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# HOW OCCUPATION MODIFIES THE RISK OF SURGERY FOR NON-TRAUMATIC SHOULDER DISORDERS IN WORKERS WITH SHOULDER PAIN: A FOLLOW-UP STUDY BASED ON THE MUSCULOSKELETAL RESEARCH DATABASE AT THE DANISH RAMAZZINI CENTER

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**Objectives** There is a need for longitudinal studies of sufficient size to allow evaluation of risk factors for musculoskeletal disorders as opposed to symptoms. The Musculoskeletal Research Database at the Danish Ramazzini Center is being established with this purpose. This follow-up study focuses on risk of surgery for non-traumatic shoulder disorders in relation to occupational shoulder exposures depending on shoulder pain at baseline.

**Methods** The Musculoskeletal Research Database comprises around 40 000 persons who have participated in eight previous studies of musculoskeletal symptoms in the general Danish population or in selected occupational groups. Questionnaire data on job titles, shoulder pain, and other factors was collected 1991–2005. Information on first-time shoulder surgery from 1996 and onwards and the accompanying main diagnosis will be obtained from the Danish National Patient Register. Exposure measures will be allocated by combining information on job titles with a job exposure matrix based on expert judgement. Multivariate Cox regression analyses will be used, and the analyses will be stratified for presence or absence of pain at baseline.

**Results** For the period from 1996 and onwards, the database includes around 280 000 person years, and expectedly 300–600 operations for non-traumatic shoulder disorders. Findings will be presented at the meeting.

**Conclusions** The study will contribute to the understanding of the influence of occupational shoulder exposures on the development from shoulder pain into shoulder disorders that are severe enough to be treated surgically.