



DLCG Årsmøde 2019

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PhD studerende, 1. reservelæge

Onkologisk afdeling
Hospitalsenheden Vest Herning



DLCG



Hospitalsenheden Vest

PRO?

“any report of the status of a patient's health condition that comes directly from the patient, without interpretation of the patient's response by a clinician or anyone else.”

Passiv PRO

Forskning

Kvalitetssikring

Aktiv PRO

Beslutningsstøtte

Dialogstøtte

Patient-involvering

Behovsstyret opfølgning

Symptommonitorering

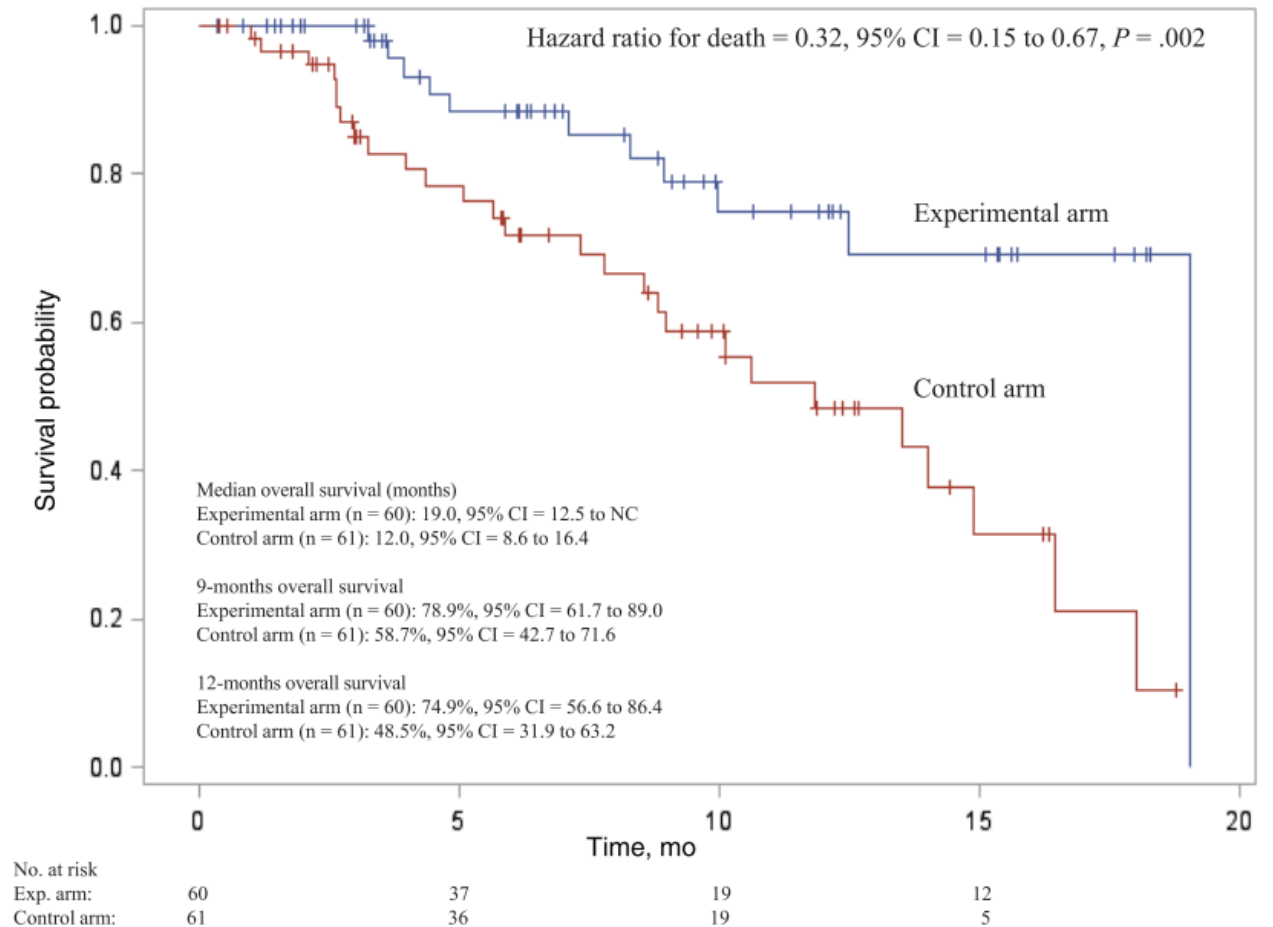
Denis et al 2017

1 års OS 74.9 v 48.5% (p=0.002)

Hazard ratio = 0.32,
(95% CI 0.15-0.67, p=.002)

PS 0-1

75.9% vs 32.5% (p < 0.001)



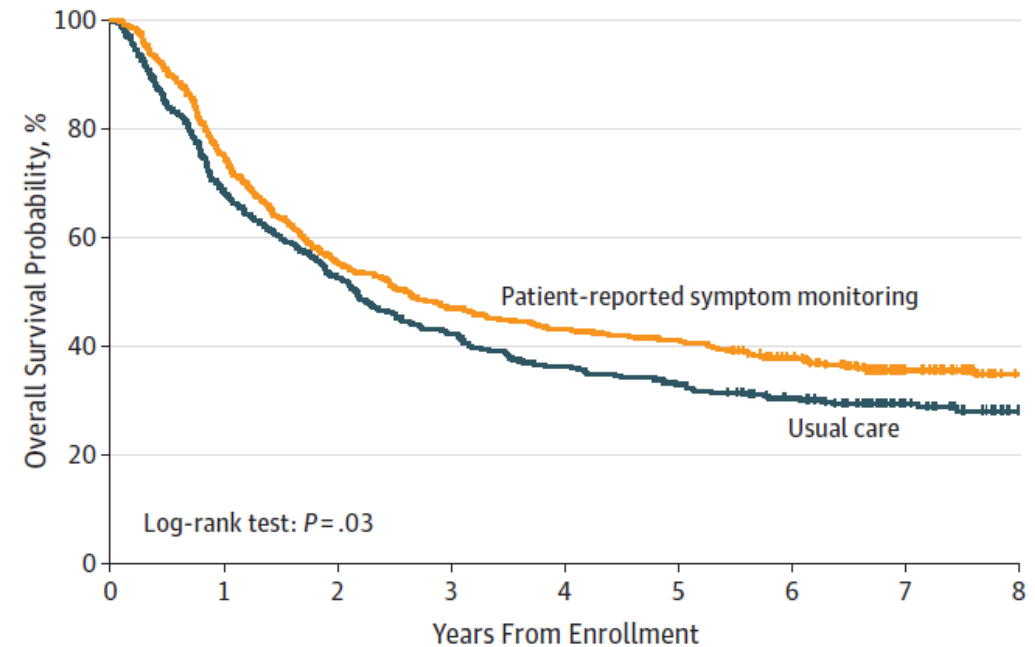
Denis et al, J Natl Cancer Inst, 2017

Basch et, 2017

1 års OS: 75% v 69% (P = .05)

Hazard ratio,

0.83 (95% CI, 0.70-0.99; $P = .04$)



No. at risk									
Patient-reported symptom monitoring	441	331	244	207	190	181	148	65	33
Usual care	325	223	171	137	118	107	89	50	27

Forklaringer på overlevelsesgevinsten

- Tidlig opsporing og behandling af progression og komplikationer
- Beslutningsstøtte
- Patient-uddannelse
- OBS mere behandling

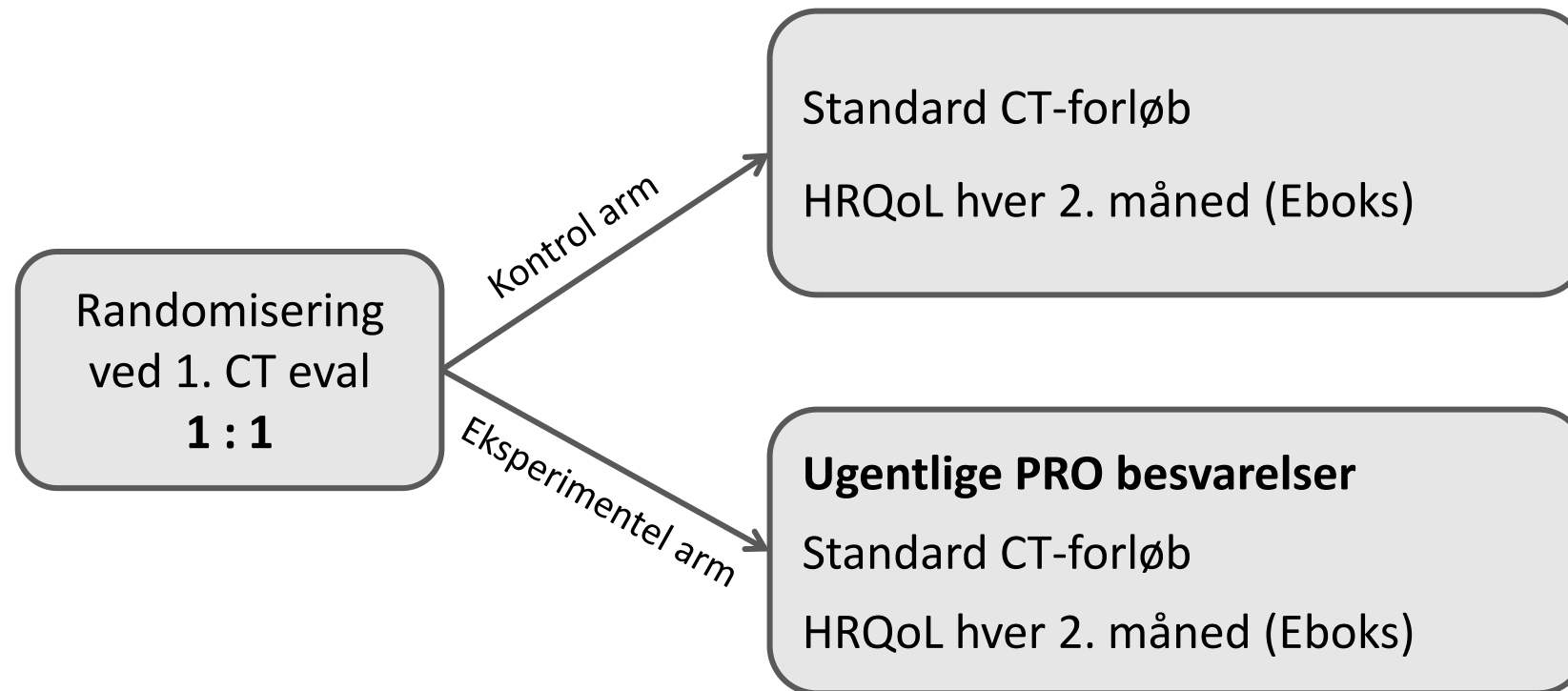


Patient **R**eported **O**utcomes used for **W**eekly **I**nternet-based **D**Etection of progressive disease in lung cancer; a randomized controlled trial

Formål:

- Kan ugentlige PRO besvarelser forlænge overlevelsen for patienter med metastatisk lungecancer i DK?

Lodtræknings-studie



Inklusionskriterier

1. Lunge cancer NSCLC og SCLC, 1. linje
2. Stadium III_{pal}/IV
3. ≥ 18 år
4. $PS \leq 2$
5. Non-progressiv sygdom på 1. eval. CT scan
6. Internet, E-boks, mobiltelefon

Vedligeholdelsesbehandling accepteres

Endpoints

Primary endpoint:

- Overall survival

Secondary endpoints:

- Performance status ved progression
- Progressionsfri overlevelse
- HRQoL
- Andel af patienter, der får medicinsk 2. linjebehandling

Ugentligt spørgeskema ProWide.dk

I den forløbne uge:

Havde du åndenød? ☒ Slet ikke ☐ Lidt ☐ En del ☐ Meget

Har du haft smerter? ☐ Slet ikke ☒ Lidt ☐ En del ☐ Meget

Var du træt? ☐ Slet ikke ☐ Lidt ☒ En del ☐ Meget

Har du savnet appetit? ☐ Slet ikke ☒ Lidt ☐ En del ☐ Meget

Hvor meget har du hostet? ☒ Slet ikke ☐ Lidt ☐ En del ☐ Meget

Har du hostet ☐ Slet ☒ Lidt ☐ En ☐ Meget

Algoritme tærskel

Automatisk genereret daglig patientliste

GRA=non-respons Antal på liste = 2

Søg:

CPR	Navn	Oprettet	Sidst sendt	Sidst svar	Næste send
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		2018-06-04	0000-00-00	2018-06-11	0000-00-00

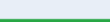
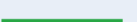
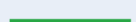
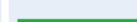
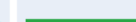
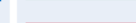
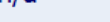
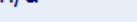
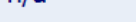
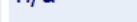
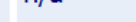
Visualisering af fortløbende besvarelser

Gå til lister

		HISTORIK	VISITATION	STAMDATA	VIS BESVARELSE	SKIFT Ambul
		•On 06 jun 18	•On 13 jun 18		•On 20 jun 18	•On 27 jun 18
Symptomer	Samlet helbred	7	6		6	5
	Åndenød	1	1		1	1
	Smerter	1	1		1	1
	Træthed	2	2		2	2
	Savnet appetit	1	2		2	2
	Hostet	1	2		2	2
	Hostet blod	1	1		2	2
	Hæshed	n/a	n/a		n/a	n/a
	Hævelse ansigt	n/a			n/a	n/a
	Knude	2	2		2	2
Andre symptomer	Ikke besvaret..	Ikke besvaret..		- Formentelig sk..	Ikke besvaret..	
Målinger	Temperatur	n/a	n/a		n/a	n/a
	Vægt	Antal kg: 76	Antal kg: 76		Antal kg: 75	Antal kg: 76
	Vægtændring	n/a	Kg ift første vægt: 0		Kg ift første vægt: -1	Kg ift første vægt: 0

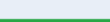
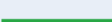
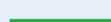
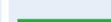
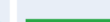
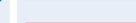
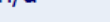
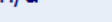
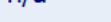
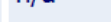


Visuel præsentation

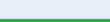
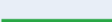
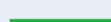
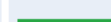
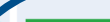
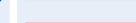
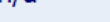
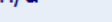
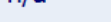
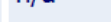
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Symptomer	Samlet helbred	 3	 4	 4	 4	 4
	Åndenød	 3	 3	 2	 2	 2
	Smerter	 3	 2	 2	 2	 2
	Træthed	 3	 3	 3	 3	 3
	Savnet appetit	 1	 1	 1	 1	 1
	Hostet	 2	 2	 2	 2	 2
	Hostet blod	 1	 1	 1	 1	 2
	Hæshed	n/a	n/a	n/a	n/a	n/a
	Hævelse ansigt	n/a	n/a	n/a	n/a	n/a
	Knude	 2	 2	 2	 2	 2
	Andre symptomer	n/a	n/a	n/a	- meget på toile..	- søndag og mand..
Målinger	Temperatur	n/a	n/a	n/a	n/a	n/a
	Vægt	Antal kg: 86	Antal kg: 86	Antal kg: 86	Antal kg: 86.5	Antal kg: 86
	Vægtændring	Kg ift første vægt: -1	Kg ift første vægt: -1	Kg ift første vægt: -1	Kg ift første vægt: -0.5	Kg ift første vægt: -1

Visuel præsentation

Pneumoni

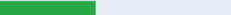
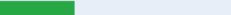
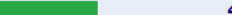
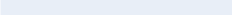
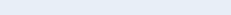
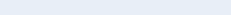
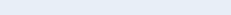
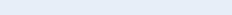
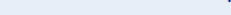
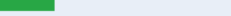
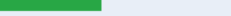
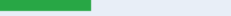
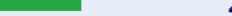
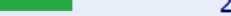
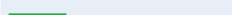
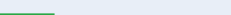
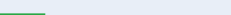
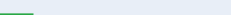
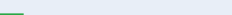
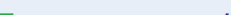
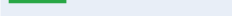
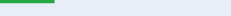
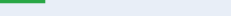
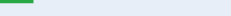
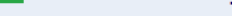
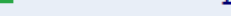
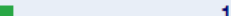
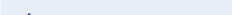
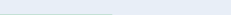
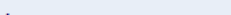
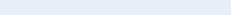
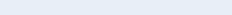
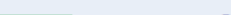
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	Åndenød	 3	 3	 2	 2	 2
	Smerter	 3	 2	 2	 2	 2
	Træthed	 3	 3	 3	 3	 3
	Savnet appetit	 1	 1	 1	 1	 1
	Hostet	 2	 2	 2	 2	 2
	Hostet blod	 1	 1	 1	 1	 2
	Hæshed	n/a	n/a	n/a	n/a	n/a
	Hævelse ansigt	n/a	n/a	n/a	n/a	n/a
	Knude	 2	 2	 2	 2	 2
	Andre symptomer	n/a	n/a	n/a	- meget på toile..	- søndag og mand..
Målinger	Temperatur	n/a	n/a	n/a	n/a	n/a
	Vægt	Antal kg: 86	Antal kg: 86	Antal kg: 86	Antal kg: 86.5	Antal kg: 86
	Vægtændring	Kg ift første vægt: -1	Kg ift første vægt: -1	Kg ift første vægt: -1	Kg ift første vægt: -0.5	Kg ift første vægt: -1

Visuel præsentation

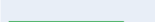
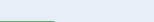
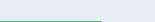
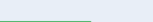
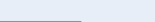
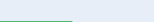
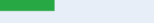
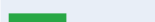
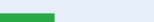
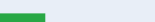
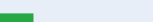
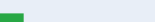
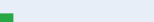
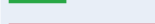
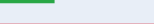
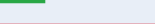
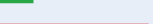
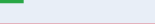
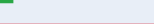
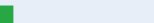
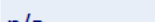
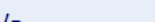
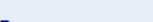
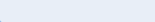
Vis fra dato.. ▾		●●Fr 26 okt 18	●Fr 02 nov 18	●Sø 11 nov 18	●●To 15 nov 18	●●To 22 nov 18
Symptomer	Samlet helbred	 3	 4	 4	 4	 4
	Åndenød	 3	 3	 2	 2	 2
	Smerter	 3	 2	 2	 2	 2
	Træthed	 3	 3	 3	 3	 3
	Savnet appetit	 1	 1	 1	 1	 1
	Hostet	 2	 2	 2	 2	 2
	Hostet blod	 1	 1	 1	 1	 2
	Hæshed	n/a	n/a	n/a	n/a	n/a
	Hævelse ansigt	n/a	n/a	n/a	n/a	n/a
	Knude	 2	 2	 2	 2	 2
	Andre symptomer	n/a	n/a	n/a	- meget på toile..	- søndag og mand..
Målinger	Temperatur	n/a	n/a	n/a	n/a	n/a
	Vægt	Antal kg: 86	Antal kg: 86	Antal kg: 86	Antal kg: 86.5	Antal kg: 86
	Vægtændring	Kg ift første vægt: -1	Kg ift første vægt: -1	Kg ift første vægt: -1	Kg ift første vægt: -0.5	Kg ift første vægt: -1

Progression

Algoritmen er ikke perfekt

Vis fra dato.. ▾		••Ti 29 jan 19	•Ti 05 feb 19	••Ti 12 feb 19	•Ti 19 feb 19	••Ti 26 feb 19	••Ti 05 mar 19
Symptomer	Samlet helbred	 4	 5	 3	 5	 4	 3
	Åndenød	 4	 3	 4	 3	 4	 4
	Smerter	 2	 1	 2	 2	 2	 2
	Træthed	 4	 4	 4	 4	 3	 4
	Savnet appetit	 1	 1	 1	 1	 1	 1
	Hostet	 4	 3	 3	 3	 4	 4
	Hostet blod	 1	 1	 1	 1	 1	 1
	Hæshed	n/a	 2	n/a	n/a	n/a	 2
	Hævelse ansigt	n/a	n/a	n/a	n/a	n/a	 2
	Knude	 3	 3	 3	 3	 3	 3
	Andre symptomer	n/a	n/a	n/a	n/a	n/a	- jeg får predis..
Målinger	Temperatur	n/a	n/a	n/a	n/a	n/a	n/a
	Vægt	Antal kg: 69	Antal kg: 69	Antal kg: 69	Antal kg: 69	Antal kg: 70	Antal kg: 70
	Vægtændring	Kg ift første vægt: 0	Kg ift første vægt: 0	Kg ift første vægt: 0	Kg ift første vægt: 0	Kg ift første vægt: 1	Kg ift første vægt: 1

Algoritmen er ikke perfekt

Vis fra dato.. ▾		••Ti 29 jan 19	•Ti 05 feb 19	••Ti 12 feb 19	•Ti 19 feb 19	••Ti 26 feb 19	••Ti 05 mar 19
Symptomer	Samlet helbred	 4	 5	 3	 5	 4	 3
	Åndenød	 4	 3	 4	 3	 4	 4
	Smerter	 2	 1	 2	 2	 2	 2
	Træthed	 4	 4	 4	 4	 3	 4
	Savnet appetit	 1	 1	 1	 1	 1	 1
	Hostet	 4	 3	 3	 3	 4	 4
	Hostet blod	 1	 1	 1	 1	 1	 1
	Hæshed	n/a	 2	n/a	n/a	n/a	 2
	Hævelse ansigt	n/a	n/a	n/a	n/a	n/a	 2
	Knude	 3	 3	 3	 3	 3	 3
	Andre symptomer	n/a	n/a	n/a	n/a	n/a	- jeg får predis..
Målinger	Temperatur	n/a	n/a	n/a	n/a	n/a	n/a
	Vægt	Antal kg: 69	Antal kg: 69	Antal kg: 69	Antal kg: 69	Antal kg: 70	Antal kg: 70
	Vægtændring	Kg ift første vægt: 0	Kg ift første vægt: 0	Kg ift første vægt: 0	Kg ift første vægt: 0	Kg ift første vægt: 1	Kg ift første vægt: 1

Progression

Status

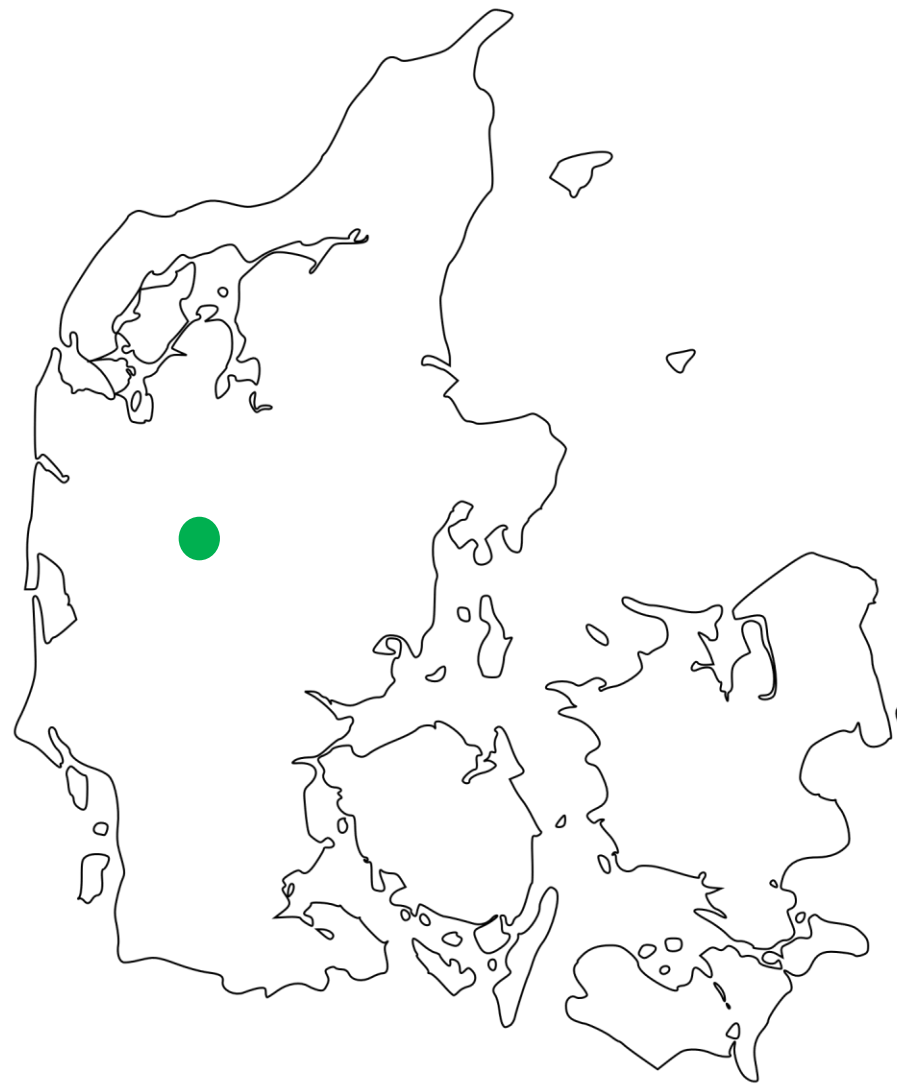
Status



Status

- **Herning:**

Sept. 2018

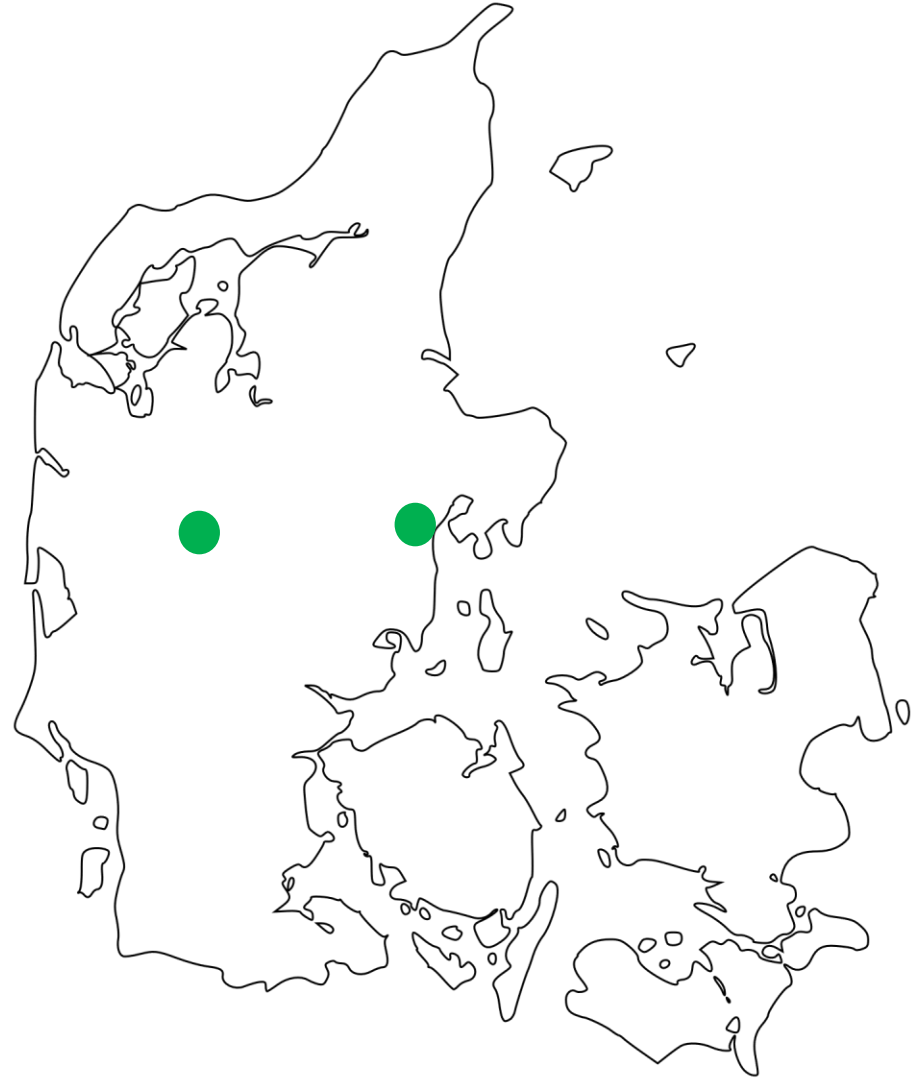


Status

- **Herning:**
- **Aarhus**

Sept. 2018

December 2018



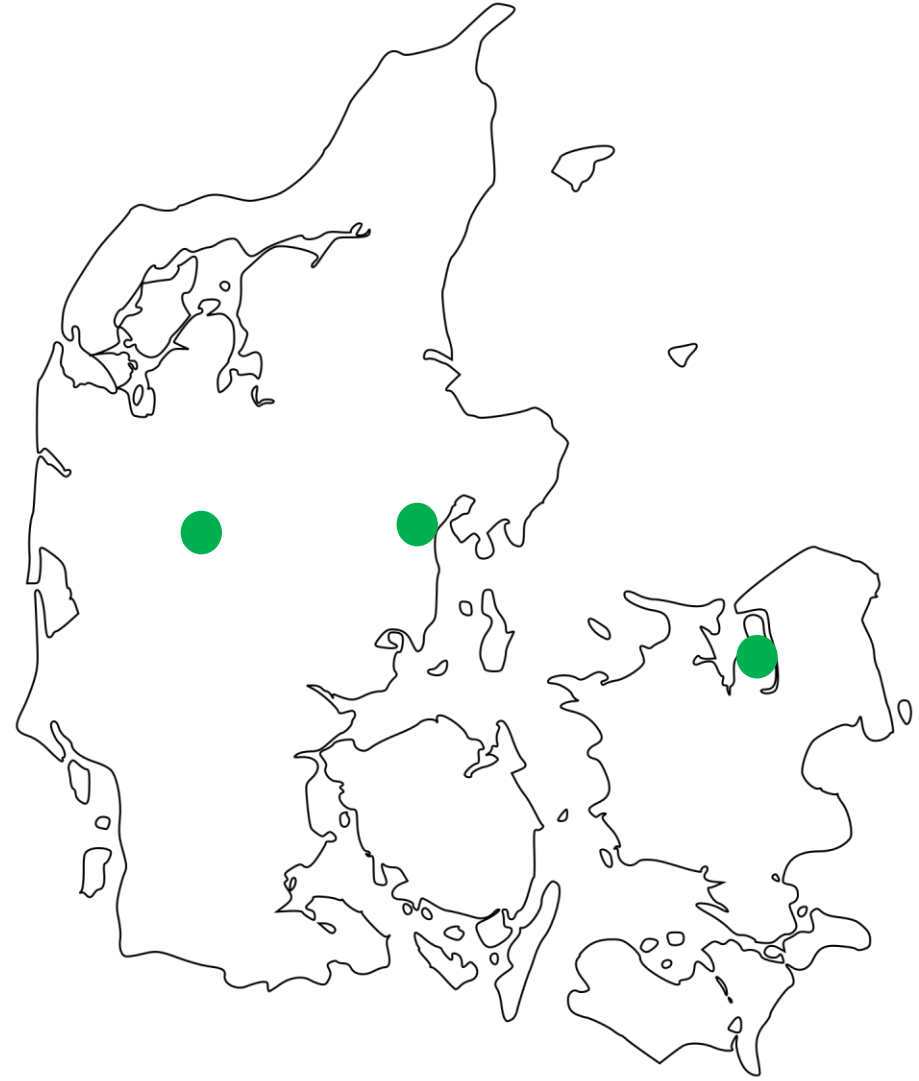
Status

- **Herning:**
- **Aarhus**
- **Hillerød**

Sept. 2018

December 2018

December 2018



Status

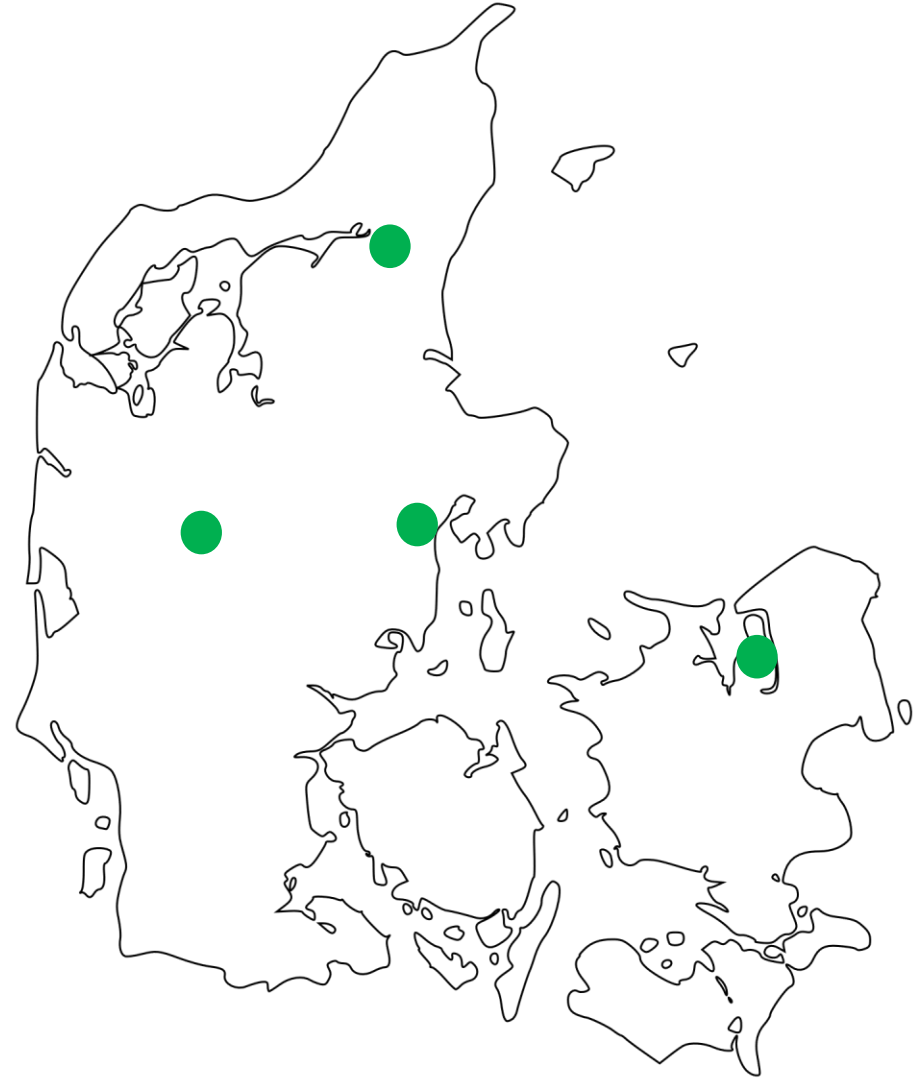
- **Herning:**
- **Aarhus**
- **Hillerød**
- **Aalborg**

Sept. 2018

December 2018

December 2018

Januar 2019



Status

- **Herning:**
- **Aarhus**
- **Hillerød**
- **Aalborg**
- **Herlev**

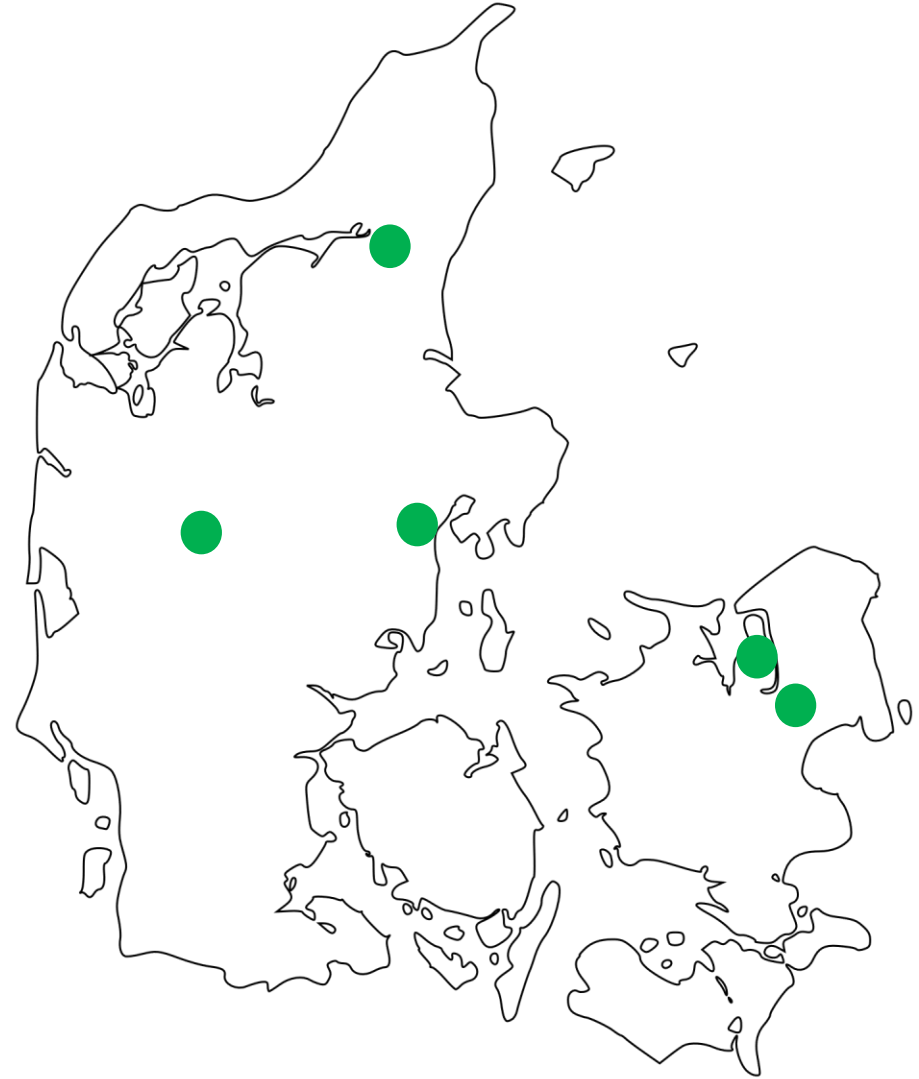
Sept. 2018

December 2018

December 2018

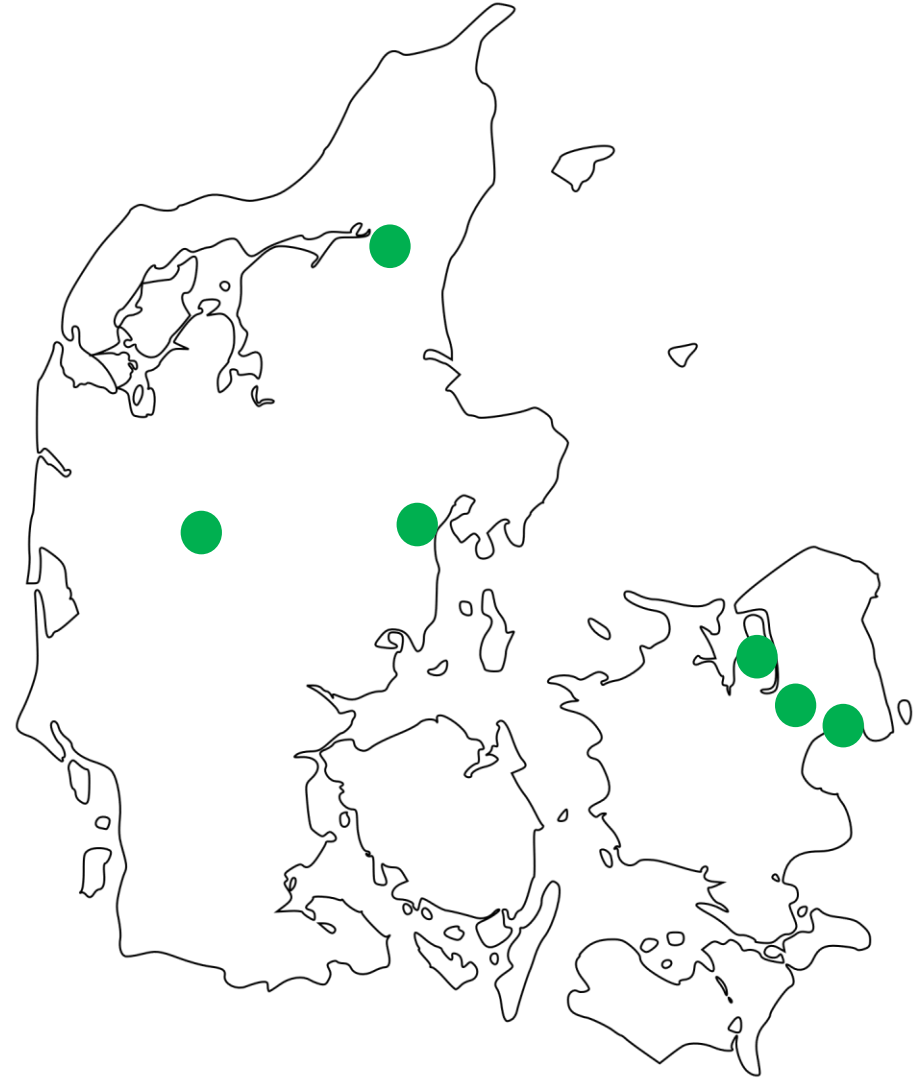
Januar 2019

Marts 2019



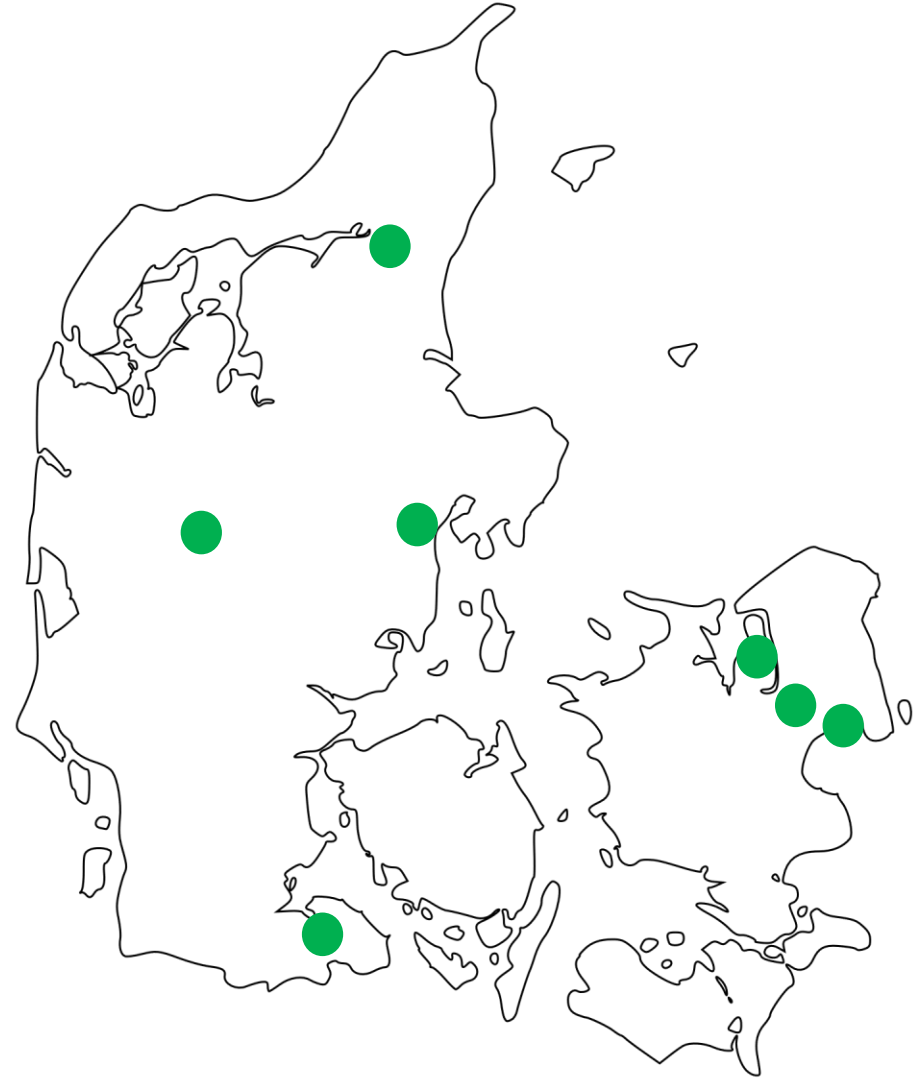
Status

- **Herning:** **Sept. 2018**
- **Aarhus** **December 2018**
- **Hillerød** **December 2018**
- **Aalborg** **Januar 2019**
- **Herlev** **Marts 2019**
- **Rigshospitalet** **April 2019**



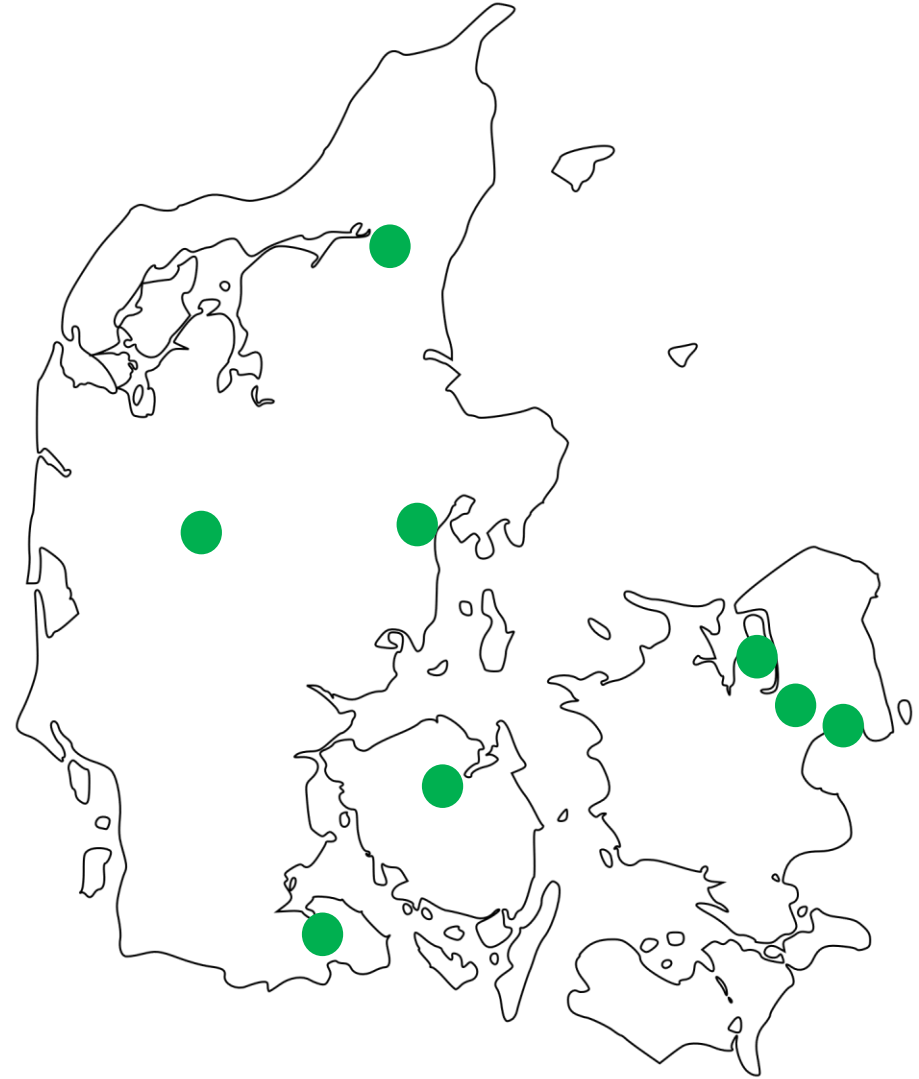
Status

- | | |
|------------------|----------------------|
| • Herning: | Sept. 2018 |
| • Aarhus | December 2018 |
| • Hillerød | December 2018 |
| • Aalborg | Januar 2019 |
| • Herlev | Marts 2019 |
| • Rigshospitalet | April 2019 |
| • Sønderborg | August 2019 |

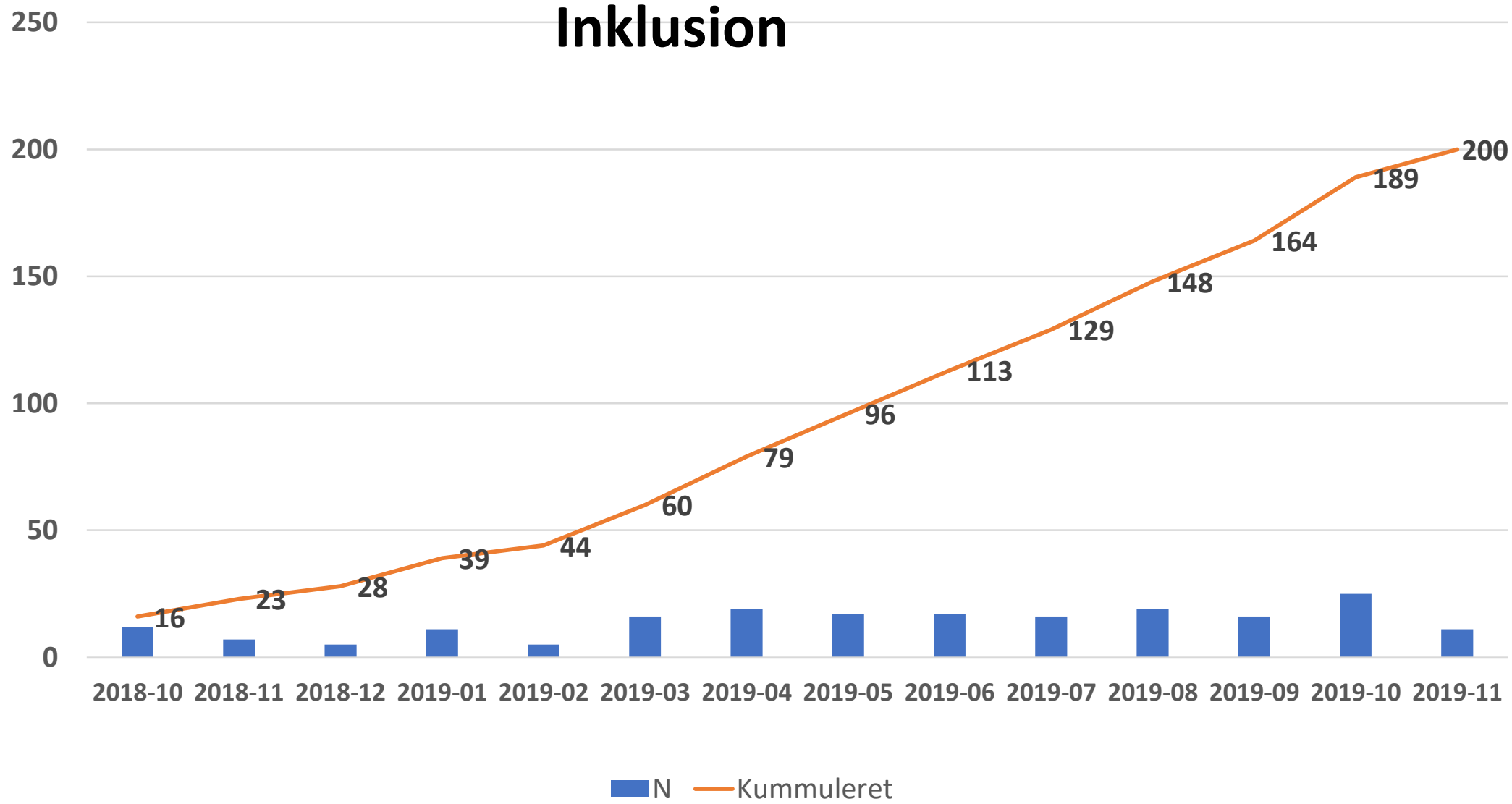


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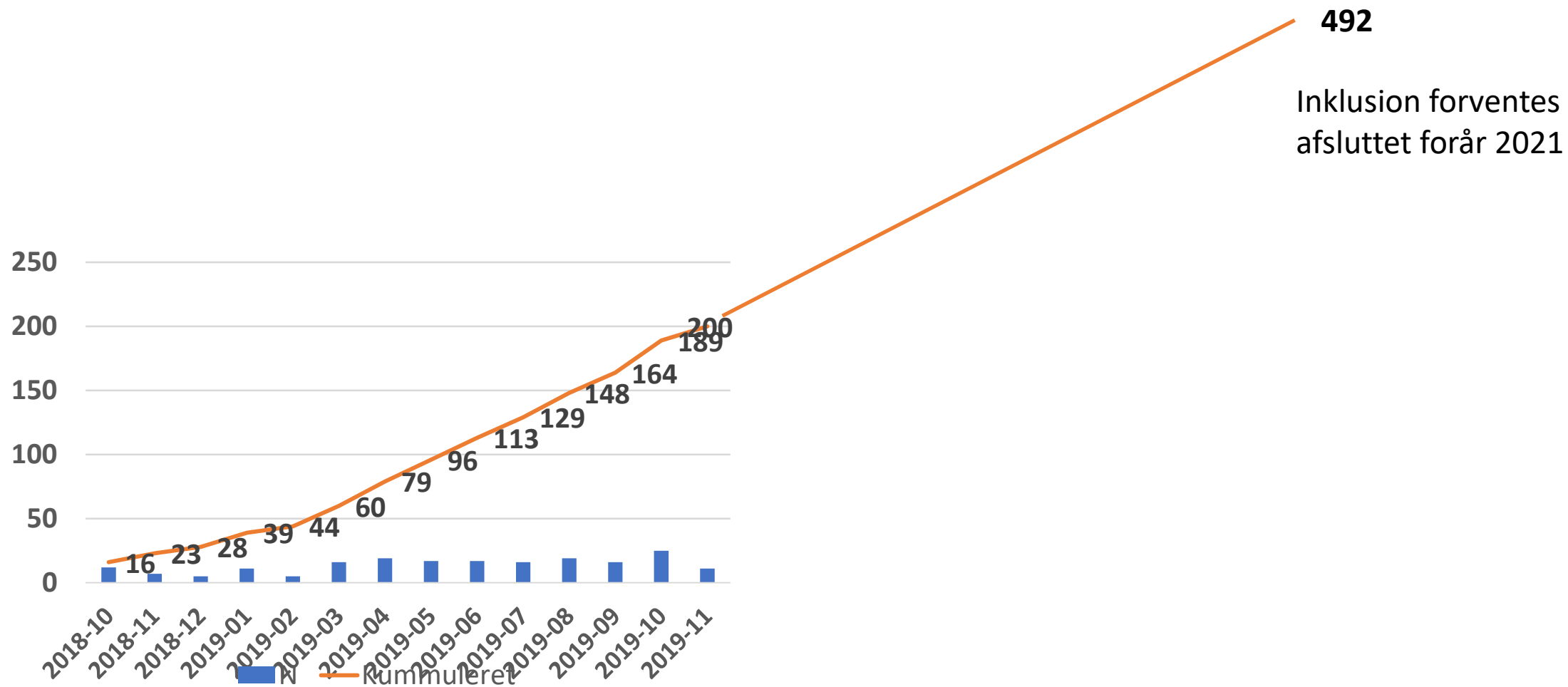
• Herning:	Sept. 2018
• Aarhus	December 2018
• Hillerød	December 2018
• Aalborg	Januar 2019
• Herlev	Marts 2019
• Rigshospitalet	April 2019
• Sønderborg	August 2019
• Odense	August 2019



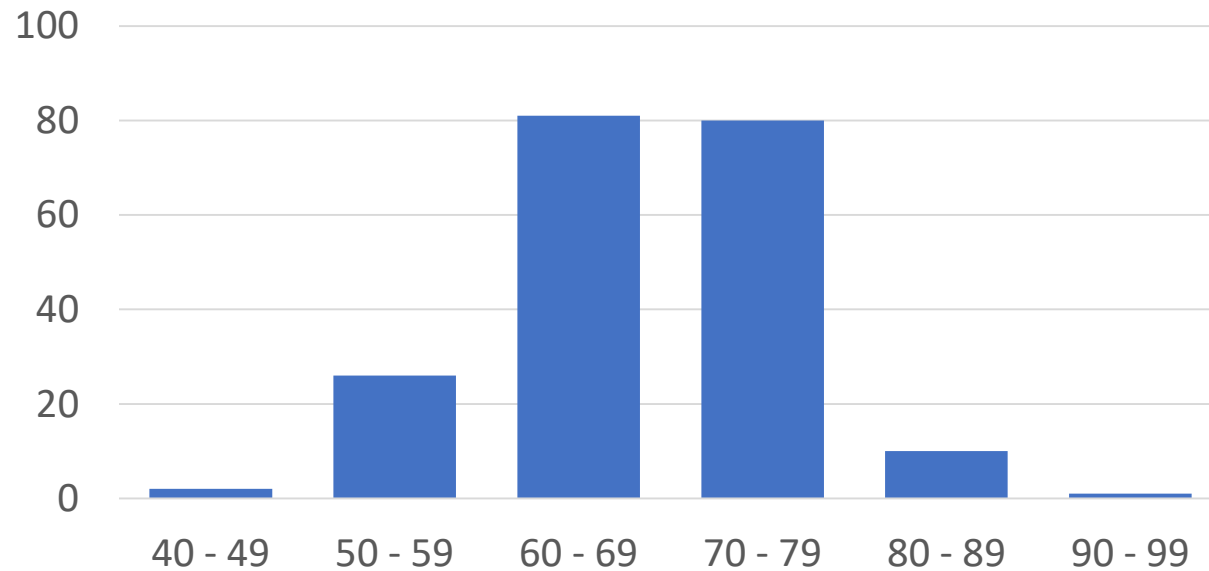
Inklusion



Inklusion



Aldersfordeling



Randomiseringsarm

Indsats: 92

Kontrol: 108

Totalt 200

Aktive patienter: 132

Kønsfordeling

Mænd: 102

Kvinder: 98

Algoritmen

1. Algoritmebeslutning

	Svar
GRØN	776
RØD	583
I alt	1350

2. Klinisk beslutning

	Svar
Ikke taget kontakt	357
Overflødigt opkald	76
Problem løst	115
Progressionsmistanke	14
Andet	60
I alt	622

Telefonopkald udføres ved 20 % af besvarelsene

5 % af alle telefonopkald giver mistanke om progression

Compliance

Ugentlige besvarelses, compliance

82 patienter i indsatsarmen

4 patienter har fortrudt deltagelse inden 1. besvarelse

17 har efter eget ønsket afslutning

Compliance (svar/forventet): 95-100 pct / uge

Ugentlige besvarelser, compliance

82 patienter i indsatsarmen

4 patienter har fortrudt deltagelse inden 1. besvarelse

17 har efter eget ønsket afslutning

Compliance (svar/forventet): 95-100 pct / uge

Livskvalitetsmålinger (eboks)

Compliance: ca. 90 % ved baseline

=> Herefter faldende

PRO og lungecancer i Danmark i fremtiden

- Beslutningsstøtte?
- Algoritmebeslutninger?
- Forskning?
- Kvalitetssikring?
- (Reduceret antal scanninger?)

PRO og lungecancer i Danmark i fremtiden

- Beslutningsstøtte?
- Algoritmebeslutninger?
- Forskning?
- Kvalitetssikring?
- (Reduceret antal scanninger?)

OBS

- Aktiv anvendelse af PRO har konsekvenser for organisationen
- Implementeringsprocessen undervurderes
- Hvad er formålet?

Spørgsmål?

Rasmus Blechingberg Friis

rasfri@rm.dk



Hospitalsenheden Vest



DLCG



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