anastrozole (a-nass-troe-zole)

**Synonyms:**

Therapeutic: antineoplastics
Pharmacologic: aromatase inhibitors

**Pregnancy Category X.**

**Indications**

Adjuvant treatment of postmenopausal hormone receptor-positive early breast cancer. Initial therapy in women with postmenopausal hormone receptor-positive or hormone receptor unknown, locally advanced, or metastatic breast cancer. Advanced postmenopausal breast cancer in women with disease progression despite tamoxifen therapy.

**Action**

Inhibits the enzyme aromatase, which is partially responsible for conversion of precursors to estrogen.

**Therapeutic Effects:**

Lowers levels of circulating estrogen, which may halt progression of estrogen-sensitive breast cancer.

**Pharmacokinetics**

**Absorption:** 83–85% absorbed following oral administration.

**Distribution:** Unknown.

**Metabolism and Excretion:** 85% metabolized by the liver; 11% excreted renally.

**Half-life:** 50 hr.

**TIME/ACTION PROFILE (lowering of serum estradiol)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO</td>
<td>within 24 hr</td>
<td>14 days</td>
<td>6 days†</td>
</tr>
</tbody>
</table>

†Following cessation of therapy

**Contraindications/Precautions**

**Contraindicated in:** OB: Potential harm to fetus or spontaneous abortion.

**Use Cautiously in:** Women with childbearing potential; Ischemic heart disease; Lactation: Pedi: Safety not established.

**Adverse Reactions/Side Effects**

**CNS:** headache, weakness, dizziness. **EENT:** pharyngitis. **Resp:** cough, dyspnea. **CV:** myocardial infarction, angina, peripheral edema. **F and E:** hypercalcemia. **GI:** nausea, abdominal pain, anorexia, constipation, diarrhea, dry mouth, vomiting. **GU:** proteinuria, vaginal bleeding, vaginal dryness. **Skin:** rash, pruritus. **Musculoskeletal:** hypercholesterolemia, weight gain. **Misc:** back pain, arthralgia, bone pain, cupulopatosial syndrome, fractures, edema. **Neuro:** paresthesia. **Misc:** allergic reactions including nausea, diarrhea, vomiting, itching, rash.

**Interactions**

Drug-Drug: None significant.

**Route/Dosage**

**PO (Adults):** 1 mg daily.

**NURSING IMPLICATIONS**

**Assessment**

- Assess patient for pain and other side effects periodically during therapy.

**Lab Test Considerations:** May cause elevated serum levels of AST, ALT, alkaline phosphatase, total cholesterol, and LDL cholesterol.

**Potential Nursing Diagnoses**

Acute pain (Side Effects)

**Implementation**

- PO: Take medication consistently with regard to food.

**Patient/Family Teaching**

- Instruct patient to take medication as directed. Take missed doses as soon as remembered unless it is almost time for next dose. Do not double doses. Advise patient to read the Patient Information Leaflet before starting and with each Rx refill; changes may occur.

- Inform patient of potential for adverse reactions, and advise patient to notify health care professional immediately if allergic reactions (swelling of the face, lips, tongue, and/or throat), liver problems (general feeling of not being well, yellowing of skin or whites of eyes, pain on the right side of abdomen), skin reactions (lesions, ulcers, or blisters), or chest pain occurs.
Advise patient that vaginal bleeding may occur during first few weeks after changing over from other hormonal therapy. Continued bleeding should be evaluated.

Teach patient to report increase in pain so treatment can be initiated.

Advise patient to notify health care professional immediately if pregnancy is planned or suspected, or if breast feeding.

**Evaluation/Desired Outcomes**

- Slowing of disease progression in women with advanced breast cancer.

**Why was this drug prescribed for your patient?**