

The first and only PARPi FDA approved in 2 distinct breast cancer treatment settings¹⁻⁴

See Indications below.

Not actual patients.

Discover more about targeted treatment with LYNPARZA for eligible patients with gBRCAm, HER2-negative early or metastatic breast cancer¹

INDICATIONS

LYNPARZA is a poly (ADP-ribose) polymerase (PARP) inhibitor indicated:

Adjuvant Treatment of gBRCAm, HER2-Negative, High-Risk Early Breast Cancer

For the adjuvant treatment of adult patients with deleterious or suspected deleterious gBRCAm, human epidermal growth factor receptor 2 (HER2)-negative, high-risk early breast cancer who have been treated with neoadjuvant or adjuvant chemotherapy. Select patients for therapy based on an FDA-approved companion diagnostic for LYNPARZA.

gBRCAm, HER2-Negative Metastatic Breast Cancer

For the treatment of adult patients with deleterious or suspected deleterious gBRCAm, human epidermal growth factor receptor 2 (HER2)-negative metastatic breast cancer who have been treated with chemotherapy in the neoadjuvant, adjuvant, or metastatic setting. Patients with hormone receptor (HR)-positive breast cancer should have been treated with a prior endocrine therapy or be considered inappropriate for endocrine therapy. Select patients for therapy based on an FDA-approved companion diagnostic for LYNPARZA.

IMPORTANT SAFETY INFORMATION

CONTRAINDICATIONS

There are no contraindications for LYNPARZA.

WARNINGS AND PRECAUTIONS

Myelodysplastic Syndrome/Acute Myeloid Leukemia (MDS/AML): Occurred in approximately 1.2% of patients with various BRCAm, gBRCAm, HRR gene-mutated or HRD-positive cancers who received LYNPARZA as a single agent or as part of a combination regimen, consistent with the approved indications, and the majority of events had a fatal outcome. The median duration of therapy in patients who developed MDS/AML was approximately 2 years (range: <6 months to >4 years). All of these patients had previous chemotherapy with platinum agents and/or other DNA-damaging agents, including radiotherapy.

Do not start LYNPARZA until patients have recovered from hematological toxicity caused by previous chemotherapy (≤Grade 1). Monitor complete blood count for cytopenia at baseline and monthly thereafter for clinically significant changes during treatment. For prolonged hematological toxicities, interrupt LYNPARZA and monitor blood count weekly until recovery.

If the levels have not recovered to Grade 1 or less after 4 weeks, refer the patient to a hematologist for further investigations, including bone marrow analysis and blood sample for cytogenetics. Discontinue LYNPARZA if MDS/AML is confirmed.

Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).

gBRCAm=germline BRCA-mutated or germline BRCA mutation(s); HER2=human epidermal growth factor receptor 2; HRD=homologous recombination deficiency; HRR=homologous recombination repair; PARPi=poly (ADP-ribose) polymerase inhibitor.



eBC CLINICAL DATA

mBC CLINICAL DATA

CLINICAL STUDIES OVERVIEW

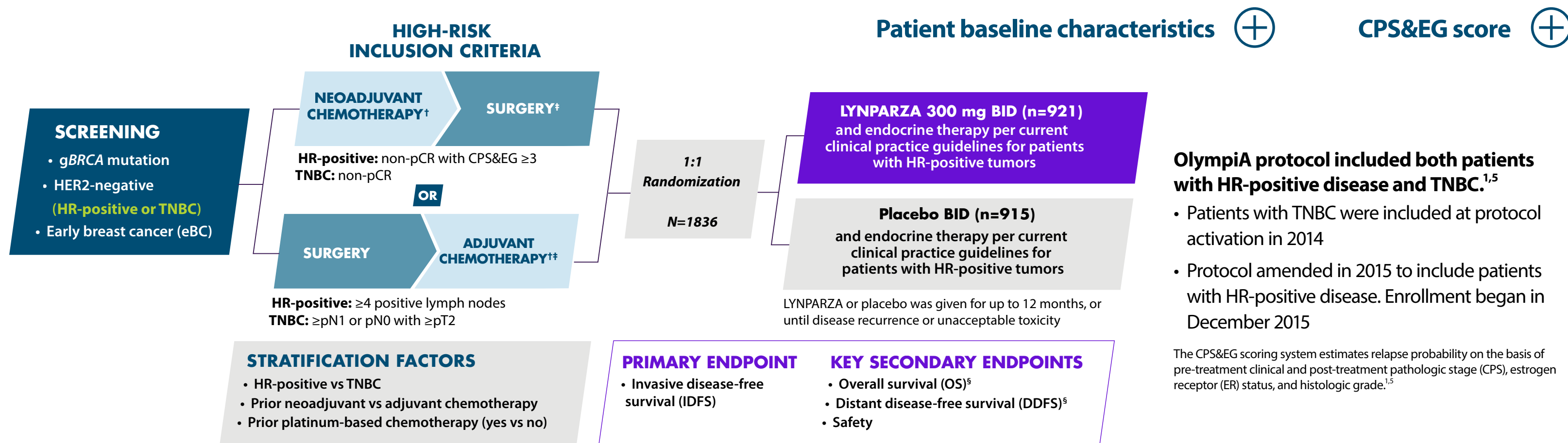
SUMMARY

ISI AND REFERENCES

OlympiA was designed to evaluate LYNPARZA as adjuvant therapy in certain patients with gBRCAm,* HER2-negative, high-risk early breast cancer¹



OlympiA was a phase 3, randomized, double-blind, placebo-controlled, international clinical trial^{1,5}



*Select patients for this indication based on an FDA-approved companion diagnostic for LYNPARZA.¹

[†]At least 6 cycles of neoadjuvant or adjuvant chemotherapy containing anthracyclines, taxanes, or both agents. Platinum-based chemotherapy was allowed.¹

[‡]Radiation therapy was given when appropriate.⁵

[§]OS and DDFS were controlled for Type 1 error within a hierarchical statistical analysis in OlympiA.⁶

BID=twice daily; CI=confidence interval; CPS&EG=pre-treatment clinical and post-treatment pathologic stage (CPS), estrogen receptor (ER) status, and histologic grade; gBRCAm=germline BRCA-mutated or germline BRCA mutation(s); HER2=human epidermal growth factor receptor 2; HR=hormone receptor; TNBC=triple-negative breast cancer.

IMPORTANT SAFETY INFORMATION (Cont'd)

WARNINGS AND PRECAUTIONS (Cont'd)

Pneumonitis: Occurred in 0.8% of patients exposed to LYNPARZA monotherapy, and some cases were fatal. If patients present with new or worsening respiratory symptoms such as dyspnea, cough, and fever, or a radiological abnormality occurs, interrupt LYNPARZA treatment and initiate prompt investigation. Discontinue LYNPARZA if pneumonitis is confirmed and treat patient appropriately.

Venous Thromboembolism (VTE): Including severe or fatal pulmonary embolism (PE) occurred in patients treated with LYNPARZA. Monitor patients for signs and symptoms of venous thrombosis and pulmonary embolism, and treat as medically appropriate, which may include long-term anticoagulation as clinically indicated.

Embryo-Fetal Toxicity: Based on its mechanism of action and findings in animals, LYNPARZA can cause fetal harm. Verify pregnancy status in females of reproductive potential prior to initiating treatment.

Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).



eBC CLINICAL DATA



mBC CLINICAL DATA

CLINICAL STUDIES OVERVIEW

SUMMARY

ISI AND REFERENCES

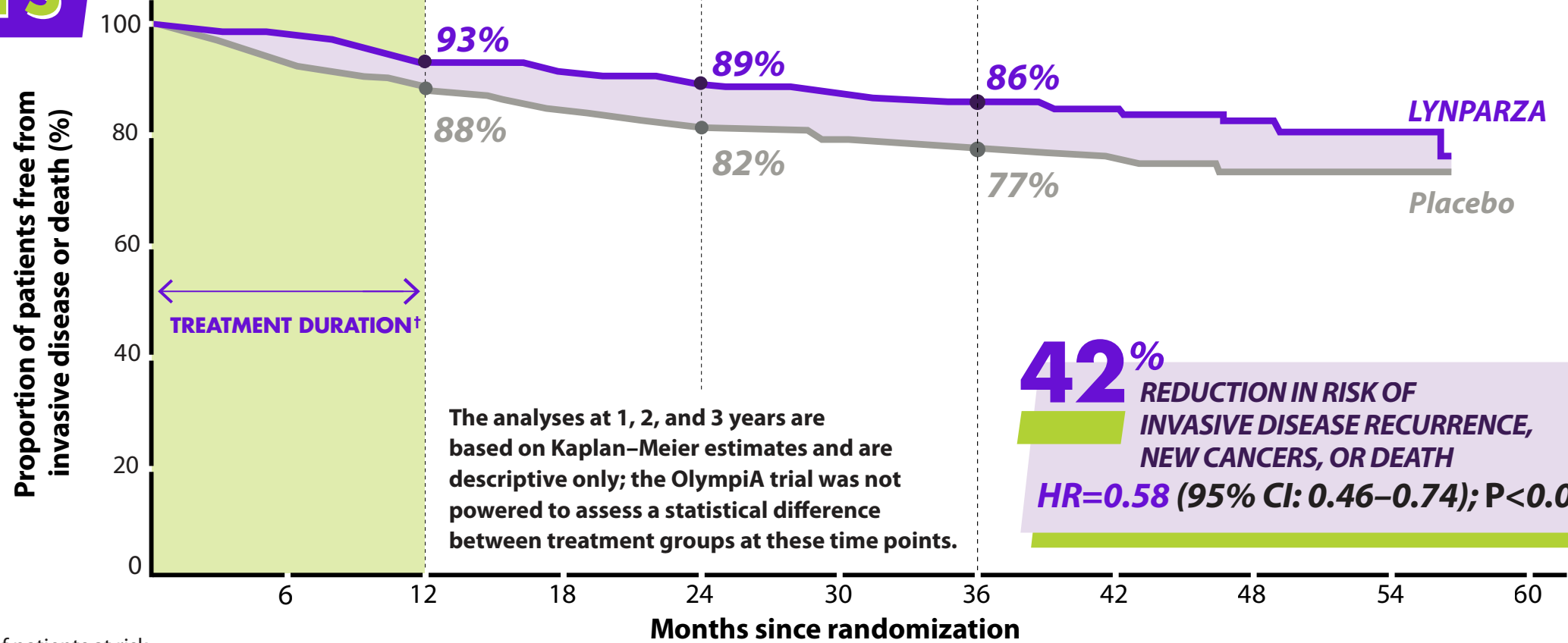
Targeted treatment with LYNPARZA for eligible patients with gBRCAm, HER2-negative, high-risk eBC

Significantly improved IDFS* benefit vs placebo in OlympiA^{1,5}



PRIMARY ENDPOINT

IDFS



Number of patients at risk											
LYNPARZA	921	820	737	607	477	361	276	183	108	55	15
Placebo	915	807	732	585	452	353	256	173	101	49	12

*Invasive disease-free survival was defined as the time to first invasive breast cancer recurrence (loco-regional or distant), second primary cancer, or death from any cause.¹
†LYNPARZA was administered for up to 12 months or until disease recurrence or unacceptable toxicity.¹
CI=confidence interval; eBC=early breast cancer; gBRCAm=germline BRCA-mutated or germline BRCA mutation(s); HR=hazard ratio; IDFS=invasive disease-free survival.

IMPORTANT SAFETY INFORMATION (Cont'd)

WARNINGS AND PRECAUTIONS (Cont'd)

Embryo-Fetal Toxicity (Cont'd)

Females

Advise females of reproductive potential of the potential risk to a fetus and to use effective contraception during treatment and for 6 months following the last dose.

Males

Advise male patients with female partners of reproductive potential or who are pregnant to use effective contraception during treatment and for 3 months following the last dose of LYNPARZA and to not donate sperm during this time.

ADVERSE REACTIONS—Adjuvant Treatment of gBRCAm, HER2-Negative, High-Risk Early Breast Cancer

Most common adverse reactions (Grades 1-4) in ≥10% of patients who received LYNPARZA in the **adjuvant setting** for **OlympiA** were: nausea (57%), fatigue (including asthenia) (42%), anemia (24%), vomiting (23%), headache (20%), diarrhea (18%), leukopenia (17%), neutropenia (16%), decreased appetite (13%), dysgeusia (12%), dizziness (11%), and stomatitis (10%).

Most common laboratory abnormalities (Grades 1-4) in ≥25% of patients who received LYNPARZA in the **adjuvant setting** for **OlympiA** were: decrease in lymphocytes (77%), increase in mean corpuscular volume (67%), decrease in hemoglobin (65%), decrease in leukocytes (64%), and decrease in absolute neutrophil count (39%).

Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).



eBC CLINICAL DATA

mBC CLINICAL DATA

CLINICAL STUDIES OVERVIEW

SUMMARY

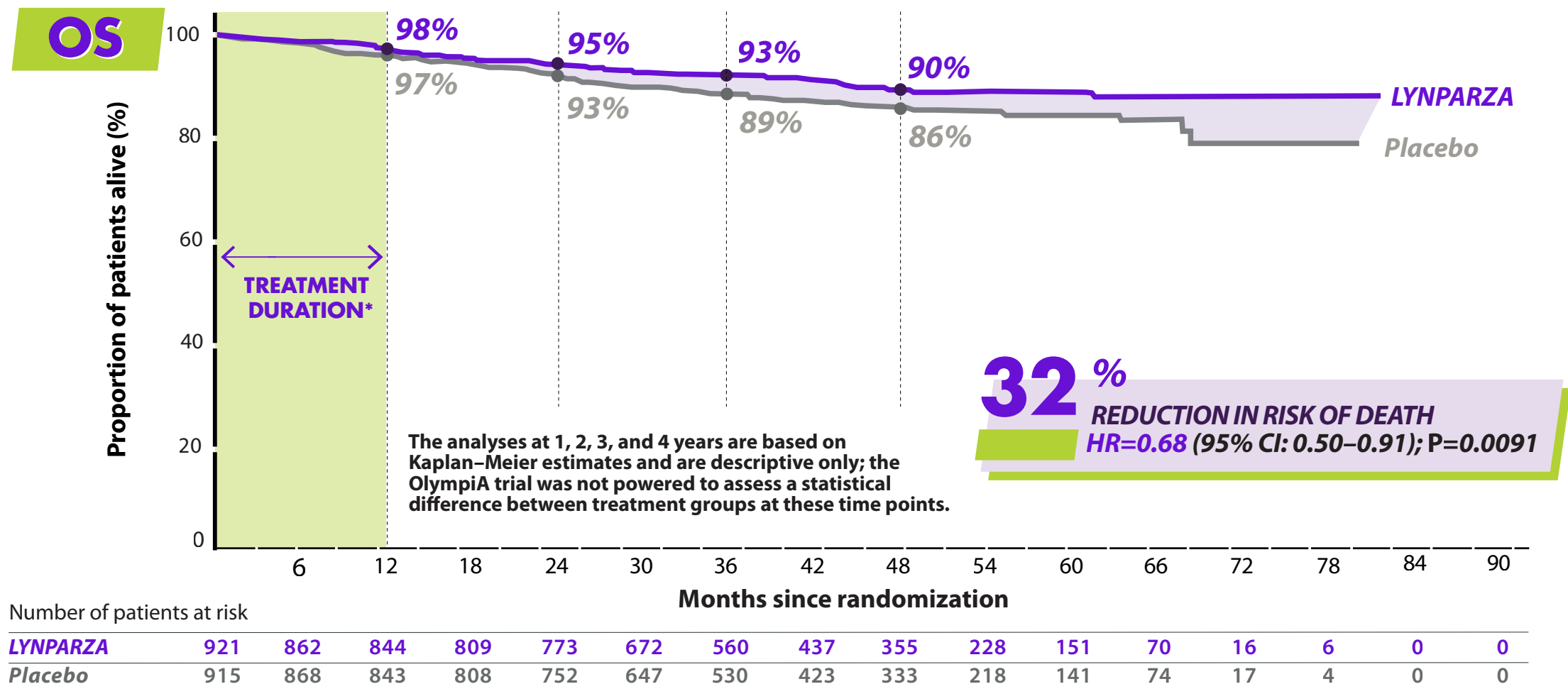
ISI AND REFERENCES

Targeted treatment with LYNPARZA for eligible patients with gBRCAm, HER2-negative, high-risk eBC

Significantly improved OS vs placebo in OlympiA^{1,7}



KEY SECONDARY ENDPOINT



- OS was controlled for Type 1 error within a hierarchical statistical analysis in OlympiA⁶
- The threshold of statistical significance was 0.015¹
- The number of deaths was 75 with LYNPARZA (n=921) vs 109 with placebo (n=915)¹
- Data from the pre-specified second interim analysis of OS (at ~330 IDFS events)¹

Adjuvant treatment with LYNPARZA may give your eligible patients the opportunity to live longer¹

*LYNPARZA was administered for up to 12 months or until disease recurrence or unacceptable toxicity.¹
eBC=early breast cancer; gBRCAm=germline BRCA-mutated or germline BRCA mutation(s); HR=hazard ratio; IDFS=invasive disease-free survival; OS=overall survival.

IMPORTANT SAFETY INFORMATION (Cont'd)

ADVERSE REACTIONS—gBRCAm, HER2-Negative Metastatic Breast Cancer

Most common adverse reactions (Grades 1-4) in ≥20% of patients who received LYNPARZA in the **metastatic setting** for **OlympiAD** were: nausea (58%), anemia (40%), fatigue (including asthenia) (37%), vomiting (30%), neutropenia (27%), respiratory tract infection (27%), leukopenia (25%), diarrhea (21%), and headache (20%).

Most common laboratory abnormalities (Grades 1-4) in ≥25% of patients who received LYNPARZA in the **metastatic setting** for **OlympiAD** were: decrease in hemoglobin (82%), decrease in lymphocytes (73%), decrease in leukocytes (71%), increase in mean corpuscular volume (71%), decrease in absolute neutrophil count (46%), and decrease in platelets (33%).

DRUG INTERACTIONS

Anticancer Agents: Clinical studies of LYNPARZA with other myelosuppressive anticancer agents, including DNA-damaging agents, indicate a potentiation and prolongation of myelosuppressive toxicity.

CYP3A Inhibitors: Avoid coadministration of strong or moderate CYP3A inhibitors when using LYNPARZA. If a strong or moderate CYP3A inhibitor must be coadministered, reduce the dose of LYNPARZA. Advise patients to avoid grapefruit, grapefruit juice, Seville oranges, and Seville orange juice during LYNPARZA treatment.

CYP3A Inducers: Avoid coadministration of strong or moderate CYP3A inducers when using LYNPARZA.

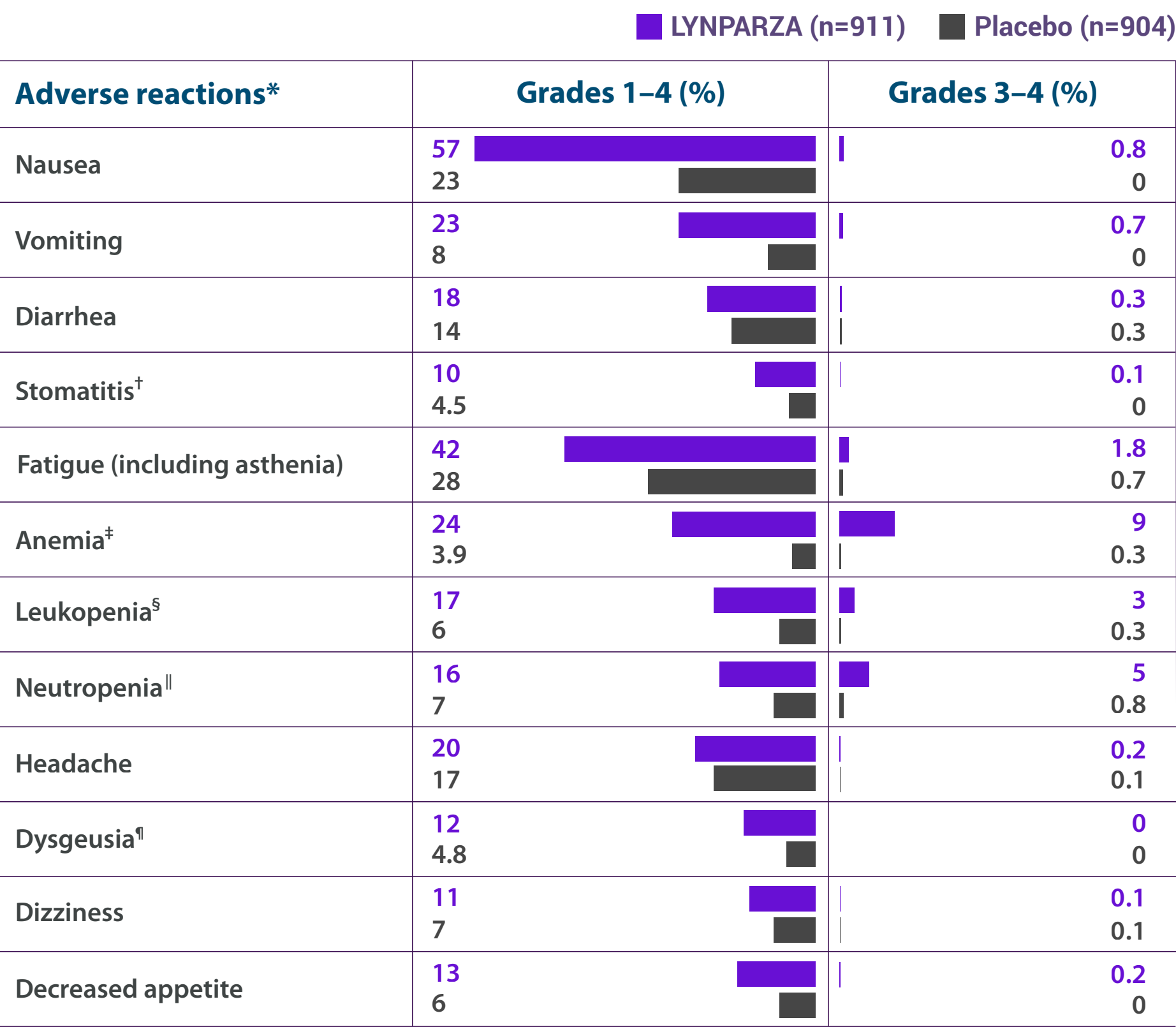
Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).



Select adverse reactions (ARs) in OlympiA



ARs in OlympiA (≥10% of patients who received LYNPARZA)¹



ARs in OlympiA were mostly Grades 1 and 2¹

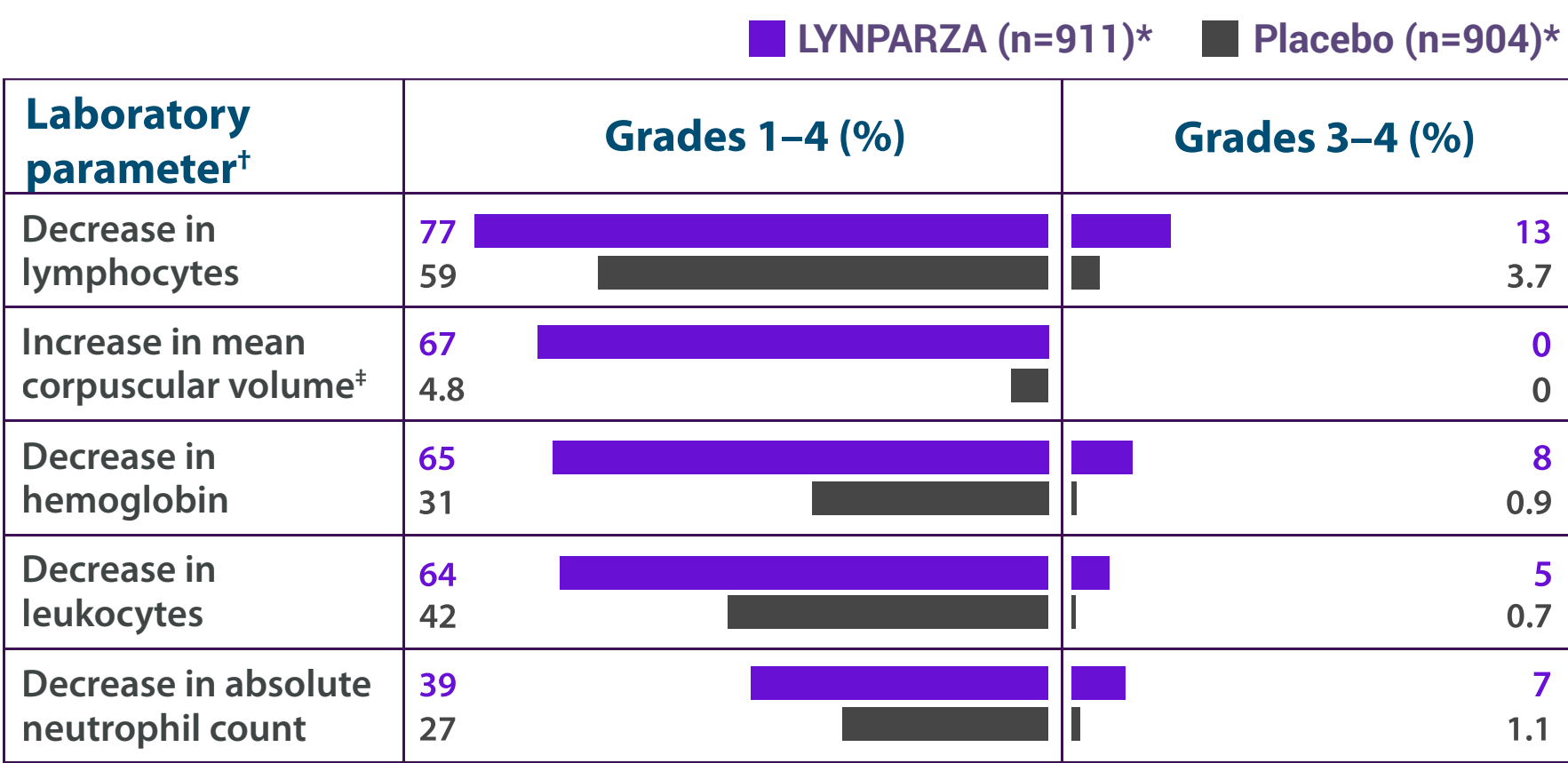
*Graded according to the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE), version 4.03.
[†]Includes aphthous ulcer, mouth ulceration, stomatitis.
[‡]Includes anemia, anemia macrocytic, erythropenia, hematocrit decreased, hemoglobin decreased, normochromic anemia, normochromic normocytic anemia, normocytic anemia, red blood cell count decreased.
[§]Includes leukopenia, white blood cell count decreased.
^{||}Includes agranulocytosis, febrile neutropenia, granulocyte count decreased, granulocytopenia, idiopathic neutropenia, neutropenia, neutropenic infection, neutropenic sepsis, neutrophil count decreased.
[¶]Includes dysgeusia, taste disorder.

Please see Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).

Select laboratory abnormalities in OlympiA



Laboratory abnormalities reported in ≥25% of patients in OlympiA¹



*This number represents the safety population. The derived values in the table are based on the total number of evaluable patients for each laboratory parameter.

[†]Patients were allowed to enter clinical studies with laboratory values of CTCAE Grade 1.

[‡]Represents the proportion of subjects whose mean corpuscular volume was >ULN.

CTCAE=Common Terminology Criteria for Adverse Events; ULN=upper limit of normal.

Please see Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).

Dose modifications due to ARs in OlympiA¹



	LYNPARZA (n=911)
Dose interruptions due to ARs	31%
Dose reductions due to ARs	23%
Discontinuations due to ARs	10%

- The most common ARs leading to dose interruptions were anemia (11%), neutropenia (6%), nausea (5%), leukopenia (3.5%), fatigue (3%), and vomiting (2.9%)¹
- The most common ARs leading to dose reductions were anemia (8%), nausea (4.7%), neutropenia (4.2%), fatigue (3.3%), leukopenia (1.8%), and vomiting (1.5%)¹
- The most common ARs leading to discontinuation were nausea (2%), anemia (1.8%), and fatigue (1.3%)¹

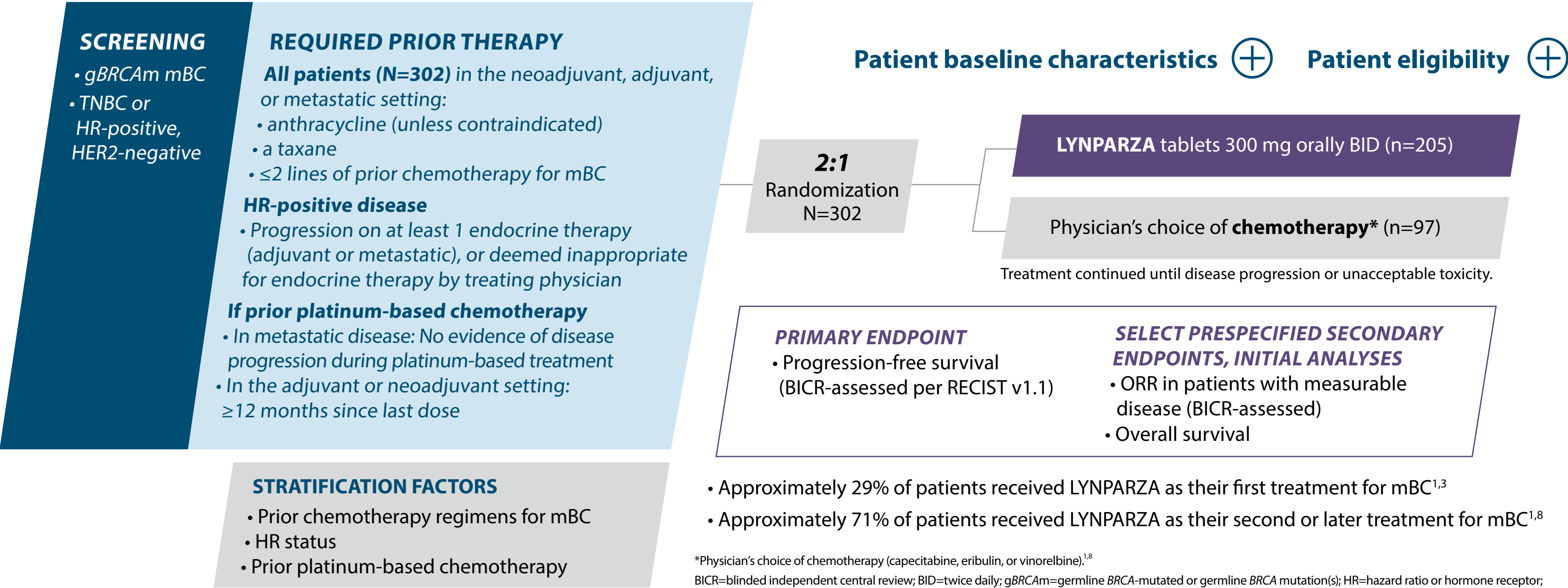
~9 out of 10 patients continued treatment with LYNPARZA without AR-related discontinuation¹

Please see Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).

OlympiAD was designed to evaluate LYNPARZA in certain patients with gBRCAm, HER2-negative metastatic breast cancer¹



OlympiAD was a phase 3, open-label, randomized, controlled, multicenter study^{1,8}



IMPORTANT SAFETY INFORMATION (Cont'd)

USE IN SPECIFIC POPULATIONS

Lactation: No data are available regarding the presence of olaparib in human milk, its effects on the breastfed infant or on milk production. Because of the potential for serious adverse reactions in the breastfed infant, advise a lactating woman not to breastfeed during treatment with LYNPARZA and for 1 month after receiving the final dose.

Pediatric Use: The safety and efficacy of LYNPARZA have not been established in pediatric patients.

Hepatic Impairment: No adjustment to the starting dose is required in patients with mild or moderate hepatic impairment (Child-Pugh classification A and B). There are no data in patients with severe hepatic impairment (Child-Pugh classification C).

Renal Impairment: No dosage modification is recommended in patients with mild renal impairment (CLcr 51-80 mL/min estimated by Cockcroft-Gault). In patients with moderate renal impairment (CLcr 31-50 mL/min), reduce the dose of LYNPARZA to 200 mg twice daily. There are no data in patients with severe renal impairment or end-stage renal disease (CLcr ≤30 mL/min).

Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).



eBC CLINICAL DATA

mBC CLINICAL DATA



CLINICAL STUDIES OVERVIEW

SUMMARY

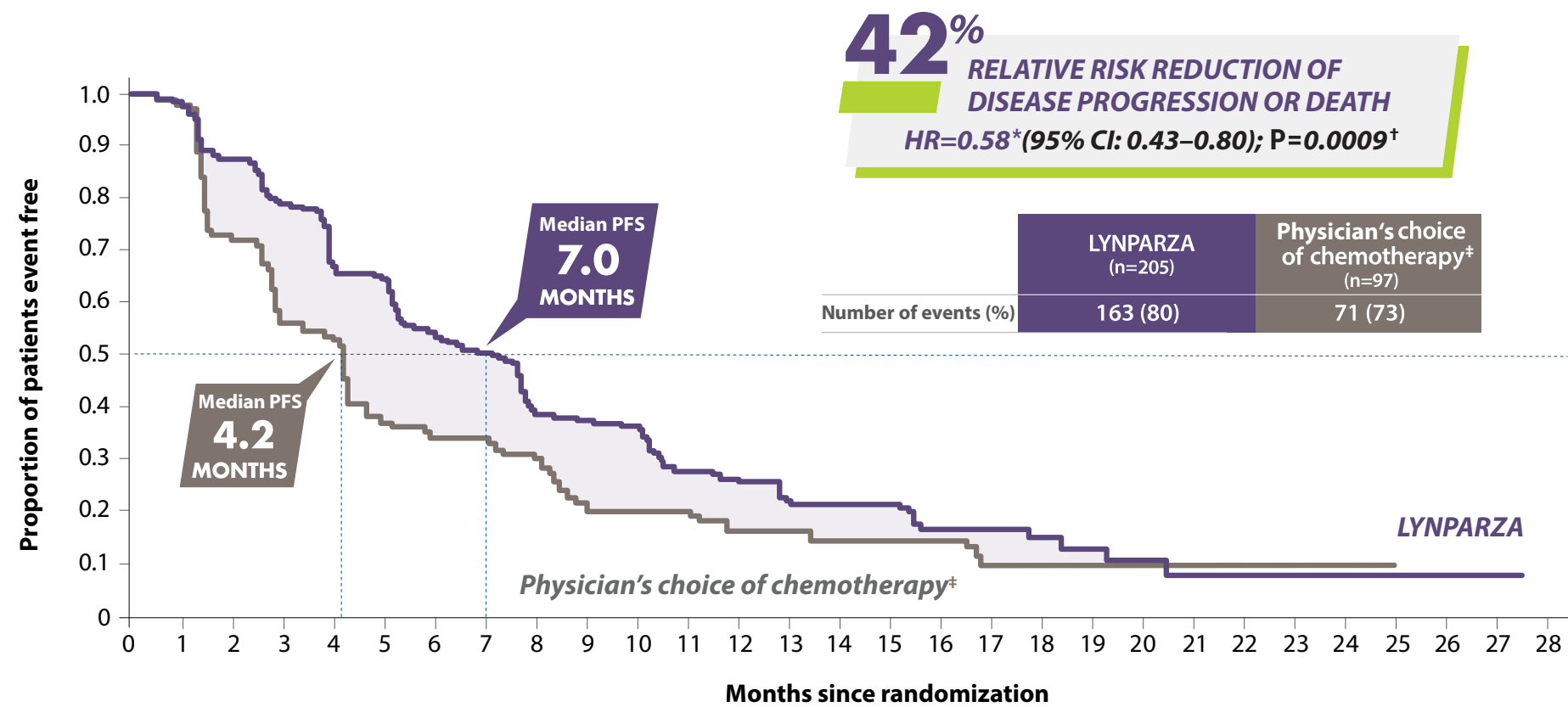
ISI AND REFERENCES

Targeted treatment with LYNPARZA for eligible patients with gBRCAm, HER2-negative mBC

Significantly improved PFS vs physician's choice of chemotherapy in OlympiAD^{1,8}



Primary endpoint: progression-free survival (PFS)^{1,8}



PFS at 12 months⁸

- 25.9% of patients treated with LYNPARZA and 15.0% of patients treated with chemotherapy[‡]

The analysis at 12 months is based on Kaplan-Meier estimates and is descriptive only; the OlympiAD trial was not designed to assess a statistical difference between treatment groups at this time point.⁵

Number of patients at risk

LYNPARZA	205	201	177	159	154	129	107	100	94	73	69	61	40	36	23	21	21	11	11	11	4	3	3	2	2	1	1	1	0
Physician's choice of chemotherapy [‡]	97	88	63	46	44	29	25	24	21	13	11	11	8	7	4	4	4	1	1	1	1	1	1	1	1	0	0	0	0

*Hazard ratio is derived from a stratified log-rank test, stratified by ER, PgR-negative vs ER and/or PgR-positive and prior chemotherapy (yes vs no).¹

[†]For PFS, P value (2-sided) was compared with 0.05.¹

[‡]Physician's choice of chemotherapy (capecitabine, eribulin, or vinorelbine).^{1,8}

ER=estrogen receptor; gBRCAm=germline BRCA-mutated or germline BRCA mutation(s); HR=hazard ratio or hormone receptor; mBC=metastatic breast cancer; PgR=progesterone receptor.

IMPORTANT SAFETY INFORMATION

CONTRAINDICATIONS

There are no contraindications for LYNPARZA.

WARNINGS AND PRECAUTIONS

Myelodysplastic Syndrome/Acute Myeloid Leukemia (MDS/AML): Occurred in approximately 1.2% of patients with various BRCAm, gBRCAm, HRR gene-mutated or HRD-positive cancers who received LYNPARZA as a single agent or as part of a combination regimen, consistent with the approved indications, and the majority of events had a fatal outcome. The median duration of therapy in patients who developed MDS/AML was approximately 2 years (range: <6 months to >4 years). All of these patients had previous chemotherapy with platinum agents and/or other DNA-damaging agents, including radiotherapy.

Do not start LYNPARZA until patients have recovered from hematological toxicity caused by previous chemotherapy (≤Grade 1). Monitor complete blood count for cytopenia at baseline and monthly thereafter for clinically significant changes during treatment. For prolonged hematological toxicities, interrupt LYNPARZA and monitor blood count weekly until recovery.

If the levels have not recovered to Grade 1 or less after 4 weeks, refer the patient to a hematologist for further investigations, including bone marrow analysis and blood sample for cytogenetics. Discontinue LYNPARZA if MDS/AML is confirmed.

Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).



eBC CLINICAL DATA

mBC CLINICAL DATA



CLINICAL STUDIES OVERVIEW

SUMMARY

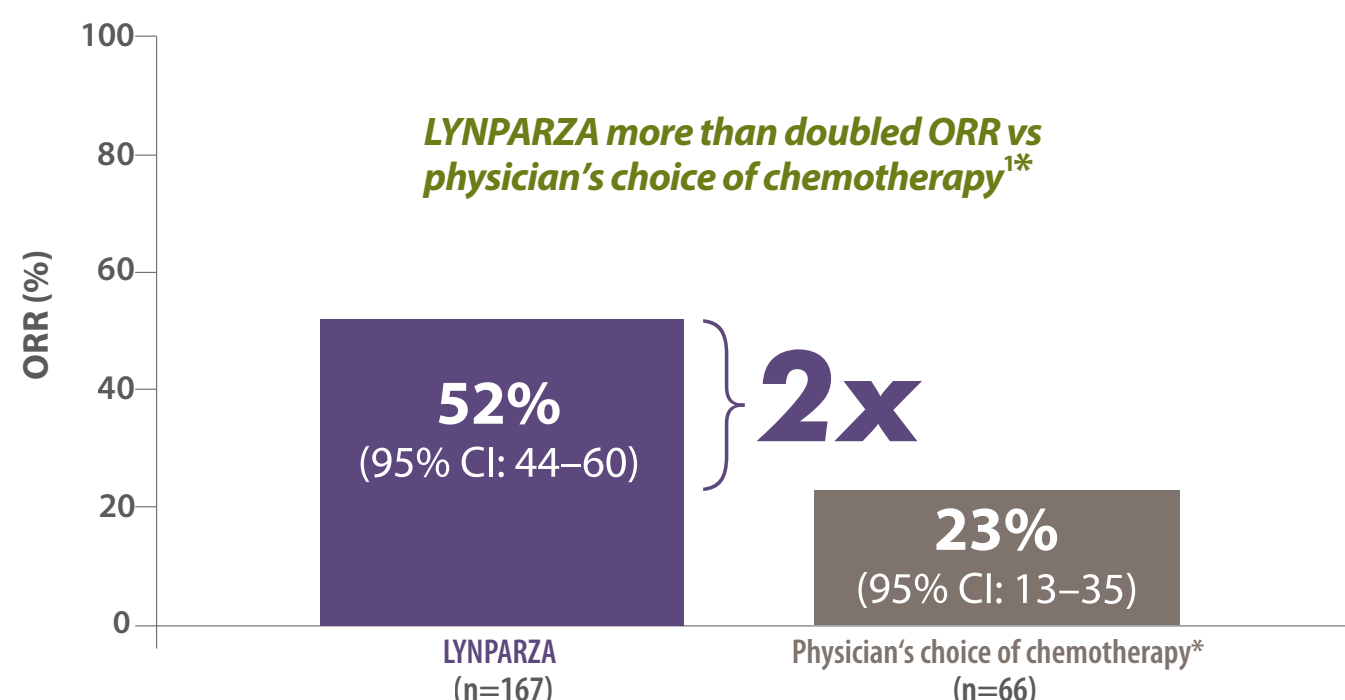
ISI AND REFERENCES

Targeted treatment with LYNPARZA for eligible patients with gBRCAm, HER2-negative mBC

ORR and OS results in OlympiAD¹



Prespecified secondary endpoint, initial analysis: objective response rate (ORR) in patients with measurable disease (BICR-assessed)¹



Prespecified secondary endpoint: overall survival

Median OS in the total study population was 19.3 months with LYNPARZA and 17.1 months with physician's choice of chemotherapy. HR=0.90 (95% CI: 0.66-1.23). OS did not achieve statistical significance. OlympiAD was not powered to show statistical significance in OS for LYNPARZA monotherapy vs chemotherapy.^{5,9}

ORR was a prespecified secondary endpoint. The OlympiAD trial was not powered to assess statistical difference in ORR or median duration of response between treatment groups.⁸

- The confirmed complete response rate was 7.8% for LYNPARZA and 1.5% for the chemotherapy arm^{1*}
- The median duration of response was 6.4 months for LYNPARZA and 7.1 months for the chemotherapy arm^{8*}

Time of data cutoff for the initial analysis was December 9, 2016⁸

Response based on confirmed responses.¹
ORR=CR+PR based on BICR, according to modified RECIST, version 1.1.⁸

A follow-up analysis for duration of response (DOR) was conducted among patients who demonstrated an objective response. This analysis was exploratory and was not a randomized comparison. Results should be interpreted with caution.⁹

- Investigator-assessed ORR was recorded in 95 patients (57.6%) in the LYNPARZA arm (n=165) and 16 patients (22.2%) in the chemotherapy arm (n=72)^{9*}
- Among responders, the median DOR was 6.9 months in the LYNPARZA arm and 4.5 months in the chemotherapy arm^{9*}
- Time of data cutoff for the follow-up analysis was September 25, 2017, representing an approximately 9-month extension from the time of data cutoff for the initial analysis⁹

Median DoR is based on the final analysis using investigator-assessed ORR.⁹

*Physician's choice of chemotherapy (capecitabine, eribulin, or vinorelbine).^{1,8}

CR=complete response; gBRCAm=germline BRCA-mutated or germline BRCA mutation(s); mBC=metastatic breast cancer; PR=partial response; RECIST=Response Evaluation Criteria in Solid Tumors.

IMPORTANT SAFETY INFORMATION (Cont'd)

WARNINGS AND PRECAUTIONS (Cont'd)

Pneumonitis: Occurred in 0.8% of patients exposed to LYNPARZA monotherapy, and some cases were fatal. If patients present with new or worsening respiratory symptoms such as dyspnea, cough, and fever, or a radiological abnormality occurs, interrupt LYNPARZA treatment and initiate prompt investigation. Discontinue LYNPARZA if pneumonitis is confirmed and treat patient appropriately.

Venous Thromboembolism (VTE): Including severe or fatal pulmonary embolism (PE) occurred in patients treated with LYNPARZA. Monitor patients for signs and symptoms of venous thrombosis and pulmonary embolism, and treat as medically appropriate, which may include long-term anticoagulation as clinically indicated.

Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).

Embryo-Fetal Toxicity: Based on its mechanism of action and findings in animals, LYNPARZA can cause fetal harm. Verify pregnancy status in females of reproductive potential prior to initiating treatment.

Females

Advise females of reproductive potential of the potential risk to a fetus and to use effective contraception during treatment and for 6 months following the last dose.

Males

Advise male patients with female partners of reproductive potential or who are pregnant to use effective contraception during treatment and for 3 months following the last dose of LYNPARZA and to not donate sperm during this time.



eBC CLINICAL DATA

mBC CLINICAL DATA



CLINICAL STUDIES OVERVIEW

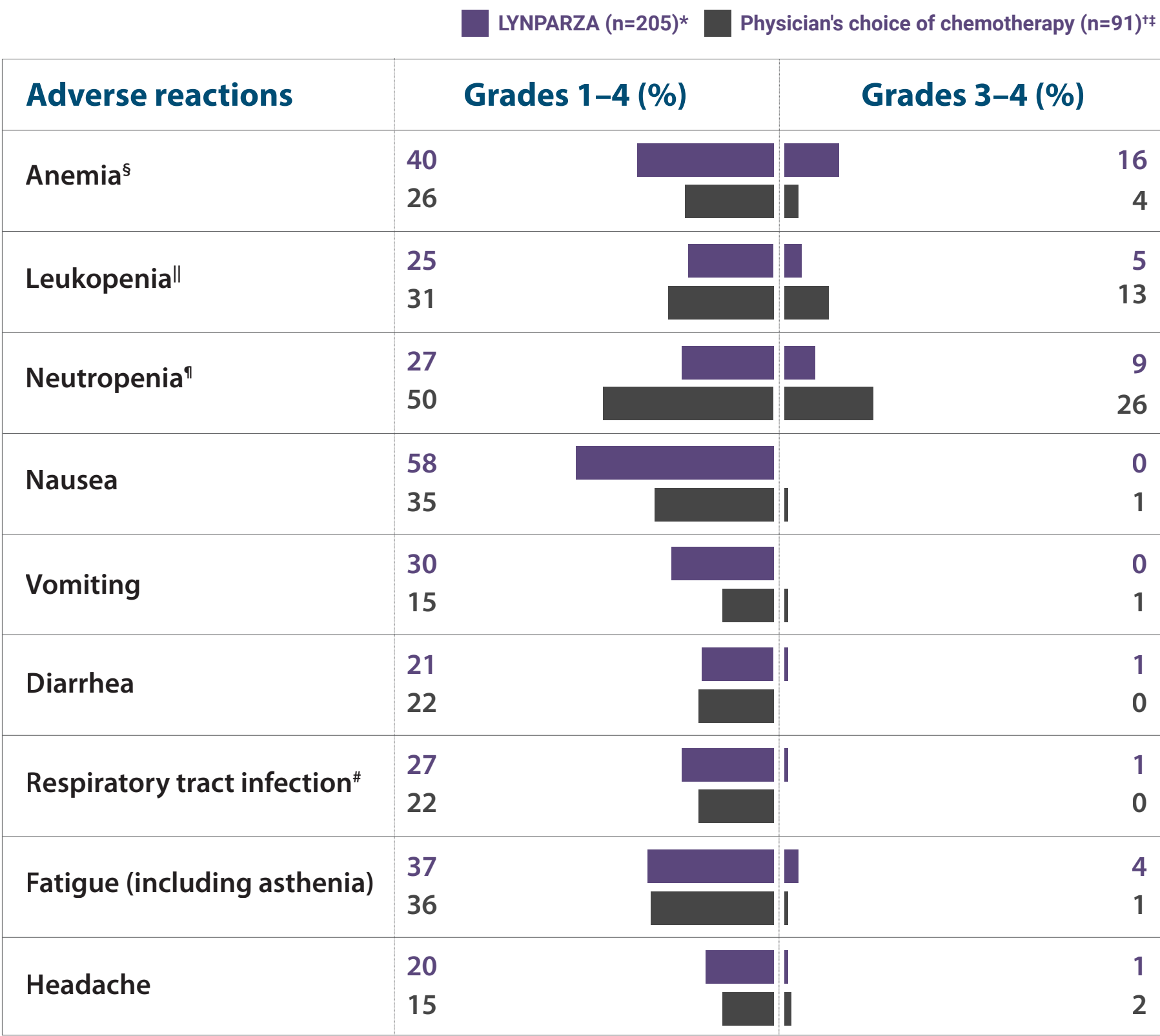
SUMMARY

ISI AND REFERENCES

Select adverse reactions (ARs) in OlympiAD¹



ARs* in OlympiAD (≥20% of patients who received LYNPARZA)¹



ARs in OlympiAD were mostly Grades 1 and 2¹

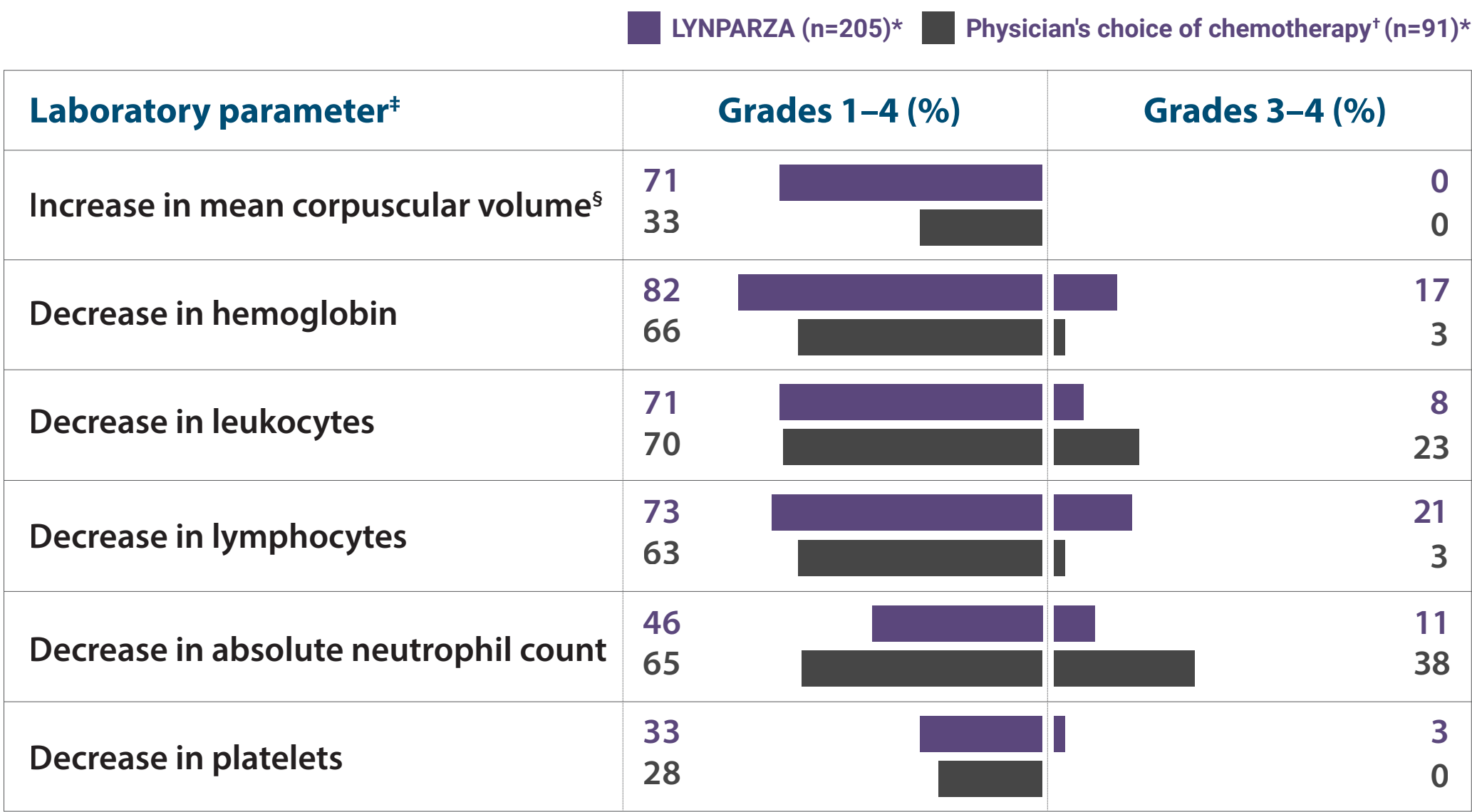
*Graded according to the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE), version 4.0.
[†]This number represents the safety population. The derived values in the table are based on the total number of evaluable patients for each laboratory parameter.
[‡]Physician's choice of chemotherapy (capecitabine, eribulin, or vinorelbine).^{1,8}
[§]Represents grouped terms consisting of anemia (anemia erythropenia, hematocrit decreased, hemoglobin decreased, and red blood cell count decreased).
^{||}Represents grouped terms consisting of leukopenia and white blood cell count decreased.
[¶]Represents grouped terms consisting of neutropenia (febrile neutropenia, granulocyte count decreased, granulocytopenia, neutropenia, neutropenic infection, neutropenic sepsis, and neutrophil count decreased).
[#]Represents grouped terms consisting of bronchitis, influenza, lower respiratory tract infection, nasopharyngitis, respiratory tract infection, rhinitis, sinusitis, upper respiratory tract infection, and upper respiratory tract infection bacterial.

Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).

Select laboratory abnormalities in OlympiAD



Laboratory abnormalities reported in ≥25% of patients in OlympiAD¹



*This number represents the safety population. The derived values in the table are based on the total number of evaluable patients for each laboratory parameter.

[†]Physician's choice of chemotherapy (capecitabine, eribulin, or vinorelbine).^{1,8}

[‡]Patients were allowed to enter clinical studies with laboratory values of CTCAE Grade 1.

[§]Represents the proportion of subjects whose mean corpuscular volume was >ULN.

ULN=upper limit of normal.

Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).

Dose modifications due to ARs in OlympiAD^{1,8}



	LYNPARZA (n=205)	Physician's choice of chemotherapy* (n=91)
Dose interruptions due to ARs	35%	28%
Dose reductions due to ARs	25%	31%
Discontinuations due to ARs	5%	8%

• Discontinuation rates associated with hematologic ARs in patients receiving LYNPARZA were anemia (2%), decreased platelet count (1%), thrombocytopenia (0.5%), neutropenia (0%), and leukopenia (0%)^{10,11}

~9 out of 10 patients continued treatment with LYNPARZA without AR-related discontinuation¹

*Physician's choice of chemotherapy (capecitabine, eribulin, or vinorelbine).^{1,8}

Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).

TEST ► TARGET ► TREAT

Consider LYNPARZA for your eligible patients with gBRCAm, HER2-negative breast cancer in the adjuvant or metastatic setting¹



In high-risk* patients in the adjuvant setting

OlympiA

Not an actual patient.

Primary Endpoint: Statistically Significant IDFS

42% REDUCTION IN RISK OF INVASIVE DISEASE recurrence, new cancers, or death vs placebo

HR=0.58 (95% CI: 0.46–0.74); P<0.0001¹

Key Secondary Endpoint: Statistically Significant OS

32% REDUCTION IN RISK OF DEATH vs placebo

HR=0.68 (95% CI: 0.50–0.91); P=0.0091¹

The most common ARs (Grades 1–4) in ≥10% of patients were: nausea (57%), fatigue (including asthenia) (42%), anemia (24%), vomiting (23%), headache (20%), diarrhea (18%), leukopenia (17%), neutropenia (16%), decreased appetite (13%), dysgeusia (12%), dizziness (11%), and stomatitis (10%).

In the metastatic setting

OlympiAD

Not an actual patient.

Primary Endpoint: Statistically Significant PFS

42% RELATIVE RISK REDUCTION OF DISEASE PROGRESSION OR DEATH VS CHEMOTHERAPY

HR=0.58 (95% CI: 0.43–0.80); P=0.0009^{1,8}

Median PFS was 7.0 months with LYNPARZA and 4.2 months for physician's choice of chemotherapy

Prespecified Secondary Endpoints: ORR[†] and OS

ORR[†]: 52% WITH LYNPARZA (N=167) and 23% with physician's choice of chemotherapy (n=66)

OS: HR=0.90 (95% CI: 0.66–1.23)^{1,8}

Median OS was 19.3 months with LYNPARZA and 17.1 months in the chemotherapy arm. OS did not reach statistical significance

The most common ARs (Grades 1–4) in ≥20% of patients were: nausea (58%), anemia (40%), fatigue (including asthenia) (37%), vomiting (30%), neutropenia (27%), respiratory tract infection (27%), leukopenia (25%), diarrhea (21%), and headache (20%).

*For patients who received prior neoadjuvant chemotherapy, high risk was defined as non-pCR in TNBC and as non-pCR with CPS&EG score ≥3 in HR-positive, HER2-negative disease. For patients who received prior adjuvant chemotherapy, high risk was defined as ≥pN1 or pN0 with ≥pT2 in TNBC and as ≥4 positive lymph nodes in HR-positive, HER2-negative disease.¹

[†]In patients with measurable disease. Response based on confirmed responses. ORR=CR+PR based on BICR, according to modified RECIST, version 1.1.¹

OlympiAD was not powered to assess a statistical difference in ORR or show statistical significance in OS for LYNPARZA vs chemotherapy.

AR=adverse reaction; BICR=blinded independent central review; CPS&EG=pre-treatment clinical and post-treatment pathologic stage (CPS), estrogen receptor (ER) status, and histologic grade; CI=confidence interval; CR=complete response; HER2=human epidermal growth factor receptor 2; HR=hazard ratio or hormone receptor; IDFS=invasive disease-free survival; non-pCR=non-pathologic complete response; ORR=objective response rate; OS=overall survival; PFS=progression-free survival; PR=partial response; RECIST=Response Evaluation Criteria in Solid Tumors; TNBC=triple negative breast cancer.

IMPORTANT SAFETY INFORMATION (Cont'd)

ADVERSE REACTIONS—Adjuvant Treatment of gBRCAm, HER2-Negative, High-Risk Early Breast Cancer

Most common adverse reactions (Grades 1-4) in ≥10% of patients who received LYNPARZA in the **adjuvant setting** for **OlympiA** were: nausea (57%), fatigue (including asthenia) (42%), anemia (24%), vomiting (23%), headache (20%), diarrhea (18%), leukopenia (17%), neutropenia (16%), decreased appetite (13%), dysgeusia (12%), dizziness (11%), and stomatitis (10%).

Most common laboratory abnormalities (Grades 1-4) in ≥25% of patients who received LYNPARZA in the **adjuvant setting** for **OlympiA** were: decrease in lymphocytes (77%), increase in mean corpuscular volume (67%), decrease in hemoglobin (65%), decrease in leukocytes (64%), and decrease in absolute neutrophil count (39%).

ADVERSE REACTIONS—gBRCAm, HER2-Negative Metastatic Breast Cancer

Most common adverse reactions (Grades 1-4) in ≥20% of patients who received LYNPARZA in the **metastatic setting** for **OlympiAD** were: nausea (58%), anemia (40%), fatigue (including asthenia) (37%), vomiting (30%), neutropenia (27%), respiratory tract infection (27%), leukopenia (25%), diarrhea (21%), and headache (20%).

Most common laboratory abnormalities (Grades 1-4) in ≥25% of patients who received LYNPARZA in the **metastatic setting** for **OlympiAD** were: decrease in hemoglobin (82%), decrease in lymphocytes (73%), decrease in leukocytes (71%), increase in mean corpuscular volume (71%), decrease in absolute neutrophil count (46%), and decrease in platelets (33%).

Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).



eBC CLINICAL DATA

mBC CLINICAL DATA

CLINICAL STUDIES OVERVIEW

SUMMARY

ISI AND REFERENCES



Not actual patients.

Choose LYNPARZA for your eligible patients with gBRCAm,* HER2-negative breast cancer in the adjuvant or metastatic setting

*Select patients for this indication based on an FDA-approved companion diagnostic for LYNPARZA.¹

gBRCAm=germline BRCA-mutated or germline BRCA mutation(s); PARP=poly (ADP-ribose) polymerase.

IMPORTANT SAFETY INFORMATION (Cont'd)

DRUG INTERACTIONS

Anticancer Agents: Clinical studies of LYNPARZA with other myelosuppressive anticancer agents, including DNA-damaging agents, indicate a potentiation and prolongation of myelosuppressive toxicity.

CYP3A Inhibitors: Avoid coadministration of strong or moderate CYP3A inhibitors when using LYNPARZA. If a strong or moderate CYP3A inhibitor must be coadministered, reduce the dose of LYNPARZA. Advise patients to avoid grapefruit, grapefruit juice, Seville oranges, and Seville orange juice during LYNPARZA treatment.

CYP3A Inducers: Avoid coadministration of strong or moderate CYP3A inducers when using LYNPARZA.

USE IN SPECIFIC POPULATIONS

Lactation: No data are available regarding the presence of olaparib in human milk, its effects on the breastfed infant or on milk production. Because of the potential for serious adverse reactions in the breastfed infant, advise a lactating woman not to breastfeed during treatment with LYNPARZA and for 1 month after receiving the final dose.

Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).



eBC CLINICAL DATA

mBC CLINICAL DATA

CLINICAL STUDIES OVERVIEW

SUMMARY

ISI AND REFERENCES

Important Safety Information



INDICATIONS

LYNPARZA is a poly (ADP-ribose) polymerase (PARP) inhibitor indicated:

Adjuvant Treatment of gBRCAm, HER2-Negative, High-Risk Early Breast Cancer

For the adjuvant treatment of adult patients with deleterious or suspected deleterious gBRCAm, human epidermal growth factor receptor 2 (HER2)-negative, high-risk early breast cancer who have been treated with neoadjuvant or adjuvant chemotherapy. Select patients for therapy based on an FDA-approved companion diagnostic for LYNPARZA.

gBRCAm, HER2-Negative Metastatic Breast Cancer

For the treatment of adult patients with deleterious or suspected deleterious gBRCAm, human epidermal growth factor receptor 2 (HER2)-negative metastatic breast cancer who have been treated with chemotherapy in the neoadjuvant, adjuvant, or metastatic setting. Patients with hormone receptor (HR)-positive breast cancer should have been treated with a prior endocrine therapy or be considered inappropriate for endocrine therapy. Select patients for therapy based on an FDA-approved companion diagnostic for LYNPARZA.

IMPORTANT SAFETY INFORMATION

CONTRAINDICATIONS

There are no contraindications for LYNPARZA.

WARNINGS AND PRECAUTIONS

Myelodysplastic Syndrome/Acute Myeloid Leukemia

(MDS/AML): Occurred in approximately 1.2% of patients with various BRCAm, gBRCAm, HRR gene-mutated or HRD-positive cancers who received LYNPARZA as a single agent or as part of a combination regimen, consistent with the approved indications, and the majority of events had a fatal outcome. The median duration of therapy in patients who developed MDS/AML was approximately 2 years (range: <6 months to

>4 years). All of these patients had previous chemotherapy with platinum agents and/or other DNA-damaging agents, including radiotherapy.

Do not start LYNPARZA until patients have recovered from hematological toxicity caused by previous chemotherapy ($\leq$ Grade 1). Monitor complete blood count for cytopenia at baseline and monthly thereafter for clinically significant changes during treatment. For prolonged hematological toxicities, interrupt LYNPARZA and monitor blood count weekly until recovery.

If the levels have not recovered to Grade 1 or less after 4 weeks, refer the patient to a hematologist for further investigations, including bone marrow analysis and blood sample for cytogenetics. Discontinue LYNPARZA if MDS/AML is confirmed.

Pneumonitis: Occurred in 0.8% of patients exposed to LYNPARZA monotherapy, and some cases were fatal. If patients present with new or worsening respiratory symptoms such as dyspnea, cough, and fever, or a radiological abnormality occurs, interrupt LYNPARZA treatment and initiate prompt investigation. Discontinue LYNPARZA if pneumonitis is confirmed and treat patient appropriately.

Venous Thromboembolism (VTE): Including severe or fatal pulmonary embolism (PE) occurred in patients treated with LYNPARZA. Monitor patients for signs and symptoms of venous thrombosis and pulmonary embolism, and treat as medically appropriate, which may include long-term anticoagulation as clinically indicated.

Embryo-Fetal Toxicity: Based on its mechanism of action and findings in animals, LYNPARZA can cause fetal harm. Verify pregnancy status in females of reproductive potential prior to initiating treatment.

Females

Advise females of reproductive potential of the potential risk to a fetus and to use effective contraception during treatment and for 6 months following the last dose.

Males

Advise male patients with female partners of reproductive potential or who are pregnant to use effective contraception during treatment and for 3 months following the last dose of LYNPARZA and to not donate sperm during this time.

ADVERSE REACTIONS—Adjuvant Treatment of gBRCAm, HER2-Negative, High-Risk Early Breast Cancer

Most common adverse reactions (Grades 1-4) in $\geq 10\%$ of patients who received LYNPARZA in the **adjuvant setting** for **OlympiA** were: nausea (57%), fatigue (including asthenia) (42%), anemia (24%), vomiting (23%), headache (20%), diarrhea (18%), leukopenia (17%), neutropenia (16%), decreased appetite (13%), dysgeusia (12%), dizziness (11%), and stomatitis (10%).

Most common laboratory abnormalities (Grades 1-4) in $\geq 25\%$ of patients who received LYNPARZA in the **adjuvant setting** for **OlympiA** were: decrease in lymphocytes (77%), increase in mean corpuscular volume (67%), decrease in hemoglobin (65%), decrease in leukocytes (64%), and decrease in absolute neutrophil count (39%).

ADVERSE REACTIONS—gBRCAm, HER2-Negative Metastatic Breast Cancer

Most common adverse reactions (Grades 1-4) in $\geq 20\%$ of patients who received LYNPARZA in the **metastatic setting** for **OlympiAD** were: nausea (58%), anemia (40%), fatigue (including asthenia) (37%), vomiting (30%), neutropenia (27%), respiratory tract infection (27%), leukopenia (25%), diarrhea (21%), and headache (20%).

Most common laboratory abnormalities (Grades 1-4) in $\geq 25\%$ of patients who received LYNPARZA in the **metastatic setting** for **OlympiAD** were: decrease in hemoglobin (82%), decrease in lymphocytes (73%), decrease in leukocytes (71%), increase in mean corpuscular volume (71%), decrease in absolute neutrophil count (46%), and decrease in platelets (33%).

Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).



eBC CLINICAL DATA

mBC CLINICAL DATA

CLINICAL STUDIES OVERVIEW

SUMMARY

ISI AND REFERENCES

Important Safety Information (Cont'd)



IMPORTANT SAFETY INFORMATION (Cont'd)

DRUG INTERACTIONS

Anticancer Agents: Clinical studies of LYNPARZA with other myelosuppressive anticancer agents, including DNA-damaging agents, indicate a potentiation and prolongation of myelosuppressive toxicity.

CYP3A Inhibitors: Avoid coadministration of strong or moderate CYP3A inhibitors when using LYNPARZA. If a strong or moderate CYP3A inhibitor must be coadministered, reduce the dose of LYNPARZA. Advise patients to avoid grapefruit, grapefruit juice, Seville oranges, and Seville orange juice during LYNPARZA treatment.

CYP3A Inducers: Avoid coadministration of strong or moderate CYP3A inducers when using LYNPARZA.

USE IN SPECIFIC POPULATIONS

Lactation: No data are available regarding the presence of olaparib in human milk, its effects on the breastfed infant or on milk production. Because of the potential for serious adverse reactions in the breastfed infant, advise a lactating woman not to breastfeed during treatment with LYNPARZA and for 1 month after receiving the final dose.

Pediatric Use: The safety and efficacy of LYNPARZA have not been established in pediatric patients.

Hepatic Impairment: No adjustment to the starting dose is required in patients with mild or moderate hepatic impairment (Child-Pugh classification A and B). There are no data in patients with severe hepatic impairment (Child-Pugh classification C).

Renal Impairment: No dosage modification is recommended in patients with mild renal impairment (CLcr 51-80 mL/min estimated by Cockcroft-Gault). In patients with moderate renal impairment (CLcr 31-50 mL/min), reduce the dose of LYNPARZA to 200 mg twice daily. There are no data in patients with severe renal impairment or end-stage renal disease (CLcr ≤30 mL/min).

Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).

You may [report side effects related to AstraZeneca products](#). [↗](#)

References: **1.** LYNPARZA® (olaparib) [prescribing information]. Wilmington, DE: AstraZeneca Pharmaceuticals LP; 2023.

2. Rubraca® (rucaparib) [prescribing information]. Vienna, Austria: pharma&, GmbH; 2023. **3.** Talzenna® (talazoparib) [prescribing information]. New York, NY: Pfizer Inc; 2023.

4. Zejula® (niraparib) [prescribing information]. Research Triangle Park, NC: GlaxoSmithKline; 2023. **5.** Tutt ANJ, Garber JE, Kaufman B, et al; OlympiA Clinical Trial Steering Committee and Investigators. Adjuvant olaparib for patients with *BRCA1*- or *BRCA2*-mutated breast cancer. *N Engl J Med*. 2021;384(25):2394-2405. **6.** Tutt ANJ, Garber JE, Kaufman B, et al; OlympiA Clinical Trial Steering Committee and Investigators. Adjuvant olaparib for patients with *BRCA1*- or *BRCA2*-mutated breast cancer. Clinical Study Protocol. *N Engl J Med*. 2021;384(25):2394-2405.

7. Geyer CE Jr, Garber JE, Gelber RD, et al. Overall survival in the OlympiA phase III trial of adjuvant olaparib in patients with germline pathogenic variants in *BRCA1/2* and high-risk, early breast cancer. *Ann Oncol*. 2022;33(12):1250-1268. **8.** Robson M, Im S-A, Senkus E, et al. Olaparib for metastatic breast cancer in patients with a germline *BRCA* mutation. *N Engl J Med*. 2017;377(6):523-533. **9.** Robson ME, Tung N, Conte P, et al. OlympiAD final overall survival and tolerability results: olaparib versus chemotherapy treatment of physician's choice in patients with a germline *BRCA* mutation and HER2-negative metastatic breast cancer. *Ann Oncol*. 2019;30(4):558-566.

10. Robson M, Im S-A, Senkus E, et al. Olaparib for metastatic breast cancer in patients with a germline *BRCA* mutation. Supplementary Appendix. *N Engl J Med*. 2017;377(6):523-533.

11. Robson ME, Tung N, Conte P, et al. OlympiAD final overall survival and tolerability results: olaparib versus chemotherapy treatment of physician's choice in patients with a germline *BRCA* mutation and HER2-negative metastatic breast cancer. Supplementary Appendix. *Ann Oncol*. 2019;30(4):558-566.



LYNPARZA is a registered trademark of the AstraZeneca group of companies.
©2023 AstraZeneca. All rights reserved. US-75340 Last Updated 9/23



eBC CLINICAL DATA

mBC CLINICAL DATA

CLINICAL STUDIES OVERVIEW

SUMMARY

ISI AND REFERENCES

In OlympiA
Baseline characteristics of patients⁶

Characteristics	LYNPARZA (n=921)	Placebo (n=915)
Age (years)		
Median	42	43
Interquartile range	(36–49)	(36–50)
Germline BRCA mutation type – no. (%)		
BRCA1	657 (71.3)	670 (73.2)
BRCA2	261 (28.3)	239 (26.1)
BRCA1 and BRCA2	2 (0.2)	5 (0.5)
Missing data	1 (0.1)	1 (0.1)
Hormone receptor status – no. (%)		
Hormone receptor positive, HER2-negative	168 (18.2)	157 (17.2)
Triple-negative	751 (81.5)	758 (82.8)
Previous adjuvant or neoadjuvant chemotherapy – no. (%)		
Adjuvant	461 (50.1)	455 (49.7)
Neoadjuvant	460 (49.9)	460 (50.3)
Regimen with both anthracycline and taxane	871 (94.6)	849 (92.8)
Anthracycline regimen, without taxane	7 (0.8)	13 (1.4)
Taxane regimen, without anthracycline	43 (4.7)	52 (5.7)
Regimen not reported	0	1 (0.1)
<6 cycles of neoadjuvant or adjuvant therapy	7 (0.8)	15 (1.6)
Platinum-based neoadjuvant or adjuvant therapy		
Yes	247 (26.8)	239 (26.1)
No	674 (73.2)	676 (73.9)

Among all randomized patients (N=1836), 89% had an ECOG PS=0, and 11% had an ECOG PS=1. Among patients with hormone receptor-positive tumors, 90% received concurrent endocrine therapy.¹

OlympiA was designed to evaluate LYNPARZA as adjuvant therapy in certain patients with gBRCAm,* HER2-negative, high-risk early breast cancer¹



CPS&EG score ≥ 3 was part of the inclusion criteria in OlympiA for patients with HR-positive, HER2-negative eBC who received prior neoadjuvant chemotherapy

Early breast cancer stage, receptor status, and grade scoring requirements for study enrollment^{1*}

Stage/Feature		Points
Clinical stage (pre-treatment)	I/IIA	0
	IIB/IIIA	1
	IIIB/IIIC	2
Pathologic stage (post-treatment)	0/I	0
	IIA/IIB/IIIA/IIIB	1
	IIIC	2
Receptor status	ER positive	0
	ER negative	1
Nuclear grade	Nuclear grade 1–2	0
	Nuclear grade 3	1

*Total score of ≥ 3 required for patients with HR-positive breast cancer.

and initiate prompt investigation. Discontinue LYNPARZA if pneumonitis is confirmed and treat patient appropriately.

Embryo-Fetal Toxicity: Based on its mechanism of action and findings in animals, LYNPARZA can cause fetal harm. Verify pregnancy status in females of reproductive potential prior to initiating treatment.

Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).



OlympiAD was designed to evaluate LYNPARZA in certain patients with gBRCAm, HER2-negative metastatic breast cancer¹



In OlympiAD
Baseline characteristics of patients⁵



Characteristics	LYNPARZA (n=205)	Physician's choice of chemotherapy (n=97)
Age (years)		
Median	44	45
Range	(22–76)	(24–68)
Germline BRCA mutation type – no. (%)		
BRCA1	117 (57.1)	51 (52.6)
BRCA2	84 (41.0)	46 (47.4)
BRCA1 and BRCA2	4 (2.0)	0
Hormone receptor status – no. (%)		
Hormone receptor positive, HER2-negative	103 (50.2)	49 (50.5)
Triple-negative	102 (49.8)	48 (49.5)
Previous chemotherapy for metastatic breast cancer – no. (%)	146 (71.2)	69 (71.1)
Previous platinum-based therapy for breast cancer – no. (%)	60 (29.3)	26 (26.8)
≥2 Metastatic sites – no. (%)	159 (77.6)	72 (74.2)
Location of metastasis – no. (%)		
Bone only	16 (7.8)	6 (6.2)
Other*	189 (92.2)	91 (93.8)

*Data for the other category include patients who did not have metastases in the bone, as well as patients who may have had metastases in the bone along with metastases in other locations.

All patients had an ECOG PS of 0 or 1. Among patients who received prior platinum-based chemotherapy, 21% in the LYNPARZA arm and 14% in the chemotherapy arm were treated for metastatic disease, and 7% in each treatment arm were treated for localized disease.

Please see additional Important Safety Information throughout and complete [Prescribing Information](#), including [Medication Guide](#).



OlympiAD was designed to evaluate LYNPARZA in certain patients with gBRCAm, HER2-negative metastatic breast cancer¹



OlympiAD was a phase 3, open-label, randomized, controlled, multicenter study^{1,8}

SCREENING

REQUIRED PRIOR THERAPY

Patient baseline characteristics

Patient eligibility

LYNPARZA may be used in eligible patients with gBRCAm,* HER2-negative mBC if previously treated with chemotherapy in the neoadjuvant, adjuvant, or metastatic setting and endocrine therapy, if appropriate.¹

	Metastatic TNBC	HR-positive, HER2-negative mBC
Select eligibility criteria ¹	✓ gBRCA mutation ✓ Prior chemotherapy (in neoadjuvant, adjuvant, or metastatic setting)	✓ gBRCA mutation ✓ Prior chemotherapy (in neoadjuvant, adjuvant, or metastatic setting) ✓ Prior endocrine therapy, if appropriate

Earliest eligibility for LYNPARZA¹

FIRST-LINE METASTATIC if prior chemotherapy given in the neoadjuvant or adjuvant setting
SECOND-LINE+ METASTATIC[†] if prior chemotherapy given in the neoadjuvant, adjuvant, or metastatic setting

*Select patients for this indication based on an FDA-approved companion diagnostic for LYNPARZA.¹
[†]Second-line+ includes the second line or later lines of treatment.

reactions in the breastfed infant, advise a lactating woman not to breastfeed during treatment with LYNPARZA and for 1 month after receiving the final dose.

Pediatric Use: The safety and efficacy of LYNPARZA have not been established in pediatric patients.

Renal Impairment: No dosage modification is recommended in patients with mild renal impairment (CLcr 51-80 mL/min estimated by Cockcroft-Gault). In patients with moderate renal impairment (CLcr 31-50 mL/min), reduce the dose of LYNPARZA to 200 mg twice daily. There are no data in patients with severe renal impairment or end-stage renal disease (CLcr ≤30 mL/min).



eBC CLINICAL DATA

mBC CLINICAL DATA

CLINICAL STUDIES OVERVIEW

SUMMARY

ISI AND REFERENCES