

# Status for nationale forsøg

Medicinsk Udvalg

# Status for nationale forsøg

## (Neo)adjuverende

**MASTER.** A randomized, multicenter, double-blind phase III, placebo-controlled comparison of standard (neo)adjuvant therapy plus placebo versus standard (neo)adjuvant therapy plus atrovastatin in patients with early breast cancer.

**Nordic Trip Trial (NTT)** . A Translational Randomized Phase III Study Exploring the Effect of the Addition of Capecitabine to Carboplatine Based Chemotherapy in Early "Triple Negative" Breast Cancer

**CryoPAC** . Et åbent randomiseret fase 2 forsøg med kølehandske og sokker overfor ingen forebyggelse i forbindelse med adjuverende paclitaxel.

**Astefania.** (adj TDM1 +/- atezolizumab til HER2 pos. ptt med non-PCR efter neoadjuverende behandling.

**Destiny 05.** Post-neoadjuvant trastuzumab deruxtecan (T-DXd) versus T-DM1 in patients with residual invasive disease following neoadjuvant therapy. Et randomiseret fase III forsøg hos patienter med HER2 positiv brystkræft.

**ALEXANDRA** . A randomized fase III study comparing atezolizumab (Anti PD-L1 Antibody) in combination with adjuvant anthracycline/taxane-based chemotherapy versus chemotherapy alone in patients with operable triple-negative breast cancer

## Metastaserende

**Destiny-09.** Trastuzumab Deruxtecan (T-DXd) With or Without Pertuzumab Versus Taxane, Trastuzumab and Pertuzumab in HER2-positive Metastatic Breast Cancer.

**Destiny-12.** At undersøge sikkerhed og effektivitet af T-DXd hos patienter med fremskreden/metastatisk HER2-positiv brystkræft med eller uden hjernemetastaser

**Epik-5.** A phase III, randomized study of alpelisib (ALP) plus fulvestrant (FUL) in patients with hormone receptor-positive (HR+), human epidermal growth factor receptor 2-negative (HER2-), *PIK3CA*-mutated advanced breast cancer (ABC) progressing on/after an aromatase inhibitor (AI) with a cyclin-dependent kinase 4/6 inhibitor (CDK4/6i).

**INAVO 120/Inavolisib** . Phase III study evaluating the efficacy and safety of Inavolisib + Palbociclib + Fulvestrant vs Placebo + Palbociclib + Fulvestrant in patients with *PIK3CA*-mutant, HR+ HER2-Negative, Locally Advanced or Metastatic Breast Cancer.

**PostMONARCH** . Phase III study of fulvestrant +/- abemaciclib following progression on a CDK4/6i + endocrine therapy.

**ImmunoBreast** - A Phase Ib Study Phase Ib, open-label, single-arm, clinical study to determine the safety, tolerability and trends of efficacy of ALECSAT as an add-on therapy to standard treatment with carboplatin and gemcitabine in female patients with locally advanced inoperable or metastatic TNBC, which has received no more than two prior systemic therapies for mTNBC, max 2 prior lines for mBC (Investigator initieret)

**CAPitello-292** : A Phase Ib/III Randomised Study of Capivasertib plus Palbociclib and Fulvestrant versus Placebo plus Palbociclib and Fulvestrant in Hormone Receptor-Positive and Human Epidermal Growth Factor Receptor 2-Negative Locally Advanced, Unresectable or Metastatic Breast Cancer (CAPitello-292).

# Adjuverende To nationale - et nordisk

**MASTER.** A randomized, multicenter, double-blind phase III, placebo-controlled comparison of standard (neo)adjuvant therapy plus placebo versus standard (neo)adjuvant therapy plus atorvastatin in patients with early breast cancer.

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# Early breast cancer statin trial the master trial

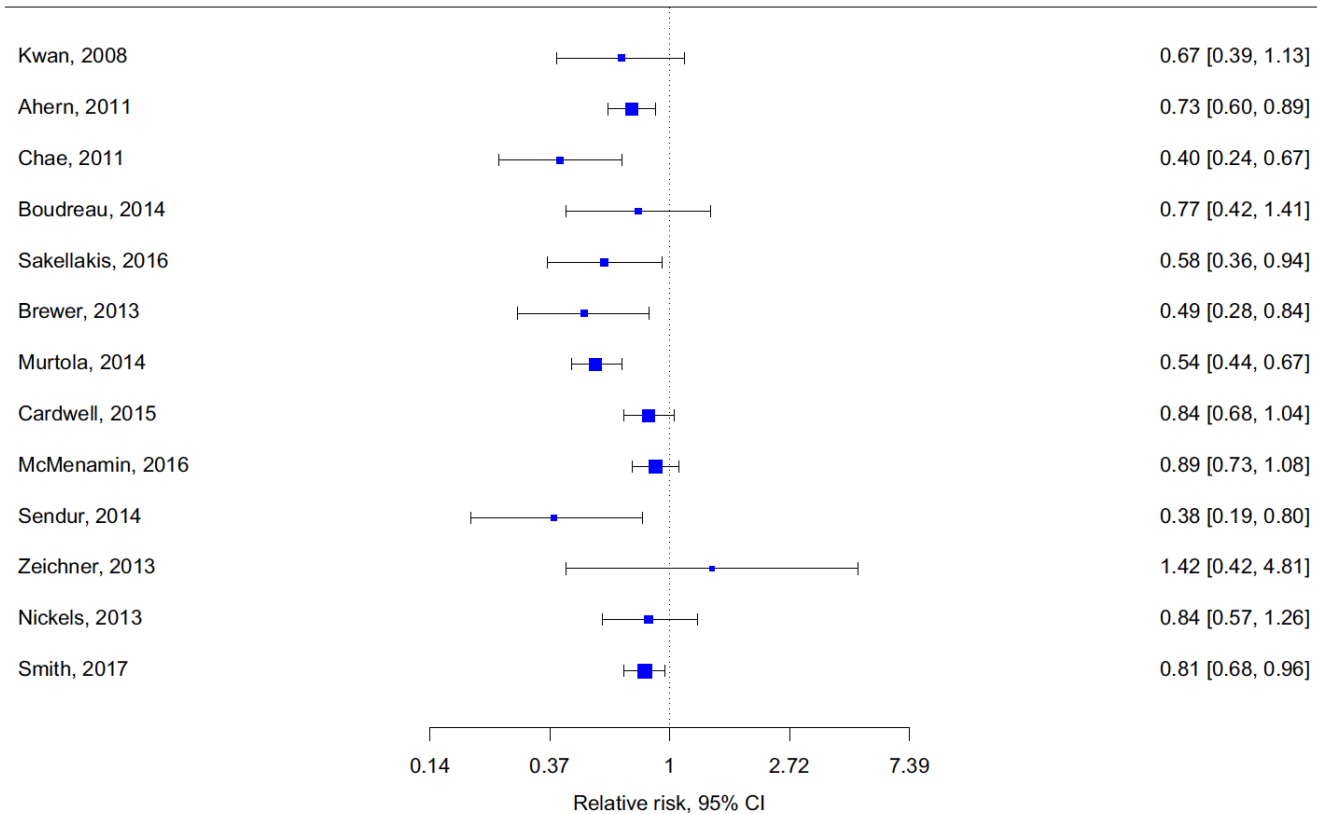
*A randomized, multicenter, double-blind, placebo-controlled comparison of standard (neo)adjuvant therapy plus placebo versus standard (neo)adjuvant therapy plus atorvastatin in patients with early breast cancer*

MAmmary cancer STatin ER positive trial

# STATINS and BC-prognosis

JIM

Statins as medication in breast cancer / S. Borgquist *et al.*



**Fig. 2** The prognostic value of statin treatment in the adjuvant breast cancer setting illustrated by a forest plot of the currently reported studies.

# Cholesterol, cholesterol lowering medication, and breast cancer outcome

**Table 4.** Marginal Structural Modeling Results of Initiation of CLM During Endocrine Treatment and Outcome Among All Treatment Arms

Variable	No.	HR	95% CI	P
No. of patients	5,944			
No. of DFS events	1,432			
No. of patients reporting CLM initiation during protocol therapy	697			
<b>DFS model results</b>				
Univariable weighted*		0.81	0.67 to 0.97	.02
Multivariable weighted†		0.79	0.66 to 0.95	.01
No. of BCFI events	940			
No. of patients reporting CLM initiation during protocol therapy	697			
<b>BCFI model results</b>				
Univariable weighted*		0.77	0.61 to 0.97	.03
Multivariable weighted†		0.76	0.60 to 0.97	.02
No. of DRFI events	729			
No. of patients reporting CLM initiation during protocol therapy	697			
<b>DRFI model results</b>				
Univariable weighted*		0.75	0.57 to 0.98	.04
Multivariable weighted†		0.74	0.56 to 0.97	.03

## RESULT:

Patients initiating CLM had a significant improved prognosis compared to those without CLM

Cholesterol, Cholesterol-Lowering Medication Use, and Breast Cancer Outcome in the BIG 1-98 Study  
 S Borgquist et al. J Clin Oncol . 2017 Apr 10;35(11):1179-1188.

# MASTER trial, Objectives



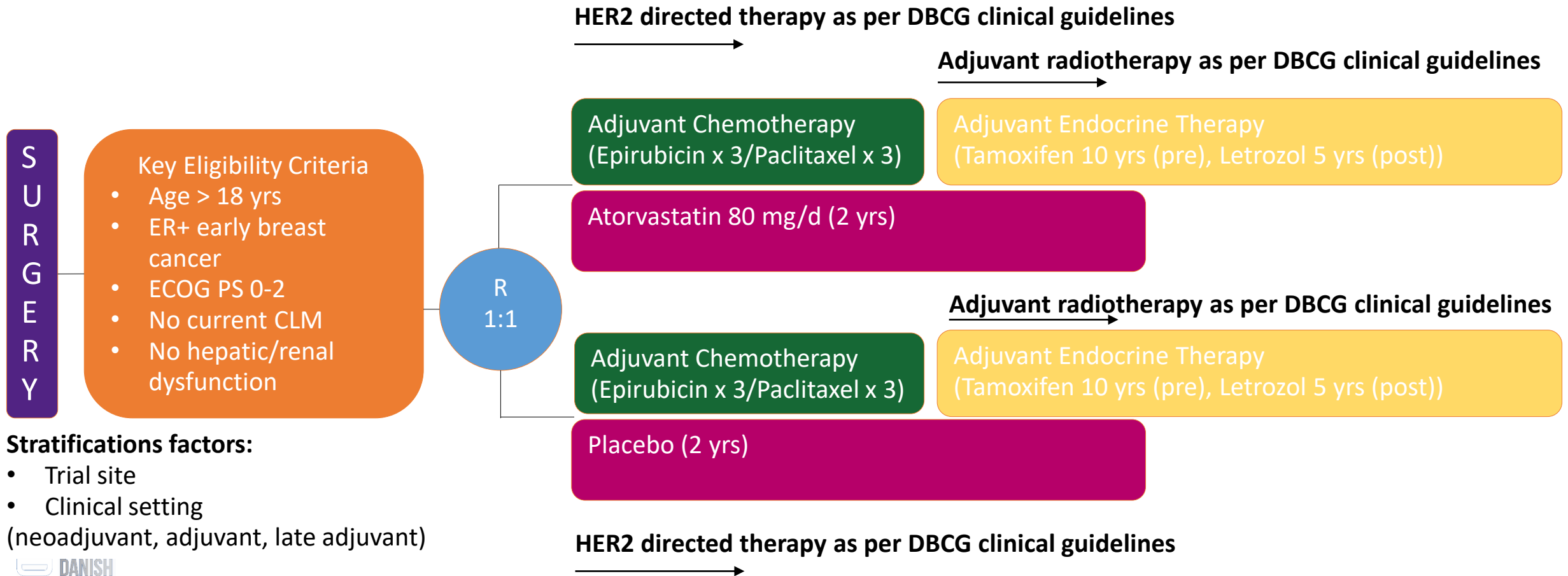
- **PRIMARY OBJECTIVE:**

- To compare invasive disease-free survival (IDFS) in patients randomized to standard (neo)adjuvant therapy plus placebo or standard (neo)adjuvant therapy plus atorvastatin

- **SECONDARY OBJECTIVES:**

- - To compare overall survival (OS), recurrence-free interval (RFI), distant recurrence-free interval (DRFI) including associations with first site of recurrence, cardiac death-free interval, and overall safety in the two treatment arms.
- - To investigate morbidity endpoints
- - To address translational endpoints

# MASTER trial design, EARLY adjuvant

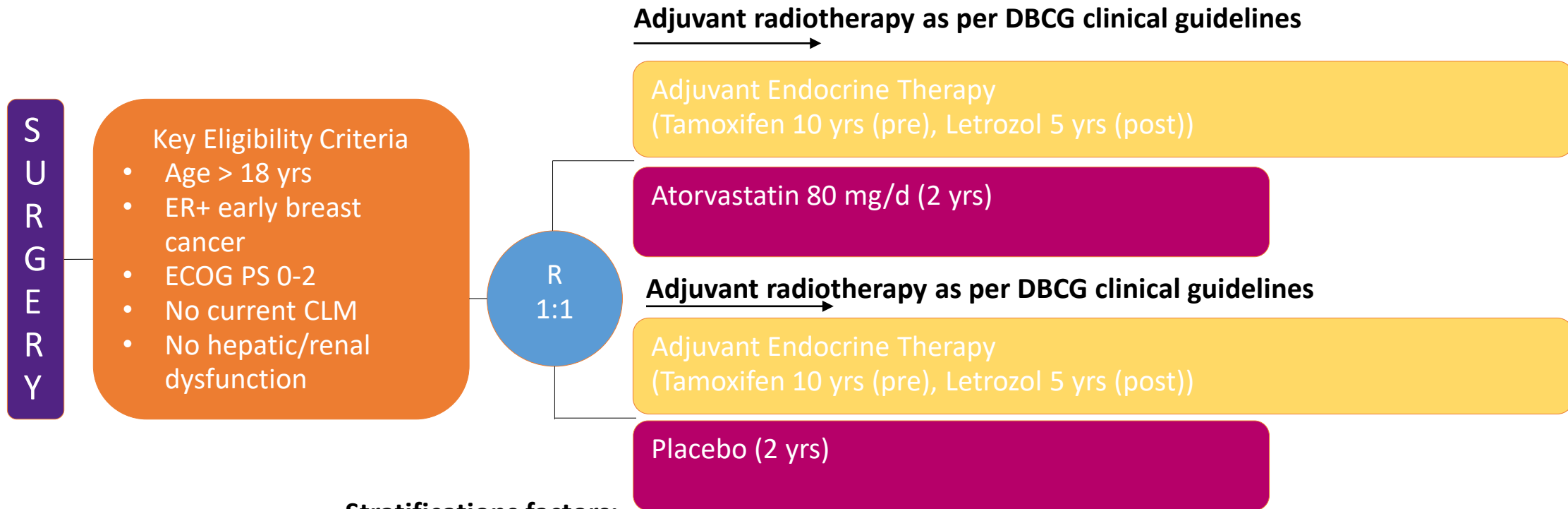


## Stratifications factors:

- Trial site
- Clinical setting  
(neoadjuvant, adjuvant, late adjuvant)



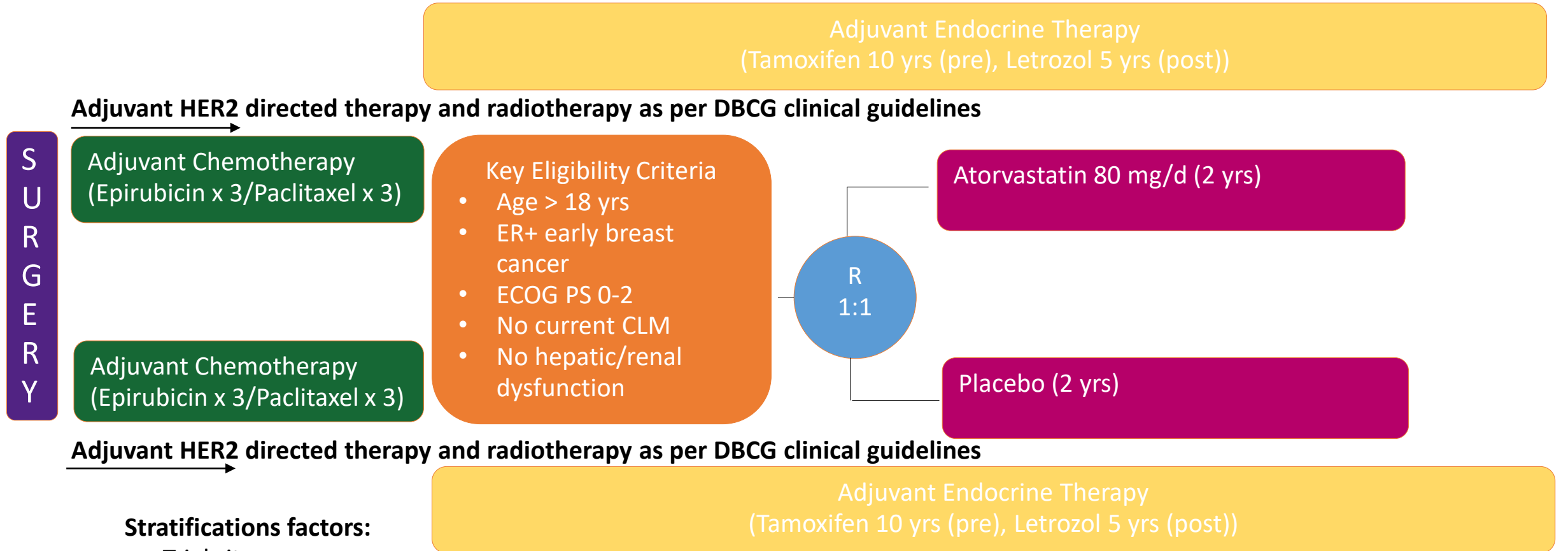
# MASTER trial design, EARLY adjuvant, ET ONLY



## Stratifications factors:

- Trial site
- Clinical setting (neoadjuvant, adjuvant, late adjuvant)

# MASTER trial design, LATE adjuvant



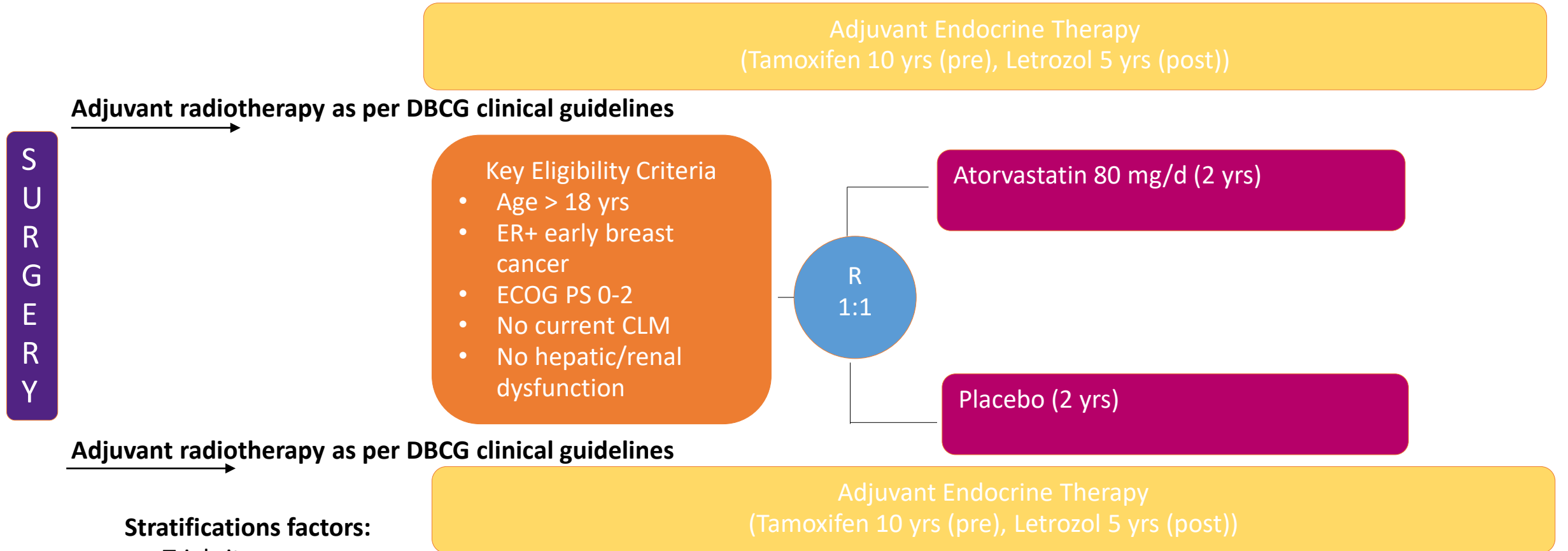
### Stratifications factors:

- Trial site
- Clinical setting (neoadjuvant, adjuvant, late adjuvant)

### Definition of “late entry”:

randomization after start of adjuvant therapy, but within three years of initiation of the endocrine treatment

# MASTER trial design, LATE adjuvant, ET only



### Stratifications factors:

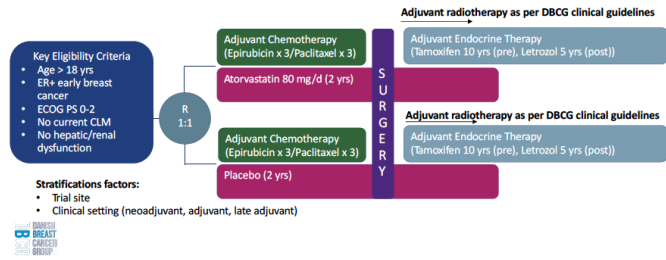
- Trial site
- Clinical setting (neoadjuvant, adjuvant, late adjuvant)

### Definition of “late entry”:

randomization after start of adjuvant therapy, but within three years of initiation of the endocrine treatment

# MASTER trial design, OBSERVATIONAL COHORT

## MASTER TRIAL DESIGN, NEOADJUVANT



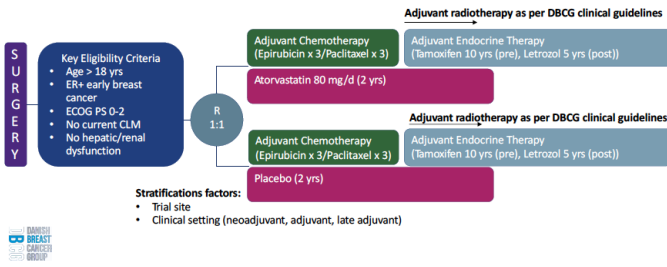
Non-randomized patient cohort on any cholesterol-lowering medication at diagnosis

Patients eligible for MASTER – any clinical setting:

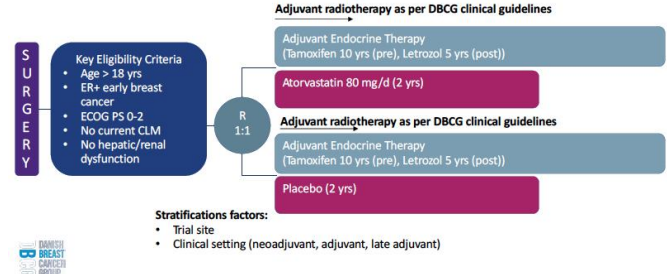
Participation in observational cohort:

1. CRF
2. PRO
3. Blood samples

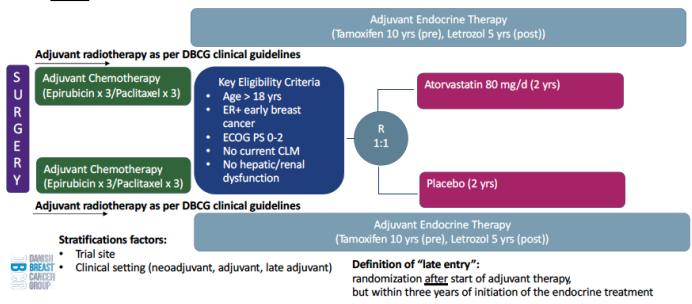
## MASTER TRIAL DESIGN, EARLY ADJUVANT



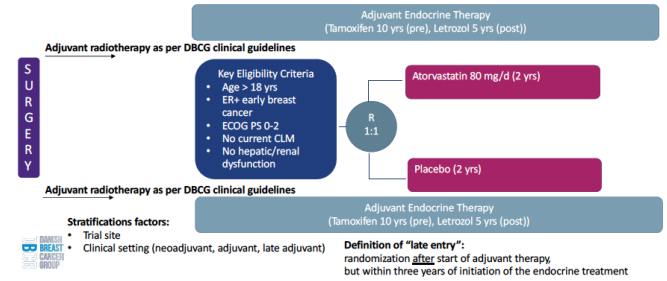
## MASTER TRIAL DESIGN, EARLY ADJUVANT, ET ONLY



## MASTER TRIAL DESIGN, LATE ADJUVANT



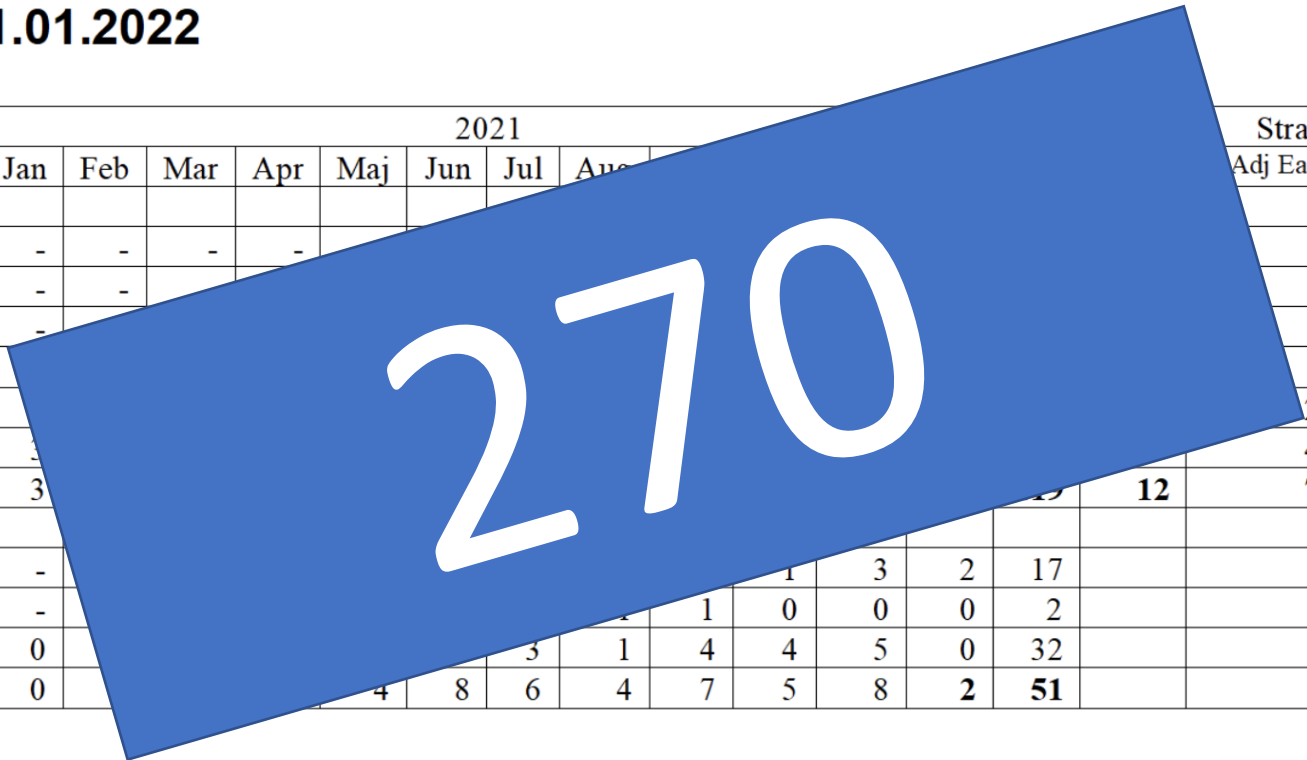
## MASTER TRIAL DESIGN, LATE ADJUVANT, ET ONLY



Første patientinklusion d. 14. januar 2021

**MASTER, Status pr. 01.01.2022**

		2021												Strata		
		Jan	Feb	Mar	Apr	Maj	Jun	Jul	Aug	Sep	Ok	Nov	Dec	Adj Early	3: Adj Late	
	RAND															
Rigshospitalet		-	-	-	-										1	0
Sønderborg		-	-											10	39	
Esbjerg		-												2	5	
Vejle														4	5	
Herning														20	17	
Aarhus														41	63	
I alt		3												78	129	
	SELV															
Sønderborg		-						1	3	2	17					
Vejle		-						1	0	0	2					
Aarhus		0						3	1	4	4	5	0	32		
I alt		0						4	8	6	4	7	5	8	2	51



# Status 2023

## MASTER, Status pr. 01.01.2023

		2021	2022										Strata			
			Jan	Feb	Mar	Apr	Maj	Jun	Juli	Aug	Sep	Ok	Nov	Dec	Adj Early	3: Adj Late
	RAND															
Rigshospitalet		1	2	5	4										6	27
Hillerød		-	-												0	5
Odense		-													7	9
Sønderborg															16	91
Esbjerg															4	19
Vejle															4	20
Herning															44	41
Aarhus														9	80	95
I alt														<b>482</b>	<b>14</b>	<b>161</b>
	SELV															
Rigshospitalet															0	0
Hillerød															1	1
Odense															0	0
Sønderborg															3	1
Esbjerg															2	2
Vejle															0	1
Aarhus		32	2	1	2	2	6	2	0	3	0	2	0	1	53	
Aalborg		-	-	-	-	-	-	-	-	-	-	-	1	0	1	
I alt		51	8	3	12	9	15	8	1	5	14	7	7	<b>6</b>	<b>146</b>	

628



NTT



**Nordic Trip/NBG-19-01, a translational randomized phase III study exploring the effect of the addition of capecitabine to carboplatinum based chemotherapy in early “triple negative” breast cancer.**

# Basal-like/ER÷,HER2÷

Præoperativ systemisk behandling bør altid anbefales til patienter med ER-negativ HER2-normal brystkræft med tumorer > 20 mm og/eller N1 da evt. residual sygdom vil have betydning for den forsatte behandling

"Lav"-risiko

T1, cN0

Mammografi + UL

Adjuvant

EC x 4, evt DD->Paclitaxel x 4

T2, N0-1 (0-3 pos.)

Mammografi + UL + MR

Neoadjuvant

DDEC x 4 -> Paclitaxel + evt. carboplatin x 4#

Residual tumor

Capecitabine

T3-4 eller N2-3 (4+ pos.)

Mammografi+UL+MR+PET-CT

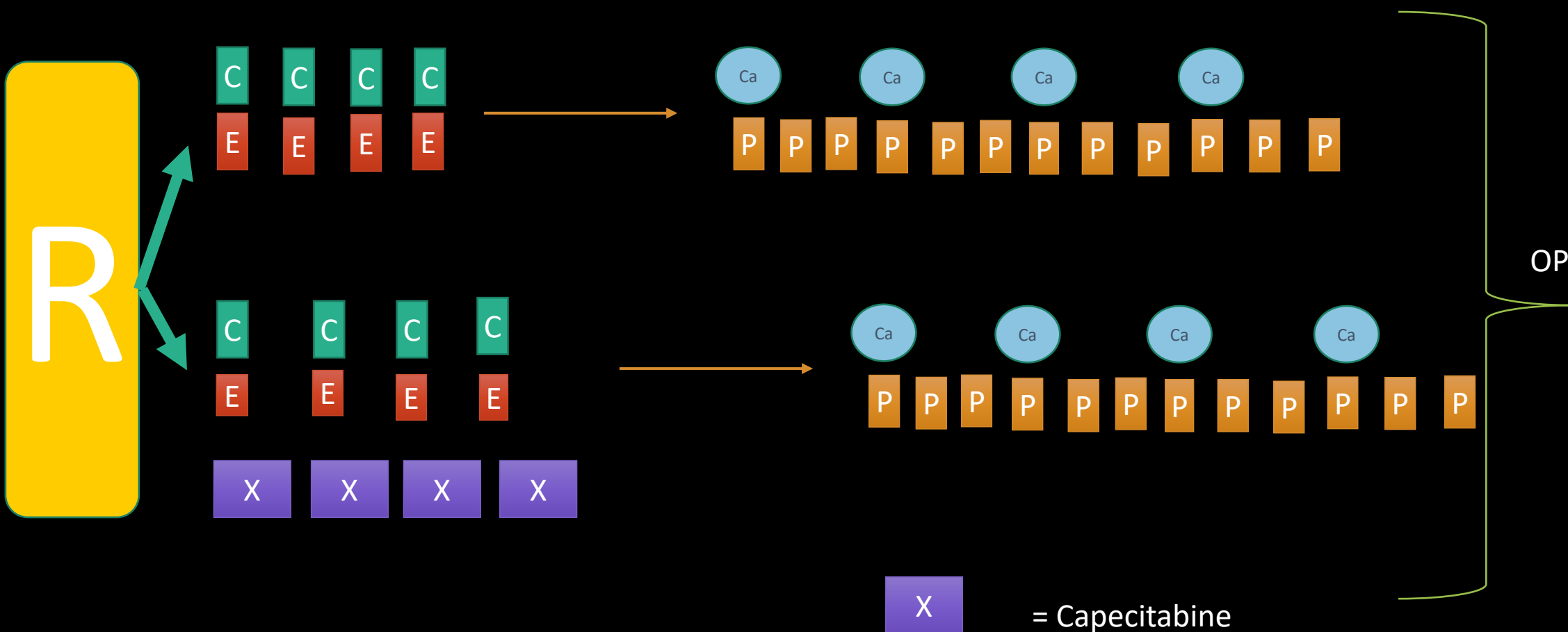
pCR

opfølgning

# Carboplatin kan dog undlades, hvis det sammen med patienten skønnes at være for bivirkningstungt



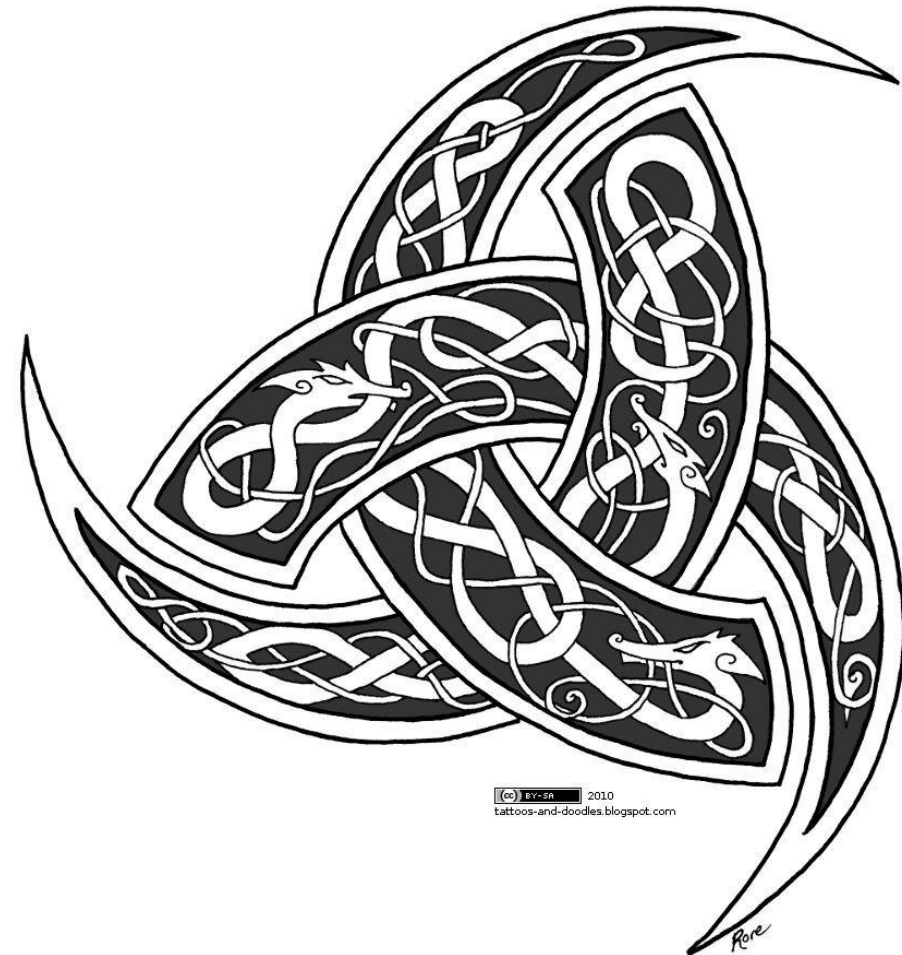
# Design



NB: Siden nov 22 + pembro i Sverige

# Patientantal og studieforsøg

- Total 820 patienter hvoraf 250 fra Danmark
- Første patient blev inkluderet januar 2020
- Forventet dato for sidste patient afsluttet (behandling): 2024
- **Behandlingsvarighed:** 20-23 uger
- **Follow-up:** 10 år



# Nordic Trip Trial

- Sverige; 18 sites (**148 pt**)
- Danmark;
  - Aalborg (screener), Vejle (screener), **Sønderborg (2 pt.)**, OUH (screener), **Næstved (4 pt.)**, **Vejle (1 pt.)** RH (**17 pt.**) og **Hillerød (1 pt.)**
- Finland; 1 site
- Island; 1 site



# Pragmatisk studie

Udredning og behandling stort set "som vi plejer":

- Mammografi
- MR-Mammae før start, efter 2 serier og præoperativt
- PET-CT hvis node-pos
- Iodkorn mv iht alm praksis biopsi som vi plejer + biopsi til projekt
- Genetisk udredning
- Ct DNA - Genomisk Medicin på RH ansvarlig i DK

# Randomisering

- Randomisering vil ske i forholdet 1:1 mellem de to behandlingsarme A og B, stratificeret for land, N-status and T-status.

## DBCG-modul

Forside

Indtast CPR

Mammaskema

Mammaskema\_før\_2020

Patient Info

Kirurgi

Kirurgi\_før\_2020

Patologi

Patologi\_før\_2020

Onkologi

Metastaserende

Strålebehandling

Off Study

DCIS/LCIS

Rykkere

**Randomisering**

### Randomisering

Er randomiseret

DBCG Randomisering (Antal tilbage / Totale antal)

Indberetning af Randomisering

Bestil flere randomiserings numre

Ingen protokol er valgt til fremvisning

Ingen protokol er valgt til randomisering

Ingen protokol er valgt til indtastning

Ingen protokol er valgt til statistik

Vis Randomiserings Oplysninger

Lave Randomisering

Indberet Randomisering

Statistik

Email DBCG

Statistik

# The trip team

## Bidrag fra DBCG

### Randomisering & database

- Maj-Britt Jensen og Michael Jespersen
- DBCG er vært for databasen
- Kirurgi-, patologi-, og onkologidata overføres

### Monitoring

- Ann Raaberg, DBCG

### Vævsbiobank

- Anne-Vibeke Lænkholm
- Roskilde er forsøgets centrale patologiafd.

Genomisk Medicin på RH varetager forsøgsblodprøver på danske patienter



## Study team i Lund

- Niklas Loman, PI og sponsor
- Åke Borg, genomisk lab., Lund
- Heidi Grill Magnusson
- Lina Zander



## Laboratoriet i Göteborg

- Barbro Linderholm
- ctDNA lab. i Göteborg



# CryoPac

***Effects of Cryotherapy  
on Objective and Subjective Symptoms  
of Taxane-Induced Neuropathy  
in Patients with Early Breast Cancer.  
A Randomized Prospective Controlled Trial***

## National status pr 5.1.2023

- Der er aktiv inklusion på alle 4 sites
- Nationalt har vi inkluderet 258 patienter(24% dropout).

	NOH	RH	AUH	SØNDERBORG
Åbnede for inklusion	uge 2, 2021.	uge 2, 2021.	uge 19, 2021.	Uge 22, 2021.
Antal patienter inkluderet:	64	100	82	12
Drop out/ screen failure	22	20	18	2

The incidence of CIPN with paclitaxel and docetaxel is dose dependent and occurs with higher cumulative dose and higher dose per cycle.

The incidence of taxane-associated chemotherapy-induced peripheral neuropathy ranges from **11% to 64% for docetaxel** and **57% to 83% for paclitaxel**, which in 2–33% is severe. A patient-reported outcome study found that **CIPN numbness persisted in 67%–80%** of patients for one year following the completion of paclitaxel therapy .