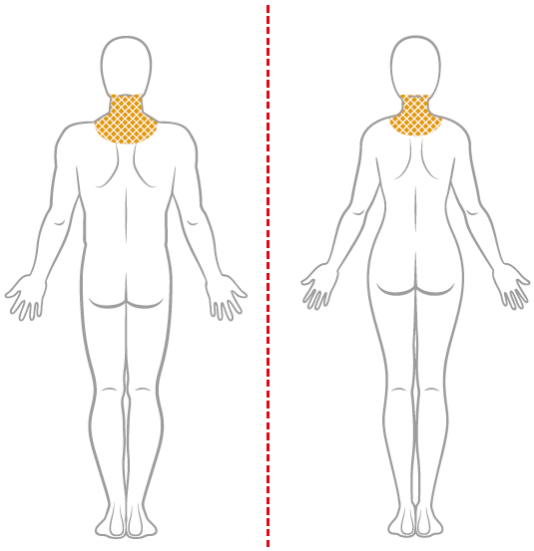
Questionnaire on musculoskeletal complaints*

** The following questionnaire is a translation of the German validated measurement instrument 'Nordic Musculoskeletal Questionnaire (NMQ)'. This translation was prepared for the publication of this study. Data collection was conducted using the German version of the questionnaire.*

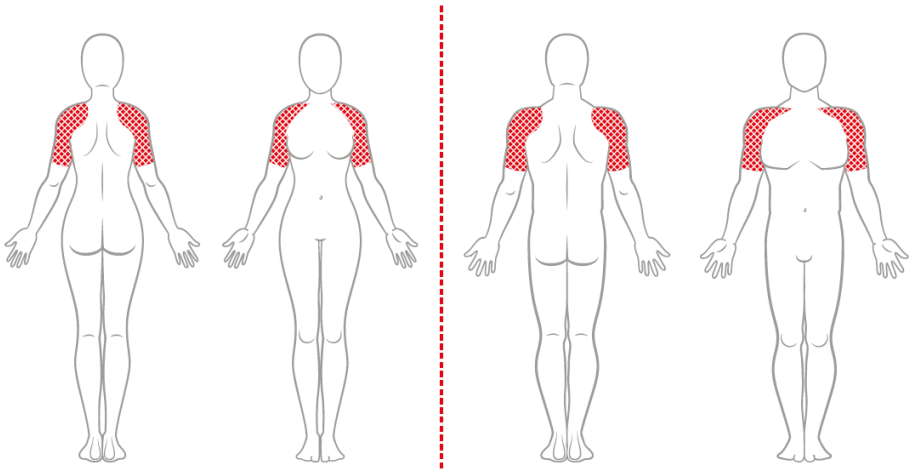
The following questions relate to the neck and cervical spine region



Q1	Did you have any complaints in the neck region and/or cervical spine in the last 12 months? If so, please sum up all the days with complaints.	1 No (continue with Q9) 2 Yes, 1–7 days 3 Yes, 8–30 days 4 Yes, more than 30 days, but not every day 5 Yes, (almost) every day
Q2	In the past 12 months, did these symptoms restrict you in your occupational activities and/or leisure time?	1 No 2 Yes
Q3	Did you also have these symptoms at any time in the last 4 weeks?	1 No 2 Yes
Q4	Did you also have these symptoms at any time in the last 7 days?	1 No 2 Yes
Q5	Did you ever get an X-ray due to the complaints in your cervical spine?	1 No (continue with Q7) 2 Yes
Q6	What findings were observed in the X-ray image of the cervical spine?	1 None 2 Osteochondrosis 3 Spondylosis 4 Spondylarthrosis

		5 I don't know
Q7	Did you ever get an MRI due to the complaints in your cervical spine?	1 No (continue with Q9) 2 Yes
Q8	What findings were observed on the MRI scan of the cervical spine?	1 None 2 Height reduction 3 Osteochondrosis 4 Spondylosis 5 Irritation of nerve roots 6 Protrusion 7 Prolapse 8 I don't know

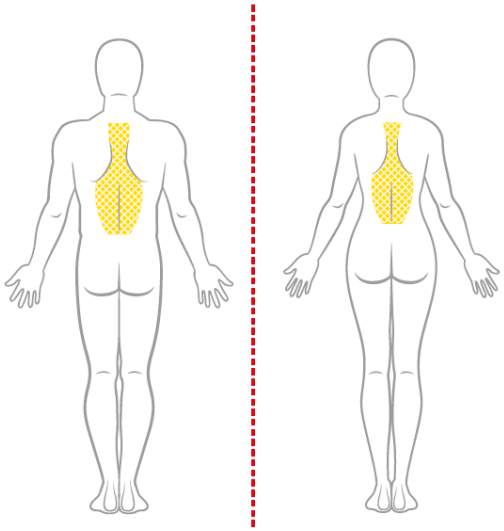
The following questions relate to the shoulder joints and/or upper arms



Q9	Did you have any complaints in your shoulder joints and/or upper arms in the last 12 months? If so, please sum up all the days with complaints.	1 No (continue with Q14) 2 Yes, 1–7 days 3 Yes, 8–30 days 4 Yes, more than 30 days, but not every day 5 Yes, (almost) every day
Q10	In the past 12 months, did these symptoms restrict you in your occupational activities and/or leisure time?	1 No 2 Yes
Q11	Did you also have these symptoms at any time in the last 4 weeks?	1 No 2 Yes
Q12	Did you also have these symptoms at any time in the last 7 days?	1 No 2 Yes
Q13	Where did the complaints in the shoulder joints and/or upper arms mainly occur?	1 left 2 right

		3 both sides

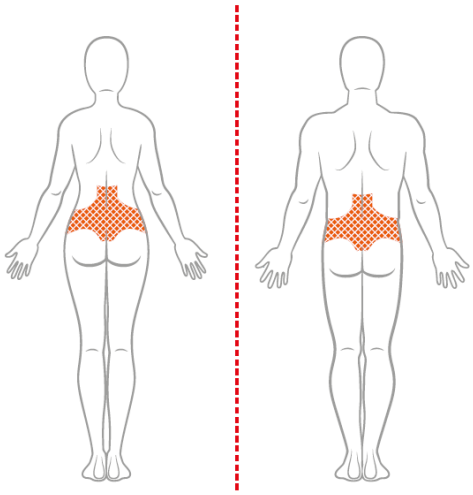
The following questions relate to the thoracic spine region



Q14	Did you have any complaints in the thoracic spine in the last 12 months? If so, please add up all the days with complaints.	1 No (continue with Q22) 2 Yes, 1–7 days 3 Yes, 8–30 days 4 Yes, more than 30 days, but not every day 5 Yes, (almost) every day
Q15	In the past 12 months, did these symptoms restrict you in your occupational activities and/or leisure time?	1 No 2 Yes
Q16	Did you also have these symptoms at any time in the last 4 weeks?	1 No 2 Yes
Q17	Did you also have these symptoms at any time in the last 7 days?	1 No 2 Yes
Q18	Did you ever get an X-ray due to the complaints in your thoracic spine?	1 No (continue with Q20) 2 Yes
Q19	What findings were observed in the X-ray image of the thoracic spine?	1 None 2 Osteochondrosis 3 Spondylosis 4 Spondylarthrosis 5 I don't know
Q20	Did you ever get an MRI due to the complaints in your thoracic spine?	1 No (continue with Q22) 2 Yes

Q21	What findings were observed on the MRI scan of the thoracic spine?	1 None 2 Height reduction 3 Osteochondrosis 4 Spondylosis 5 Irritation of nerve roots 6 Protrusion 7 Prolapse 8 I don't know

The following questions relate to the lumbar spine and lower back region



Q22	Did you have any complaints in the lumbar spine in the last 12 months? If so, please sum up all the days with complaints.	1 No (continue with Q30) 2 Yes, 1–7 days 3 Yes, 8–30 days 4 Yes, more than 30 days, but not every day 5 Yes, (almost) every day
Q23	In the past 12 months, did these symptoms restrict you in your occupational activities and/or leisure time?	1 No 2 Yes
Q24	Did you also have these symptoms at any time in the last 4 weeks?	1 No 2 Yes
Q25	Did you also have these symptoms at any time in the last 7 days?	1 No 2 Yes
Q26	Did you ever get an X-ray due to the complaints in your lumbar spine?	1 No (continue with Q28) 2 Yes
Q27	What findings were observed in the X-ray image of the lumbar spine?	1 None

		2 Osteochondrosis 3 Spondylosis 4 Spondylarthrosis 5 I don't know
Q28	Did you ever get an MRI due to the complaints in your lumbar spine?	1 No (continue with Q30) 2 Yes
Q29	What findings were observed on the MRI scan of the lumbar spine?	1 None 2 Height reduction 3 Osteochondrosis 4 Spondylosis 5 Irritation of nerve roots 6 Protrusion 7 Prolapse 8 I don't know

Questions about physical posture during work

Q30	How long do you work on average per shift in a standing and bent position?	1 Not at all 2 XX hours
Q31	How long do you work on average per shift in an awkward posture, e.g., with your upper body twisted?	1 Not at all 2 XX hours
Q32	How long do you work on average per shift sedentary?	1 Not at all 2 XX hours

Questions about radiation protection equipment

Q33	Do you wear a radiation protection apron while you work?	1 No (continue with Q39) 2 Yes
Q34	How many parts does your radiation protection apron, which you wear regularly, consist of? (excluding eye protection, headgear, thyroid and sternum protection)	1 One-piece suit (coat) 2 Two-piece suit/costume (vest and skirt) 3 More than two pieces (without eye protection, without head covering, without thyroid/sternum protection)
Q35	Do you regularly wear additional radiation protection clothing? (Multiple answers possible!)	1 No 2 Yes, eye protection 3 Yes, thyroid and sternum protection

		4 Yes, headgear
Q36	What protective material is your radiation protection apron, which you wear regularly, made of?	What protective material is your radiation protection apron, which you wear regularly, made of?
Q37	How many procedures using radiation protection aprons do you perform per year, approximately?	XXXX Quantity of procedures
Q38	For how many years have you been wearing a radiation protection apron at work?	XX years

Questions relating work incapacity due to musculoskeletal complaints

Q39	Have you ever been unable to work due to spinal problems or illness? (Multiple answers possible!)	1 No (continue with Q44) 2 Yes, due to cervical spine complaints 3 Yes, due to thoracic spine complaints 4 Yes, due to lumbar spine complaints
Q40	How long in total have you been unable to work due to spinal complaints or illness?	XXX days
Q41	Did you undergo spinal surgery?	1 No (continue with Q44) 2 Yes
Q42	What kind of surgery was performed?	1 Standard decompression procedure, e.g., nucleotomy or sequesterotomy 2 Standard decompression procedure followed by fusion of the affected spinal segments 3 Neither of the two alternatives
Q43	Did you ever get rehabilitation measures because of a spinal condition?	1 No 2 Yes

Questions relating pre-existing conditions and accidents

Q44	Have you ever had an accident involving injury to your spine?	1 No 2 Yes, namely _____ [free text]

Q45	Have you ever been diagnosed with a pre-existing spinal condition? (e.g., severe scoliosis)	1 No 2 Yes, namely _____ [free text]

Questions relating to mental strain at work

When you consider your work situation as a whole, how satisfied are you with ...		Very satisfied	satisfied	Somewhat satisfied	dissatisfied	Very dissatisfied
Q46	... your career perspectives?	1	2	3	4	5
Q47	... the people you work with?	1	2	3	4	5
Q48	... the physical working conditions?	1	2	3	4	5
Q49	... the way your department is managed?	1	2	3	4	5
Q50	... the way your skills are used?	1	2	3	4	5
Q51	... your wages/salary?	1	2	3	4	5
Q52	... your work as a whole, taking all circumstances into account?	1	2	3	4	5

Questions relating health behaviour

Q53	Do you engage in any sporting activities in your leisure time?	1 No (continue with Q57) 2 Yes
Q54	What sporting activity or activities do you engage in?	[Free text]
Q55	How many hours per week do you practice this activity/these activities? Please sum up the hours if you practice several activities.	xx hours per week
Q56	For how many years have you been practicing this activity/these activities regularly?	xx Jahre
Q57	Do you currently smoke (cigarettes, cigars, cigarillos, pipes or other tobacco products)?	1 Yes, every day 2 Yes, occasionally 3 No, I used to smoke (continue with Q59) 4 No, I have never smoked (continue with Q60)
Q58	How many cigarettes do you currently smoke on average per day (including all other tobacco products)?	1 less than 1 (continue with Q60) 2 [Free text] pieces (continue with Q60)

Q59	Only ex-smokers: when did you quit smoking?	At the age of ___ (please specify age)

General questions

Q60	What is your gender?	1 female 2 male 3 diverse
Q61	How old are you?	Age: xx years
Q62	How tall are you?	Height: xxx cm
Q63	How much do you weigh?	Body weight: xxx kg
Q64	What is your main occupation at present?	1 doctor for vascular surgery 2 doctors for diabetology 3 doctors for surgery 4 doctors for internal medicine 5 doctors from another specialisation: [free text]
Q65	Since when have you been working in this occupation?	Approximately since XXXX (year)
Q66	How many hours do you work on average per week (including overtime)?	XXX hours per week (continued from end 2)

End

End 1	Thank you for your interest in our study. If you decide to participate at a later date, simply follow the link again. https://LINK.
End 2	Thank you for participating in our study!