

# Clinical trials of CDK (cyclin-dependent kinase) inhibitor for advanced breast cancer (metastatic) in HR+ HER2-

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## 1 CDK4/6 inhibitor

| Trial  | Treatments   | Patients  | Trials design and methods                       |
|--|--|---|---|
| <b>palbociclib + exemestane vs capecitabine</b>                          |  |   |   |
| <b>PEARL</b> <i>ongoing</i><br>[NCT02028507]<br>n=NA<br>follow-up:       | Palbociclib, 125 mg, orally once daily on Day 1 to Day 21 followed by 7 days off treatment given as every 28 days cycles in combination with Exemestane, 25 mg, orally once daily (continuously).<br>versus<br>Capecitabine, 1,250 mg/m <sup>2</sup> twice daily for 2 weeks followed by a 1 week rest period, given as 3 weeks cycles. Capecitabine can be administered at a dose of 1,000 mg/m <sup>2</sup> twice daily for 2 weeks followed by a 1 week of rest period, given as 3 weeks cycles, in | Hormonal Receptor (HR) Positive/HER2 Negative Metastatic Breast Cancer (MBC) Patients With Resistance to Non-steroidal Aromatase Inhibitors | open label<br>HUNGARY                           |
| <b>palbociclib + fulvestrant vs fulvestrant alone</b>                    |  |   |   |
| <b>PALOMA 3</b> , 2015<br>[NCT01942135]<br>n=347/174<br>follow-up:       | palbociclib (125 mg per day orally for 3 weeks, followed by 1 week off) and fulvestrant (500 mg intramuscularly per standard of care every 14 days for the first three injections and then every 28 days)<br>versus<br>placebo and fulvestrant   | women with HR+, HER2 negative metastatic breast cancer whose disease has progressed after prior endocrine therapy                           | Parallel groups<br>double-blind<br>17 countries |
| <b>ribociclib (LEE011)+ fulvestrant vs fulvestrant alone</b>             |  |   |   |
| <b>MONALEESA-3</b> <i>ongoing</i><br>[NCT02422615]<br>n=NA<br>follow-up: | Ribociclib 600mg daily oral (days 1 to 21 in a 28-day Cycle) in combination with fulvestrant 500mg i.m. injections every 28 days (Cycle n Day 1) with 1 additional dose on Day 15 of Cycle 1<br>versus<br>placebo + fulvestrant 500mg i.m. injections every 28 days (Cycle n Day 1) with 1 additional dose on Day 15 of Cycle 1  | post-menopausal women with advanced breast cancer   | Parallel groups<br>double-blind                 |
| <b>palbociclib + letrozole vs letrozole alone</b>                        |  |   |   |

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| <b>Trial</b>  | <b>Treatments</b>   | <b>Patients</b>  | <b>Trials design and methods</b>                |
|---|---|--|---|
| <b>PALOMA-4</b> <i>ongoing</i><br>[NCT02297438]<br>n=NA<br>follow-up:           | Palbociclib, 125mg, orally once daily on Day 1 to Day 21 of every 28-day cycle followed by 7 days off treatment in combination with Letrozole, 2.5mg, orally once daily (continuously)<br>versus<br>Placebo, 125mg, orally once daily on Day 1 to Day 21 of every 28-day cycle followed by 7 days off treatment in combination with Letrozole, 2.5mg, orally once daily (continuously.) | Asian Postmenopausal Women With ER+/HER2- Advanced Breast Cancer   | Parallel groups<br>double-blind<br>china        |
| <b>palbociclib + letrozole vs letrozole alone</b>                               |   |  |   |
| <b>PALOMA-2</b> , 2016<br>[NCT01740427]<br>n=666<br>follow-up:                  | PD-0332991, 125mg, orally once daily on Day 1 to Day 21 of every 28-day cycle followed by 7 days off treatment in combination with Letrozole, 2.5mg, orally once daily (continuously.)<br>versus<br>Placebo, 125mg, orally once daily on Day 1 to Day 21 of every 28-day cycle followed by 7 days off treatment in combination with Letrozole, 2.5mg, orally once daily (continuously)  | postmenopausal women with ER(+)/HER2(-) advanced breast cancer who have not received prior systemic anti cancer therapies for their advanced/metastatic disease                | Parallel groups<br>double-blind<br>USA          |
| <b>PALOMA 1/TRIO-18</b> , 2015<br>[NCT00721409]<br>n=84/81<br>follow-up:        | continuous oral letrozole 2.5 mg daily plus oral palbociclib 125 mg, given once daily for 3 weeks followed by 1 week off over 28-day cycles<br>versus<br>continuous oral letrozole 2.5 mg daily   | postmenopausal women with advanced oestrogen receptor-positive and HER2-negative breast cancer who had not received any systemic treatment for their advanced disease          | Parallel groups<br>open-label                   |
| <b>ribociclib (LEE011) + letrozole vs letrozole alone</b>                       |   |  |   |
| <b>MONALEESA-2</b> , 2016<br>[NCT01958021]<br>n=334/334<br>follow-up: 18 months | ribociclib (600 mg per day on a 3-weeks-on, 1-week-off schedule) plus letrozole (2.5 mg per day)<br>versus<br>placebo + letrozole   | postmenopausal women with HR-positive, HER2-negative recurrent or metastatic breast cancer who had not received previous systemic therapy for advanced disease                 | Parallel groups<br>double-blind<br>29 countries |
| <b>Abemaciclib +nsAI vs nsAI</b>  |   |  |   |
| <b>MONARCH 3</b> , 2017<br>[NCT02246621]<br>n=493<br>follow-up:                 | Abemaciclib (LY2835219) + nonsteroidal aromatase inhibitors (nSAI)<br>versus<br>Placebo + NSAI  | Postmenopausal Women With Hormone Receptor-Positive, HER2-Negative Locoregionally Recurrent or Metastatic Breast Cancer With No Prior Systemic Therapy in This Disease Setting | Parallel groups<br>double-blind                 |
| <b>ribociclib (LEE011) + nsAI/TAM gos vs nsAI/TAM + gos</b>                     |   |  |   |

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| Trial  | Treatments   | Patients   | Trials design and methods       |
|--|--|--|---------------------------------|
| <b>MONALEESA-7</b> <i>ongoing</i><br>[NCT02278120]<br>n=NA<br>follow-up: | LEE011 600 mg daily oral (3 weeks on/ 1 week off) in Combination With Tamoxifen and Goserelin or a Non-steroidal Aromatase Inhibitor (NSAI) and Goserelin versus placebo in Combination With Tamoxifen and Goserelin or a Non-steroidal Aromatase Inhibitor (NSAI) and Goserelin | premenopausal women with HR positive, HER2 negative advanced breast cancer | Parallel groups<br>double-blind |

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#### **MONALEESA-7, :**

## **2 About TrialResults-center.org**

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The TrialResults-center database provides a unique view of the treatment efficacy based on all data provided directly from clinical trial results, offering a valuable alternative to personal bibliographic search, published meta-analysis, etc. Furthermore, it would allow comparing easily the various concurrent therapeutic for the same clinical condition.

Rigorous meta-analysis method is used to populate TrialResults-center: widespread search of published and non published trials, study selection using pre-specified criteria, data extraction using standard form.

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