Novedades en Quimioterapia
Nab-paclitaxel
José Ignacio Chacón. Hospital Virgen de la Salud. Toledo
Indice

- Cáncer de Páncreas
- Cáncer de mama
Cáncer de páncreas
Increased Survival in Pancreatic Cancer with nab-Paclitaxel plus Gemcitabine

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Mansoor N. Saleh, M.D., Marion Harris, M.D., Michele Reni, M.D.,
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ABSTRACT
**Study Design**

**Planned N = 842**
- Stage IV
- No prior treatment for metastatic disease
- KPS ≥ 70
- Measurable disease
- Total bilirubin ≤ ULN
- No age limitation

**nab-P**
125 mg/m² IV qw 3/4
+ Gem
1000 mg/m² IV qw 3/4

1:1, stratified by KPS, region, liver metastasis

**Gem**
1000 mg/m² IV qw 7/8
then qw 3/4

- Primary endpoint: OS
- Secondary endpoints: PFS and ORR by independent review (RECIST v1.0)
- Safety and tolerability graded according to NCI CTCAE v3.0
- Treat until progression

*nab-P, nab-paclitaxel; gem, gemcitabine; ITT, Intent-to-Treat; KPS, Karnofsky performance status; NCI CTCAE, National Cancer Institute Common Terminology Criteria for Adverse Events; ORR, overall response rate; OS, overall survival; PFS, progression-free survival; qw 3/4, first 3 of 4 weeks; qw 7/8, first 7 of 8 weeks; RECIST, Response Criteria In Solid Tumors; ULN, upper limit of normal.*
### MPACT (CA046) Phase III Trial

- Patients enrolled at 151 sites in North America, Europe, and Australia
- A total of 76 patients enrolled in Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>nab-P + Gem, n</th>
<th>Gem, n</th>
<th>All, n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>235</td>
<td>241</td>
<td>476 (55)</td>
</tr>
<tr>
<td>Australia</td>
<td>61</td>
<td>59</td>
<td>120 (14)</td>
</tr>
<tr>
<td>Russia</td>
<td>50</td>
<td>50</td>
<td>100 (12)</td>
</tr>
<tr>
<td>Canada</td>
<td>33</td>
<td>30</td>
<td>63 (7)</td>
</tr>
<tr>
<td>Italy</td>
<td>21</td>
<td>16</td>
<td>37 (4)</td>
</tr>
<tr>
<td>Ukraine</td>
<td>14</td>
<td>12</td>
<td>26 (3)</td>
</tr>
<tr>
<td>Spain</td>
<td>6</td>
<td>10</td>
<td>16 (2)</td>
</tr>
<tr>
<td>Germany</td>
<td>3</td>
<td>5</td>
<td>8 (1)</td>
</tr>
<tr>
<td>Austria</td>
<td>3</td>
<td>3</td>
<td>6 (1)</td>
</tr>
<tr>
<td>France</td>
<td>4</td>
<td>2</td>
<td>6 (1)</td>
</tr>
<tr>
<td>Belgium</td>
<td>1</td>
<td>2</td>
<td>3 (&lt; 1)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>431</strong></td>
<td><strong>430</strong></td>
<td><strong>861 (100)</strong></td>
</tr>
</tbody>
</table>
Incremento de 1,8 m:
Mejora relativa de la OS del 27%
Updated Survival From a Randomized Phase III Trial (MPACT) of nab®-Paclitaxel Plus Gemcitabine Versus Gemcitabine Alone for Patients With Metastatic Adenocarcinoma of the Pancreas

D Goldstein, RH El-Maraghi, P Hammel, V Heinemann, V Kunzmann, J Sastre, W Scheithauer, S Siena, J Tabernero, L Teixeira, G Tortora, J-L Van Laethem, R Young, D Penenberg, B Lu, A Romano, DD Von Hoff

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Summary of Primary Results in the ITT Population From MPACT

- The primary report of MPACT showed superior efficacy for nab-P plus Gem vs Gem alone for OS (primary endpoint) and all secondary efficacy endpoints.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>nab-P + Gem n = 431</th>
<th>Gem n = 430</th>
<th>HR</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median OS, months</td>
<td>8.5</td>
<td>6.7</td>
<td>0.72</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Median PFS, months</td>
<td>5.5</td>
<td>3.7</td>
<td>0.69</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>ORR, %</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent review</td>
<td>23</td>
<td>7</td>
<td></td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Investigator review</td>
<td>29</td>
<td>8</td>
<td></td>
<td>&lt; 0.001</td>
</tr>
</tbody>
</table>

a Original database cutoff September 17, 2012.

Gem, gemcitabine; nab-P, nab-paclitaxel; ORR, overall response rate; OS, overall survival; PFS, progression free survival.

Updated Overall Survival as of May 9, 2013

Updated Overall Survival as of May 9, 2013

OS, months

<table>
<thead>
<tr>
<th>Events/n</th>
<th>Median (95% CI)</th>
<th>75th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>380/431</td>
<td>8.7 (7.89 - 9.69)</td>
<td>14.8</td>
</tr>
<tr>
<td>394/430</td>
<td>6.6 (6.01 - 7.20)</td>
<td>11.1</td>
</tr>
</tbody>
</table>

Incremento de 2.1 m: Mejora relativa de la OS del 33%

Patients at risk

nab-P + Gem: 431 357 284 208 144 84 48 34 25 16 10 6 5 2 1 0
Gem: 430 340 231 149 90 47 27 19 14 8 4 2 0 0 0 0

Gem, gemcitabine; HR, hazard ratio; nab-P, nab-paclitaxel; OS, overall survival.
## Overall Survival Rates

<table>
<thead>
<tr>
<th>Survival Parameter</th>
<th>nab-P + Gem n = 431</th>
<th>Gem n = 430</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Original Data Cutoff</td>
<td>Updated Cutoff</td>
</tr>
<tr>
<td></td>
<td>9/17/12</td>
<td>5/9/13</td>
</tr>
<tr>
<td>Median OS, months</td>
<td>8.5</td>
<td>8.7</td>
</tr>
<tr>
<td>Survival rates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 months</td>
<td>67%</td>
<td>66%</td>
</tr>
<tr>
<td>12 months</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>24 months</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>36 months</td>
<td>—</td>
<td>4%</td>
</tr>
<tr>
<td>40 months</td>
<td>—</td>
<td>3%</td>
</tr>
<tr>
<td>42 months</td>
<td>—</td>
<td>3%</td>
</tr>
</tbody>
</table>

- Longer follow-up demonstrated a median OS difference of 2.1 months and identification of ≥ 3-year survivors in the nab-paclitaxel plus gemcitabine arm.

Updated Overall Survival - Western Europe

**OS, months**

<table>
<thead>
<tr>
<th>Events/n (%)</th>
<th>Median (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>nab-P + Gem</td>
<td>28/38 (74)</td>
</tr>
<tr>
<td>Gem</td>
<td>27/38 (71)</td>
</tr>
</tbody>
</table>

HR 0.82
95% CI, 0.482 - 1.400
P = 0.471

**Patients at Risk**

<table>
<thead>
<tr>
<th>Months</th>
<th>nab-P + Gem</th>
<th>Gem</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>3</td>
<td>32</td>
<td>34</td>
</tr>
<tr>
<td>6</td>
<td>27</td>
<td>21</td>
</tr>
<tr>
<td>9</td>
<td>21</td>
<td>16</td>
</tr>
<tr>
<td>12</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>18</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*nab-P, nab-paclitaxel; gem, gemcitabine; OS, overall survival; HR, hazard ratio.*

Original article

Quality-adjusted survival with combination nab-paclitaxel + gemcitabine vs gemcitabine alone in metastatic pancreatic cancer: a Q-TWiST analysis
Figure 1. Kaplan-Meier survival curves showing the mean times in TOX, TWIST, and REL states. (a) Nab-paclitaxel + gemcitabine; (b) Gemcitabine.

Figure 4. Differences in Q-TWIST (best case) among pre-specified sub-groups through 45 months. *The percentage for the level of CA19-9 was calculated based on the number of total patients with CA19-9 data: 116/750 = 15%, 242/750 = 32%, and 392/750 = 52%. No. of patients (%), number of patients (%); Mean diff (95% CI), mean difference (95% confidence interval); GEM, gemcitabine; Nab-Paclitaxel + GEM, albumin-bound paclitaxel + gemcitabine; CA 19-9, carbohydrate antigen 19-9.
Cáncer de mama
NABRAX: Neoadjuvant Therapy of Breast Cancer With Weekly nab®-Paclitaxel: Final Safety of GEICAM 2011-02


nab® is a registered trademark of Celgene Corporation.
GEICAM, Grupo Español de Investigación Cáncer de Mama.


M. Martin¹, S. Antolin², A. Anton³, A. Plazola³, E. Garcia-Martinez⁴, M.A. Seguí⁵, P. Sánchez-Rovira⁶, C. Esteban⁷, E. Garcia-Valdecasas⁷, L. Calvo⁷, M. Quindos⁷, E. Carraço⁷, C. Rodríguez-Martín⁸, J.J. Chacón³ on behalf of Spanish Breast Cancer Research Group (GEICAM)

Instituto de Investigación Sanitaria Gregorio Marañón. Madrid, Spain; *Hospital Universitario de Canarias, La Vaguada, Santa Cruz de Tenerife, Spain; #Hospital Universitario Dr. Negrín, Las Palmas de Gran Canaria, Spain; **Hospital Universitario San Cecilio, Granada, Spain; Hospital General Universitario Reina Sofia, Córdoba, Spain; Corporation Saraiva P1: Tex. Barcelona, Spain; *Hospital Universitario de Guadalajara, Guadalajara, Spain; **Hospital Universitario de Zaragoza, Zaragoza, Spain; Hospital Universitario de Alcalá de Henares, Alcalá de Henares, Madrid, Spain

Background

Nab-paclitaxel is an innovative chemotherapy that consists of a nanometer-range particles of human serum albumin bound paclitaxel. It exploits the role of albumin as the natural carrier of hydrophobic molecules in human to increase paclitaxel delivery to tumor cells (1,2).

Weekly nab-paclitaxel showed superior efficacy compared to every 3-weeks docetaxel in a randomized phase II study in metastatic breast cancer (3).

This trial has been designed to evaluate the activity and safety of weekly nab-paclitaxel as neoadjuvant treatment of early stage BC patients with positive estrogen receptors and negative HER2.

Objectives

PRIMARY OBJECTIVE:
- To determine the percentage of patients with poor response [residual cancer burden III (RCS-III)] rate measured by the Symmans criteria.

SECONDARY OBJECTIVES:
- To determine the pathologic complete response (pCR; R0-R1) rate in patients treated with this regimen.
- To determine the objective response rate (ORR).
- To determine the invasive disease free survival (IDFS).
- To determine the toxicity.
- To determine the rate of conversion to breast conserving surgery (BCS).
- To determine the rate of conversion to breast conserving surgery (BCS).

Patients & Methods

Day 1,8,15: Nab-paclitaxel 150 mg/m²
1 cycle = 28 days.

Major Eligibility Criteria:
- Female patients >18 years with written informed consent
- Histologically confirmed diagnosis of primary unilateral invasive early breast cancer with longest tumor size in breast 2 cm, or <1 cm in axillary involvement.
- ER positive (>1%) and HER2 negative: IHC 0, or 1+ or FISH/ISH negative.
- ECOG PS 0-2
- Adequate renal and liver function and bone marrow reserve.
- No inflammatory breast cancer (T4d) or supraclavicular lymph nodes (N3).

Adjuvant therapy under investigator criteria

Adjuvant therapy under investigator criteria

Conclusions

The median dose intensity was very high suggesting that the 150 mg/m² is appropriate in non pretreated patients.

Grade 3-4 toxicity was very low.

Serious neurotoxicity was the most clinically relevant toxicity being grade 2 and grade 3 in 26% and 2.5% of patients respectively. Four patients discontinued therapy due to this toxicity.

Efficiency data will be disclosed in 6 months from now.

References


This presentation is the intellectual property of the authors. Contact secretaria-cientifica@geicam.org for permission to reprint and/or distribute.
Nabrax (AX-BRST-PI-0014): Neoadjuvant nab-Paclitaxel in Early Breast Cancer

Study Design

N = 83
- Primary, unilateral, invasive, early BC
- Longest tumor size ≥ 2 cm (or > 1 cm if axillary involvement)
- ER+ and HER2–
- ECOG PS < 2

nab-Paclitaxel
150 mg/m² days 1, 8, and 15 every 28 days × 4 cycles

Surgery

Adjuvant therapy
Investigator criteria

Primary endpoint: Percentage of patients with poor response (RCB III rate) measured by Symmans criteria
Secondary endpoints: pCR (RCB 0 rate), ORR, IDFS, toxicity, rate of BCS, biomarkers

BC, breast cancer; BCS, breast-conserving surgery; ECOG PS, Eastern Cooperative Oncology Group performance status; ER, estrogen receptor; HER2, human epidermal growth factor receptor 2; IDFS, invasive disease–free survival; ORR, overall response rate; pCR, pathologic complete response; RCB, residual cancer burden.

## Nabrax (AX-BRST-PI-0014): Neoadjuvant nab-Paclitaxel in Early Breast Cancer

### Patient Characteristics

<table>
<thead>
<tr>
<th>Baseline Characteristics</th>
<th>N = 83</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Median age (range), years</strong></td>
<td>48 (28 - 75)</td>
</tr>
<tr>
<td><strong>Menopausal status, n (%)</strong></td>
<td></td>
</tr>
<tr>
<td>Premenopausal</td>
<td>52 (62.7)</td>
</tr>
<tr>
<td>Postmenopausal</td>
<td>31 (37.3)</td>
</tr>
<tr>
<td><strong>Hormone receptor status, n (%)</strong></td>
<td></td>
</tr>
<tr>
<td>ER+/PgR+</td>
<td>62 (74.7)</td>
</tr>
<tr>
<td>ER+/PgR−</td>
<td>19 (22.9)</td>
</tr>
<tr>
<td>ER+/PgR not available</td>
<td>2 (2.4)</td>
</tr>
<tr>
<td><strong>ECOG PS, n (%)</strong></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>80 (96.4)</td>
</tr>
<tr>
<td>1</td>
<td>2 (2.4)</td>
</tr>
<tr>
<td>Missing</td>
<td>1 (1.2)</td>
</tr>
</tbody>
</table>

BC, breast cancer; ECOG PS, Eastern Cooperative Oncology Group performance status; ER, estrogen receptor; PgR, progesterone receptor.

Nabrax (AX-BRST-PI-0014): Neoadjuvant nab-Paclitaxel in Early Breast Cancer

**Treatment Exposure**

<table>
<thead>
<tr>
<th>Treatment Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cycles administered, n (%)</strong></td>
<td><strong>N = 83</strong></td>
</tr>
<tr>
<td>0</td>
<td>2 (2.4)</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>4 (4.8)</td>
</tr>
<tr>
<td>4</td>
<td>77 (92.8)</td>
</tr>
<tr>
<td><strong>Relative dose intensity, mg/m²/wk</strong></td>
<td><strong>N = 81</strong></td>
</tr>
<tr>
<td>Median (range) in %</td>
<td>98.5 (58.2 - 105.2)</td>
</tr>
<tr>
<td>Mean (95% CI) in %</td>
<td>94.2 (92.0 - 96.4)</td>
</tr>
</tbody>
</table>

- 92.8% of patients received all 4 cycles of therapy
  - Two patients did not receive treatment
  - Four patients discontinued early due to grade 2/3 sensory neuropathy, 1 discontinued early due to grade 2 GI pain, and 1 chose to discontinue treatment (reason not specified)

BC, breast cancer; GI, gastrointestinal.

Nabrax (AX-BRST-PI-0014): Neoadjuvant nab-Paclitaxel in Early Breast Cancer

Adverse Events

<table>
<thead>
<tr>
<th>NCI CTCAE 4.0 Events, n (%)&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Per Patient (N = 81)</th>
<th>Per Cycle (N = 320)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G2</td>
<td>G3</td>
</tr>
<tr>
<td>Neutropenia&lt;sup&gt;b&lt;/sup&gt;</td>
<td>22 (27.2)</td>
<td>10 (12.3)</td>
</tr>
<tr>
<td>Leukopenia</td>
<td>21 (25.9)</td>
<td>3 (3.7)</td>
</tr>
<tr>
<td>Fatigue</td>
<td>18 (22.2)</td>
<td>3 (3.7)</td>
</tr>
<tr>
<td>Sensory neuropathy</td>
<td>21 (25.9)</td>
<td>2 (2.5)</td>
</tr>
<tr>
<td>Alopecia</td>
<td>54 (66.7)</td>
<td>0</td>
</tr>
<tr>
<td>Arthralgia</td>
<td>7 (8.6)</td>
<td>0</td>
</tr>
<tr>
<td>Myalgia</td>
<td>6 (7.4)</td>
<td>0</td>
</tr>
</tbody>
</table>

- Six serious adverse events were reported
  - Two related to study drug (grade 3 and grade 1 neurotoxicity, each lasting > 1 year)
  - Four not related to study drug (grade 2 pneumonia, grade 2 colitis, local catheter infection, and relapse of multiple sclerosis)

<sup>a</sup> Irregular menses occurred in 10 of 52 premenopausal patients (12 cycles).

<sup>b</sup> No febrile neutropenia was observed.

BC, breast cancer; G, grade; NCI CTCAE, National Cancer Institute Common Terminology Criteria for Adverse Events.

The SNAP Trial: Schedules of nab®-Paclitaxel in Metastatic Breast Cancer International Breast Cancer Study Group (IBCSG 42-12) and Breast International Group (BIG 2-12)

A Gennari, G Jerusalem, R Maibach, for the International Breast Cancer Study Group

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SNAP, Schedules of nab-Paclitaxel.

SNAP (AX-BRST-PI-0013): Schedules of nab-Paclitaxel in Metastatic Breast Cancer

**Study Design**

**Planned N = 240**

- HER2-
- ER− or ER+ but resistant to endocrine therapy
- Stage IV
- No prior chemotherapy for metastatic disease
- Measurable disease\(^a\)
- No peripheral neuropathy grade ≥ 2
- Normal organ function

**nab-Paclitaxel**

- 150 mg/m\(^2\) IV days 1 and 15 every 28 days × 3 cycles

1:1:1

**nab-Paclitaxel**

- 150 mg/m\(^2\) IV days 1 and 15 every 28 days until progression

**nab-Paclitaxel**

- 100 mg/m\(^2\) days 1, 8, 15 every 28 days until progression

**nab-Paclitaxel**

- 75 mg/m\(^2\) IV days 1, 8, 15, and 22 every 28 days until progression

**Primary endpoint:** PFS (compared with historical PFS of first-line docetaxel)

- Tumor evaluation by RECIST 1.1 performed every 12 weeks from randomization until documented disease progression

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\(^a\) Or nonmeasurable but radiologically evaluable.

ER, estrogen receptor; HER2, human epidermal growth factor receptor 2; IV, intravenous; PFS, progression-free survival; RECIST, Response Evaluation Criteria in Solid Tumors; SNAP, Schedules of nab-Paclitaxel.

Nabrax: Neoadjuvant therapy of breast cancer with weekly nab-paclitaxel: Final Efficacy and biomarkers analysis of GEICAM/2011-02 study

M. Martin¹, S. Antolin²; A. Antón³; A. Plazaola⁴; E. García-Martínez⁵; M.A. Seguí⁶; P. Sánchez-Rovira⁷; J. Palacios⁸; L. Calvo²; C. Esteban⁹; E. Espinosa¹⁰; A. Guerrero¹¹; N. Batista¹²; A. Barnadas¹³; A.M. Arance¹⁴; E. Carrasco¹⁵; C. Rodríguez-Martín¹⁵; R. Caballero¹⁵; M.I. Casas¹⁵; J.I. Chacón⁹

M. Martin¹, S. Antolin²; A. Antón³ et al. Nabrax: Neoadjuvant therapy of breast cancer with weekly nab-paclitaxel: Final Efficacy and biomarkers analysis of GEICAM/2011-02 study Presented as a Poster at ASCO 2014, poster nº 1051
Nabrax: Neoadjuvant therapy of breast cancer with weekly nab-paclitaxel: Final Efficacy and biomarkers analysis of GEICAM/2011-02 study

M. Martí, S. Antonio; A. Ambro; A. Frassineti; E. García-Martínez; M.A. Segui; P. Barroso-Ayala; J. Palacios; L. Correa; G. Barcelo; E. Espanol; A. Galindo; N. Balseiro; A. Banado; J.A. Arana; E. Cazadora; C. Rodriguez-Martín; M.I. Casado; J.I. Chacón

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Background
- Nanoparticle albumin bound paclitaxel (nab-P) is an innovative chemotherapy consisting of nanometer-range particles of human serum albumin bound paclitaxel. Albumin acts as a natural carrier of hydrophobic molecules increasing paclitaxel delivery to tumor cells (1,2).
- Nab-P administered weekly showed superior efficacy compared to docetaxel administered every 3-weeks in a randomized phase II study in first line metastatic breast cancer (3).
- This phase II trial designed to evaluate the activity and safety of weekly nab-P as neoadjuvant treatment of early stage breast cancer patients with positive estrogen receptors (ER) and negative HER2.

Patients & Methods
- 1 cycle = 28 days. Days 1, 18, 15: Nab-paclitaxel 150 mg/m2.
- Major eligibility criteria:
  - Female patients > 18 years with written informed consent
  - Histologically confirmed diagnosis of primary unilateral invasive early breast cancer with longest tumor size in breast ≥ 2 cm, or ≥ 1 cm if axillary involvement.
  - Local ER positive (>1%) and HER2 negative: IHC 0, or 1+ or FISH/ISH negative.
  - ECOG PS ≤ 2 and adequate renal and liver function and bone marrow reserve.
  - No inflammatory breast cancer (T4d) or supravacular lymph nodes (N3).

Primary objective:
- Percentage of patients with poor response [residual cancer burden II (RCB-III)] rate measured by the Symm/McNabb criteria (centrally determined).

Secondary objectives:
- Good pathological response (RCB-0/1+) rate in patients treated with this regimen.
- Objective response rate (ORR).
- Invasive disease free survival (DFS).
- Rate of conversion to breast conserving surgery (BCS).
- Explore the correlation of molecular subtypes (St. Gallen criteria (3), Han et al (6)) and biomarkers with RCB (RCB0, RCB55, RCB88).

Consort and Patient characteristics
- Figure 3. Consort study flowchart: Dose delivery and safety analysis reported at SABCS 2013.
- Table 1. Patient characteristics
   - Table 2. Dosecounts (Martin et al) vs nab-P in Nabrax (Central pathological response)

Efficacy
- The Objective Response Rate (ORR) by MRI was 76.5% (95.3-88.7).
- The Rate of conversion to BCS was 40%.

Results
- Biomarker and subtype analysis
- Biomarkers (ER, PR, HER2) (FISH in case of HER2+), following ASCO/CAP guidelines, for K67 (cut-off 15% and 20%), CAV1 in stroma (High vs Low/Moderate, Low vs Moderate/High), and SPARC in stroma (High vs Low/Moderate vs High).

Table 3. Fisher exact test analysis for biomarkers correlation with good pathological response (RCB0-1+).

Conclusions
- Our study was unable to show the pre-specified efficacy hypothesis. However the RCB 0+1 rate is encouraging taking into account docetaxel activity (10.6%) in this patient population, nab-P merits further evaluation in randomized trials.
- Our exploratory analysis on biomarkers suggest a prognostic role of CAV1 in RCB 0+1.

Acknowledgements
We thank the investigators involved in the Nabrax study as well the patients participating in the study and GEICAM and Central Lab staff. We also acknowledge Calgene for their financial support.

References
Subtypes distribution

- Luminal A: 3 (4%)
- Luminal B1: 19 (25%)
- TN: 55 (71%)
Efficacy

The study hypothesis was that the RCB III rate will drop from 33% (historical controls treated with docetaxel in the same population, Martin et al [4]) to 16% with nab-P.

<table>
<thead>
<tr>
<th>RCB</th>
<th>Martin et al (4) (docetaxel) N=47</th>
<th>NABRAX (nab-P) N=78*</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (pCR)</td>
<td>1 (2%)</td>
<td>4 (5.1%)</td>
</tr>
<tr>
<td>I</td>
<td>4 (8.5%)</td>
<td>13 (16.7%)</td>
</tr>
<tr>
<td>II</td>
<td>25 (53%)</td>
<td>37 (47.4%)</td>
</tr>
<tr>
<td>III</td>
<td>17 (36%)</td>
<td>23 (29.5%)</td>
</tr>
<tr>
<td>Missing</td>
<td>0 (0%)</td>
<td>1 (1.3%)</td>
</tr>
</tbody>
</table>
Geparsepto: A Randomized Phase III Trial Comparing Nanoparticle-based Paclitaxel With Solvent-based Paclitaxel as Part of Neoadjuvant Chemotherapy for Patients With Early Breast Cancer (German Breast Group)

Estimated Enrollment: 1200
Study Start Date: July 2012
Estimated Study Completion Date: July 2014
Estimated Primary Completion Date: July 2014 (Final data collection date for primary outcome measure)

<table>
<thead>
<tr>
<th>Arms</th>
<th>Assigned Interventions</th>
</tr>
</thead>
</table>
| Experimental: nab-Paclitaxel 125 mg/m² weekly, infusion | Drug: nab-Paclitaxel
nab-Paclitaxel is applied for 12 weeks, followed by epirubicin and cyclophosphamide, applied 4 cycles 3-weekly. In case of HER2-positive tumor patients receive tarstuzumab and pertuzumab 3-weekly during all cycles. nab-Paclitaxel 125 mg/m² weekly for 12 weeks Other Name: Abraxane |
| Active Comparator: Paclitaxel 80 mg/m² weekly, infusion | Drug: Paclitaxel
Paclitaxel is applied for 12 weeks, followed by epirubicin and cyclophosphamide, applied 4 cycles 3-weekly. In case of HER2-positive tumor patients receive tarstuzumab and pertuzumab 3-weekly during all cycles. Paclitaxel 80 mg/m² weekly for 12 weeks |

Primary Outcome Measures: Pathological complete response (pCR=ypT0 ypN0)
ABI-007-MBC-001

tnAcity: A Phase II/III Trial of Weekly nab®-Paclitaxel Plus Gemcitabine or Carboplatin vs Gemcitabine/Carboplatin as First-Line Treatment for Triple-Negative Metastatic Breast Cancer

DA Yardley, A Brufsky, RE Coleman, P Conte, J Cortes, S Glück, J-MA Nabholtz, J O’Shaughnessy, L Li, D Barton, R Beck, N Harbeck, on Behalf of the tnAcity Investigators

nab® is a registered trademark of Celgene Corporation.

tnAcity (ABI-007-MBC-001): Phase II/III

**nab-P + Carboplatin or Gemcitabine in TNBC**

**Schema: Phase II and III**

### Phase II (n = 240)

- **nab-P 125 mg/m²**
  - + Gem 1000 mg/m²
  - d1, 8 q3w
  - n = 80

### Phase III (n = 550)

- **Selected nab-P arm from phase II**
  - n = 275

- **Gem 1000 mg/m²**
  - + Carbo AUC 2
  - d1, 8 q3w
  - n = 275

### Stratification factors

- Phase II: DFI ≤ 1 year vs > 1 year
- Phase III: DFI ≤ 1 year vs > 1 year; prior adjuvant or neoadjuvant taxane treatment (yes vs no)

### Treatment until disease progression or unacceptable toxicity in both phases

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**AUC**, area under the curve; **Carbo**, carboplatin; **DFI**, disease-free interval; **Gem**, gemcitabine; **nab-P**, nab-paclitaxel; **q3w**, every 3 weeks; **TNBC**, triple-negative breast cancer; **TNMBC**, triple-negative metastatic breast cancer.

Conclusiones

- El nab-paclitaxel ha supuesto un cambio significativo en el tratamiento del cáncer de páncreas avanzado.
- En el tratamiento del cáncer de mama se consolida, con paso lento pero seguro, como una alternativa real (más potente y menos tóxica) a dos de nuestros pesos pesados, el docetaxel y el paclitaxel.