

## Associations between single and combined occupational mechanical exposures and surgery for subacromial impingement syndrome: a nationwide Danish cohort study<sup>1</sup>

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1. Supplementary material
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**Table S1.** Estimation of exposure duration for arm elevation single and arm elevation combined with force >0 for a 10-year time window with a 1-year lag.

Year	Arm elevation (min/day)	Force (score)	Arm elevation single			Arm elevation combined with force >0		
			>2.25–5.00 min/day	≥5.00–10.00 min/day	≥10.00 min/day	>2.25–5.00 min/day	≥5.00–10.00 min/day	≥10.00 min/day
1993	12.0	2	0	0	1	0	0	1
1994	12.0	2	0	0	1	0	0	1
1995	7.5	1	0	1	0	0	1	0
1996	7.5	1	0	1	0	0	1	0
1997	7.5	1	0	1	0	0	1	0
1998	7.5	1	0	1	0	0	1	0
1999	7.5	1	0	1	0	0	1	0
2000	7.5	1	0	1	0	0	1	0
2001	7.5	0	0	1	0	0	0	0
2002	7.5	0	0	1	0	0	0	0
-	-	-	<b>0</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>6</b>	<b>2</b>

**Table S2.** Correlation matrix between the intensity-specific exposure duration variables for the different exposure combinations.

<b>Arm elevation combined with repetition</b>				<b>Repetition combined with arm elevation</b>			<b>Force combined with arm elevation</b>				
	Low	Medium	High		Low	Medium	High		Low	Medium	High
Low	1.00			Low	1.00			Low	1.00		
Medium	-0.10	1.00		Medium	-0.09	1.00		Medium	-0.24	1.00	
High	-0.14	-0.07	1.00	High	-0.14	-0.04	1.00	High	-0.15	-0.05	1.00
<b>Arm elevation combined with force</b>				<b>Repetition combined with force</b>			<b>Force combined with repetition</b>				
Low	1.00			Low	1.00			Low	1.00		
Medium	-0.07	1.00		Medium	-0.09	1.00		Medium	-0.12	1.00	
High	-0.09	-0.07	1.00	High	-0.13	-0.04	1.00	High	-0.10	-0.25	1.00
<b>Arm elevation combined with repetition and force</b>				<b>Repetition combined with arm elevation and force</b>			<b>Force combined with arm elevation and repetition</b>				
Low	1.00			Low	1.00			Low	1.00		
Medium	-0.10	1.00		Medium	-0.08	1.00		Medium	-0.12	1.00	
High	-0.12	-0.07	1.00	High	-0.12	-0.04	1.00	High	-0.10	-0.05	1.00