

Nursing Management of Patients Receiving CDK4/6 Inhibitor Therapy: **A Pocket Guide**

CDK4/6 Inhibitors in Breast Cancer: Current Indications, Dosing, and Administration



	Abemaciclib	Palbociclib	Ribociclib
Indications	- In combination with ET (tamoxifen or an aromatase inhibitor) for the adjuvant treatment of adult patients with HR+/HER2-negative, node-positive, EBC at high risk of recurrence - In combination with an AI as initial endocrine-based therapy for the treatment of adult patients with HR+/HER2- advanced or MBC - In combination with fulvestrant for the treatment of adult patients with HR+/HER2- advanced or MBC with disease progression following ET - As monotherapy for the treatment of adult patients with HR+/HER2- advanced or MBC with disease progression following ET and prior CT in the metastatic setting	- For the treatment of adult patients with HR+/HER2- advanced or MBC in combination with: - An AI as initial ET or - Fulvestrant in patients with disease progression following ET	- In combination with an AI for the adjuvant treatment of adults with HR+/HER2- stage II and III EBC at high risk of recurrence - For the treatment of adults with HR+/HER2- advanced or MBC in combination with: - An AI as initial ET or - Fulvestrant as initial ET or following disease progression on ET
Dosing	- Combination dosing: 150 mg PO BID - Monotherapy dosing: 200 mg PO BID	125 mg PO QD x 21 days followed by 7 days off treatment (28-day cycle)	- EBC: 400 mg PO QD x 21 days followed by 7 days off treatment (28-day cycle) - Advanced or MBC: 600 mg PO QD x 21 days followed by 7 days off treatment
Administration	Tablets: With or without food	- Capsules: With food - Tablets: With or without food	Tablets: With or without food

Key AEs With CDK4/6 Inhibitors: Monitoring and Prevention

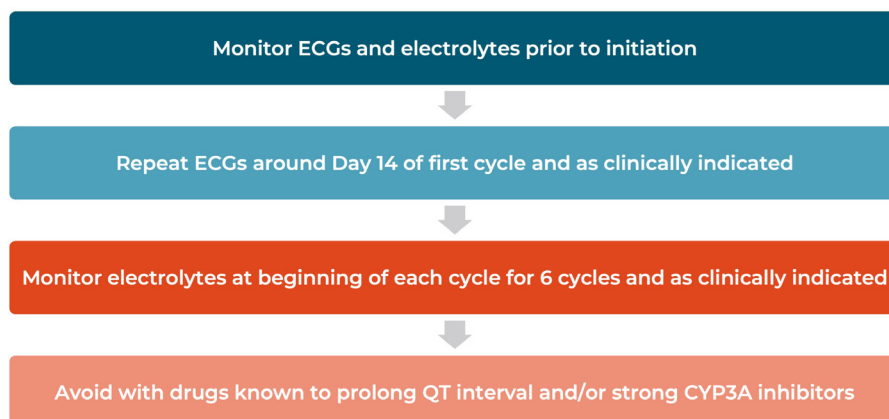


Diarrhea	Hepatobiliary Toxicity	Neutropenia	VTE	ILD/Pneumonitis	QT Prolongation
Abemaciclib Ribociclib Palbociclib	Abemaciclib Ribociclib	Abemaciclib Ribociclib Palbociclib	Abemaciclib	Abemaciclib Ribociclib Palbociclib	Ribociclib
Antidiarrheal therapy Increase oral hydration Notify healthcare professional Dietary modification	LFTs before starting treatment, Q2W x 2 mo, then: - Abemaciclib, QM x 2 mo, then as indicated - Ribociclib, at start of cycle x 4 cycles	CBC before starting treatment, then: - Abemaciclib, Q2W x 2 mo, QM x 2 mo, then as indicated - Ribociclib and palbociclib, Q2W x 2 cycles, start of next 4 cycles, then as indicated	- Monitor for signs and symptoms of thrombosis or pulmonary embolism - Advise patients to immediately report any signs/symptoms of thromboembolism, such as pain or swelling in an extremity, shortness of breath, chest pain, tachycardia, and tachypnea	Monitor for pulmonary symptoms indicative of ILD or pneumonitis (eg, hypoxia, cough, dyspnea)	Monitor for signs and symptoms of QT prolongation

Monitoring QT Prolongation With Ribociclib



- Educate patients on the signs/symptoms of QT prolongation
- Advise patients to contact their HCP immediately following signs/symptoms of QT prolongation
- In case of QTcF prolongation at any time during treatment, more frequent ECG monitoring is recommended





To access our **Interactive Decision Support Tool** for managing adverse events associated with CDK4/6 inhibitors for HR+/HER2- breast cancer, scan here or

go to: clinicaloptions.com/CDK46AEtool



DIARRHEA

Grade	Abemaciclib	Palbociclib	Ribociclib
Patients should start on antidiarrheals at the first sign of loose stools and be advised to increase fluid intake			
1 <4 stools/day over baseline	No dose adjustment is required	No dose adjustment is required	- No dose adjustment is required - Initiate appropriate medical therapy and monitor as clinically indicated
2 4-6 stools/day over baseline	- If does not resolve to grade ≤1 within 24 hr, hold treatment until resolves then resume at the same dose - For persistent/recurrent event at same dose despite max supportive care, hold dose until resolves to grade ≤1, then resume at next lower dose	Same as for grade 1	Same as for grade 1
3 ≥7 stools/day over baseline	Hold until resolves to grade ≤1, then resume at next lower dose	Hold until symptoms resolve to grade ≤1 or grade ≤2 if not considered a safety risk for the patient, then resume at next lower dose	- Hold until recovery to grade ≤1, then resume at the same dose level - For recurrent event, resume at next lower dose level
4 Life-threatening consequences/ urgent intervention indicated	Same as for grade 3	Same as for grade 3	Permanently discontinue

NEUTROPENIA

Grade	Abemaciclib	Palbociclib	Ribociclib
1 ANC 1500/mm ³ -<LLN	No dose adjustment is required	No dose adjustment is required	No dose adjustment is required; consider hold if infectious concerns
2 ANC 1000-<1500/mm ³	Same as for grade 1	Same as for grade 1	Same as for grade 1
3 ANC 500-<1000/mm ³	- Hold dose until toxicity resolves to grade ≤2, then resume at the same dose - For recurrent event, resume at next lower dose	- Day 1 of cycle: hold dose, repeat CBC within 1 wk; when resolves to grade ≤2, start next cycle at same dose level - Day 15 of first 2 cycles: - If grade 3 on Day 15, continue at current dose to complete cycle and repeat CBC on Day 22 - If grade 4 on Day 22, hold palbociclib until grade ≤2 and resume at next lower dose - Consider dose reduction in cases of >1 wk recovery from grade 3 neutropenia or recurrent grade 3 neutropenia on Day 1 of subsequent cycles - Febrile: treat as grade 4	- Hold dose until toxicity resolves to grade ≤2, then resume at the same dose - For recurrent event, resume at next lower dose - Febrile: treat as grade 4
4 ANC <500/mm ³	Hold dose until toxicity resolves to grade ≤2, then resume at next lower dose	Hold dose until resolves to grade ≤2, then resume at next lower dose	Hold dose until resolves to grade ≤2, then resume at next lower dose

HEPATOTOXICITY

Grade	Abemaciclib	Ribociclib
1 >ULN - 3x ULN	No dose adjustment is required	No dose adjustment is required
2 >3-5x ULN	- Same as for grade 1 - For persistent/recurrent event, hold dose until resolves to baseline or grade 1 and resume at next lower dose level	Baseline grade <2 - Hold dose until resolves to ≤ baseline and resume at same dose level - For recurrent event, hold and resume at next lower dose Baseline grade 2 - No dose adjustment is required
3 >5-20x ULN	Same as for persistent/recurrent grade 2	- Hold dose until resolves to ≤ baseline and resume at next lower dose - For recurrent event, permanently discontinue
4 >20x ULN	Permanently discontinue	Permanently discontinue
≥2 AND total bilirubin >2x ULN in the absence of cholestasis	Same as for grade 4	Same as for grade 4

VENOUS THROMBOEMBOLISM (VTE)

CTCAE Grade	Abemaciclib
Early breast cancer	
Any grade	Hold treatment and manage as clinically indicated; resume when clinically stable
Metastatic breast cancer	
- Grade 1/2 - Venous thrombosis that may or may not need medical intervention - Grade 3/4 - Grade 3: thrombosis - Grade 4: life-threatening event with hemodynamic or neurologic instability	- No dose modification required - Hold treatment and manage as clinically indicated; resume when clinically stable

QT PROLONGATION

QTcF Prolongation	Ribociclib
Early breast cancer	
>480 ms and ≤500 ms	- Hold treatment and wait until QTcF resolves to ≤480 ms - Resume at same dose - If QTcF >480 ms recurs, hold treatment and wait until QTcF resolves to ≤480 ms, then resume at next lower dose level
>500 ms	- Hold treatment and wait until QTcF resolves to ≤480 ms, then resume at next lower dose level - If QTcF >500 ms recurs, permanently discontinue
Advanced or metastatic breast cancer	
>480 ms and ≤500 ms	- Hold treatment and wait until QTcF resolves to ≤480 ms - Reduce to next lower dose level - If QTcF >480 ms recurs, hold treatment and wait until QTcF resolves to ≤480 ms, then resume at next lower dose level
>500 ms	Same as for early breast cancer

ILD/PNEUMONITIS

Grade	Abemaciclib	Palbociclib	Ribociclib
1 <i>Asymptomatic</i>	- No dose adjustment is required - Initiate appropriate therapy and monitor	- No dose adjustment is required - Initiate appropriate therapy and monitor	- No dose interruption or adjustment is required - Initiate appropriate therapy and monitor
2 <i>Symptomatic</i>	- Same as for grade 1 - For persistent/recurrent event, hold dose until toxicity resolves to baseline or grade ≤1 and then resume at next lower dose level	Hold dose in patients with new/worsening respiratory symptoms with suspected pneumonitis and evaluate the patient	- Hold dose until toxicity resolves to grade ≤1, then consider resuming at next lower dose based on personalized risk-benefit assessment - For recurrent event, permanently discontinue
3	Permanently discontinue	Permanently discontinue	Permanently discontinue
4	Same as for grade 3	Same as for grade 3	Same as for grade 3

RECOMMENDED DOSE REDUCTIONS WITH THE CDK4/6 INHIBITORS

	Abemaciclib		Palbociclib	Ribociclib	
	Combined With Fulvestrant, Tamoxifen, or an AI	Monotherapy	Tablets or Capsules	EBC	Advanced or MBC
Recommended starting dose	150 mg BID	200 mg BID	125 mg QD	400 mg/day	600 mg QD
First dose reduction	100 mg BID	150 mg BID	100 mg QD	200 mg/day	400 mg QD
Second dose reduction	50 mg BID	100 mg BID	75 mg QD	NA	200 mg QD
Third dose reduction	NA	50 mg BID	NA	NA	NA

Discontinue CDK4/6 inhibitor if lowest dose shown in the table is not tolerated

CDK4/6 Inhibitor Adherence Strategies to Share With Patients:



- ⊗ Establish a routine! Take your medicines at the same time(s) every day and be consistent (with or without food)
- ⊗ Put pill bottles/boxes in an area you use every day to remind yourself to take your medications (eg, nightstand, bathroom, kitchen)
- ⊗ Use “pill reminder” apps on your smartphone or tablet
- ⊗ Set daily reminders on your smartphone, calendar, or tablet
- ⊗ Avoid grapefruit and grapefruit juices
- ⊗ Always check with your doctor or nurse before starting herbs or supplements
- ⊗ Have a plan for side effects—pick up all over-the-counter/prescribed medicines (eg, antidiarrheal, antinausea) before your treatment starts and make sure you know when to use them!
- ⊗ Ask your doctor/pharmacist/nurse what to do if you miss a dose
- ⊗ Remember that you have options! Call your doctor/nurse with any side effect that is difficult for you to manage
- ⊗ Ask that instructions be communicated and/or written in your primary language
- ⊗ Bring a friend or family member to your appointment so they learn about your treatment plan and can be a support to you, and ask if you can record the discussion

References:

Abemaciclib [prescribing information]. Indianapolis, IN: Lilly; 2025.

Palbociclib [prescribing information]. New York, NY: Pfizer Labs; 2025.

Ribociclib [prescribing information]. East Hanover, NJ: Novartis Pharmaceuticals; 2024.

U.S. Department of Health and Human Services. Common Terminology Criteria for Adverse Events (CTCAE). v5.0. Published November 27, 2017. Available at: https://ctep.cancer.gov/protocoldevelopment/electronic_applications/docs/ctcae_v5_quick_reference_5x7.pdf. Accessed April 16, 2025.



powered by CEA