Clinical trials of CDK (cyclin-dependent kinase) inhibitor for advanced breast cancer (metastatic) in all type of patients

TrialResults-center www.trialresultscenter.org

1 CDK4/6 inhibitor

Trial	Treatments	Patients	Trials design and methods
palbociclib + exemestane vs capecitabine			
PEARL *ongoing* [NCT02028507] n=NA 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). versus Capecitabine, 1,250 mg/m2 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/m2 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 HUngary
palbociclib + fulvestrant vs fulvestrant alone			
PALOMA 3 , 2015 [NCT01942135] n=347/174 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) versus placebo and fulvestrant	women with HR+, HER2 negative metastatic breast cancer whose disease has progressed after prior endocrine therapy	Parallel groups double-blind 17 countries
ribociclib (LEE011)+ fulvestrant vs fulvestrant alone			
MONALEESA-3 *ongoing* [NCT02422615] n=NA follow-up:	Riblociclib 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 versus 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 double-blind
palbociclib + letrozole vs letrozole alone			

continued...

Trial	Treatments	Patients	Trials design and methods
PALOMA-4 *ongoing* [NCT02297438] n=NA 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)) versus 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 double-blind china
palbociclib + letrozole vs letrozole alone			
PALOMA-2 , 2016 [NCT01740427] n=666 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).) versus 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 double-blind USA
PALOMA 1/TRIO-18 , 2015 [NCT00721409] n=84/81 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 versus 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 open-label
ribociclib (LEE011) + letrozole vs letrozole alone			
MONALEESA-2 , 2016 [NCT01958021] n=334/334 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) versus 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 double-blind 29 countries
Abemaciclib +nsAI vs nsAI			
MONARCH 3 , 2017 [NCT02246621] n=493 follow-up:	Abemaciclib (LY2835219) + nonsteroidal aromatase inhibitors (nSAI) versus 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 double-blind
ribociclib (LEE011) + nsAI/TAM gos vs nsAI/TAM + gos			

continued...

Trial	Treatments	Patients	Trials design and methods
MONALEESA-7 *ongoing* [NCT02278120] n=NA 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 double-blind
palbociclib vs placebo			
PENELOPE-B *ongoing* [NCT01864746] n=NA follow-up:	-	Hormone Receptor Positive Her2 Normal Patients With Residual Disease After Neoadjuvant Chemotherapy and Surgery	Parallel groups double-blind

References

PEARL, 0:

PALOMA 3, 2015:

Turner NC, Ro J, Andr F, Loi S, Verma S, Iwata H, Harbeck N, Loibl S, Huang Bartlett C, Zhang K, Giorgetti C, Randolph S, Koehler M, Cristofanilli M Palbociclib in Hormone-Receptor-Positive Advanced Breast Cancer. N Engl J Med 2015 Jul 16;373:209-219 [26030518] 10.1056/NEJMoa1505270

Loibl S, Turner NC, Ro J, Cristofanilli M, Iwata H, Im SA, Masuda N, Loi S, Andr F, Harbeck N, Verma S, Folkerd E, Theall KP, Hoffman J, Zhang K, Bar Palbociclib Combined with Fulvestrant in Premenopausal Women with Advanced Breast Cancer and Prior Progression on Endocrine Therapy: PALOMA-3 Results. Oncologist 2017;: [28652278]

Verma S, Bartlett CH, Schnell P, DeMichele AM, Loi S, Ro J, Colleoni M, Iwata H, Harbeck N, Cristofanilli M, Zhang K, Thiele A, Turner NC, Rugo HS Palbociclib in Combination With Fulvestrant in Women With Hormone Receptor-Positive/HER2-Negative Advanced Metastatic Breast Cancer: Detailed Safety Analysis From a Multicenter, Randomized, Placebo-Controlled, Phase III Study (PALOMA-3). Oncologist 2016;21:1165-1175 [27368881]

Harbeck N, Iyer S, Turner N, Cristofanilli M, Ro J, Andr F, Loi S, Verma S, Iwata H, Bhattacharyya H, Puyana Theall K, Bartlett CH, Loibl S Quality of life with palbociclib plus fulvestrant in previously treated hormone receptor-positive, HER2-negative metastatic breast cancer: patient-reported outcomes from the PALOMA-3 trial. Ann Oncol 2016;27:1047-54 [27029704]

Cristofanilli M, Turner NC, Bondarenko I, Ro J, Im SA, Masuda N, Colleoni M, DeMichele A, Loi S, Verma S, Iwata H, Harbeck N, Zhang K, Theall KP, Jiang Y, Bartlett CH, Koehler M, Slamon D Fulvestrant plus palbociclib versus fulvestrant plus placebo for treatment of hormone-receptor-positive, HER2-negative metastatic breast cancer that progressed on previous endocrine therapy (PALOMA-3): final analysis of the multicentre, double-blind, phase 3 randomised controlled trial. Lancet Oncol 2016;17:425-39 [26947331]

MONALEESA-3, 0:

PALOMA-4, 0:

PALOMA-2, 2016:

Finn RS, Martin M, Rugo HS, Jones S, Im SA, Gelmon K, Harbeck N, Lipatov ON, Walshe JM, Moulder S, Gauthier E, Lu DR, Randolph S, Diras V, Slamon DJ Palbociclib and Letrozole in Advanced Breast Cancer. N Engl J Med 2016;375:1925-1936 [27959613]

PALOMA 1/TRIO-18, 2015:

Finn RS, Crown JP, Lang I, Boer K, Bondarenko IM, Kulyk SO, Ettl J, Patel R, Pinter T, Schmidt M, Shparyk Y, Thummala AR, Voytko NL, Fowst C, Huang X, Kim ST, Randolph S, Slamon DJ The cyclin-dependent kinase 4/6 inhibitor palbociclib in combination with letrozole versus letrozole alone as first-line treatment of oestrogen receptor-positive, HER2-negative, advanced breast cancer (PALOMA-1/TRIO-18): a randomised phase 2 study. Lancet Oncol 2015;16:25-35 [25524798]

Bell T, Crown JP, Lang I, Bhattacharyya H, Zanotti G, Randolph S, Kim S, Huang X, Huang Bartlett C, Finn RS, Slamon D Impact of palbociclib plus letrozole on pain severity and pain interference with daily activities in patients with estrogen receptor-positive/human epidermal growth factor receptor 2-negative advanced breast cancer as first-line treatment. Curr Med Res Opin 2016;32:959-65 [26894413]

MONALEESA-2, 2016:

Hortobagyi GN, Stemmer SM, Burris HA, Yap YS, Sonke GS, Paluch-Shimon S, Campone M, Blackwell KL, Andr F, Winer EP, Janni W, Verma S, Conte P, Arteaga CL, Cameron DA, Petrakova K, Hart LL, Villanueva C, Chan A, Jakobsen E, Nusch A, Burdaeva O, Grischke E Ribociclib as First-Line Therapy for HR-Positive, Advanced Breast Cancer. N Engl J Med 2016 Oct 7;: [27717303] 10.1056/NEJMoa1609709

Sonke GS, Hart LL, Campone M, Erdkamp F, Janni W, Verma S, Villanueva C, Jakobsen E, Alba E, Wist E, Favret AM, Bachelot T, Hegg R, Wheatley-Price P, Souami F, Sutradhar S, Miller M, Germa C, Burris HA Ribociclib with letrozole vs letrozole alone in elderly patients with hormone receptor-positive, HER2-negative breast cancer in the randomized MONALEESA-2 trial. Breast Cancer Res Treat 2017;: [29058175]

MONARCH 3, 2017:

Sledge GW Jr, Toi M, Neven P, Sohn J, Inoue K, Pivot X, Burdaeva O, Okera M, Masuda N, Kaufman PA, Koh H, Grischke EM, Frenzel M, Lin Y, Barriga S, Smith IC, Bourayou N, Llombart-Cussac A MONARCH 2: Abemaciclib in Combination With Fulvestrant in Women With HR+/HER2- Advanced Breast Cancer Who Had Progressed While Receiving Endocrine Therapy. J Clin Oncol 2017;:JCO2017737585 [28580882]

Goetz MP, Toi M, Campone M, Sohn J, Paluch-Shimon S, Huober J, Park IH, Trdan O, Chen SC, Manso L, Freedman OC, Garnica Jaliffe G, Forrester T, Frenzel M, Barriga S, Smith IC, Bourayou N, Di Leo A MONARCH 3: Abemaciclib As Initial Therapy for Advanced Breast Cancer. J Clin Oncol 2017;:JCO2017756155 [28968163]

MONALEESA-7, :

PENELOPE-B, 0:

2 About TrialResults-center.org

TrialResults-center is an innovative knowledge database that collects the results of RCTs and provides dynamic interactive systematic reviews and meta-analysis in the field of all major heart and vessels diseases.

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.

TrialResults-center is continually updated on a weekly basis. We continually search all new results (whatever their publication channel) and these news results are immediately added to the database with a maximum of 1 week.

TrialResults-center is non-profit and self-funded.