

## 202 busulfan

**CV:** *Tachycardia, palpitations, hypotension, chest pain*

**EENT:** *Sore throat, tinnitus, blurred vision, nasal congestion; red, change in taste, smell*

**GI:** *Nausea, dry mouth, diarrhea, constipation, increased appetite*

**GU:** *Frequency, hesitancy, change in libido*

**INTEG:** *Rash, edema, pruritus, alopecia, dry skin*

**MISC:** *Sweating, fatigue, fever*

**MS:** *Pain, weakness, muscle cramps, myalgia*

**RESP:** *Hyperventilation, chest congestion, shortness of breath*

### PHARMACOKINETICS

Peak 40-90 min, half-life 2-4 hr, rapidly absorbed, metabolized by liver (CYP3A4), excreted in feces, protein binding 86%

### INTERACTIONS

**Increase:** busPIRone—CYP3A4 inhibitors (erythromycin, itraconazole, nefazodone, ketoconazole, ritonavir, verapamil, diltiazem, several other protease inhibitors)

**Increase:** B/P—procarbazine, MAOIs; do not use together

**Increase:** CNS depression—psychotropic products, alcohol (avoid use)

**Increase:** serotonin syndrome—SSRIs, SNRIs, serotonin receptor agonists

**Decrease:** busPIRone effects—rifampin

**Decrease:** busPIRone action—CYP3A4 inducers (rifampin, phenytoin, PHENobarbital, carBAMazepine, dexamethasone)

### Drug/Herb

**Increase:** CNS depression—chamomile, kava, valerian

### Drug/Food

**Increase:** peak concentration of busPIRone—grapefruit juice

### NURSING CONSIDERATIONS

#### Assess:

- B/P lying, standing; pulse; if systolic B/P drops 20 mm Hg, hold product, notify prescriber
- CNS reactions because some may be unpredictable

- Mental status: mood, sensorium, affect, sleeping pattern, drowsiness, dizziness; withdrawal symptoms when dose reduced, product discontinued

- Safety measures if drowsiness, dizziness occurs

- **Beers:** avoid in older adults with delirium or at high risk for delirium

#### Evaluate:

- Therapeutic response: decreased anxiety, restlessness, sleeplessness

#### Teach patient/family:

- That product may be taken consistently with/without food

- To avoid OTC products, alcohol ingestion, other psychotropic medications unless approved by prescriber; to avoid large amounts of grapefruit juice

- To avoid activities that require alertness because drowsiness may occur

- Not to discontinue medication abruptly after long-term use; if dose is missed, do not double

- To rise slowly because fainting may occur, especially among geriatric patients

- That drowsiness may worsen at beginning of treatment; that 2 wk of therapy may be required before therapeutic effects occur, max effect 3-6 wk

- **Serotonin syndrome:** to report immediately (fever, tremor, sweating, diarrhea, delirium)

- **Pregnancy/breastfeeding:** report if pregnancy is planned or suspected or if breastfeeding

### HIGH ALERT

#### busulfan (Rx)

(byoo-sul'fan)

#### Busulfex, Myleran

*Func. class.:* Antineoplastic alkylating agent

*Chem. class.:* Bifunctional alkylating agent