EndoPredict®
One Test – Three Clinical Answers

Clear, Individual and Fast Results

EndoPredict is a prognostic and predictive second generation gene expression test to determine the risk of distant recurrence up to 15 years and the 10 year absolute chemotherapy benefit for patients with ER+/HER2- primary breast cancer. EndoPredict is the only test that answers three important clinical questions.

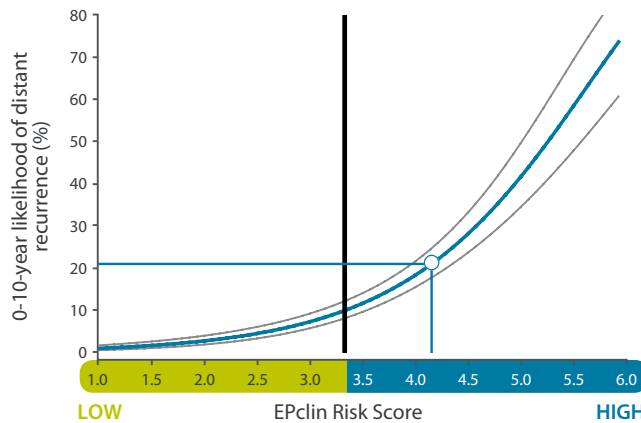## EndoPredict provides the individual risk of distant recurrence at 10 years

1

Can chemotherapy be avoided?

(Risk at 10 years[1])

LIKELIHOOD OF DISTANT RECURRENCE WITHIN YEARS 0-10
EndoPredict provides the risk of distant recurrence at 10 years

0-10-year likelihood of distant recurrence (%) — EPclin Risk Score — LOW / HIGH

LIKELIHOOD OF DISTANT RECURRENCE WITHIN 10 YEARS
21%

EndoPredict indicates the patient's risk of recurrence within years 0-10 after diagnosis.[1]
Validated in four prospective-retrospective studies with more than 3,200 patients providing level 1 evidence[1,2,3,4]

## EndoPredict predicts individual chemotherapy benefit at 10 years

2

What is the absolute benefit from chemotherapy?

(Chemotherapy benefit[5])

ABSOLUTE CHEMOTHERAPY BENEFIT AT 10 YEARS
5 years endocrine therapy alone versus chemotherapy plus 5 years endocrine therapy

10-year likelihood of distant recurrence (%) — EPclin Risk Score
— Endocrine treatment
-- Chemotherapy and endocrine treatment
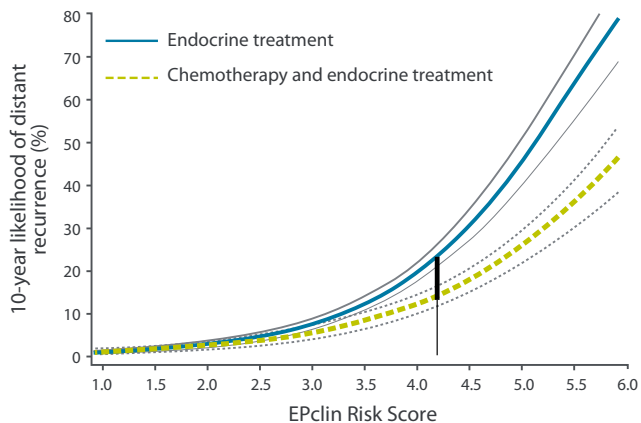
ABSOLUTE BENEFIT OF CHEMOTHERAPY AT 10 YEARS
9%

EndoPredict provides an estimate of the patient's absolute benefit of chemotherapy in 10 years.[5]
As shown in a study with 3,746 patients with ER+, HER2- breast cancer and with current (taxane-anthracycline containing) treatment regimens.

EndoPredict is the only prognostic test that provides individual recurrence risk up to 15 years

3

Can endocrine therapy be stopped after 5 years?

(Risk between 5 and 15 years[6])

LIKELIHOOD OF LATE DISTANT RECURRENCE WITHIN YEARS 5-15
For patients with no recurrence after 5 years of endocrine therapy alone

5-15-year likelihood of distant recurrence (%) — EPclin Risk Score — LOW / HIGH
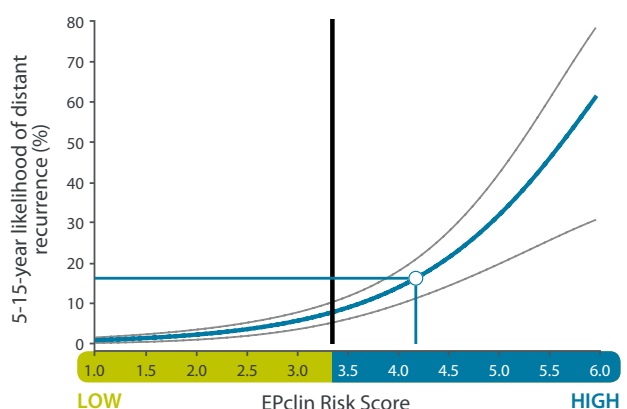
LIKELIHOOD OF DISTANT RECURRENCE WITHIN YEARS 5-15
16%

EndoPredict provides the patient's recurrence risk up to 15 years.[6] Validated in 1,386 ER+, HER2- node negative and node positive patients.

EndoPredict Combines Gene Expression and Clinical-Pathological Factors
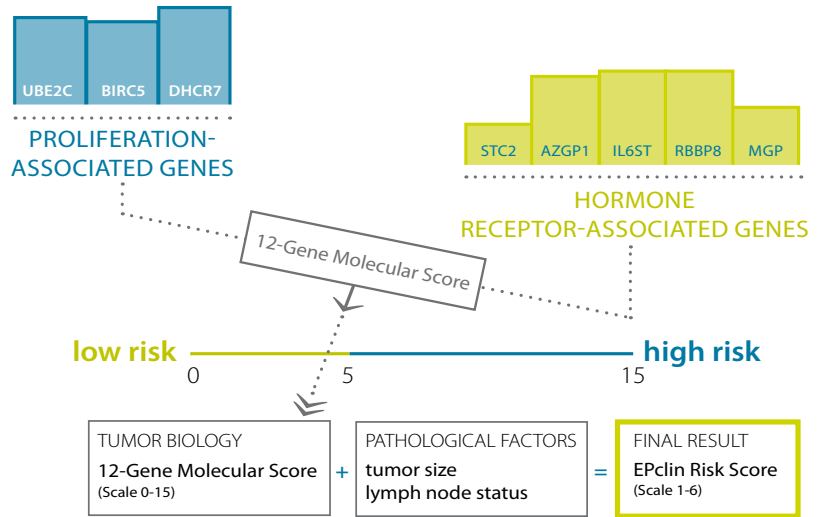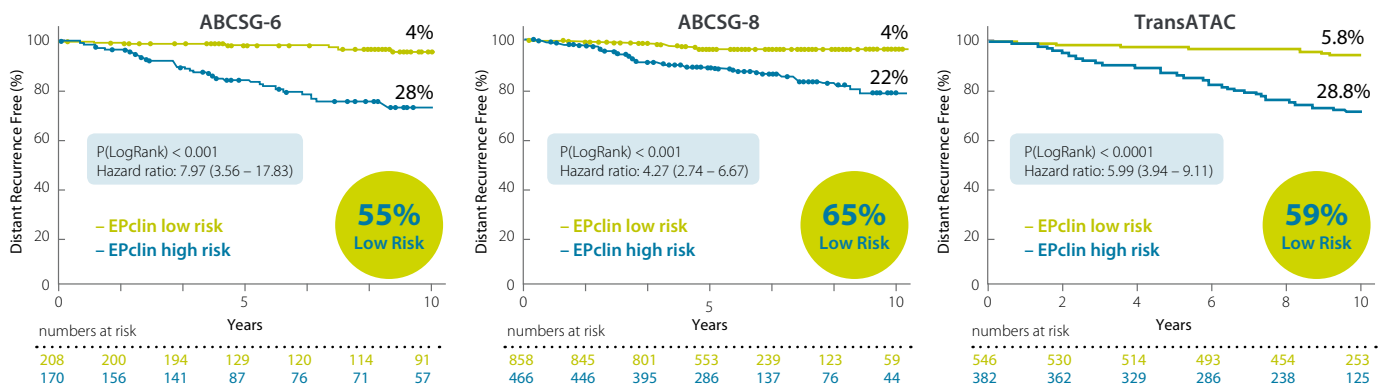
EndoPredict measures the activity of **eight genes** (proliferation-associated genes and hormone receptor-related genes for accurate assessment of early and late recurrence risk).[1,7] These genes are compared against three normalization and one control gene and the **12-Gene Molecular Score** is calculated.

The final EndoPredict result **(EPclin Risk Score)** is calculated combining the Molecular Score with **tumor size and lymph node status**. This makes EndoPredict a second generation gene expression test and a more powerful predictor of prognosis.

UBE2C BIRC5 DHCR7

PROLIFERATION-
ASSOCIATED GENES

STC2 AZGP1 IL6ST RBBP8 MGP

HORMONE
RECEPTOR-ASSOCIATED GENES

12-Gene Molecular Score

low risk ——————————————— high risk
0   5   15

TUMOR BIOLOGY		PATHOLOGICAL FACTORS		FINAL RESULT
12-Gene Molecular Score (Scale 0-15)	+	tumor size lymph node status	=	EPclin Risk Score (Scale 1-6)

Second generation gene expression test

EndoPredict Consistently Identifies a Large Group of Low Risk Patients that Can Avoid Chemotherapy

ABCSG-6

Distant Recurrence Free (%)

4%
28%

P(LogRank) < 0.001
Hazard ratio: 7.97 (3.56 – 17.83)

– EPclin low risk
– EPclin high risk

55% Low Risk

Years

numbers at risk

| 208 | 200 | 194 | 129 | 120 | 114 | 91 |
| 170 | 156 | 141 | 87 | 76 | 71 | 57 |

ABCSG-8

Distant Recurrence Free (%)

4%
22%

P(LogRank) < 0.001
Hazard ratio: 4.27 (2.74 – 6.67)

– EPclin low risk
– EPclin high risk

65% Low Risk

Years

numbers at risk

| 858 | 845 | 801 | 553 | 239 | 123 | 59 |
| 466 | 446 | 395 | 286 | 137 | 76 | 44 |

TransATAC

Distant Recurrence Free (%)

5.8%
28.8%

P(LogRank) < 0.0001
Hazard ratio: 5.99 (3.94 – 9.11)

– EPclin low risk
– EPclin high risk

59% Low Risk

Years

numbers at risk

| 546 | 530 | 514 | 493 | 454 | 253 |
| 382 | 362 | 329 | 286 | 238 | 125 |

Analysis of ER+, HER2–, N+ and N0 patients from ABCSG-6, ABCSG-8 and TransATAC[1,3]
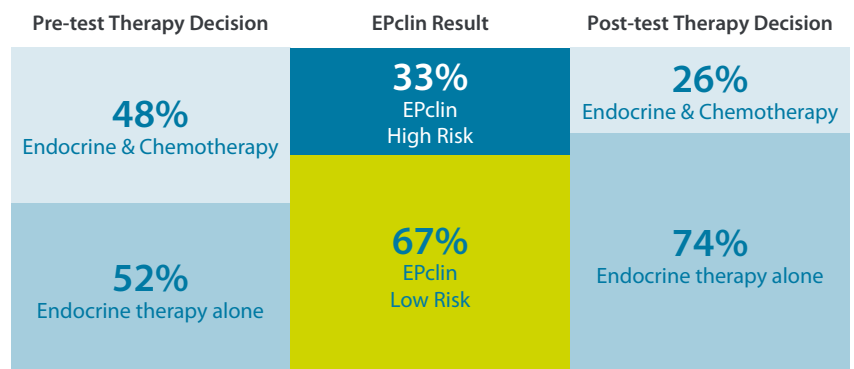
EndoPredict Leads to Substantial Reduction of Chemotherapy

Decision impact studies documented how EndoPredict results affect the treatment decision in clinical practice.

In the ADENDOM Study EndoPredict changed therapy decision in 35.8% of cases. EndoPredict led to a 20.9% net reduction of chemotherapy.

With EndoPredict more patients can safely avoid chemotherapy.

Pre-test Therapy Decision	EPclin Result	Post-test Therapy Decision
48% Endocrine & Chemotherapy	**33%** EPclin High Risk	**26%** Endocrine & Chemotherapy
52% Endocrine therapy alone	**67%** EPclin Low Risk	**74%** Endocrine therapy alone

Decision Impact Study ADENDOM[8]

REFERENCES: **1.** Filipits M. et al.: Clin. Cancer Res. 2011, **2.** Martin M. et al.: BCR 2014, **3.** Buus et al.: J Natl Cancer Inst. 2016, **4.** Sestak I. et al.: JAMA Oncol. 2018, **5.** Sestak I. et al.: Breast Cancer Res Treat. 2019, **6.** Filipits M. et al.: Clin Cancer Res. 2019, **7.** Dubsky P. et al. BJC 2013, **8.** Penault-Llorca F. et al.: The Breast 2019

myriad®
WHEN DECISIONS MATTER

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