compare the implant survival and patient-reported outcomes of RTSA between the two groups. Logistic, cox and linear regression models will be used to assess the associations independent of potential confounding factors. Furthermore, we would report and compare the patient and treatment characteristics.

**Approval date:** December 2021