Verzenio (abemaciclib)
Introduction

- **Brand name:** Verzenio
- **Generic name:** Abemaciclib
- **Pharmacological class:** Kinase inhibitor
- **Strength and Formulation:** 50mg, 100mg, 150mg, 200mg; tabs
- **Manufacturer:** Eli Lilly
- **How supplied:** Blister pack—14
- **Legal Classification:** Rx
Verzenio
Indications

- **In combination with fulvestrant** for the treatment of women with HR-positive, HER2-negative advanced or metastatic breast cancer with disease progression following endocrine therapy.
- **As monotherapy** for the treatment of adults with HR-positive, HER2-negative advanced or metastatic breast cancer with disease progression following endocrine therapy and prior chemotherapy in the metastatic setting.
Swallow whole
Take at the same time every day
**Combination with fulvestrant** (see full labeling): initially 150mg twice daily; in pre/perimenopausal women: also treat with a gonadotropin-releasing hormone agonist according to current practice standards
Dosage & Administration

- **Monotherapy:** initially 200mg twice daily
- **Both:** continue until disease progression or unacceptable toxicity
- Dose modifications for adverse reactions, concomitant strong CYP3A4 inhibitors: see full labeling
- Severe hepatic impairment: reduce frequency to once daily
Considerations for Special Populations

- **Pediatric**: Not established
- **Pregnancy**: Exclude status prior to initiation
- **Nursing mothers**: Not recommended during and for at least 3 weeks after the last dose
- **Elderly**: No overall differences in safety or efficacy
- **Hepatic impairment**: See Dosage & Administration
Advise patients to initiate antidiarrheal (eg, loperamide) and increase fluids at first sign of loose stools; **discontinue** if Grade 3/4 diarrhea occurs or hospitalization required, until resolves.

**Monitor** CBCs and LFTs prior to initiation and every 2 weeks for the first 2 months, then monthly for the next 2 months, and as clinically indicated.
Warnings/Precautions

- Dose interruption/reduction/discontinuation or delay in starting treatment cycles if Grade 3/4 neutropenia, recurrent Grade 2 or Grade 3/4 transaminase elevation occurs
- Monitor for signs/symptoms of venous thromboembolic events; treat appropriately
- Embryo-fetal toxicity
- Females of reproductive potential should use effective contraception during therapy and for at least 3 weeks after last dose
Interactions

- **Avoid** concomitant ketoconazole, grapefruit products
- **Concomitant** other strong CYP3A inhibitors: reduce abemaciclib dose
- **Avoid** concomitant strong CYP3A inducers (eg, rifampin): consider alternative agents
Adverse Reactions

- Diarrhea
- Neutropenia
- Nausea
- Abdominal pain
- Infections
- Fatigue
- Anemia
- Leukopenia
- Decreased appetite
- Vomiting
- Headache
- Thrombocytopenia
- Venous thromboembolism
- Hepatotoxicity
Mechanism of Action

- Abemaciclib inhibits cyclin-dependent kinases 4 and 6 (CDK4/6)
- In estrogen receptor-positive (ER+) breast cancer cell lines, cyclin D1 and CDK4/6 promote phosphorylation of the retinoblastoma protein, cell cycle progression, and cell proliferation
- In breast cancer models, abemaciclib dosed daily without interruption as a single agent or in combination with antiestrogens resulted in reduction of tumor size
MONARCH 2 was a randomized, placebo-controlled, multicenter study in women with HR-positive, HER2-negative metastatic breast cancer in combination with fulvestrant in patients with disease progression following endocrine therapy who had not received chemotherapy in the metastatic setting (N=669)

- Patients were randomized to Verzenio or placebo orally twice daily plus IM fulvestrant
Clinical Studies

- **Progression-free survival (PFS)** was higher in the Verzenio + fulvestrant group vs placebo + fulvestrant group (16.4 months vs. 9.3 months)
  - Hazard ratio (HR) 0.553, 95% CI: 0.449, 0.681; \( P < 0.0001 \)
- **Objective response rate (ORR)** was also higher in the Verzenio + fulvestrant group vs placebo + fulvestrant group (48.1% vs 21.3%)
Clinical Studies

- **MONARCH 1** was a single-arm, open-label, multicenter study in women with measurable HR-positive, HER2-negative metastatic breast cancer whose disease progressed during or after endocrine therapy, had received a taxane in any setting, and who received 1 or 2 prior chemotherapy regimens in the metastatic setting (N=132)
  - Patients received Verzenio 200mg orally twice daily on a continuous schedule
Clinical Studies

- Investigator-assessed ORR was **19.7%** (95% CI: 13.3, 27.5) and independent review ORR was **17.4%** (95% CI: 11.4, 25.0)
- Investigator-assessed median duration of response was **8.6 months** and independent review duration was **7.2 months**
- For more clinical trial data, see full labeling
New Product Monograph

- For more information view the product monograph available at:

  http://www.empr.com/verzenio/drug/34758/