## Kisqali

(ribociclib)



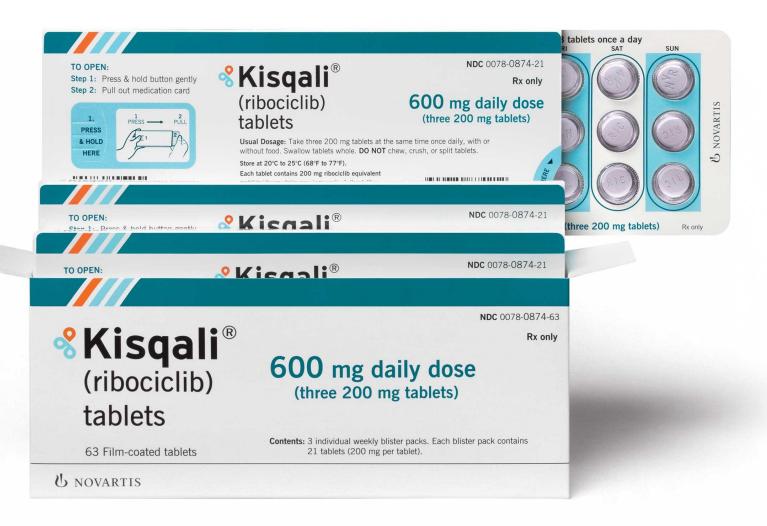
New Product Slideshow



#### Introduction

- Brand name: Kisqali
- Generic name: Ribociclib
- Pharmacological class: Kinase inhibitor
- Strength and Formulation: 200mg; tablets
- Manufacturer: Novartis
- How supplied: Blister pack—14, 21
- Legal Classification: Rx

## KISQALI



#### **Indications**

In combination with an aromatase inhibitor, as initial endocrine-based therapy for the treatment of postmenopausal women with hormone receptor (HR)-positive, human epidermal growth factor receptor 2 (HER2)-negative advanced or metastatic breast cancer

### **Dosage & Administration**

- Swallow whole
- 600mg once daily for 21 consecutive days followed by 7 days off treatment for a complete 28-day cycle
- Take preferably in the AM with letrozole 2.5mg once daily throughout the 28-day cycle (see full labeling of letrozole or for dosing/administration with other aromatase inhibitors)
- Dose modifications: see full labeling

# **Considerations for Special Populations**

- Pregnancy: Avoid; exclude status prior to initiation
- Nursing mothers: Not recommended (during and for ≥3 weeks after last dose)
- Pediatric: Not established
- Elderly: No overall differences observed in safety or efficacy
- Hepatic impairment: Moderate and severe impairment: initially 400mg once daily

- Avoid in patients with long QT syndrome, uncontrolled or significant cardiac disease including recent MI, CHF, unstable angina and bradyarrhythmias, electrolyte abnormalities
- Assess ECG prior to initiation; start therapy only if QTcF values <450 msec</li>
- Repeat ECG at Day 14 of Cycle 1, beginning of Cycle 2, and as clinically indicated; monitor more frequently if any QTcF prolongation occurs

- Monitor serum electrolytes prior to initiation, at the beginning of the first 6 cycles, and as clinically indicated; correct any abnormality before starting
- Permanently discontinue if QTcF >500msec or >60msec change from baseline and associated with any of the following: Torsades de Pointes, polymorphic ventricular tachycardia, unexplained syncope, or serious arrhythmia

- Perform LFTs prior to initiation; monitor every 2 weeks for first 2 cycles, at the beginning of each subsequent 4 cycles, and as clinically indicated; monitor more frequently if Grade ≥2 abnormalities noted
- Discontinue if AST/ALT >20XULN, Grade 3
   (AST/ALT >5 to 20XULN) recurs, or AST/ALT
   >3XULN with total bilirubin >2XULN

- Perform CBCs prior to initiation; monitor every 2 weeks for first 2 cycles, at the beginning of each subsequent 4 cycles, and as clinically indicated
- Discontinue if any other Grade 4 toxicities occur
- Embryo-fetal toxicity
- Females of reproductive potential should use effective contraception during and for ≥3 weeks after last dose

#### Interactions

- Avoid concomitant with strong CYP3A inhibitors (eg, boceprevir, clarithromycin, conivaptan, grapefruit juice, indinavir, itraconazole, ketoconazole, lopinavir/ritonavir, nefazodone, nelfinavir, posaconazole, ritonavir, saquinavir, voriconazole); consider alternatives; if unavoidable, reduce to Kisqali 400mg once daily
- Avoid grapefruit, pomegranates, pomegranate juice
- Avoid concomitant with strong CYP3A inducers (eg, phenytoin, rifampin, carbamazepine, St. John's wort); consider alternatives

#### Interactions

- Caution with concomitant CYP3A substrates with a narrow therapeutic index (eg, alfentanil, cyclosporine, dihydroergotamine, ergotamine, everolimus, fentanyl, midazolam, pimozide, quinidine, sirolimus, tacrolimus); may need to reduce these doses
- Avoid concomitant with drugs known to prolong QT interval (eg, amiodarone, bepridil, chloroquine, clarithromycin, disopyramide, halofantrine, haloperidol, methadone, moxifloxacin, IV ondansetron, pimozide, procainamide, quinidine, sotalol)

#### **Adverse Reactions**

- Neutropenia
- Nausea
- Fatigue
- Diarrhea
- Leukopenia
- Alopecia
- Vomiting

- Constipation
- Headache
- Back pain
- QT prolongation
- Hepatobiliary toxicity
- Possible infertility

#### **Mechanism of Action**

- Ribociclib is an inhibitor of cyclin-dependent kinase (CDK) 4 and 6
- These kinases are activated upon binding to D-cyclins and play a crucial role in signaling pathways which lead to cell cycle progression and cellular proliferation
- In studies using patient-derived estrogen receptor (+) breast cancer xenograft models, treatment with ribociclib + antiestrogen led to increased tumor growth inhibition vs. each drug alone

• MONALEESA-2 was a randomized, double-blind, placebo-controlled, multicenter study of Kisqali + letrozole vs. placebo + letrozole in postmenopausal women with HR-positive, HER2-negative, advanced breast cancer who received no prior therapy for advanced disease (n=668)

- Letrozole 2.5mg was given orally once daily for 28 days with either Kisqali 600mg or placebo once daily for 21 consecutive days followed by 7 days off until disease progression or unacceptable toxicity
- The major efficacy outcome was investigator-assessed progression-free survival (PFS) using RECIST v1.1

- The **PFS** was not reached (NR) in the Kisqali + letrozole group: median 19.3 months-NR compared to 14.7 months in the placebo + letrozole group (hazard ratio [HR] 0.556, 95% CI: 0.429-0.720; P<0.0001)</p>
- Among patients with measurable disease,
   overall response rate was seen in 52.7
   patients in the Kisqali + letrozole group vs. 37.1
   patients in the placebo + letrozole group

 Results were consistent across patient subgroups of prior adjuvant or neoadjuvant chemotherapy or hormonal therapies, liver and/or lung involvement, and bone-only metastases

For more clinical trial data, see full labeling

## New Product Monograph

 For more information view the product monograph available at:

http://www.empr.com/kisqali/drug/34652/