LEIDEN UNIVERSITY MEDICAL CENTER

FOCUS

Female breast cancer in the elderly; Optimizing Clinical guidelines

USing clinico-pathological and molecular data

Department of Surgery

Prof. dr. van de Velde

Dr. Liefers

Dr. Kuppen

Drs. de Kruijf

Drs. Van de Water

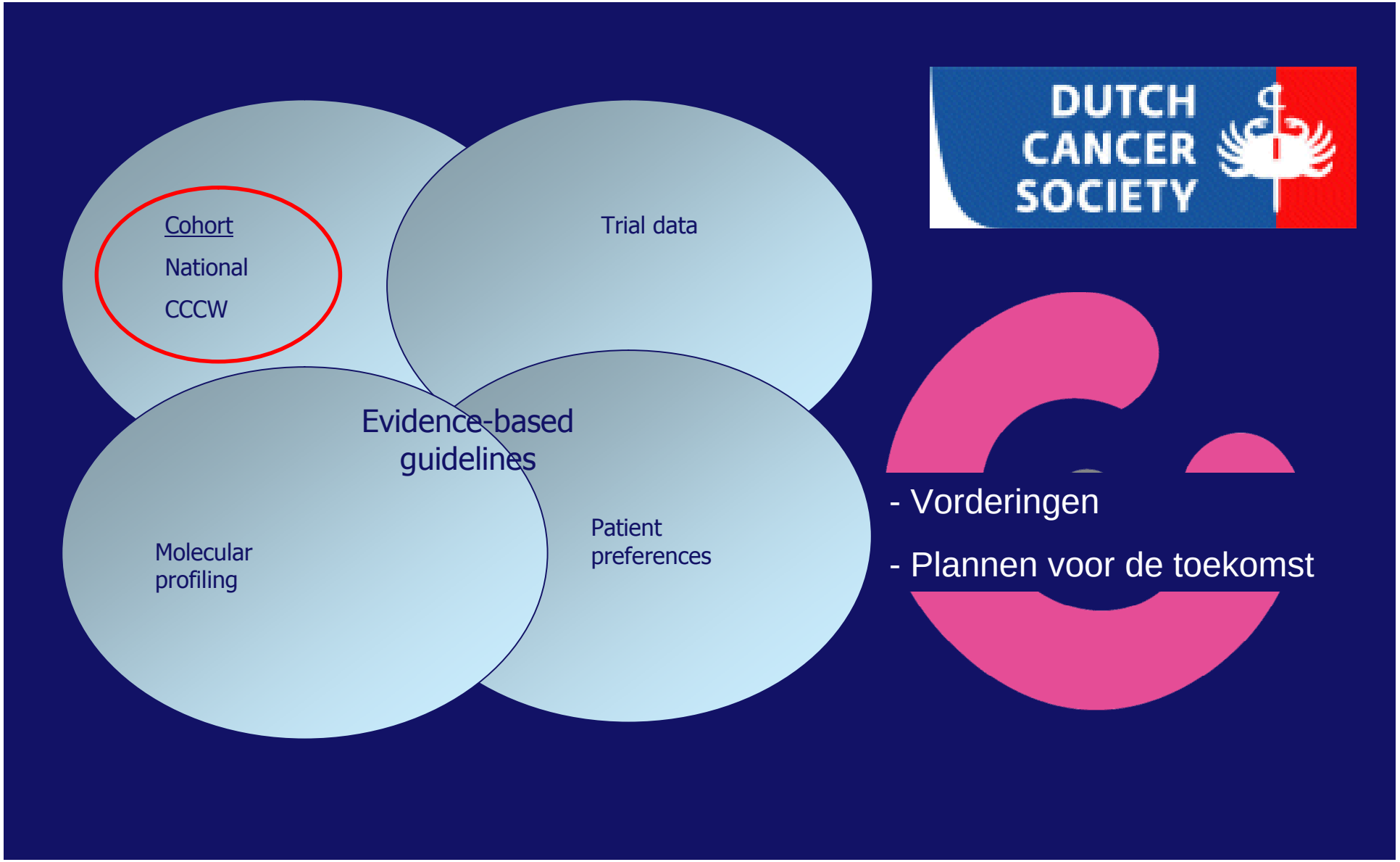
Ing. Sajet

Department of Geriatrics

Prof. dr. Westendorp

Dr. de Craen

***FOCUS study**: **F**emale breast cancer in the elderly; **O**ptimizing **C**linical guidelines **US**ing clinico-pathological and molecular data.*



Breast cancer in the Netherlands

1. **Differences between young and elderly patients**
2. Changes over time

Breast Cancer Res Treat
DOI 10.1007/s10549-010-0898-8

EPIDEMIOLOGY

Breast cancer in elderly compared to younger patients in the Netherlands: stage at diagnosis, treatment and survival in 127,805 unselected patients

E. Bastiaannet · G. J. Liefers · A. J. M. de Craen · P. J. K. Kuppen · W. van de Water · J. E. A. Portielje · L. G. M. van der Geest · M. L. G. Janssen-Heijnen · O. M. Dekkers · C. J. H. van de Velde · R. G. J. Westendorp

Stage at diagnosis

Changes in stage distribution for 75+ (outside the screening program)

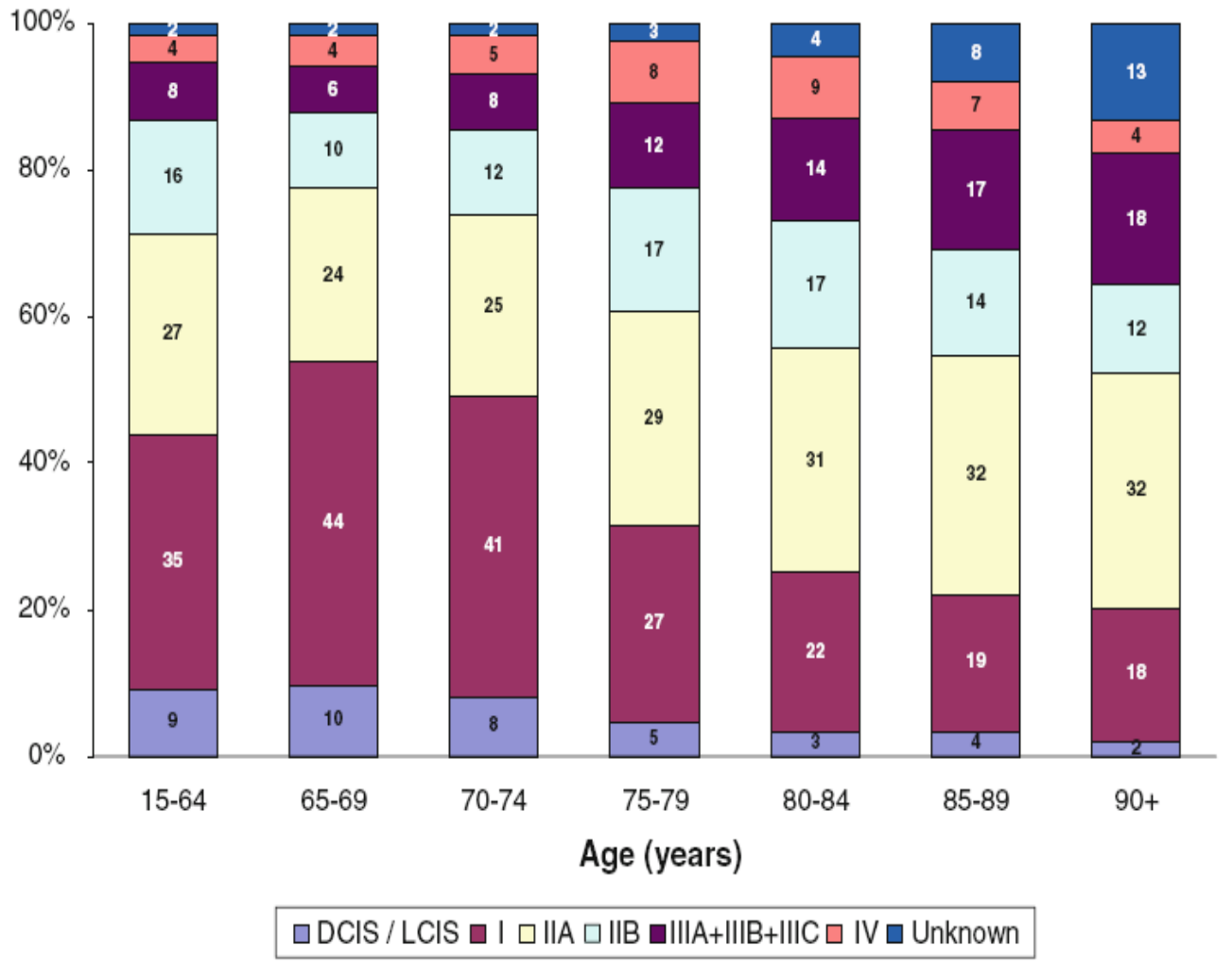
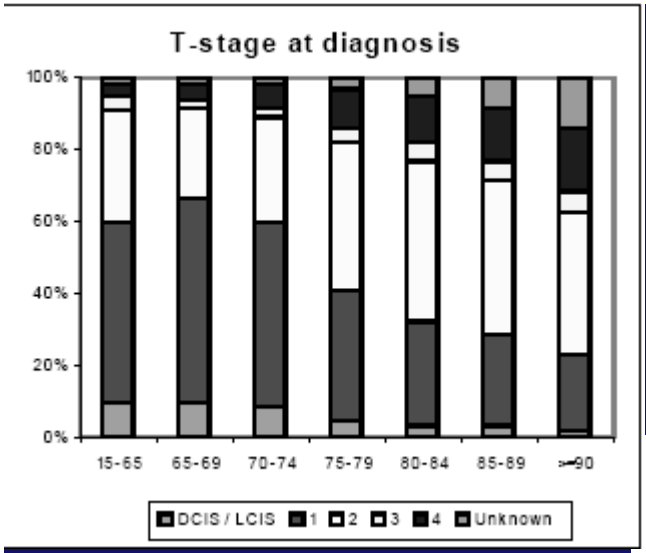
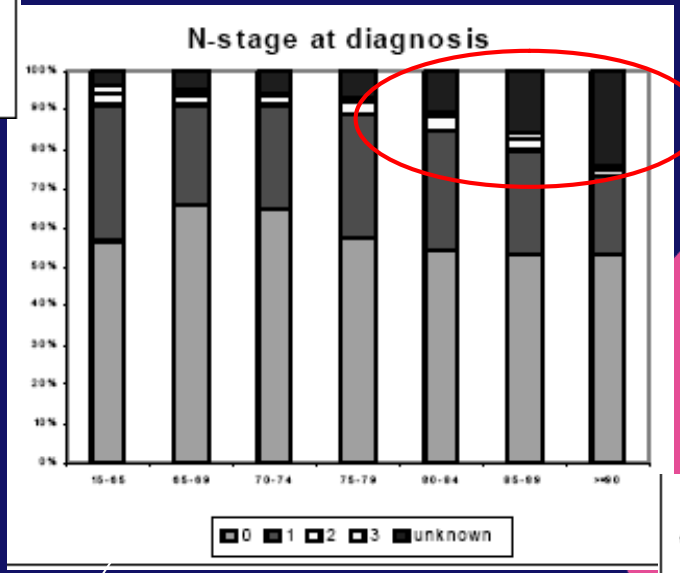
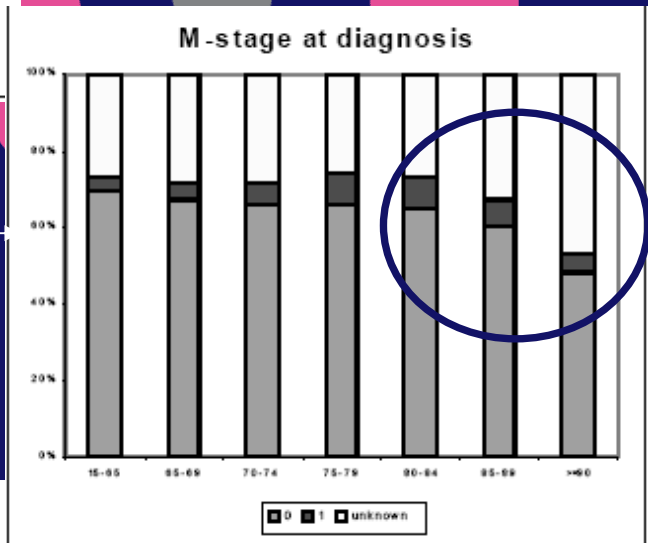


Fig. 1 Stage at diagnosis (%) according to TNM classification of the year of diagnosis for the Dutch cohort breast cancer patients 1995–2005



- Increase in higher T-stage
- Increase in unknown T-stage





Increase in unknown stage

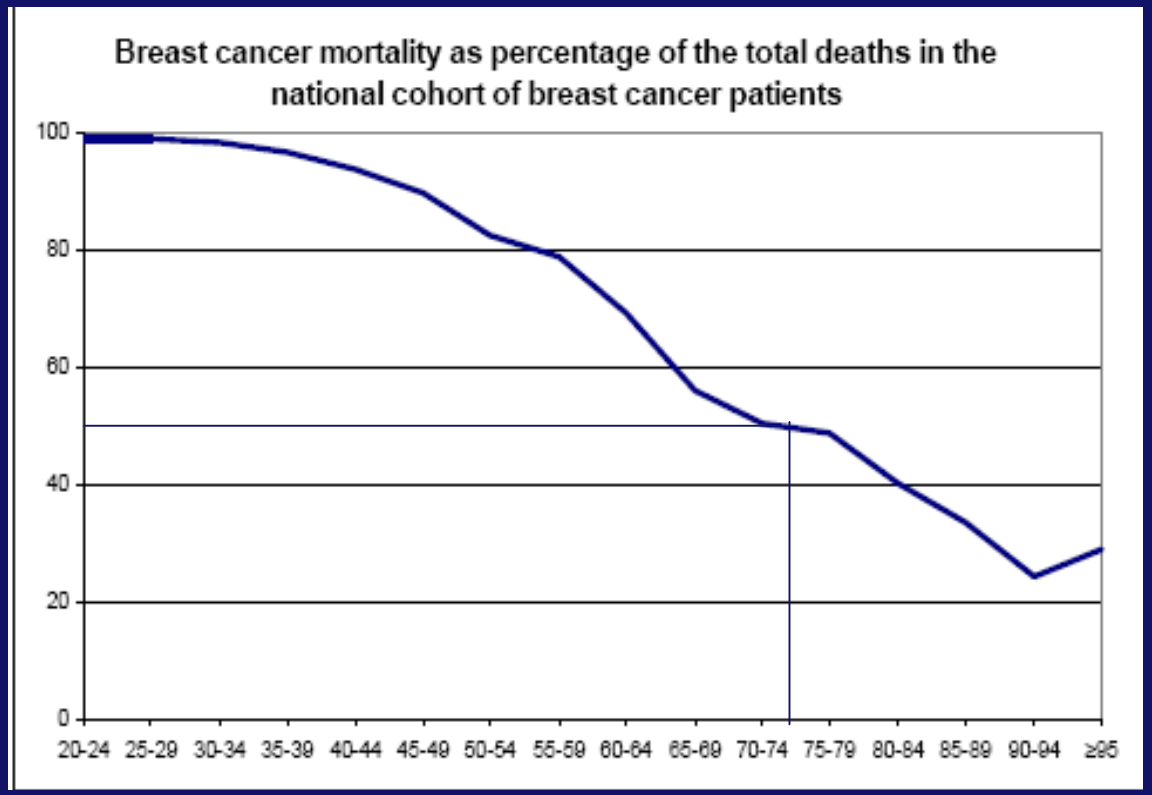
Treatment in the Netherlands

Table 2 Treatment of female breast cancer patients in the Netherlands, according to age

Treatment	Age (years)							*P* value**
	15–64	65–69	70–74	75–79	80–84	85–89	90+	
Surgery in all tumors, except T4 and M1*	99.2	98.8	97.7	93.3	83.2	64.6	41.2	<0.001
Radiotherapy after breast conserving surgery*	91.4	90.9	90.3	86.3	70.8	35.9	14.6	<0.001
Mastectomy for In Situ, Stage I or Stage II	45.0	46.0	54.3	68.6	78.6	82.2	76.2	<0.001
Lymph node dissection	66.2	62.5	61.3	64.3	55.2	39.0	19.9	<0.001
Hormonal treatment as monotherapy	0.8	2.0	3.8	9.5	18.1	31.1	47.3	<0.001
Any adjuvant systemic treatment	78.5	70.7	66.9	63.8	59.7	57.0	53.3	<0.001

* Part of the Dutch guidelines, ** *P* for trend

Proportion of patients who die of the breast cancer



* Decrease in proportion of patients who die of the breast cancer
* Oldest elderly: 24-28%
* 75+: >50% other causes of death

(Observed – Expected) / (Observed) * 100

Breast cancer in the Netherlands

1. Differences between young and elderly patients
2. **Changes over time**

Lack of survival gain for elderly women with breast cancer

E. Bastiaannet[1,2,*], J.E.A. Portielje[3,*], C.J.H. van de Velde[1], A.J.M. de Craen[2], S. van der Velde[1], P.J.K. Kuppen[1], L.G.M. van der Geest[4], M.L.G. Janssen-Heijnen[5], O.M. Dekkers[6], R.G.J. Westendorp[2], G.J. Liefers[1]

*both authors contributed equally

Submitted The Oncologist

Data will be available soon.

Population-based study

- One of the largest population-based studies
- Few studies have been able to stratify within the elderly

- However no details

Comprehensive Cancer Centre West

Selection

- Female patients with breast cancer
- 1999-2001
- 65 years and older

→ 1600 females included

1997-2004

> Inclusion 4000 females

Registration form

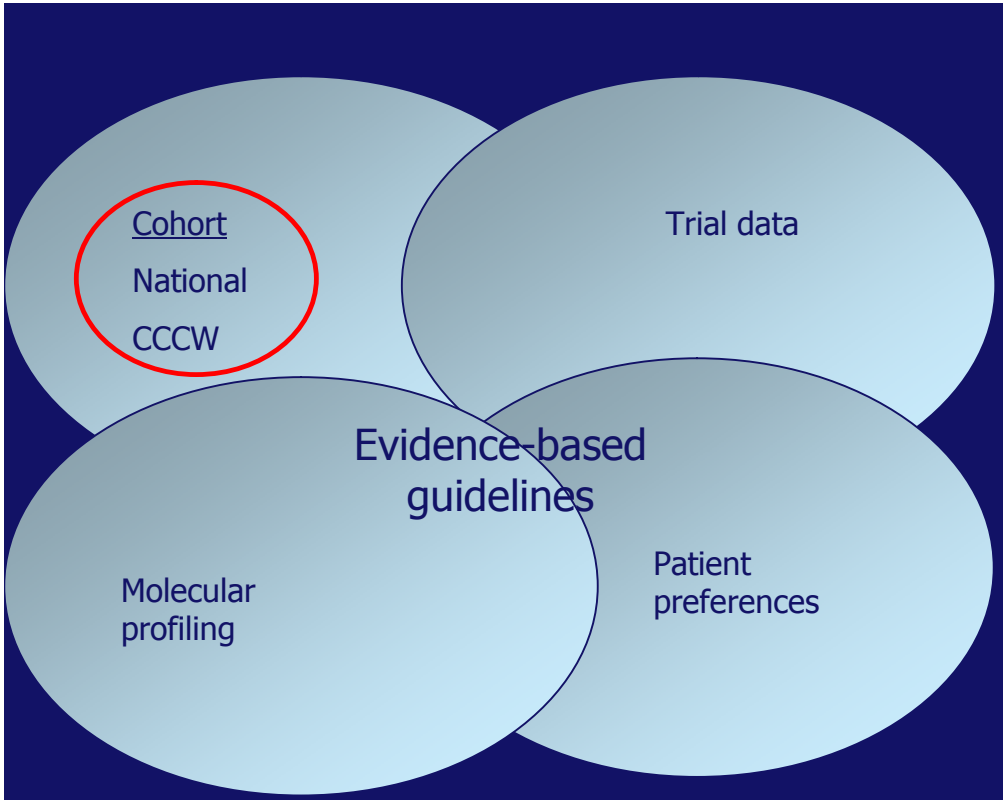
- Histopathology
  - Morfology, size, grade, TNM, etc
  - Receptors
- Detection (screening / patient detected)
- Comorbidity
  - Charlson
  - Smoking
  - BMI
  - Results from the blood test
  - Geriatric parameters
- Follow-up
  - Status
  - Recurrence
  - Treatment recurrence
- Complications
  - Surgery
  - Radiotherapy
  - Chemotherapy (CTC)
  - Hormone therapy
- Treatment
  - Surgery
  - Radiotherapy
  - Adjuvant treatment
    - Unplanned change
  - Palliative treatment

Socio-economic status

- **Department of Surgery**
  - GJ Liefers
  - W van de Water
  - CJH van de Velde
- **Department Gerontology & Geriatrics**
  - AJM de Craen
  - RGJ Westendorp
- **HAGA Hospital**
  - JEA Portielje
- **Comprehensive Cancer Centre West (Leiden) & South (Eindhoven)**
  - LGM van de Geest
  - M Aarts

Submitted BCRT; results will be available soon

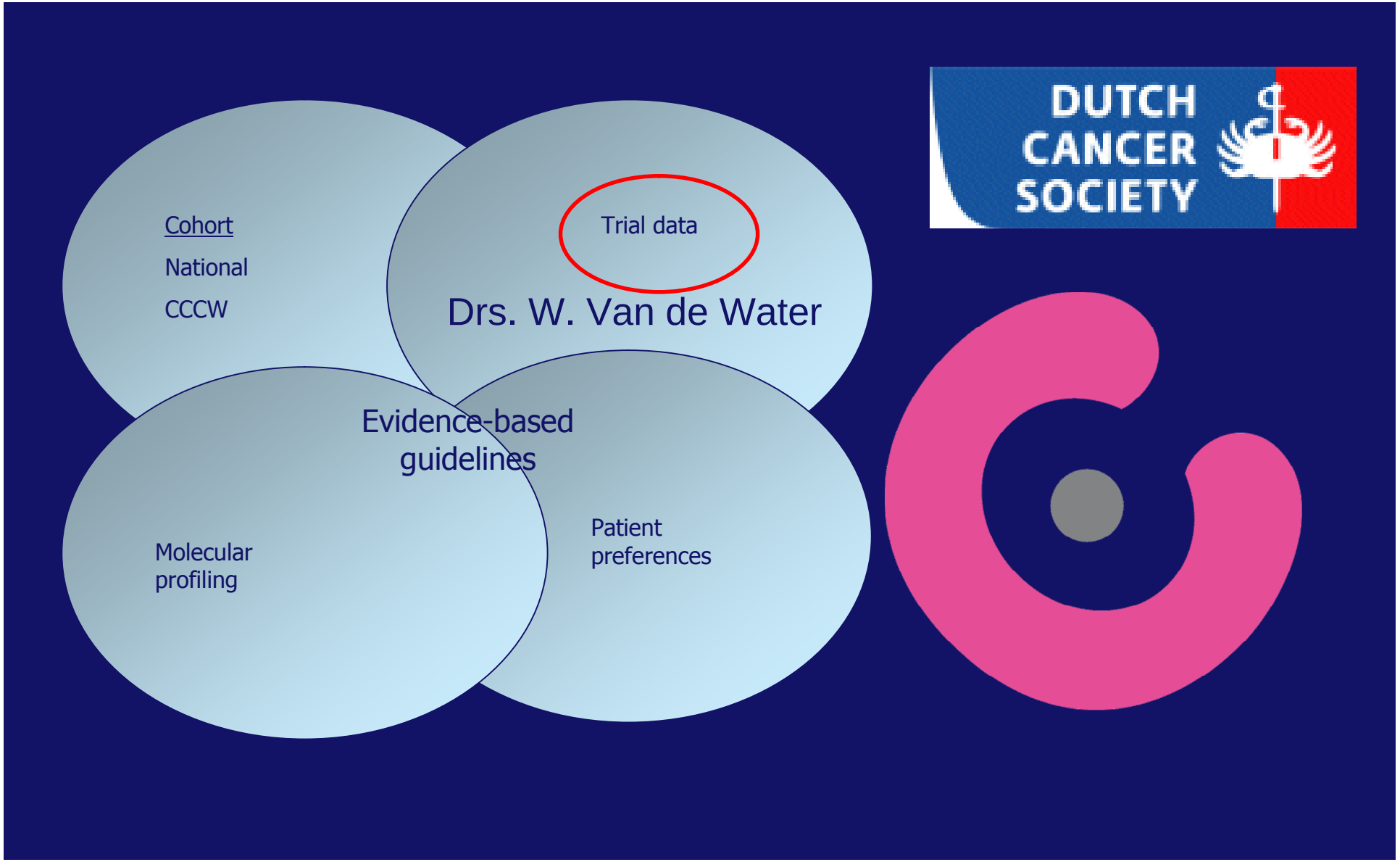
***FOCUS study**: **F**emale breast cancer in the elderly; **O**ptimizing **C**linical guidelines **US**ing clinico-pathological and molecular data.*



Future research

- No surgery (HAGA & LUMC)
- Adherence to guidelines over time
- Stage IV patients
- International comparison

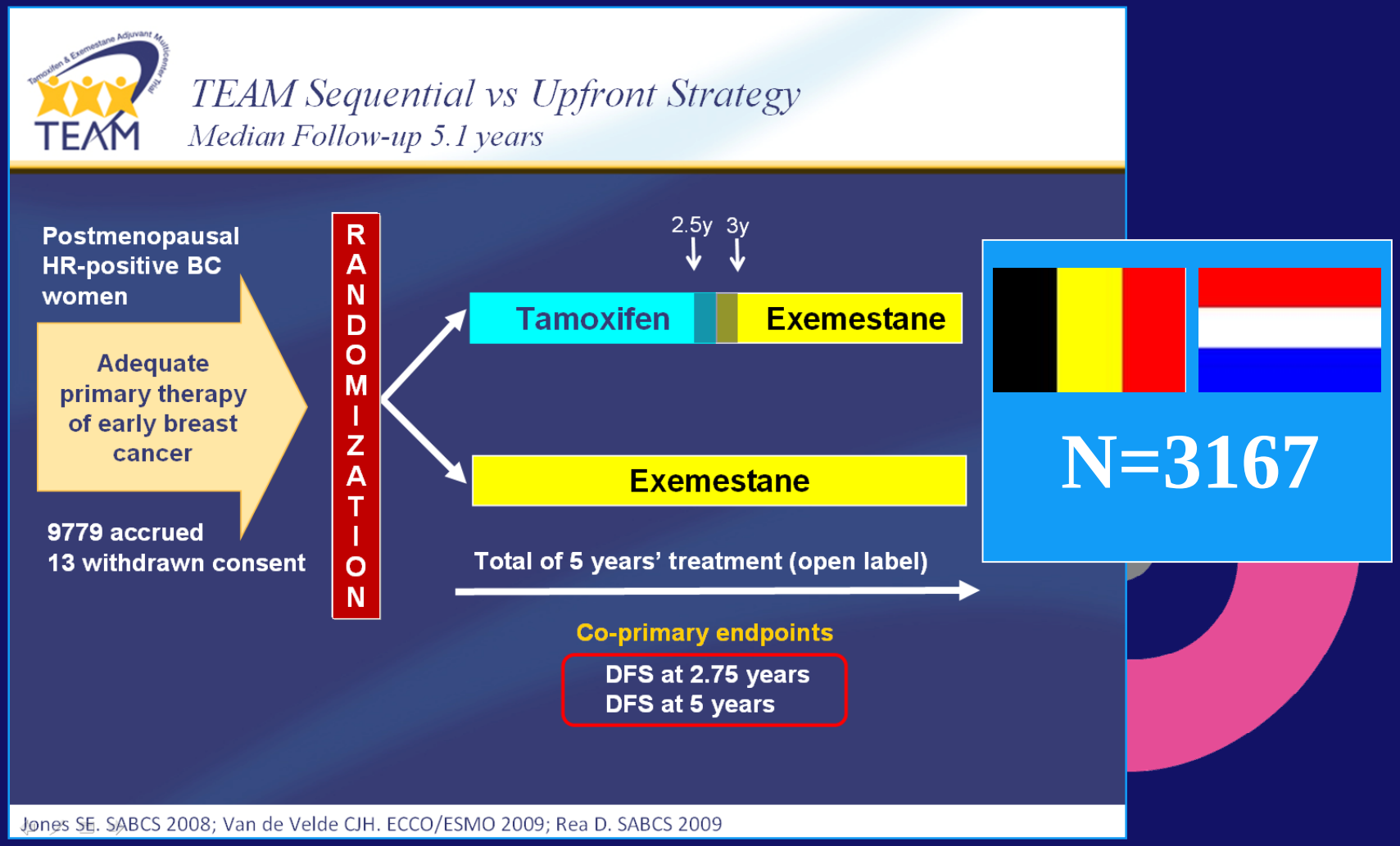
***FOCUS study**: **F**emale breast cancer in the elderly; **O**ptimizing **C**linical guidelines **US**ing clinico-pathological and molecular data.*



Hormonal therapy compliance in young and old breast cancer patients

W. van de Water, MD

TEAM Benelux data



Results will be available soon

Efficacy of hormonal therapy in young and old breast cancer patients

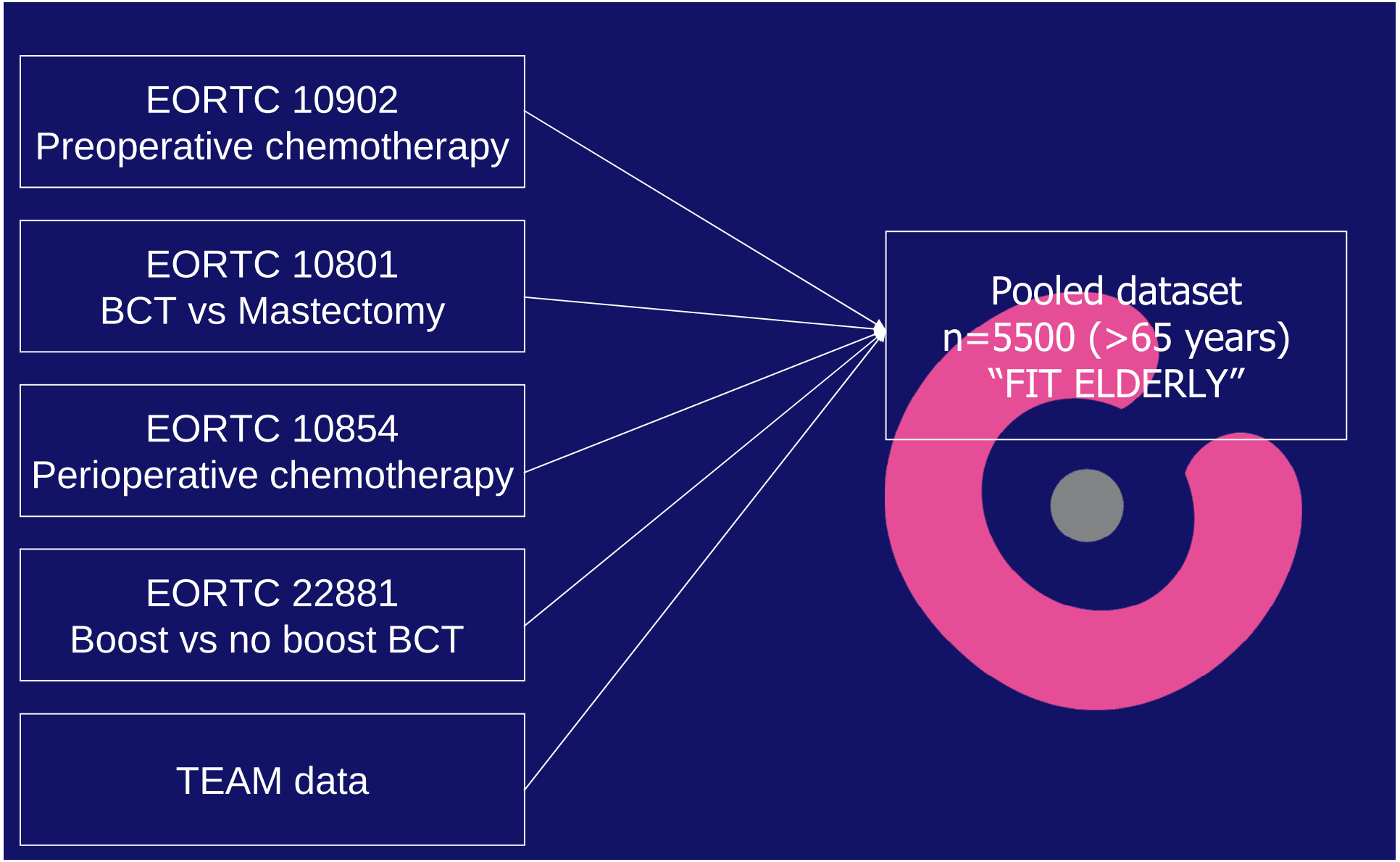
W. van de Water, MD

Research questions

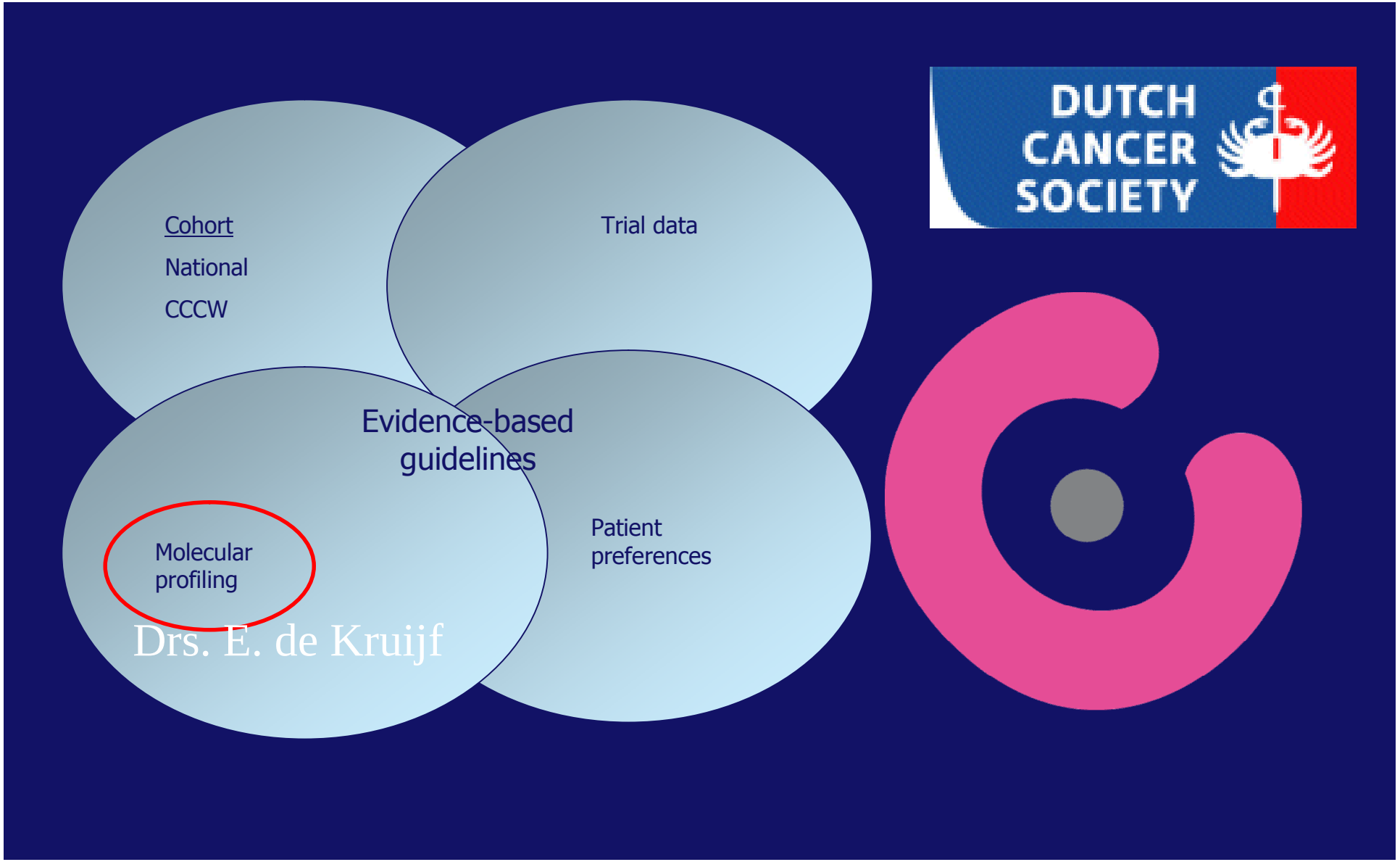
- Age specific adverse events?
- Age specific efficacy of hormonal therapy?
- Age specific competing risk of death?

International TEAM database (almost 10000 patients)

Data from clinical trials



***FOCUS study**: **F**emale breast cancer in the elderly; **O**ptimizing **C**linical guidelines **US**ing clinico-pathological and molecular data.*

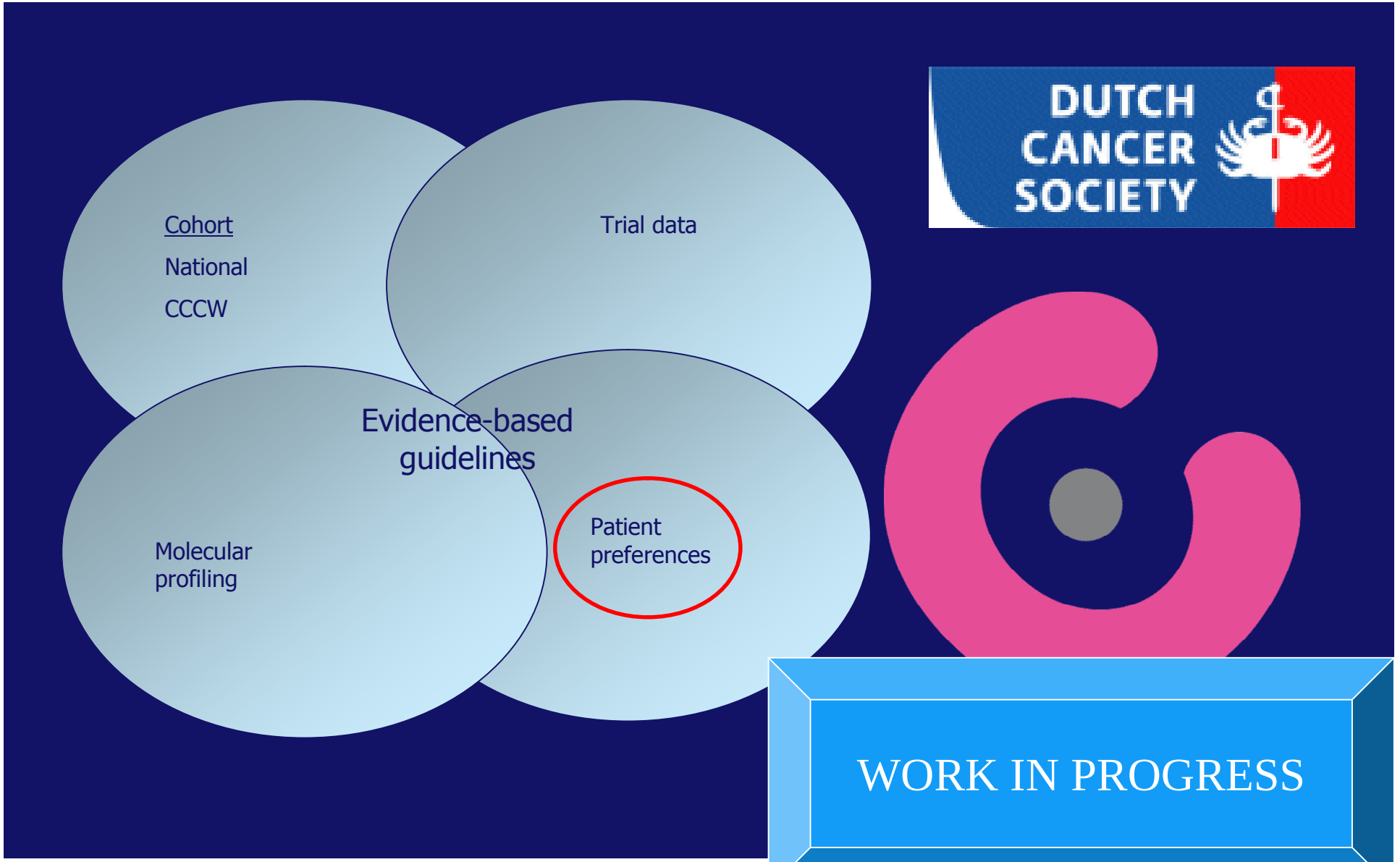


Aims

- Welke biologische factoren verschillen tussen jongere en oudere patiënten
- Valideren van bestaande prognostische/predictieve factoren in oudere patiënten
- Vinden van nieuwe prognostische/predictieve factoren in oudere patiënten

Inzicht krijgen in biologische mechanismen in borstkanker in oudere patiënten om tot evidence based risico inschattingen en stratificaties van patiënten te komen

***FOCUS study**: **F**emale breast cancer in the elderly; **O**ptimizing **C**linical guidelines **US**ing clinico-pathological and molecular data.*



Prospective study

Combination of all data

* Molecular data
* Trial data
* Data from cohorts

Risk model

- Recurrent disease
- (Breast cancer related) death
- Adverse events
- Patient and tumor characteristics
- Patient preferences

Evidence based, high quality care

Tailored treatment guidelines