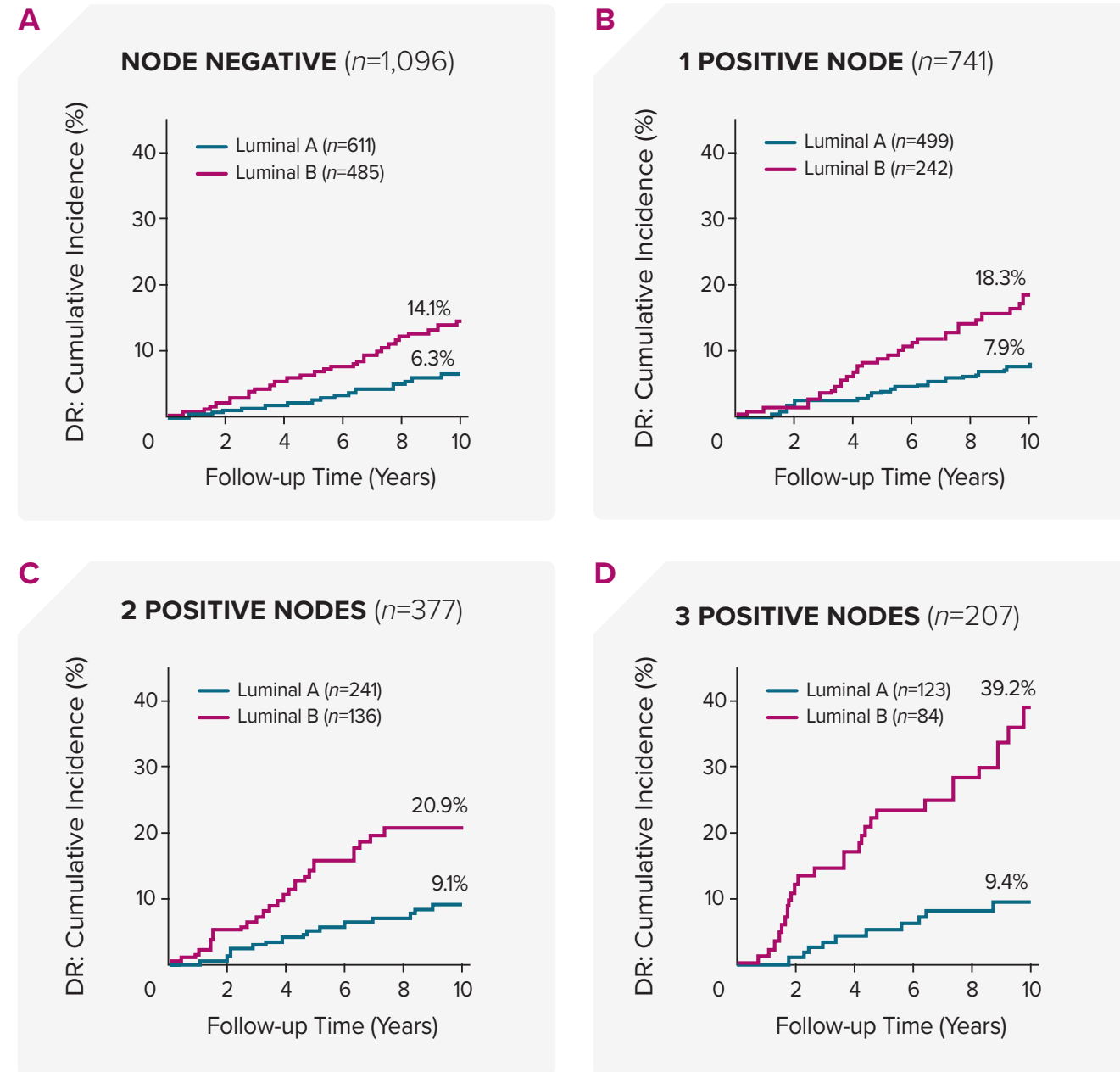# Prognostic value of the molecular subtypes of Breast Cancer

RESULTS FROM A DBCG STUDY

The Prosigna ROR score more accurately estimated the probability of 10-year distant recurrence in this population compared with the risk stratification provided by other gene panels[2]

A

NODE NEGATIVE (*n*=1,096)

DR: Cumulative Incidence (%)
Luminal A (*n*=611)
Luminal B (*n*=485)
14.1%
6.3%
Follow-up Time (Years)

B

1 POSITIVE NODE (*n*=741)

DR: Cumulative Incidence (%)
Luminal A (*n*=499)
Luminal B (*n*=242)
18.3%
7.9%
Follow-up Time (Years)

C

2 POSITIVE NODES (*n*=377)

DR: Cumulative Incidence (%)
Luminal A (*n*=241)
Luminal B (*n*=136)
20.9%
9.1%
Follow-up Time (Years)

D

3 POSITIVE NODES (*n*=207)

DR: Cumulative Incidence (%)
Luminal A (*n*=123)
Luminal B (*n*=84)
39.2%
9.4%
Follow-up Time (Years)

The discordance between IHC-based subtype and Prosigna molecular subtypes is considerable; errors in assigning subtype can significantly affect breast cancer treatment efficacy.[3]

Prosigna is the only standardized assay for identification of the intrinsic molecular subtypes of breast cancer (Luminal A, Luminal B, HER2-enriched and Basal-like).[3]

DR: Distant Recurrence, **IHC:** Immunohistochemistry,

More **comprehensive information** for better **treatment decisions**
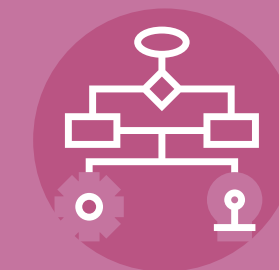
Prosigna
BREAST CANCER ASSAY

Provides more accurate prognosis which is the **foundation of treatment recommendations**[1]
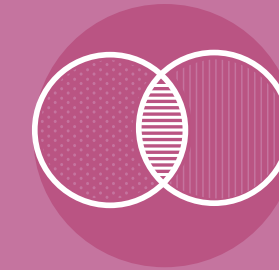
Prosigna® combines **tumour gene expression and clinico-pathological factors** in a single 10-year Risk of distant Recurrence (ROR) score[4,5]
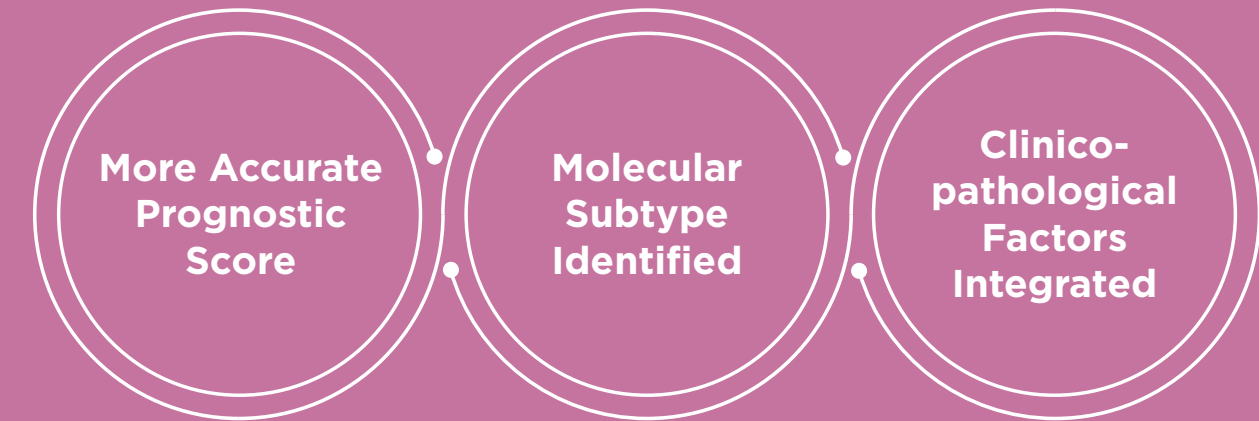
The only breast cancer prognostic test identifying the **four PAM50 molecular subtypes**

Easy access to local testing with **faster turnaround times**

1. Sestak I, *et al.* JAMA Oncol. 2018;4(4):545-553. **2.** Lænkholm AV, *et al.* J Clin Oncol. 2018;10;36(8):735-740. **3.** Perou M, Sørlie T, Eisen M, *et al.* Nature. 2000;406(6796):747–752 **4.** Liu S, *et al.* Breast Cancer Res. 2014;16(5):432. **5.** Alexandre M, *et al.* Cancer Manag Res. 2019;11:10353-10373

AC094.01.2209

Prosigna
BREAST CANCER ASSAY

2nd generation test
that more comprehensively **informs treatment decisions**

CE-IVD MARKED
—
GUIDELINES RECOMMENDED

More Accurate Prognostic Score

Molecular Subtype Identified

Clinico-pathological Factors Integrated

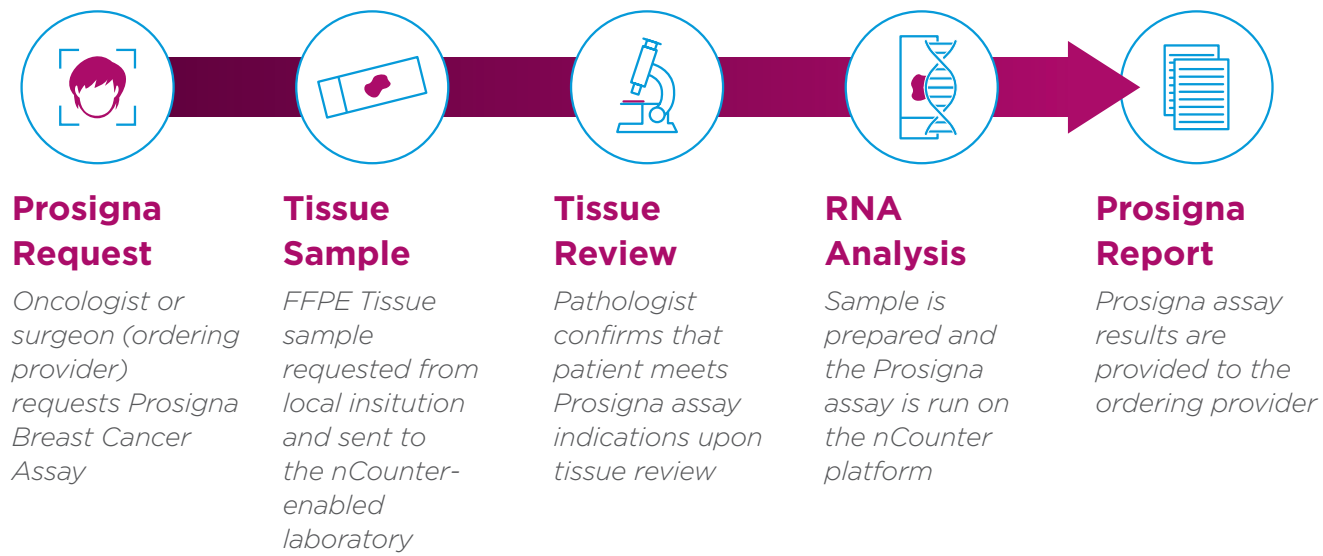**veracyte**

Visit our website: **www.prosigna.com**
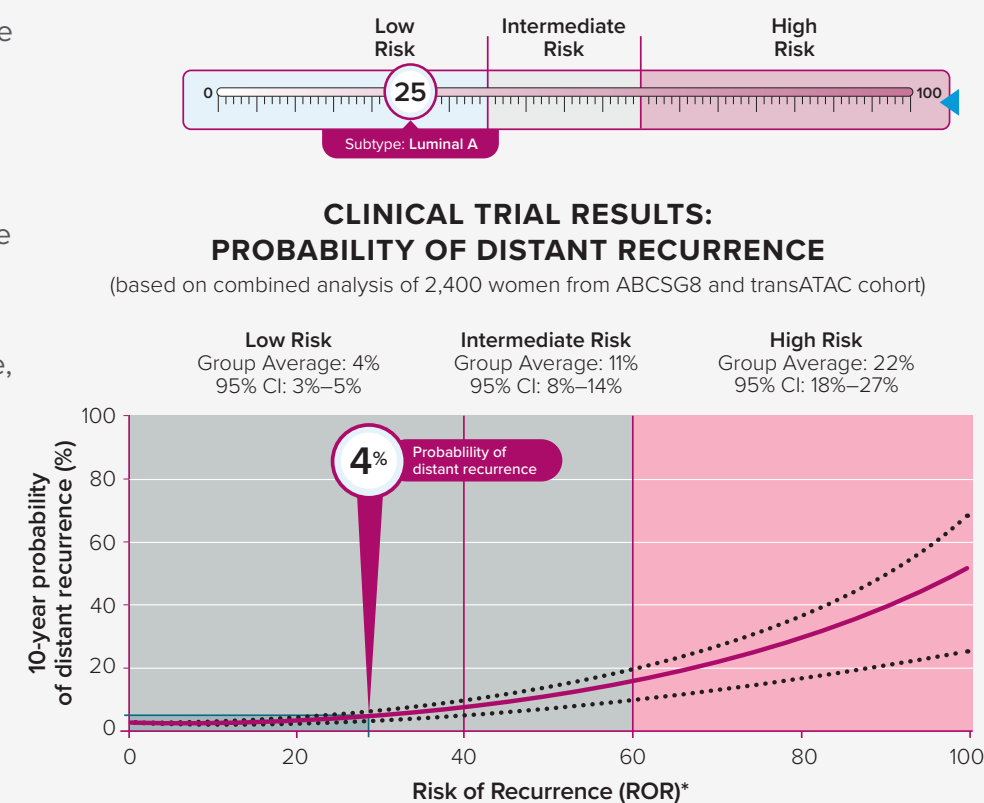Contact us: **info@prosigna.com**

veracyte

A local solution with more comprehensive information and fast and efficient turnaround time when patients cannot afford to wait

Your local lab and trusted pathology team can deliver sophisticated genomic analysis

Prosigna Request
Oncologist or surgeon (ordering provider) requests Prosigna Breast Cancer Assay

Tissue Sample
FFPE Tissue sample requested from local insitution and sent to the nCounter-enabled laboratory

Tissue Review
Pathologist confirms that patient meets Prosigna assay indications upon tissue review

RNA Analysis
Sample is prepared and the Prosigna assay is run on the nCounter platform

Prosigna Report
Prosigna assay results are provided to the ordering provider

The Prosigna assay reports three key pieces of information specific to your patient:

1. Molecular Subtype (Luminal A, Luminal B, HER2-enriched, Basal-like)

2. Risk of Recurrence (ROR) Score
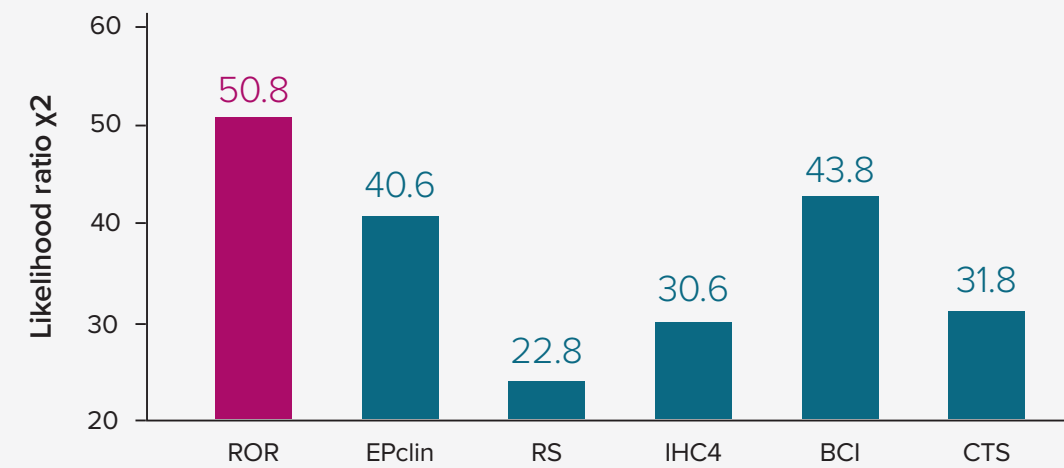
3. Risk Group (Low, Intermediate, High)

The Prosigna ROR score provides more accurate prognostic information on the risk of distant recurrence among gene expression and immunohistochemical biomarkers.[1]

Low Risk | Intermediate Risk | High Risk

Subtype: Luminal A

CLINICAL TRIAL RESULTS: PROBABILITY OF DISTANT RECURRENCE
(based on combined analysis of 2,400 women from ABCSG8 and transATAC cohort)

Low Risk Group Average: 4% 95% CI: 3%–5%
Intermediate Risk Group Average: 11% 95% CI: 8%–14%
High Risk Group Average: 22% 95% CI: 18%—27%

4% Probability of distant recurrence

10-year probability of distant recurrence (%)

Risk of Recurrence (ROR)*

*This graph is specific for Node-negative patients. Please see full product insert for details for Node-positive patients. **CI:** confidence interval, **FFPE:** Formalin-Fixed Paraffin-Embedded, **HER2:** human epidermal growth factor receptor 2, **RNA:** Ribonucleic Acid, **ROR:** Risk of Recurrence Score.

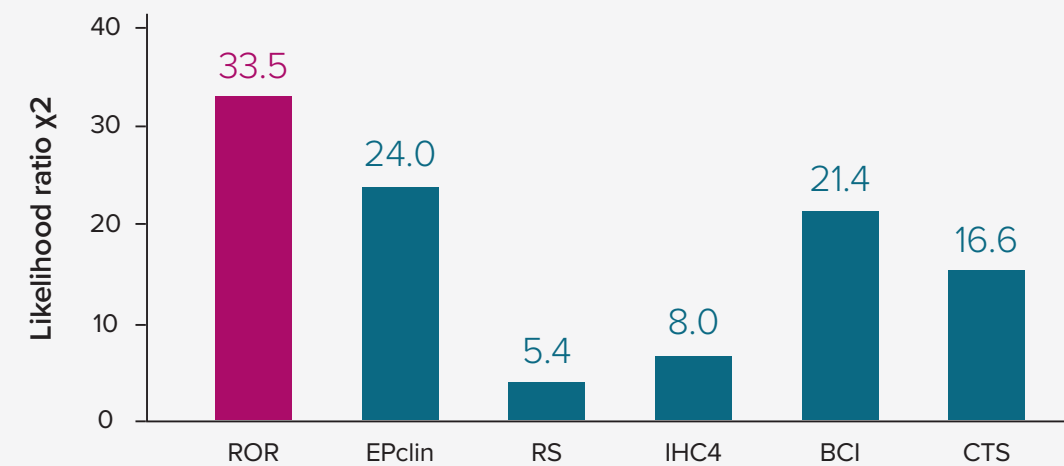## Prosigna® provides the most prognostic information in node-negative patients[1]
RESULTS FROM A TRANSATAC STUDY

A higher likelihood ratio χ2* indicates a higher prognostic test performance

COMPARATIVE PERFORMANCE OF GENOMIC SIGNATURES - YEARS 0 TO 10

Likelihood ratio χ2

ROR 50.8 | EPclin 40.6 | RS 22.8 | IHC4 30.6 | BCI 43.8 | CTS 31.8

COMPARATIVE PERFORMANCE OF GENOMIC SIGNATURES - YEARS 5 TO 10

Likelihood ratio χ2

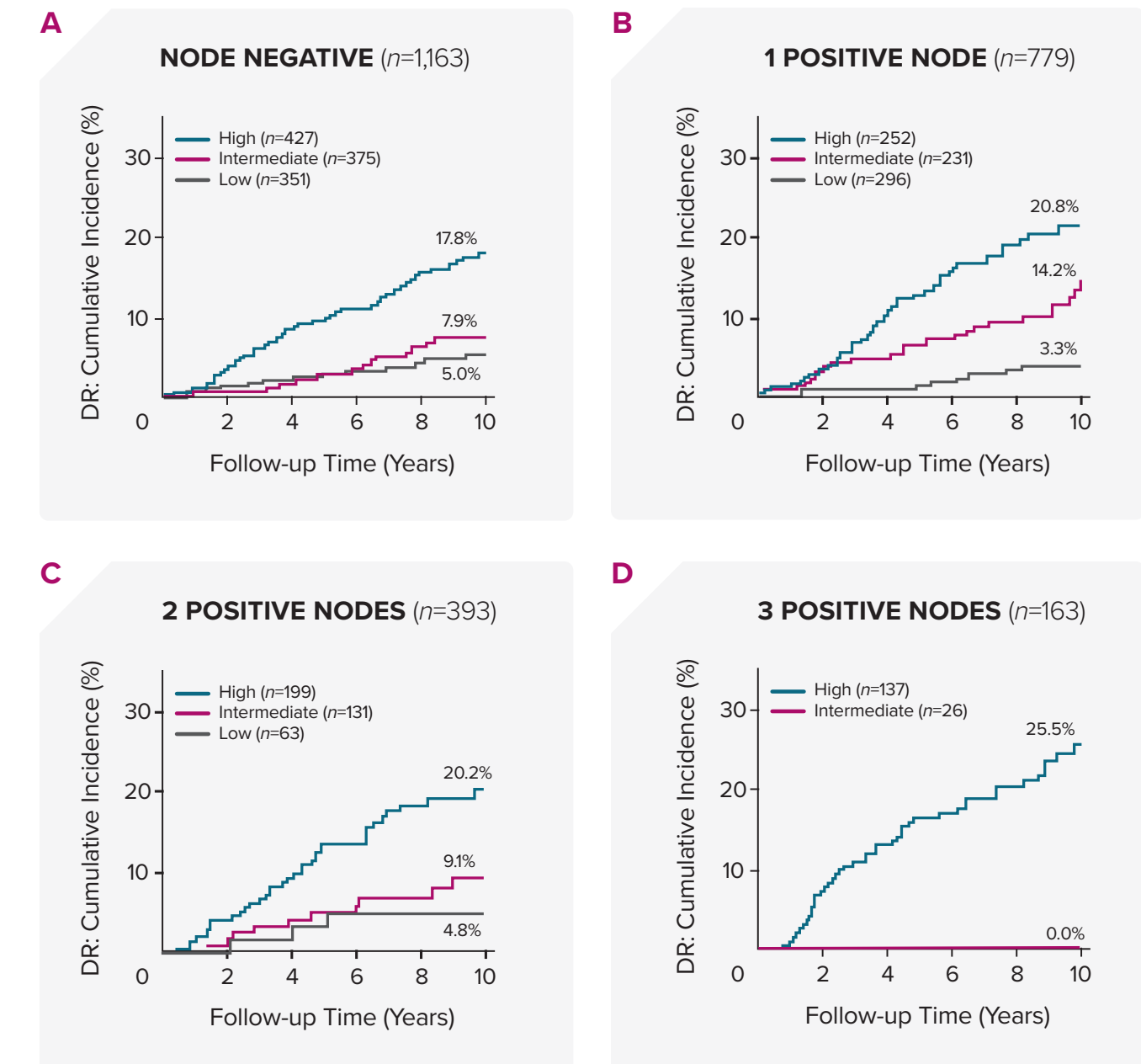ROR 33.5 | EPclin 24.0 | RS 5.4 | IHC4 8.0 | BCI 21.4 | CTS 16.6

Prosigna outperforms the leading first generation test and the other 2nd generation test, from 0 to 10 years and for late recurrence. **" For women with node-negative disease, the ROR, followed by BCI, and EPclin were significantly more prognostic for overall and late distant recurrence. "** - Dr. Ivana Sestak [1]

*The likelihood ratio χ2 is a statistical measure that is used to compare the performance of different tests. **BCI:** Breast Cancer Index, **CTS:** Clinical Treatment Score, **EPclin:** EndoPredict clinical, **IHC4:** Immunohistochemical Score, **ROR:** Risk of Recurrence Score, **RS:** Recurrence Score.

Prosigna® accurately identifies node-positive patients of low-risk group with favourable outcomes regardless of nodal status[2]
RESULTS FROM A DBCG STUDY

All patients categorized as low-risk by the Prosigna Breast Cancer assay, regardless of nodal involvement status, have a distant recurrence absolute risk below or equal to 5%[2]

A NODE NEGATIVE (*n*=1,163)

DR: Cumulative Incidence (%)
Follow-up Time (Years)
High (*n*=427)
Intermediate (*n*=375)
Low (*n*=351)
17.8%
7.9%
5.0%

B 1 POSITIVE NODE (*n*=779)

DR: Cumulative Incidence (%)
Follow-up Time (Years)
High (*n*=252)
Intermediate (*n*=231)
Low (*n*=296)
20.8%
14.2%
3.3%

C 2 POSITIVE NODES (*n*=393)

DR: Cumulative Incidence (%)
Follow-up Time (Years)
High (*n*=199)
Intermediate (*n*=131)
Low (*n*=63)
20.2%
9.1%
4.8%

D 3 POSITIVE NODES (*n*=163)

DR: Cumulative Incidence (%)
Follow-up Time (Years)
High (*n*=137)
Intermediate (*n*=26)
25.5%
0.0%

DR: Distant Recurrence.

Direct access to key publication: