

# More Patients in Early Stage?

Has there been any stage migration towards more patients in early stage during the last 15 years?

Results from the Danish Lung Cancer Registry.

Torben Riis Rasmussen (DK)

On behalf of the Danish Lung Cancer Group

# Do we find more lunge cancer patients in early stage today than we did 10-15 years ago?

- Several things have changed in Denmark over the past 15 years.
- Great efforts have been spend to find patients at the GP in an earlier stage than before, **yes....**
- **But** at the same time our diagnostic methods have become more sensitive and we find metastases where we didn't find it before.
- And patients with Stage IV disease who would 15 years ago not have been offered any active treatment because of high age or comorbidity are today diagnosed and staged because now we have treatment to offer.

# Political Decision in August 2007



**"Cancer is an acute disease!"**

Press conference, 10. August 2007

# National implementation of Diagnostic Fast Track Pathways

Sundhedsfaglige elementer som grundlag for  
pakkeforløb for

**LUNGEKRÆFT**



Udarbejdet for Sundhedsstyrelsen af arbejdsgruppe i 2007

Godkendt af Kræftstyregruppen, december 2007

Det faglige grundlag er baseret på kliniske retningslinjer og guidelines fra  
Dansk Lunge Cancer Gruppe (DLCG)

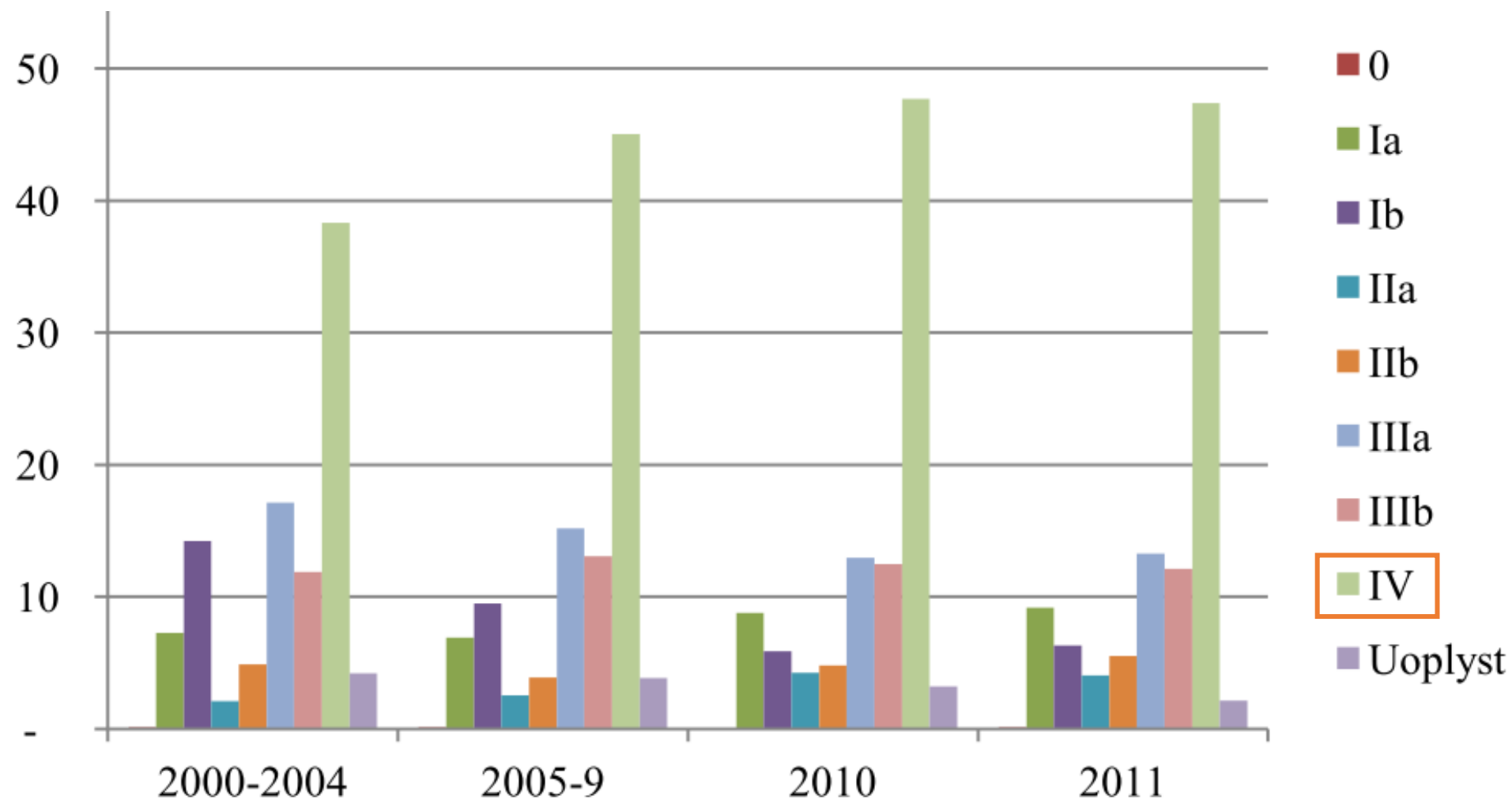
# PET in the work-up for lung cancer

avoids futile thoracotomy for 1/5 of patients

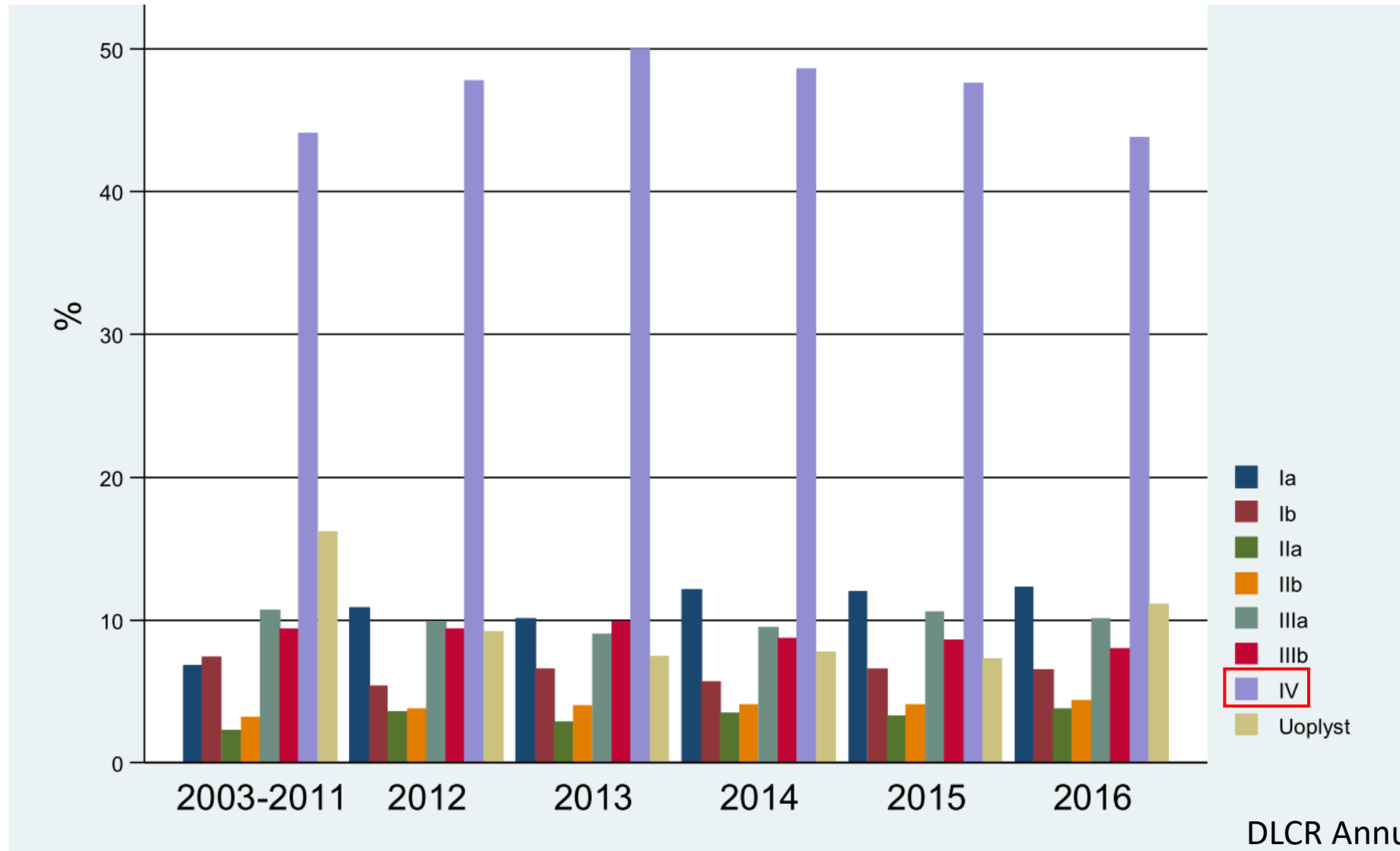
	CWU (n=96)	CWU+PET (n=92)
<b>No thoracotomy</b>	18 (19%)	32 (35%)
Confirmed N2/3	10	18
Confirmed distant metastases	1	7
Benign primary lesions	2	3
Other tumour	2	1
Intercurrent morbidity, refusal	3	3
<b>Thoracotomy</b>	78 (81%)	60 (65%)
Non-futile thoracotomy	39 (41%)	41 (44%)
Futile thoracotomy	39 (41%)	19 (21%)
Benign	7	2
Explorative thoracotomy	1	1
IIIA-N2	6	4
IIIB	6	2
Recurrence or death within 1 year	19	10

Table 2: **Specification of primary outcome**

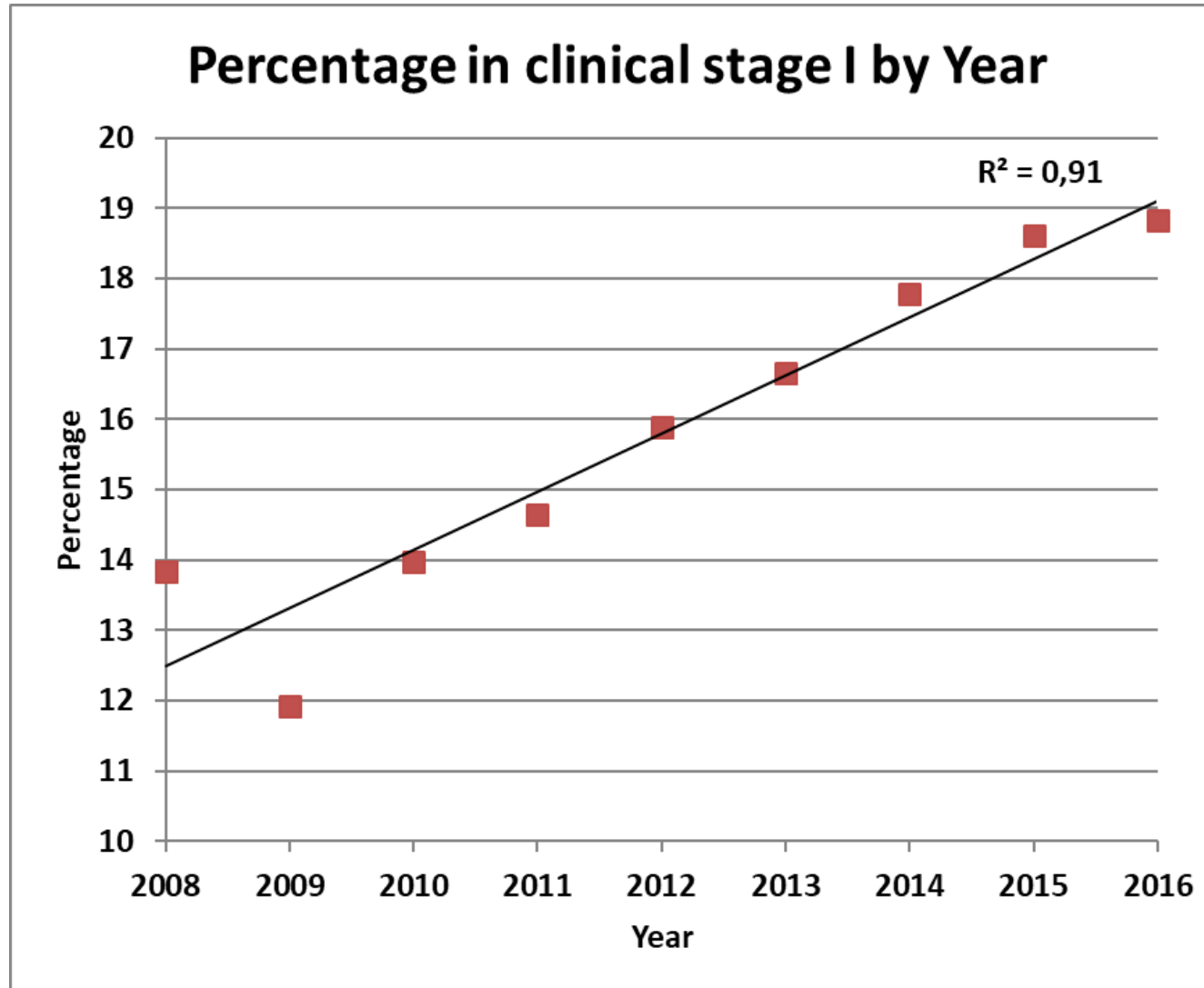
# Pct-Distribution of cTNM by Year 2000-2011



# Pct-Distribution of cTNM by Year 2003-2016



# Clinical Stage I by Year 2008-2016





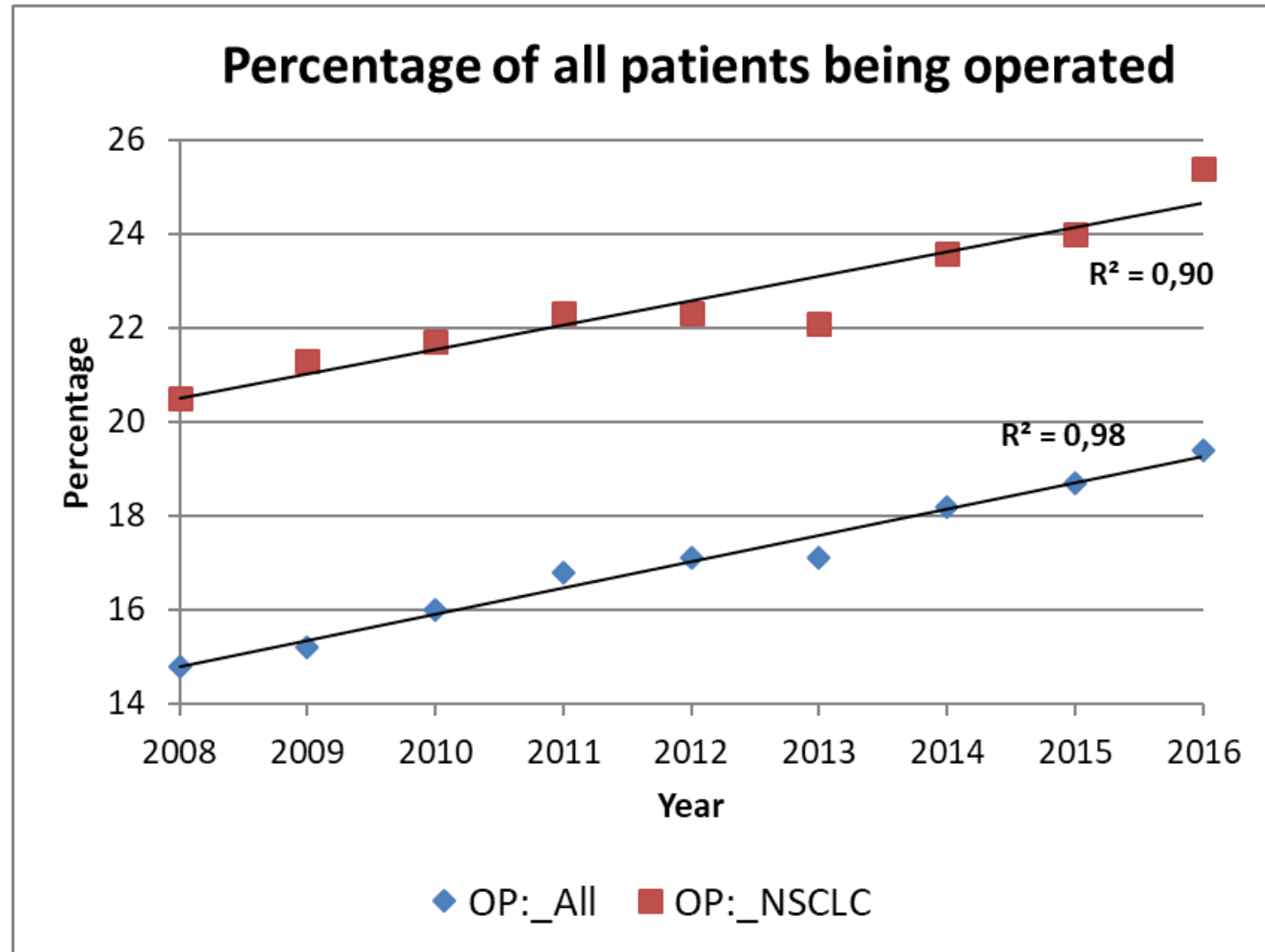
# Surgery as First Treatment by Year 2003-2016

Diagnoseår	Ingen behandling	Operation	Kemoterapi	Stråleterapi	I alt
2003	1426(38.4%)	505(13.6%)	1079 (29.0%)	708 (19.0%)	<b>3718(100.0%)</b>
2004	1398(37.0%)	485(12.8%)	1177 (31.1%)	720 (19.0%)	<b>3780(100.0%)</b>
2005	1409(35.5%)	555(14.0%)	1330 (33.5%)	673 (17.0%)	<b>3967(100.0%)</b>
2006	1471(36.1%)	534(13.1%)	1421 (34.8%)	652 (16.0%)	<b>4078(100.0%)</b>
2007	1421(32.9%)	605(14.0%)	1551 (35.9%)	740 (17.1%)	<b>4317(100.0%)</b>
2008	1385(31.1%)	660(14.8%)	1652 (37.1%)	759 (17.0%)	<b>4456(100.0%)</b>
2009	1272(28.4%)	680(15.2%)	1741 (38.9%)	782 (17.5%)	<b>4475(100.0%)</b>
2010	1326(28.3%)	751(16.0%)	1722 (36.7%)	891 (19.0%)	<b>4690(100.0%)</b>
2011	1213(26.0%)	785(16.8%)	1727 (37.0%)	948 (20.3%)	<b>4673(100.0%)</b>
2012	1168(24.8%)	805(17.1%)	1823 (38.7%)	918 (19.5%)	<b>4714(100.0%)</b>
2013	1063(23.1%)	788(17.1%)	1867 (40.6%)	883 (19.2%)	<b>4601(100.0%)</b>
2014	1033(21.7%)	865(18.2%)	1912 (40.2%)	951 (20.0%)	<b>4761(100.0%)</b>
2015	1059(22.4%)	882(18.7%)	1848 (39.1%)	938 (19.8%)	<b>4727(100.0%)</b>
2016	1102(23.2%)	920(19.4%)	1764 (37.2%)	955 (20.1%)	<b>4741(100.0%)</b>
Total	17746(28.8%)	9820(15.9%)	22614 (36.7%)	11518 (18.7%)	<b>61698(100.0%)</b>

# Resection Rate for NSCLC 2012-2016

Enhed	Std. opfyldt	Tæller/nævner	Uoplyst Antal(%)	Aktuelle år	Tidligere år			
				2016	2015	2014	2013	2012
Danmark	ja	899 / 3872	0 (0)	<b>23.2</b> (21.9-24.6)	23.5	23.0	21.4	22.1
Hovedstaden	ja	197 / 984	0 (0)	<b>20.0</b> (17.6-22.7)	23.3	22.3	21.3	22.0
Sjælland	nej	136 / 706	0 (0)	<b>19.3</b> (16.4-22.4)	21.8	19.1	19.2	18.4
Syddanmark	ja	194 / 854	0 (0)	<b>22.7</b> (19.9-25.7)	22.5	21.1	21.1	21.2
Midtjylland	ja	220 / 854	0 (0)	<b>25.8</b> (22.9-28.8)	22.1	24.5	21.1	23.8
Nordjylland	ja	152 / 474	0 (0)	<b>32.1</b> (27.9-36.5)	31.1	31.8	25.6	26.6

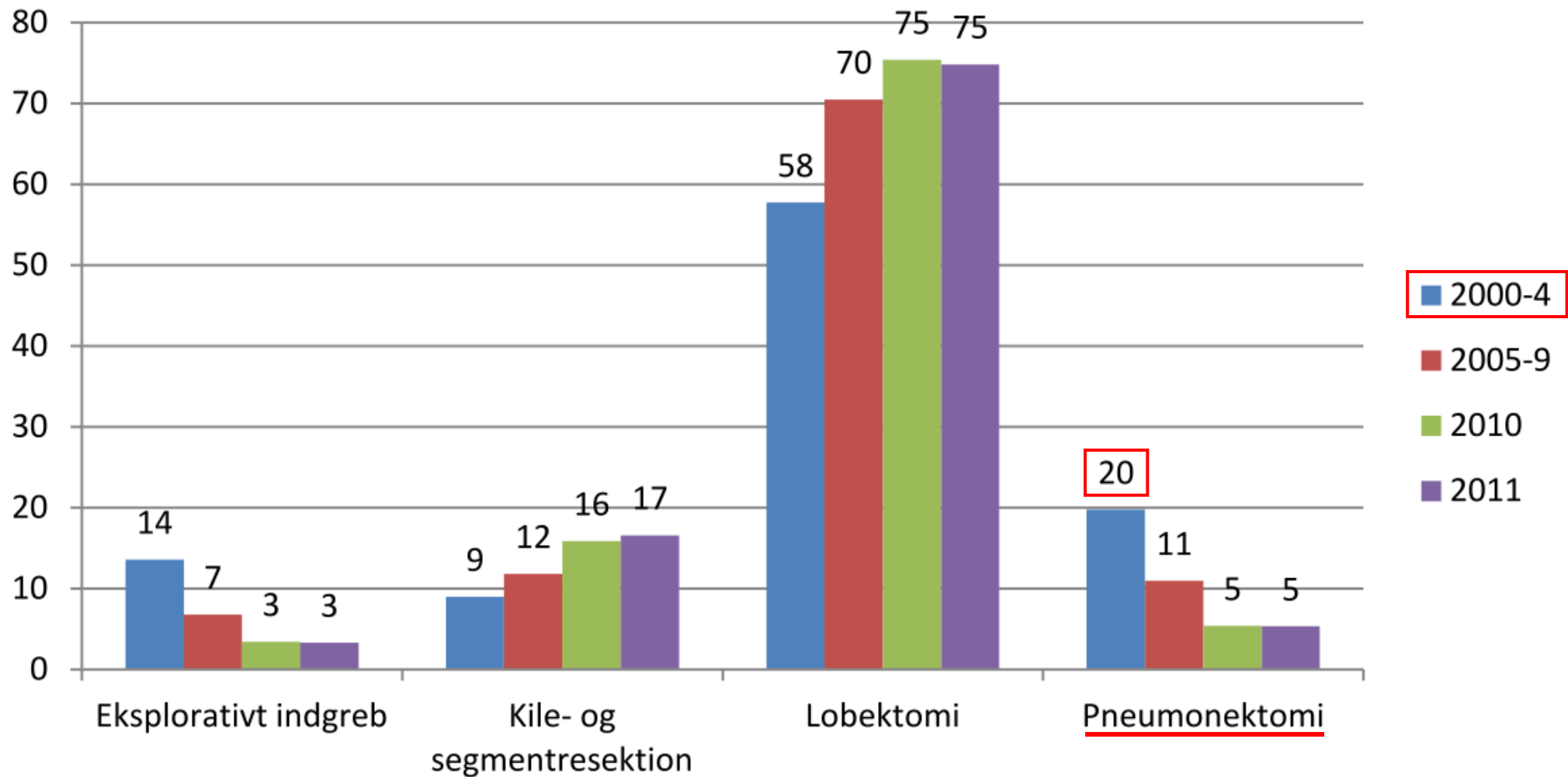
# Percentage of patients being operated



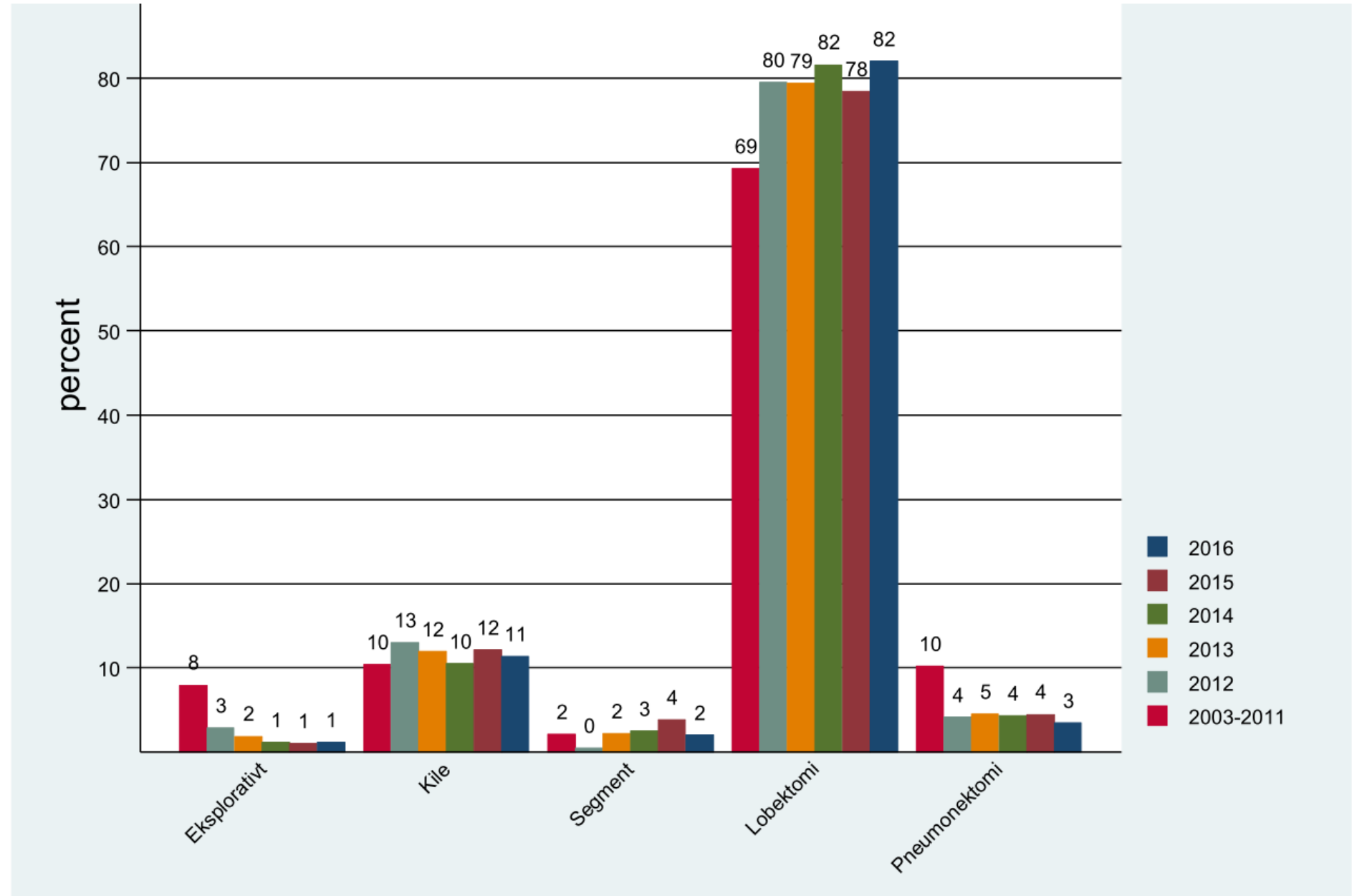
# Percentage of patients being operated

- However, the higher percentage of patients being operated is also partly because the surgeons have become more skilful and today use more 'gentle' surgical methods so that ever more fragile patients can tolerate surgery.
- 2000-2004: 20% pneumonectomies
- 2012-2016: 4% pneumonectomies

# Types of Operation by Year 2000-2011



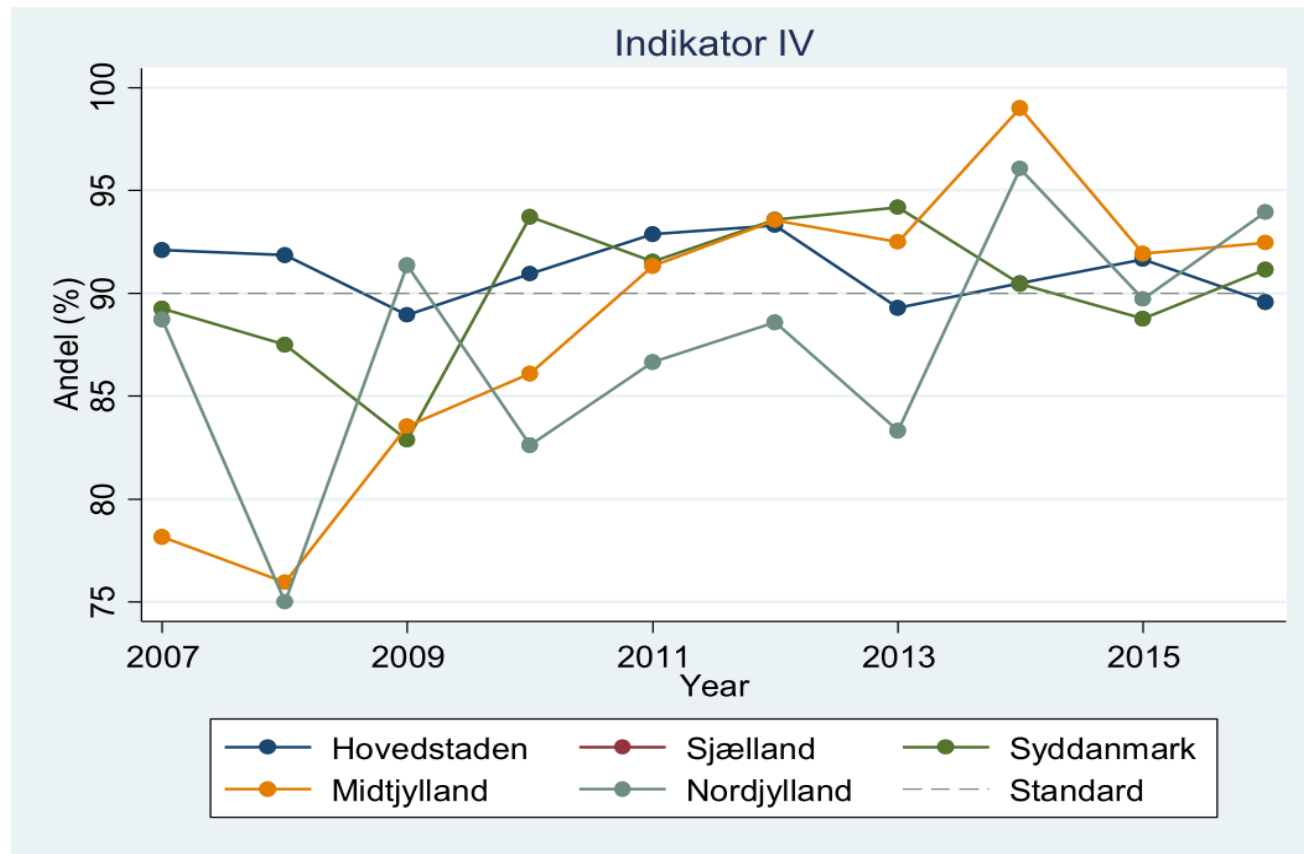
# Types of Operation by Year 2003-2016



Are there any indications  
that too many patients are operated?

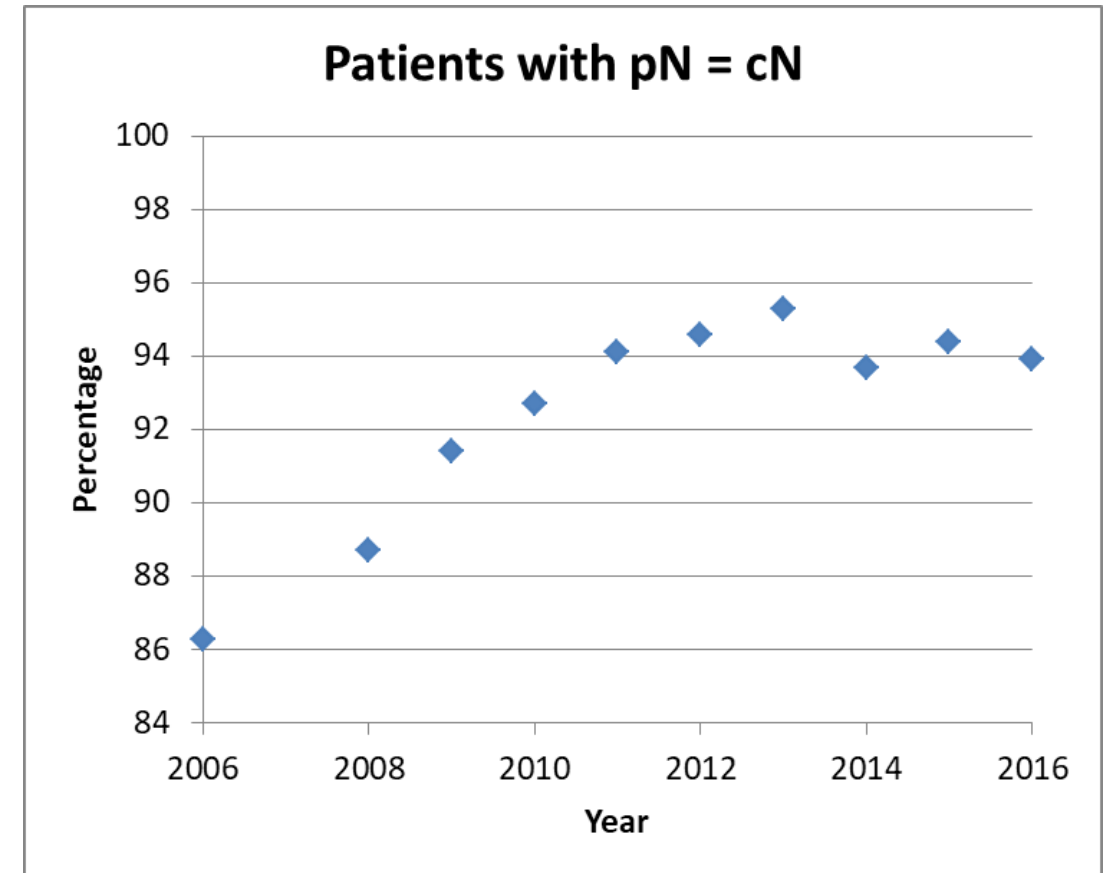
# Quality control of operations

**pTNM = cTNM**



DLCR Annual Report 2016

**pN = cN**

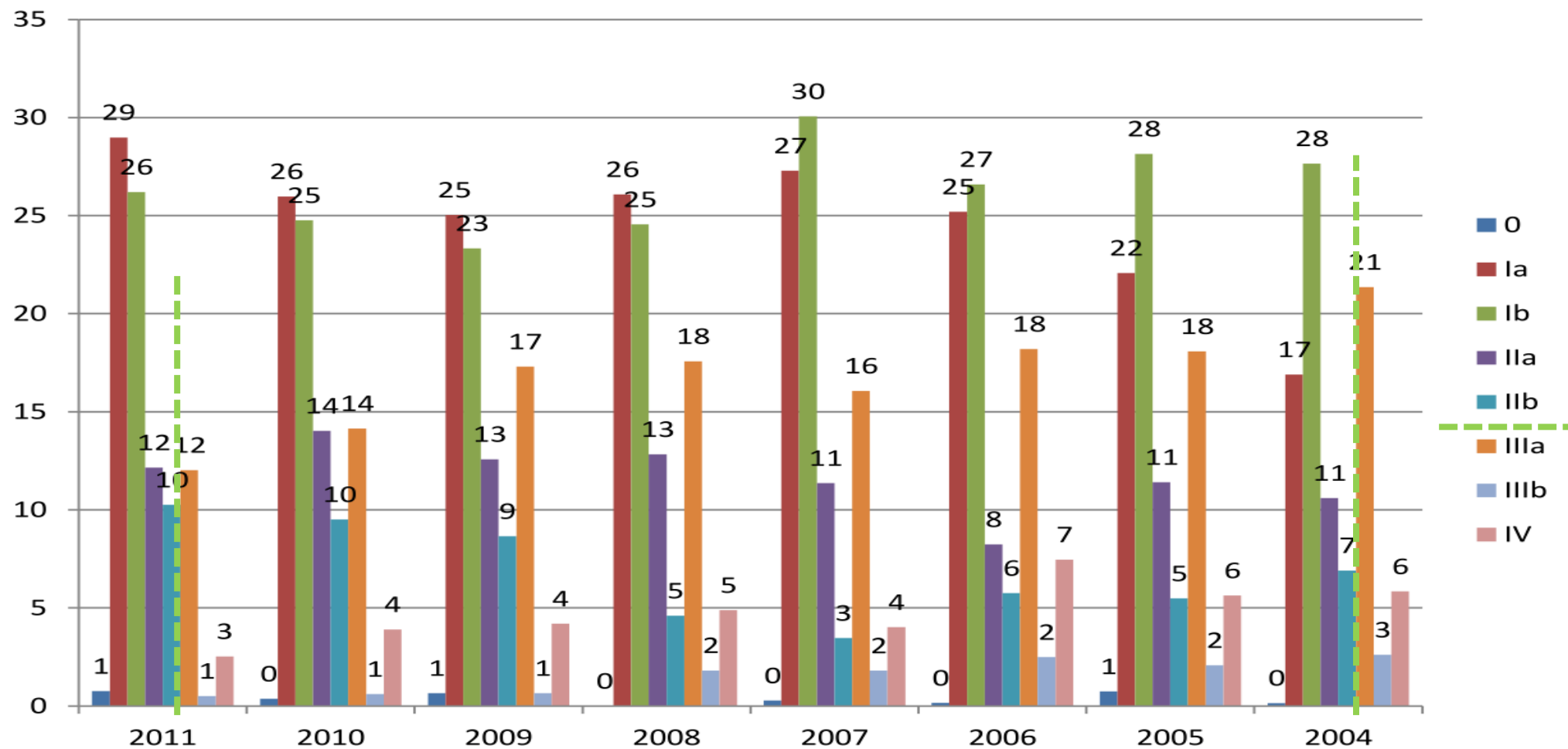


Graph based on data from DLCR Annual Reports



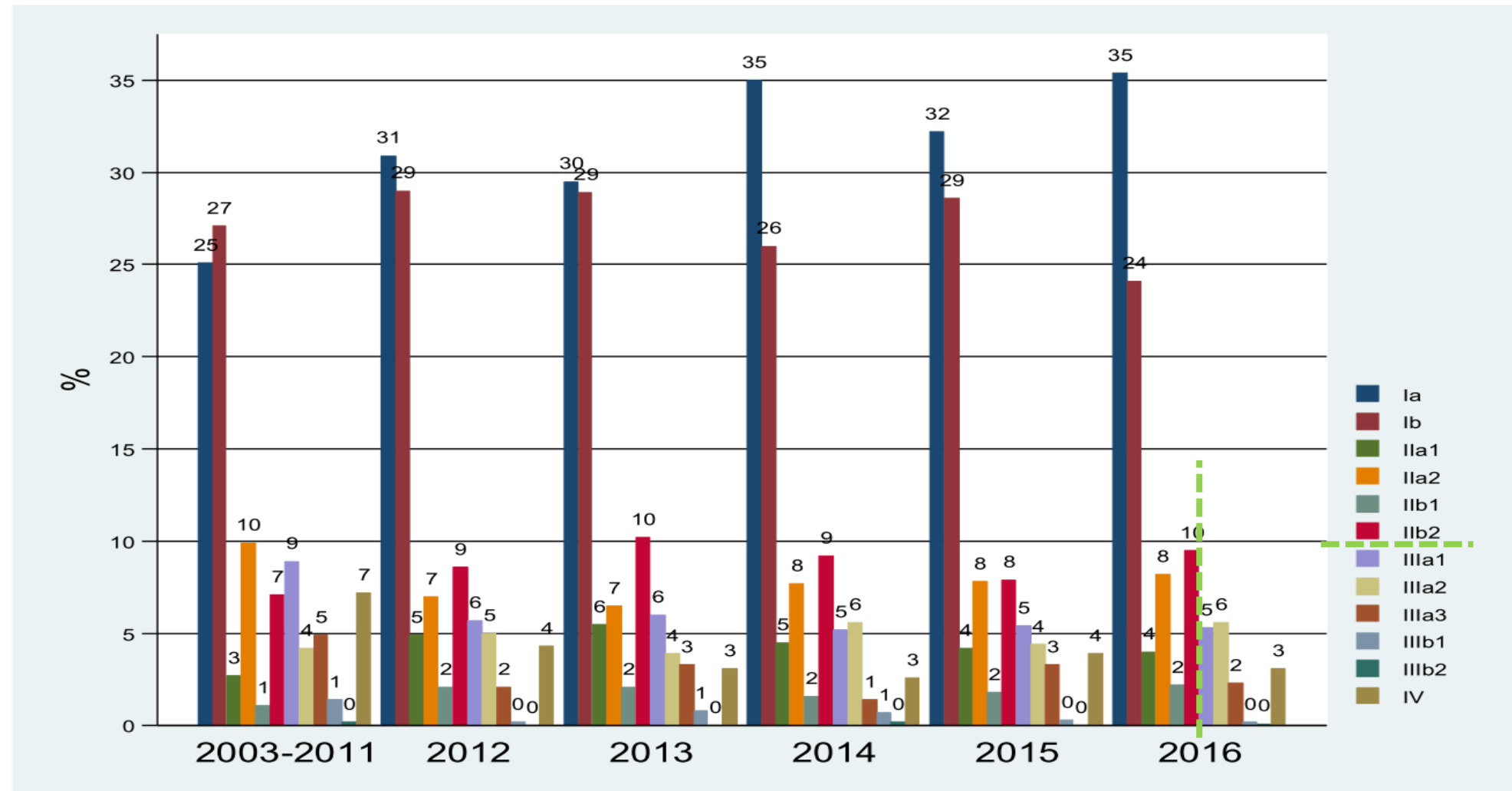
# Pct-Distribution of pStage by Year 2004-2011

8.6.1 Fig. pTNM-stadie fordeling

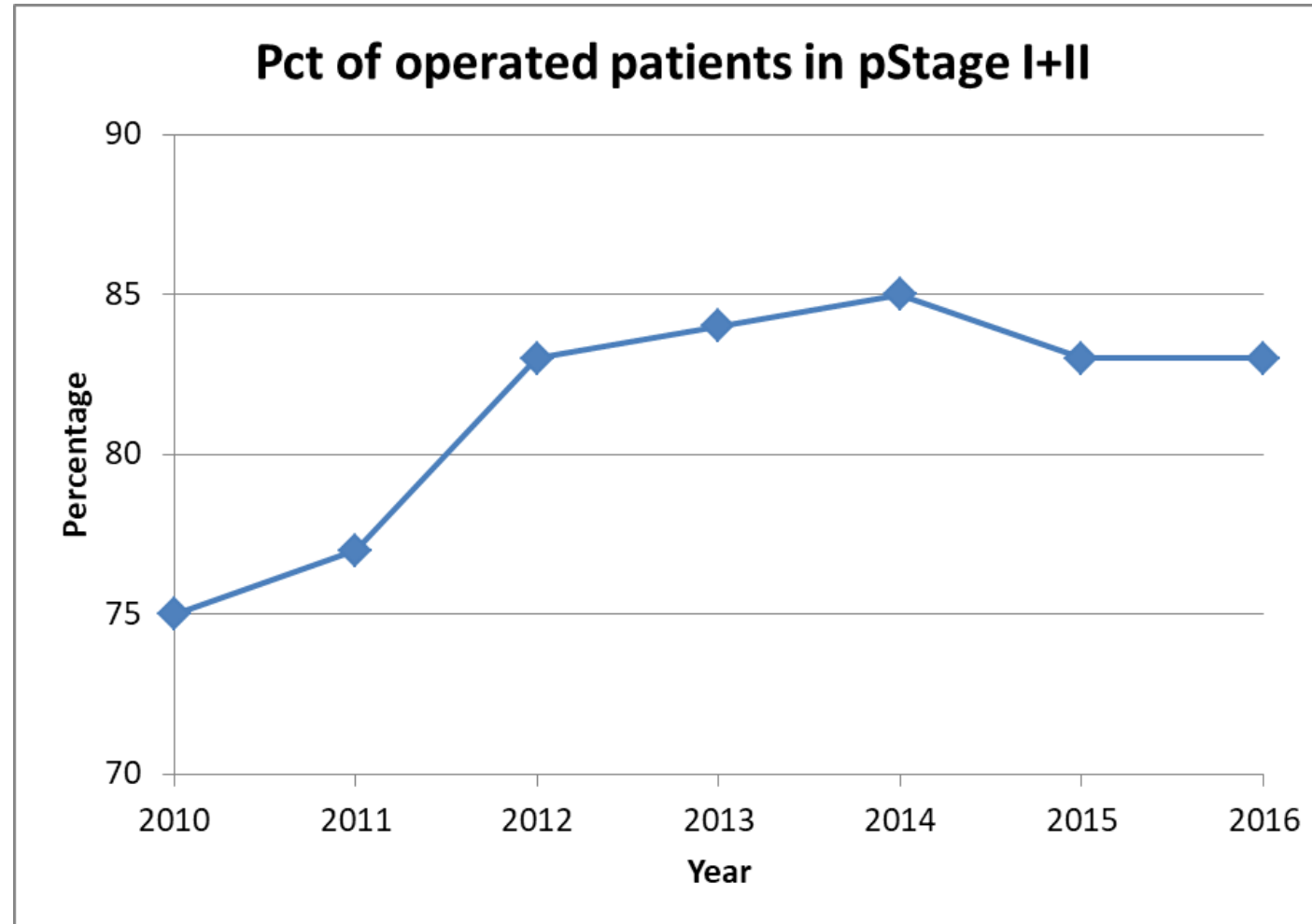


# Pct-Distribution of pStage by Year 2003-2016

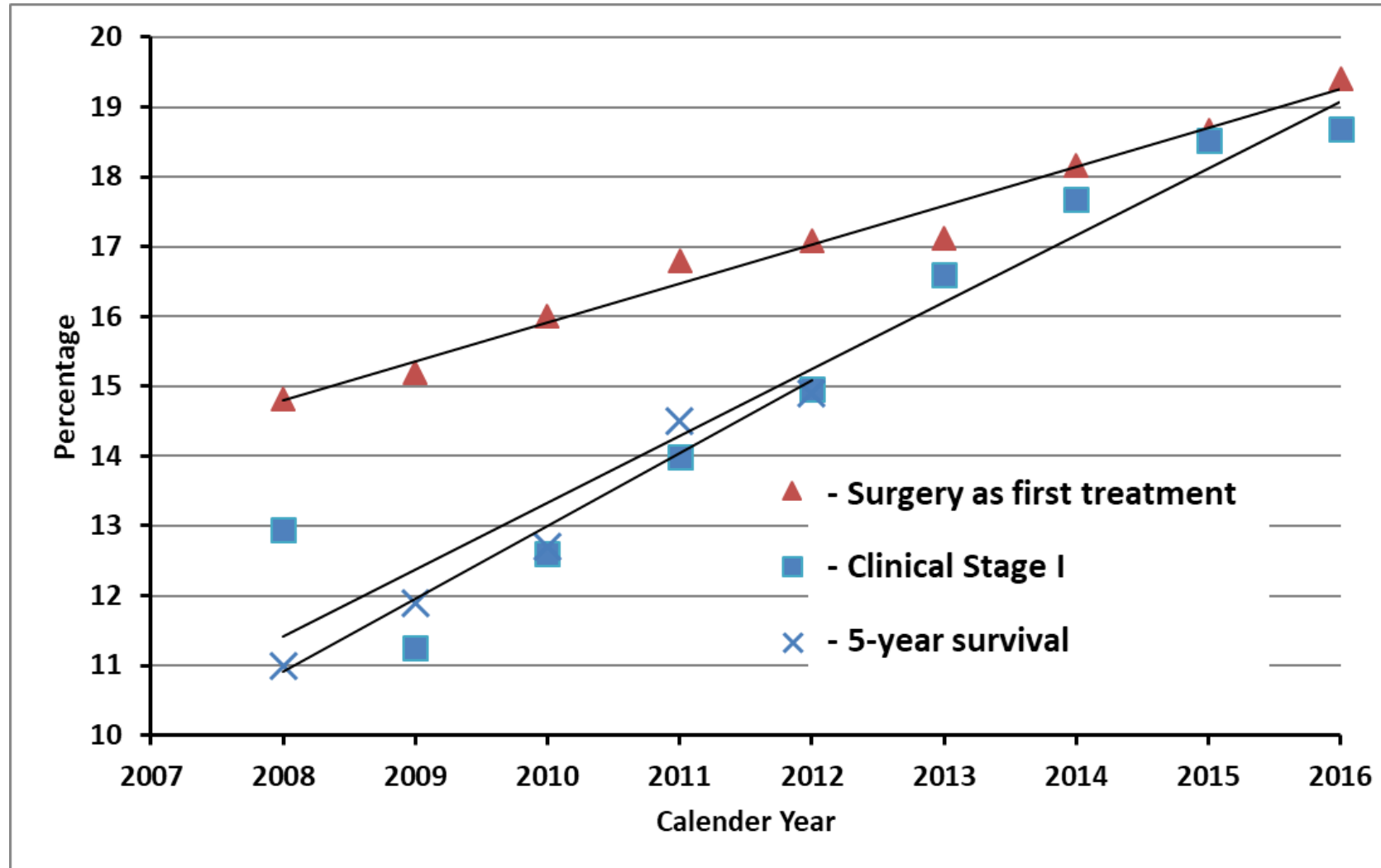
7.2.4.1 Figur pTNM-stadie fordeling



# Quality control of operations: Pct ptt in pStage I+II



# Clinical Stage I, Surgery and 5-year Survival



Graphs based on data from DLCR Annual Reports

# Finally Denmark is catching up

