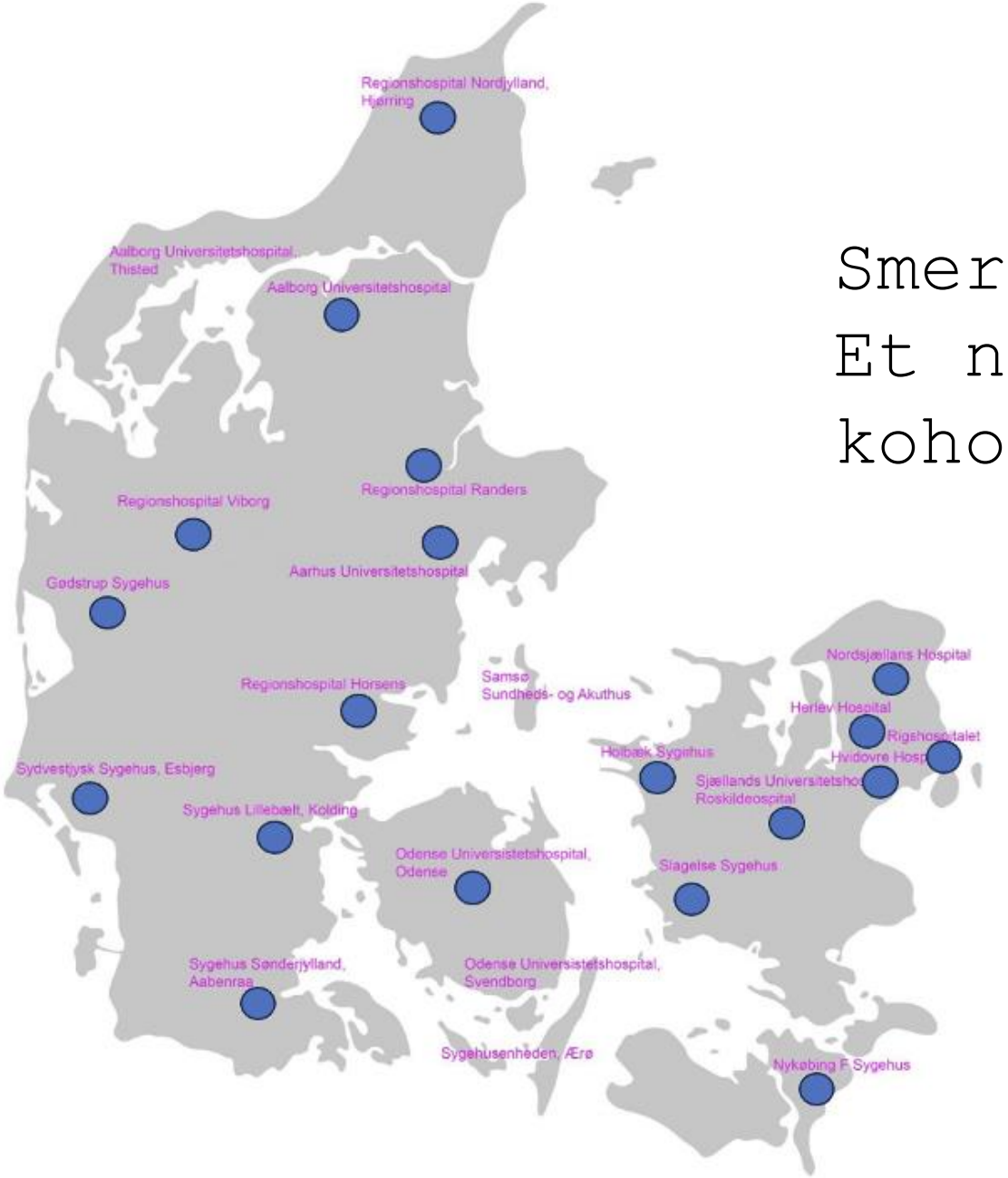


Smerter efter kejsersnit
Et nationalt prospektivt kohorte studie

Tværfagligt symposium, Roskilde 2025

Patricia Duch, Anæstesilæge,
Hillerød Hospital

Smerter efter kejsersnit
Et nationalt prospektivt kohorte studie

Patricia Duch, Anne Wikkelsø, Christoffer C Jørgensen, Stig Mølsted, Mette Andersson, Tine Brink, Andreas Burén, Liva Christensen, Megan Dale, Kim Ekelund, Julie Glavind, Deepti Jain, Joanna Kosz-Strusiewicz, Maria Kromann, Kim Lindelof, Johan Lund, Janne Lund-Olesen, Jon Sandberg, Nicole Schultz, Greta Skou, Julie Slavensky, Amalie Thiele-Nygaard, Neel Walløe, Kim Wildgaard, Hans C Østergaard, Janus C Jakobsen, Ole Mathiesen, Anders Nørskov, Helene Nedergaard

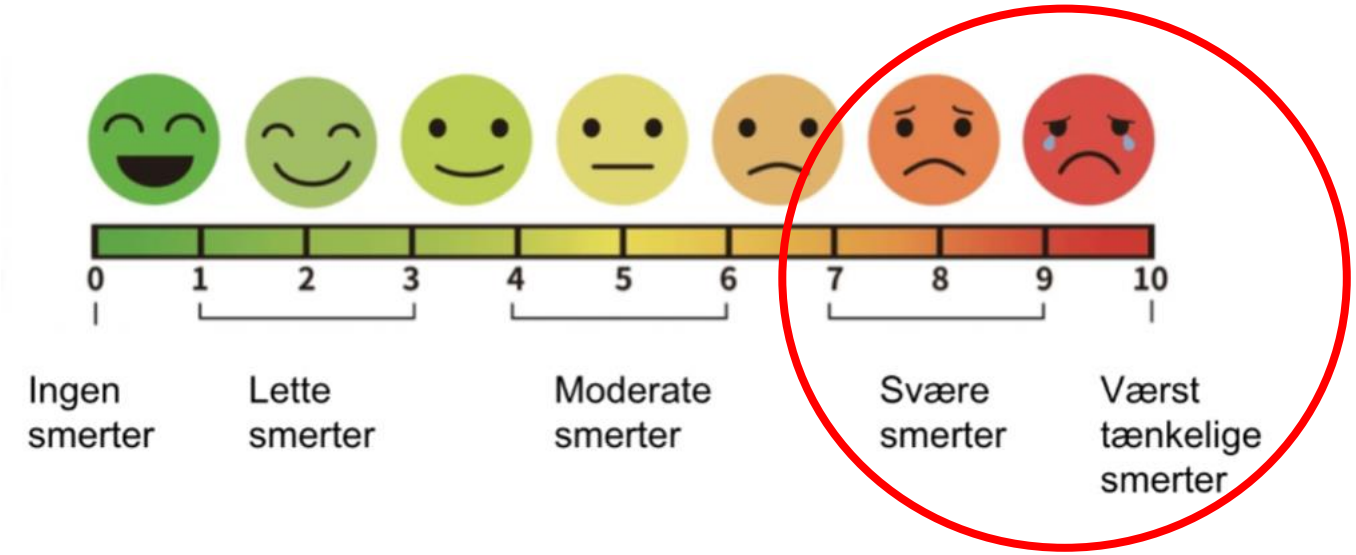
Baggrund

- Empiri
- Stort engelsk observationelt studie 2023: 50% har svære smerter i første døgn. (O'Carroll et al. 2023)
- Kraftige akutte smerter kan påvirke evnen til at tage sig af sig selv og sin nyfødte (Roofthooft et al. 2022)
- Mulig øget risiko for udvikling af kroniske smerter(Yimer et al. 2019)
- Pilot studie, 100 NOH patienter, 66% rapporterede svære smerter i det første døgn (Duch et al. 2024)

Formål

Hvordan har de danske kejsersnitspatienter det i tiden efter operationen?

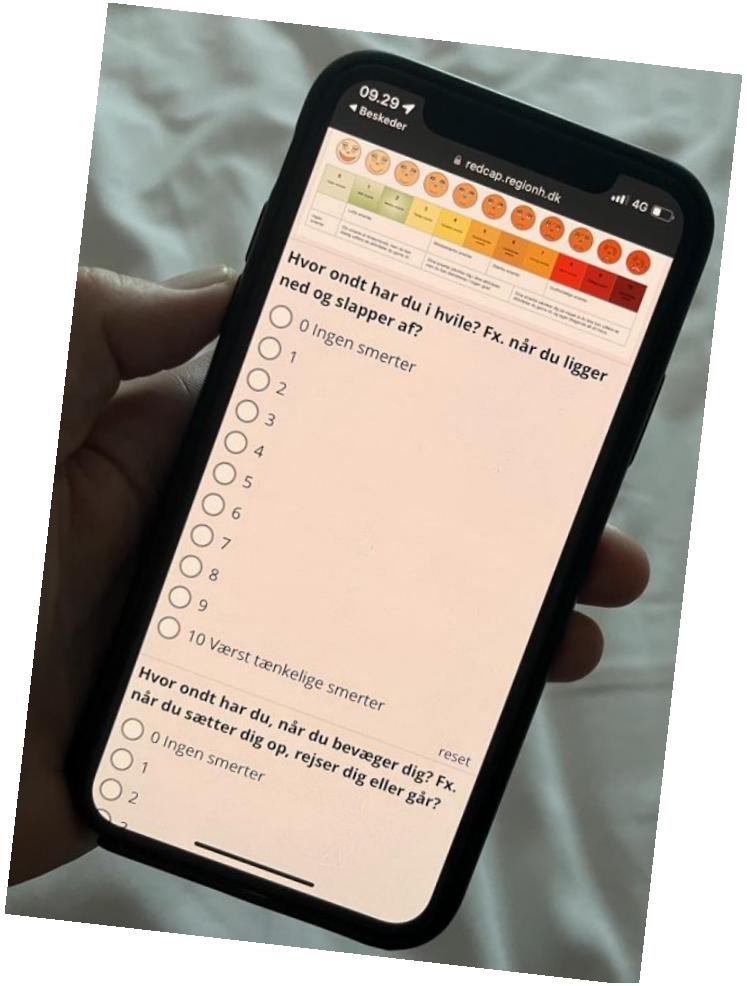
Oplever de også svære smerter (NRS ≥ 7)



Numeric Rating Scale (NRS) 0-10

Studie Metode

- Prospektivt observationelt kohortestudie
- Elektive kejsersnit i spinal bedøvelse fra alle danske fødehospitaler
- Patient rapporterede outcomes og journalopslag
- Outcomes: Smerter, opioid bivirkninger og recovery
- August 2023-Juni 2024



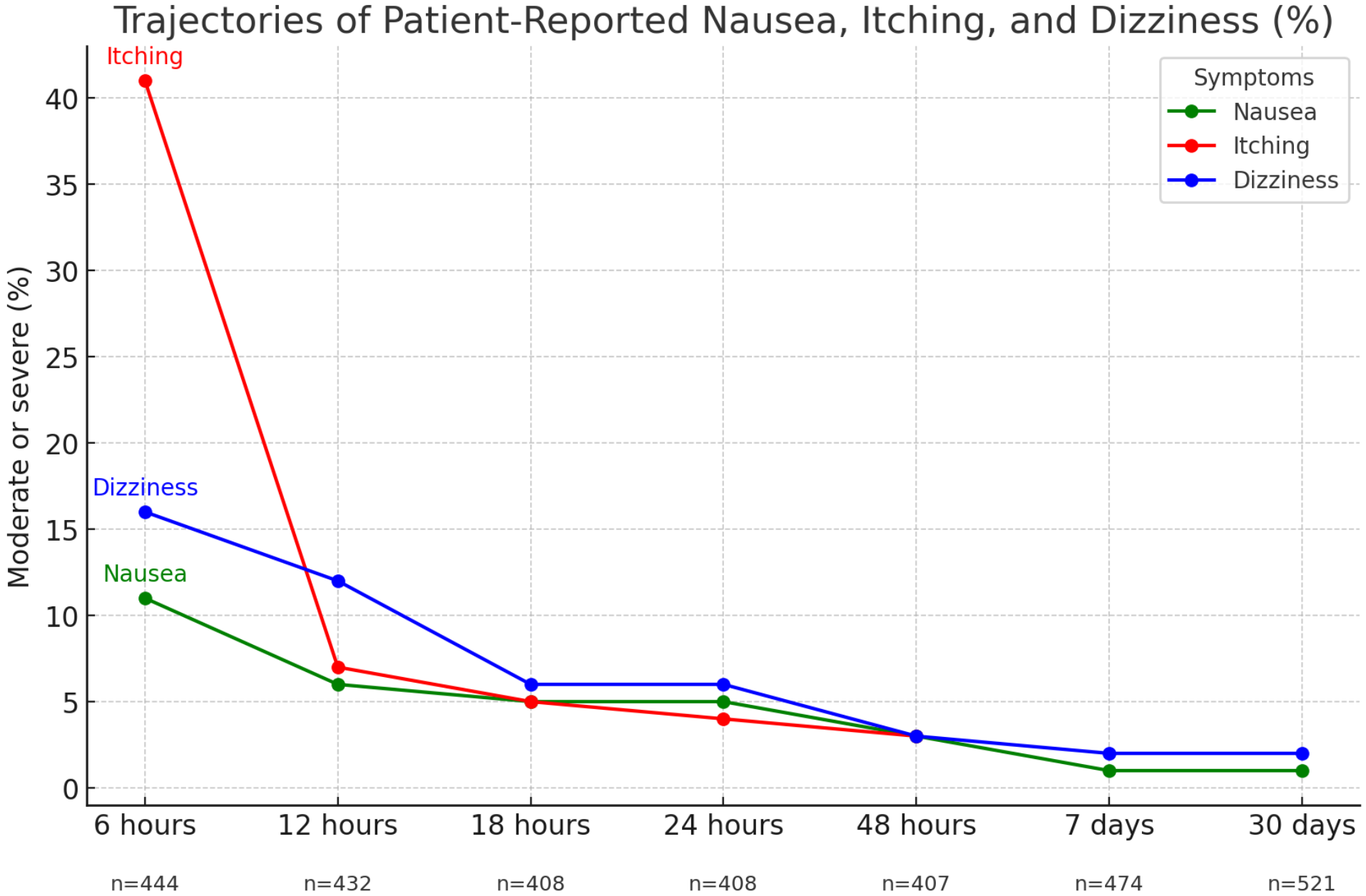
Tidsintervaller mellem spørgeskemaer udsendes som SMS

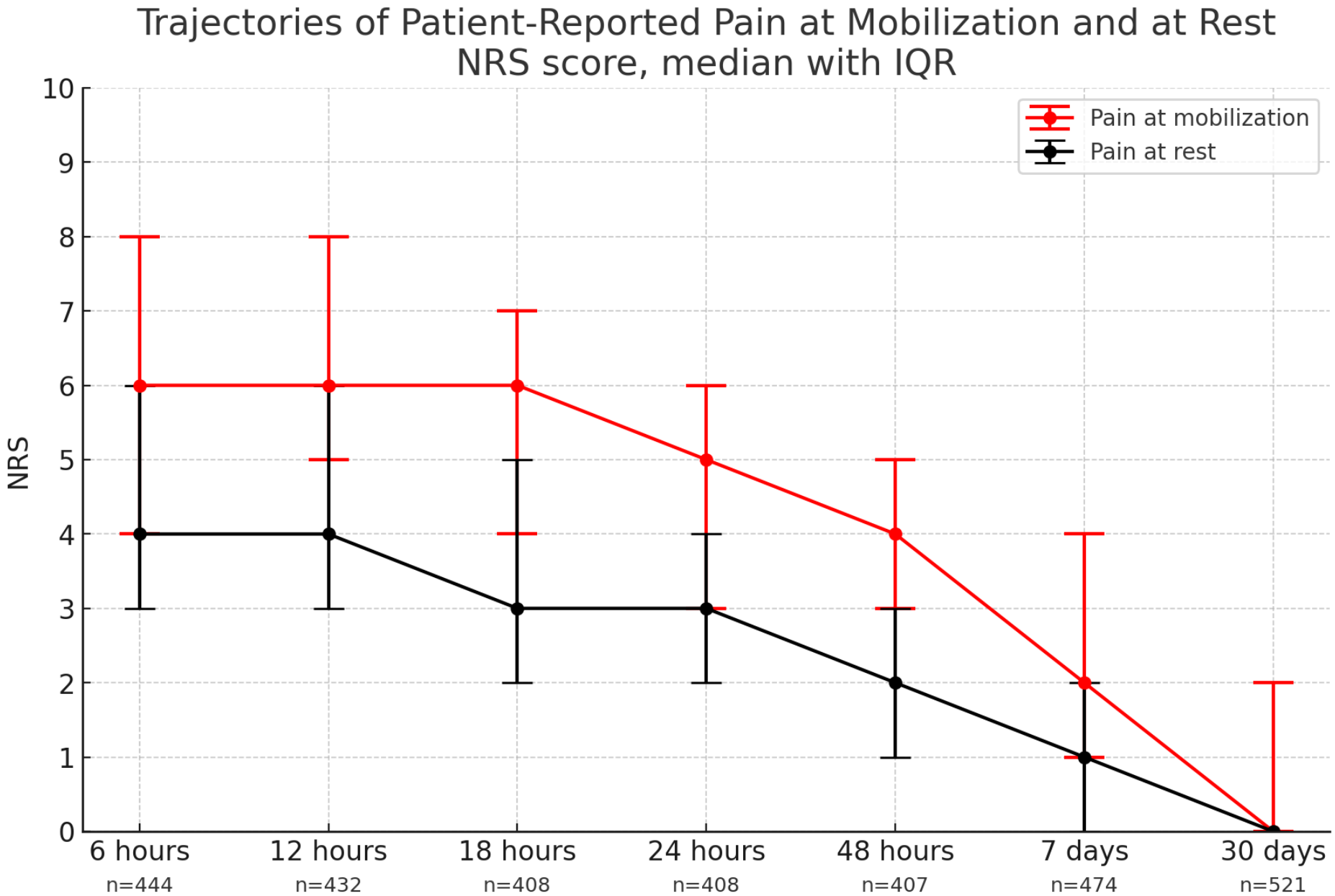
Cesarean Delivery → 6 hours → 12 hours → 18 hours → 24 hours → 48 hours → 7 days → 30 days

Table 1 Patient characteristics. Values are mean (SD), median (IQR [range]) or number (proportion)

	Caesarean Delivery n = 638
Age, years	33 (4.5)
BMI, kg/m^2	25 (22-30)
Number of previous caesarean deliveries	1 (0-1)
Surgery	
Duration of surgery, minutes	40 (32-52)
Peroperative bleeding, ml	450 (300-700)
Extorisation of uterus	249 (39%)

Ialt inkluderet 30% af alle de danske elektive sectio patienter/6 mdr.


Trajectories of Patient-Reported Nausea, Itching, and Dizziness (%)
Moderate or severe (%)
0
5
10
15
20
25
30
35
40
Itching
Dizziness
Nausea
Symptoms
Nausea
Itching
Dizziness
6 hours
12 hours
18 hours
24 hours
48 hours
7 days
30 days
n=444
n=432
n=408
n=408
n=407
n=474
n=521



NRS: Numeric Rating Scale (0-10). IQR: Interquartile range.

Det første døgn..

Pain or opioid related adverse effects anytime within 24 hours after caesarean delivery	
Severe pain (NRS ≥ 7)	334/568 (59%)
Shoulder pain	171/568 (30%)
Pruritus	198/568 (35%)
Nausea	90/568 (16%)
Dizziness	131/568 (23%)
Pruritus, Nausea, Dizziness	288/568 (51%)

Smertebehandling

Table 2 Pain management. Values are mean (SD), median (IQR [range]) or number (proportion)

	Caesarean Delivery n = 638
Anaesthesia	
Spinal anaesthesia	638 (100%)
With added intrathecal fentanyl/sufentanil	602 (94%)
+ intrathecal morphine (one site)	43 (7%)
Postoperative in-hospital pain management	
Scheduled paracetamol, NSAID, and opioids per request	638 (100%)
+ scheduled long-acting opioids (three sites)	88 (14%)
Opioid 0-24 hours post caesarean delivery, oral, mg.	30 (20-50)
Opioid 25-48 hours post caesarean delivery, oral, mg.	0 (0-15)
Scheduled truncal nerve block after caesarean delivery	43 (7%)

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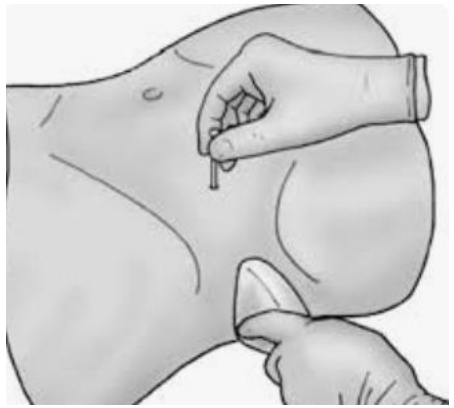

Analyses of subgroups with intrathecal morphine, truncal nerve blocks, or severe pain.
Values are median (IQR) or number (proportion) with 95% CI.

	value	n	p-value
Intrathecal morphine vs all patients without truncal nerve block			
Severe pain (NRS ≥ 7) within 24 hours			
+ Intrathecal morphine	55% (51-59)	40	0.631
% Intrathecal morphine	59% (55-63)	489	
Opioids, mg (oral morphine equivalent)			
+ Intrathecal morphine	0 (0-17.5)	40	< 0.001
% Intrathecal morphine	40 (20-50)	489	
Truncal nerve block vs all patients without intrathecal morphine			
Severe pain (NRS ≥ 7) within 24 hours			
+ Truncal nerve block	62% (58-66)	39	0.747
% Truncal nerve block	59% (55-63)	489	
Opioids, mg (oral morphine equivalent)			
+ Truncal nerve block	10 (0-20)	39	< 0.001
% Truncal nerve block	40 (20-50)	489	
Severe pain			
Opioids, mg (oral morphine equivalent)			
+ Severe pain (NRS ≥ 7) within 24 hours	39 (20-50)	334	< 0.001
% Severe pain (NRS ≥ 7) within 24 hours	30 (10-40)	234	

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Opioid og smerter..

- Overraskende høje smertescorer
- Ikke så højt opioid forbrug

Nuværende smertebehandling : Fast PCM, NSAID og PN morfin

Konklusion

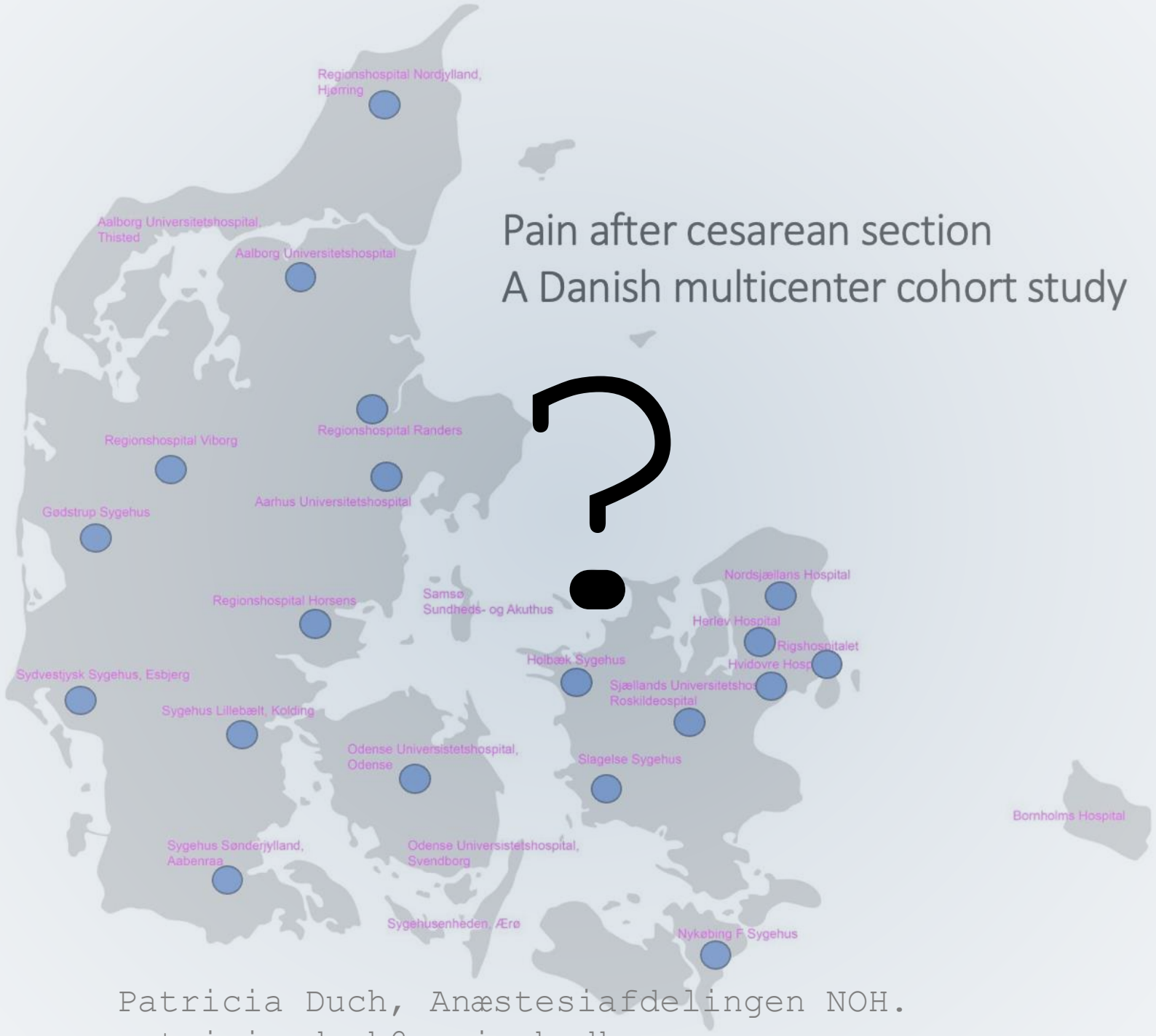
- 59% af de danske kejsersnitspatienter oplever svære smerter (NRS ≥ 7) i det første døgn
- Smerterne er kraftigst de første 12 timer og aftager markant i løbet af det første døgn
- Truncale nerveblokader og intratekal morfin sænker opioid forbruget, men ændrer ikke forekomsten af svære smerter i det første døgn.
- Bivirkninger i det første døgn: Kvalme (16%), svimmelhed (23%) og kløe (50%)
- Bivirkningerne er kraftigst i de første 12 timer

Fremadrettet

- Fokus på smertelindring, undgå severe pain
- Subanalyser for risikofaktorer for smerter
- Vi fortsætter med at følge kohorten mhp udviklingen af kroniske smerter
- Internationale guidelines anbefaler intratekal morfin til sectio-spinal
  - Den smertestillende effekt er dog ikke særlig velundersøgt ift øgning af bivirkninger.
- RCT med intratekal morfin (MOTHER). ærtescorer og opiod-bivirkninger

CEPRA

Pain after cesarean section
A Danish multicenter cohort study



Patricia Duch, Anæstesiafdelingen NOH.
patricia.duch@regionh.dk