

Tuusula, Finland November 2025

Dynamics of udder health key performance indicators

– a national perspective 2017-2024

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STØTTET AF

Mælkeafgiftsfonden

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Seges Innovation – an independent research and innovation company which works for sustainable and competitive agriculture and food production.

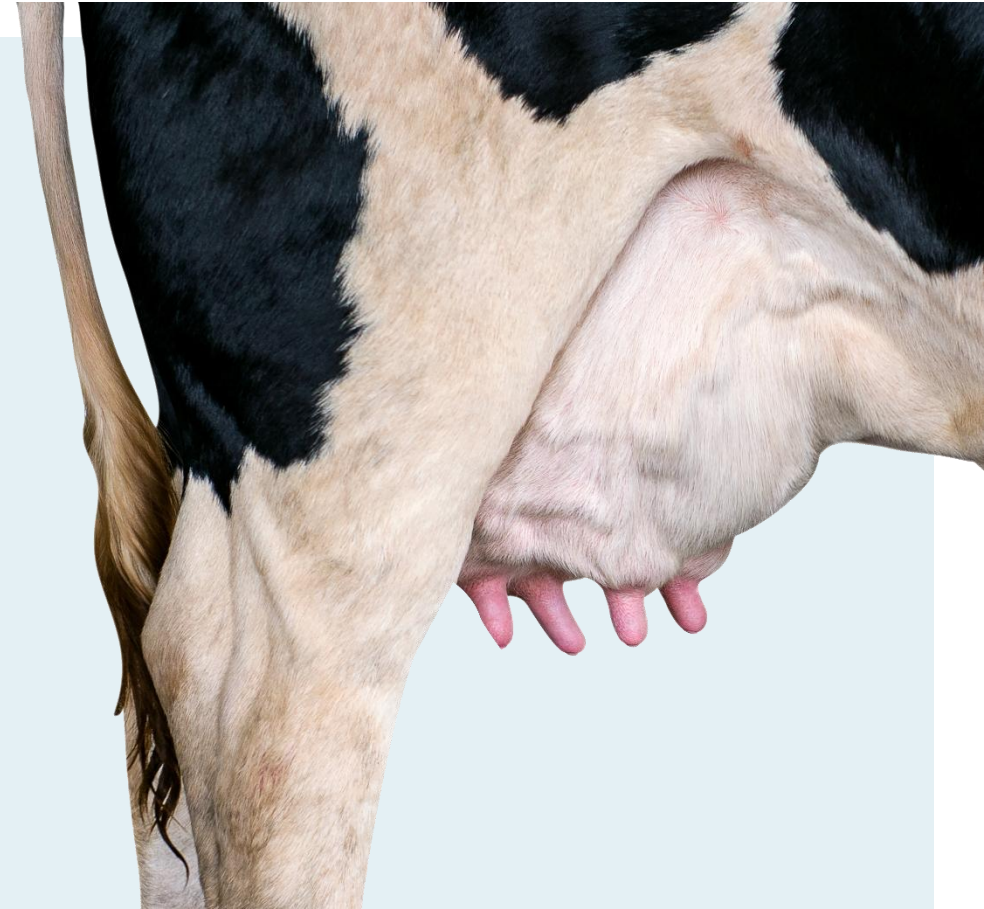
Same status in funding-legislation as universities.

Established more than 50 years ago.

More than 500 employees

This is what we are going to share

- Key performance indicators in milk quality
- Victories and remaining battle fields...
- Invitations to join us

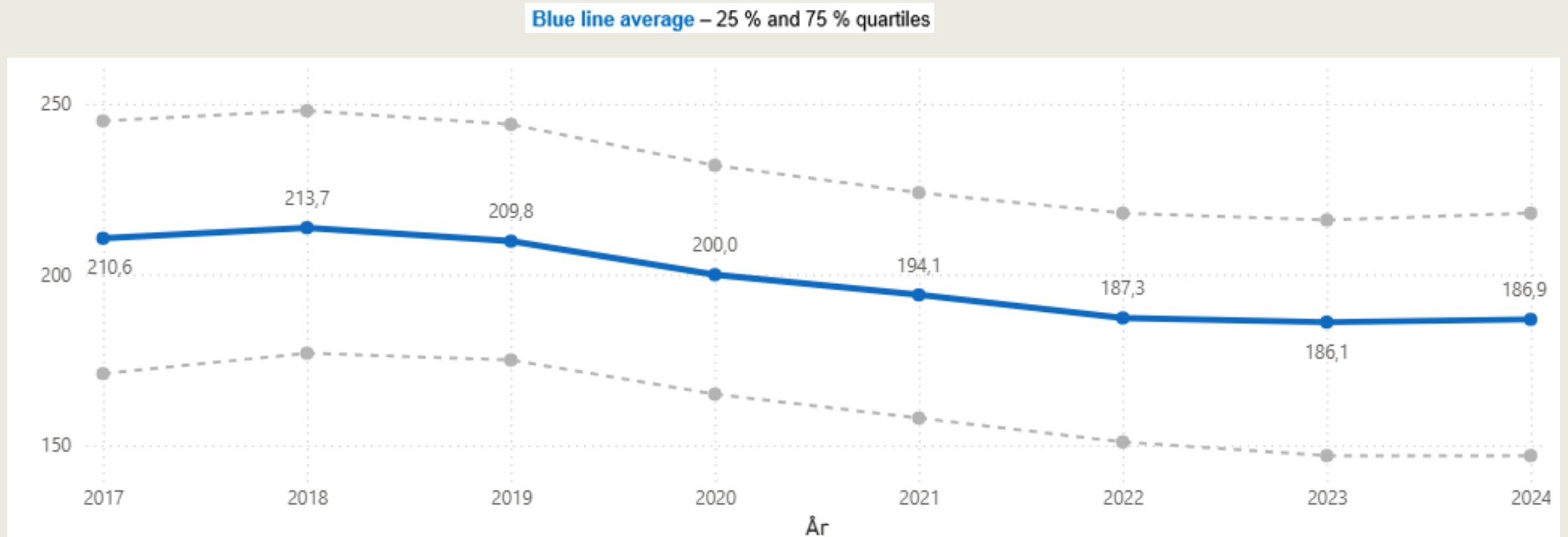


The big picture – in Danish!

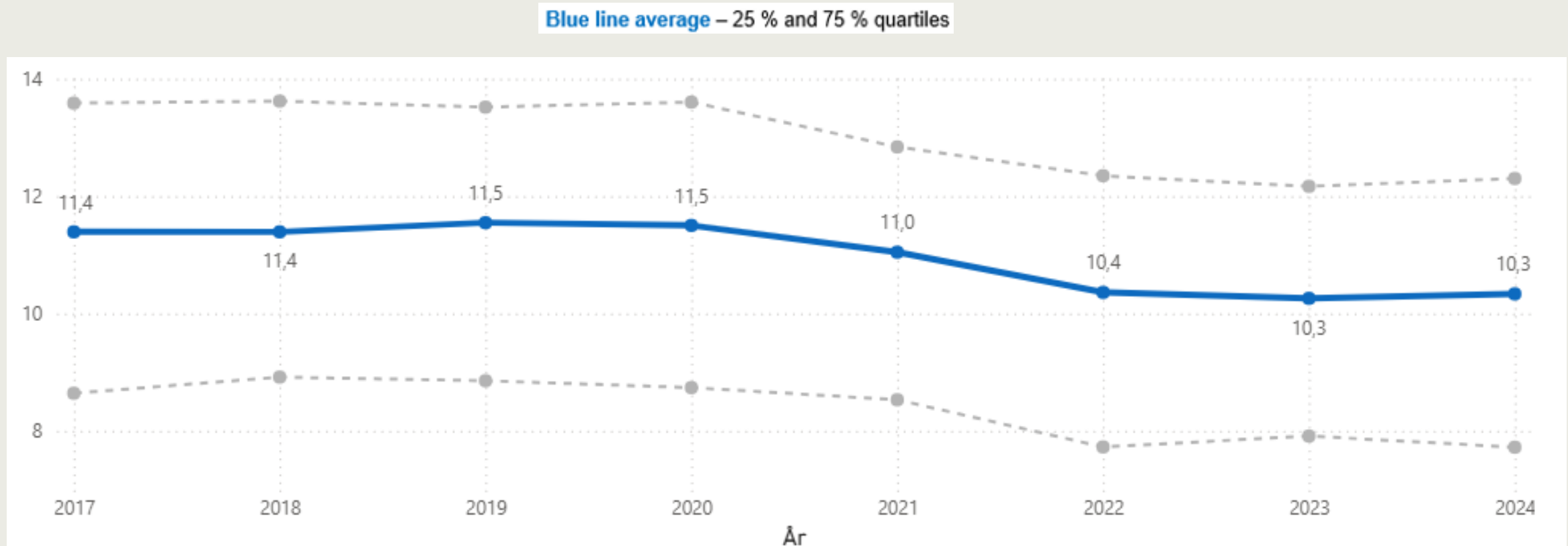
91% of Danish cows in DHI

År	2017			2018			2019			2020			2021			2022			2023			2024		
Nøgletal	Gns.	75%	25%	Gns.	75%	25%	Gns.	75%	25%	Gns.	75%	25%	Gns.	75%	25%	Gns.	75%	25%	Gns.	75%	25%	Gns.	75%	25%
Celletal	210,6	171,0	245,0	213,7	177,0	248,0	209,8	175,0	244,0	200,0	165,0	232,0	194,1	158,0	224,0	187,3	151,0	218,0	186,1	147,0	216,0	186,9	147,0	218,0
Kurerede i goldperiode	64,2	74,0	55,6	63,4	73,7	54,1	63,2	73,5	55,0	63,2	73,7	53,3	63,7	75,0	54,2	65,3	75,0	56,7	65,2	76,0	55,8	66,2	76,9	57,1
Kurerede i laktation	32,4	36,6	27,3	32,5	36,7	27,7	32,6	37,0	27,6	32,8	37,5	27,8	33,3	37,7	28,1	34,2	38,5	29,1	35,1	40,0	29,5	34,6	39,1	29,3
Inficerede nykælvere, øvrig kalvs	25,1	18,4	30,9	25,5	18,7	31,1	25,8	18,9	32,1	26,0	19,0	32,0	25,2	18,4	31,1	24,1	17,4	30,0	23,6	16,5	29,8	23,2	16,3	29,0
Inficerede i alt	23,3	18,1	27,8	23,4	18,5	27,9	23,5	18,4	28,0	23,5	18,5	27,7	22,7	17,8	26,5	21,3	16,2	25,5	20,9	16,0	24,8	21,1	15,9	25,1
Nyinf. øvr. kalvs, 1. kontrol e. kælvn.	20,8	14,4	25,9	20,8	14,6	25,9	21,2	14,9	26,2	21,4	14,7	27,2	20,9	14,5	26,3	20,4	13,8	25,8	19,8	13,3	25,3	19,6	13,1	25,0
Kronisk inficerede	15,0	10,8	18,7	15,1	11,0	18,3	15,1	10,9	18,4	15,1	10,9	18,3	14,5	10,5	17,7	13,5	9,5	16,5	13,1	9,0	16,1	13,3	9,1	16,5
Nyinficerede i alt	12,0	9,3	14,1	12,0	9,4	14,1	12,2	9,5	14,1	12,1	9,4	14,2	11,7	9,2	13,5	11,0	8,4	13,0	10,9	8,4	12,9	11,0	8,3	13,1
Nyinficerede i laktation	11,4	8,6	13,6	11,4	8,9	13,6	11,5	8,9	13,5	11,5	8,7	13,6	11,0	8,5	12,8	10,4	7,7	12,3	10,3	7,9	12,2	10,3	7,7	12,3
Nyinf. 1. kalvs, 1. kontrol e. kælvn.	10,4	5,9	13,3	10,3	5,7	13,6	11,2	6,2	14,6	10,7	5,9	14,1	9,9	5,4	13,2	9,6	5,0	13,1	10,0	5,1	13,5	10,7	5,7	14,0
Sygdomslængde, laktation	3,3	2,7	3,7	3,3	2,7	3,6	3,3	2,7	3,6	3,2	2,7	3,6	3,2	2,7	3,6	3,1	2,6	3,4	3,0	2,5	3,4	3,1	2,6	3,4
Yverlidelser pr. årsko	0,2	0,1	0,3	0,2	0,1	0,3	0,2	0,1	0,3	0,2	0,1	0,3	0,2	0,1	0,3	0,2	0,1	0,2	0,2	0,1	0,2	0,2	0,0	0,2

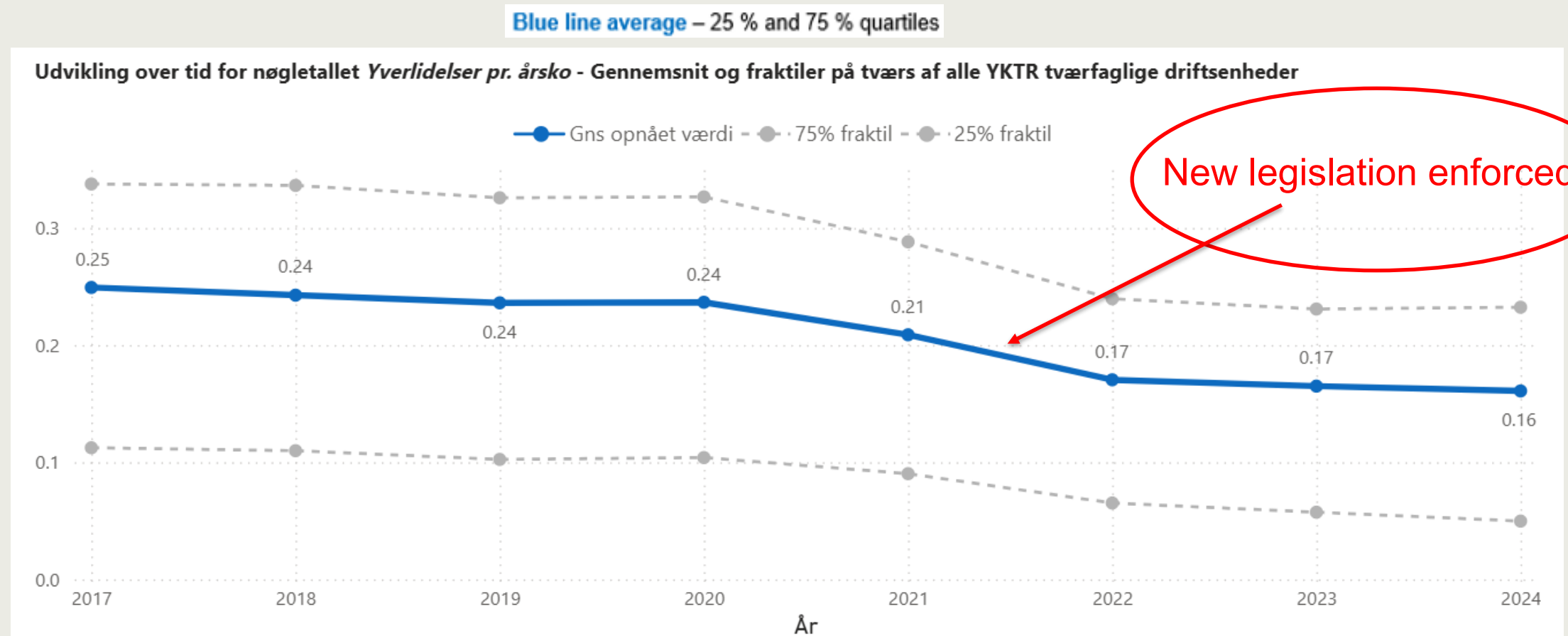
Development in BTSCC in DHI herds



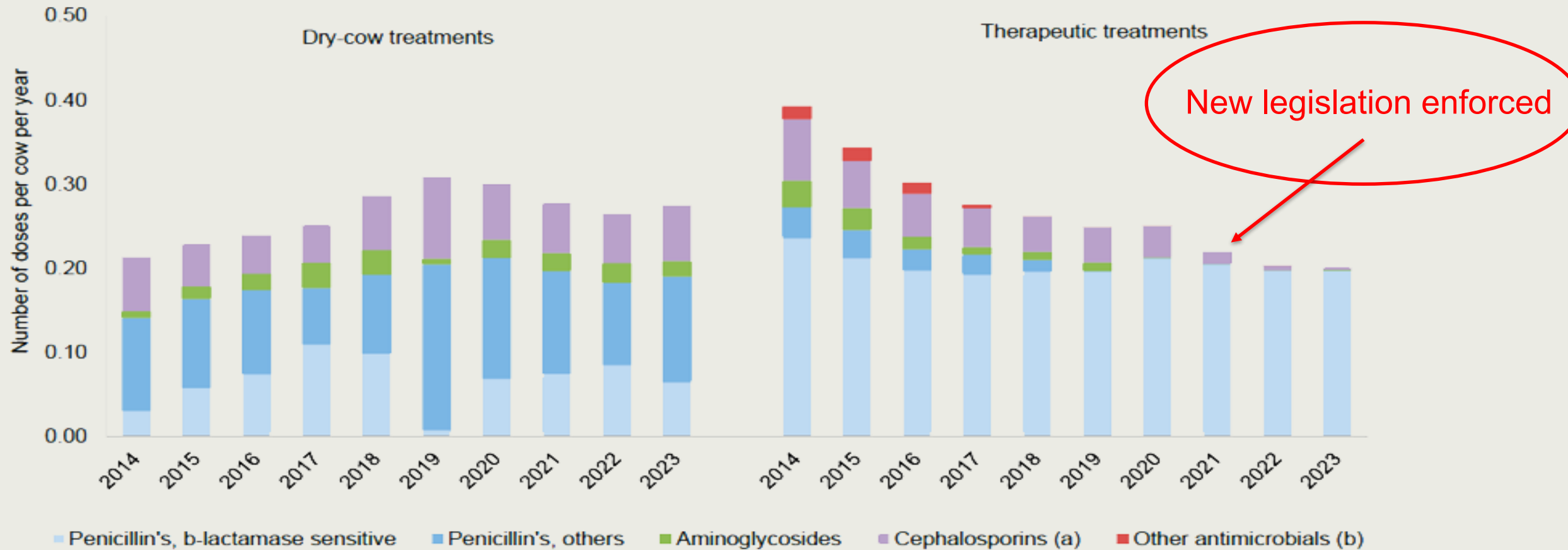
Dynamics in new infection risk % during lactation



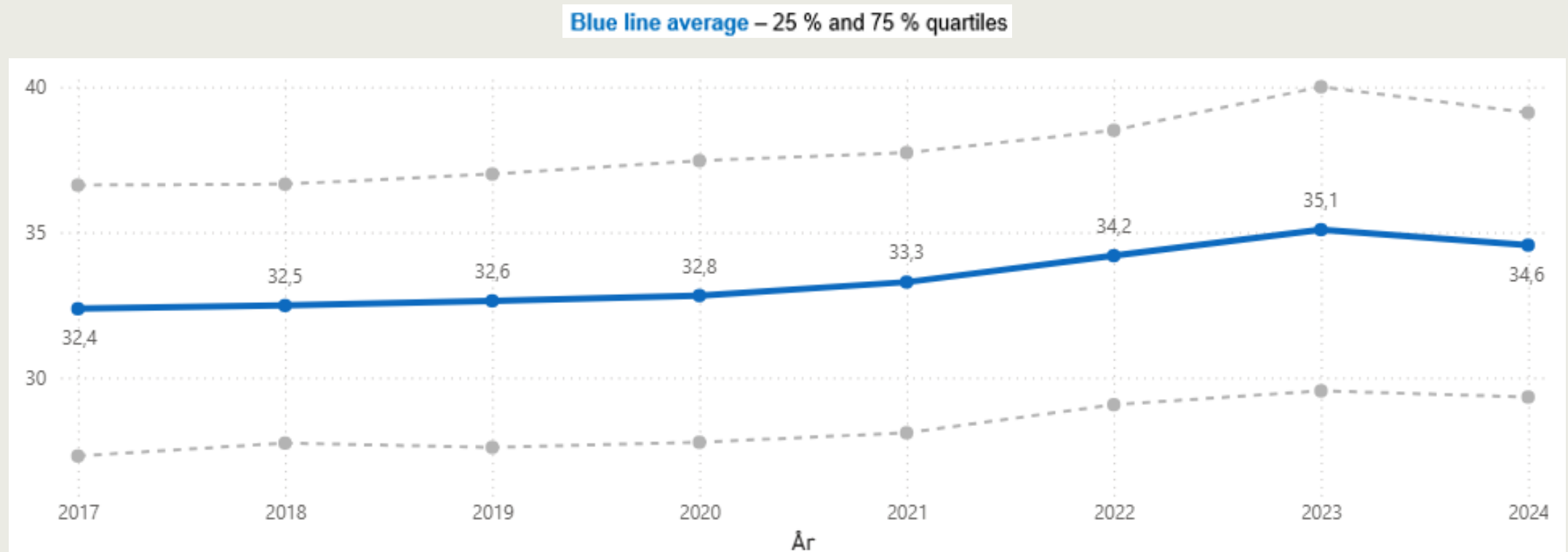
Treatment of clinical mastitis – case cow/year



Consumption of antibiotics



Cure of infection – based on DHI test day SCC



Summing up so far...

- Results reflect large-scale, longitudinal data without cherry-picking!
- BTSCC ↓ But NOT due to increased waste!
- NIMI + CM% ↓ And Cure-rate ↑
But NOT due to increased consumption of antimicrobials!

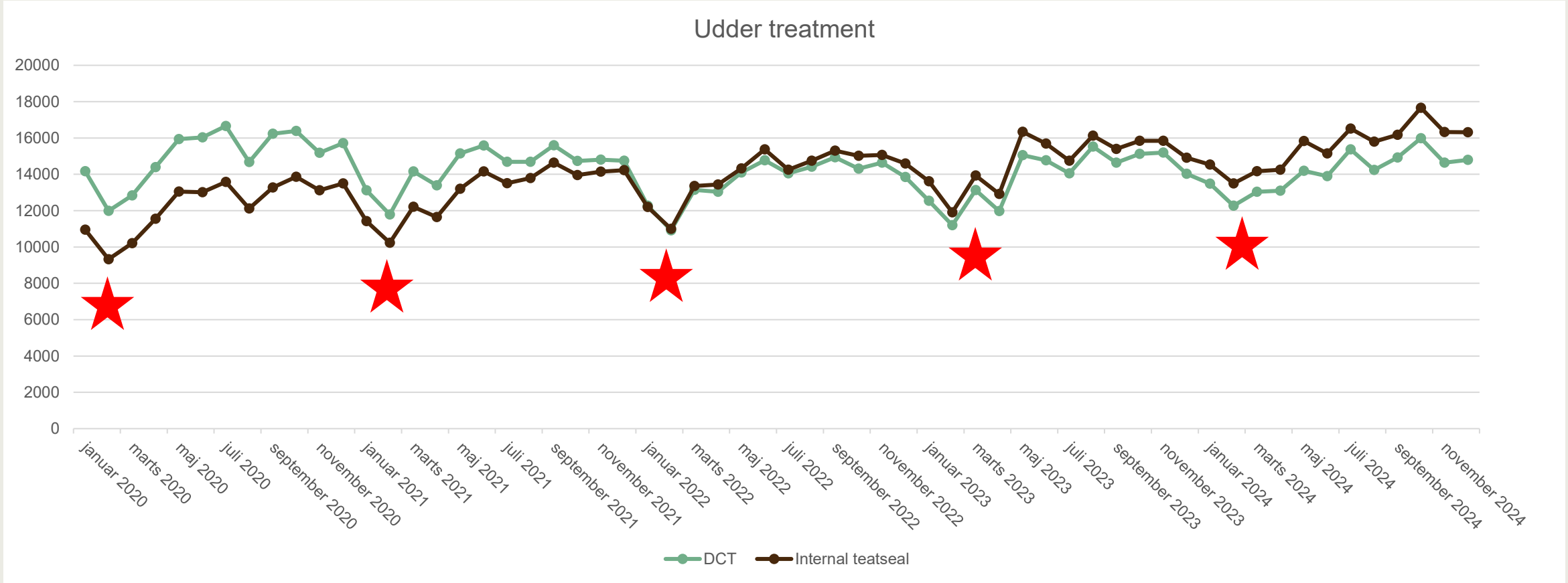


Management
driven
improvements of
udder health

What could be further improved?

- Poor diagnostic accuracy on most mastitis cases (*Astrup et al. 2022*) → Probably mis- and overuse of antimicrobials.
- So, what we have achieved is to reduce the consumption of antibiotics – we still lack to target the consumption.
- No systematic National surveillance for AMR but high levels of decreased sensitivity towards penicillin in common mastitis pathogens (*Jensen et al. 2024, Kløve et al. 2025*)

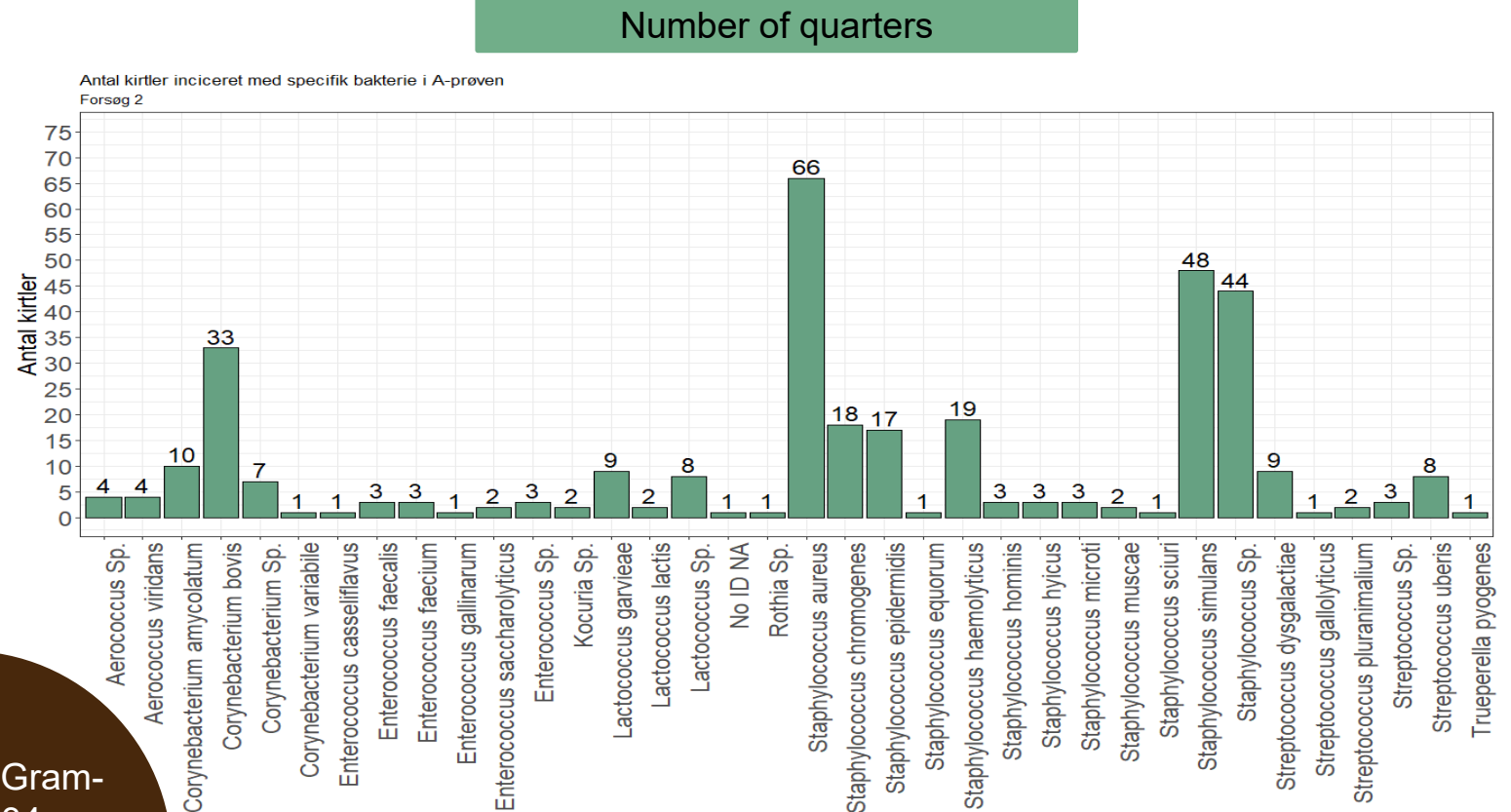
An example: Sesonal variation in management of dry cow udder health



Another example: Prudent use of antibiotics...?

- Lack of regulation on the drug-of-choice for Dry Cow Treatment
- Is DCT necessary – and if so, what is the actual need for broad-spectrum antimicrobials...?

0 cases of Gram-negative in 234 cows (911 milk samples) with SCC > 200.000 at dry-off...



Summing up so far...

- Lack of evidence-driven strategies on e.g.:
 - How to handle seasonality in udder health management?
 - How to select cows for quarter versus cow-SDCT?
 - How to de-select antibiotic treatment



Farm tailored
precision dairy
farming

Invitations...

- IDF Evidence Based selective dry-cow therapy:
 - Literature review
 - GAP analysis
 - Recommendations
- Workshop on Total Bacterial Count
 - Spring 2026
 - Guest speaker from Quality Milk Production Services, Cornell University

Please join 😊



Thanks for your attention!

Questions and comments will be highly appreciated!



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