Minipress®
Capsules
(prazosin hydrochloride)
For Oral Use

DESCRIPTION
MINIPRESS® (prazosin hydrochloride), a quinazoline derivative, is the first of a new chemical class of antihypertensives. It is the hydrochloride salt of 1-(4-amino-6,7-dimethoxy-2-quinazolinyl)-4-(2-furoyl) piperazine and its structural formula is:

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confined mainly to the level of the resistance vessels (arterioles). Unlike conventional 
alpha-blockers, the antihypertensive action of prazosin is usually not accompanied by a reflex 
tachycardia. Tolerance has not been observed to develop in long term therapy.

Hemodynamic studies have been carried out in man following acute single dose administration 
and during the course of long term maintenance therapy. The results confirm that the therapeutic 
effect is a fall in blood pressure unaccompanied by a clinically significant change in cardiac 
output, heart rate, renal blood flow and glomerular filtration rate. There is no measurable 
negative chronotropic effect.

In clinical studies to date, prazosin hydrochloride has not increased plasma renin activity.

In man, blood pressure is lowered in both the supine and standing positions. This effect is most 
pronounced on the diastolic blood pressure.

Following oral administration, human plasma concentrations reach a peak at about three hours 
with a plasma half-life of two to three hours. The drug is highly bound to plasma protein. 
Bioavailability studies have demonstrated that the total absorption relative to the drug in a 20% 
alcoholic solution is 90%, resulting in peak levels approximately 65% of that of the drug in 
solution. Animal studies indicate that prazosin hydrochloride is extensively metabolized, 
primarily by demethylation and conjugation, and excreted mainly via bile and feces. Less 
extensive human studies suggest similar metabolism and excretion in man.

In clinical studies in which lipid profiles were followed, there were generally no adverse changes 
noted between pre- and post-treatment lipid levels.

**INDICATIONS AND USAGE**
MINIPRESS is indicated in the treatment of hypertension. It can be used alone or in combination 
with other antihypertensive drugs such as diuretics or beta-adrenergic blocking agents.

**CONTRAINDICATIONS**
MINIPRESS is contraindicated in patients with known sensitivity to quinazolines, prazosin, or 
any of the inert ingredients.

**WARNINGS**
As with all alpha-blockers, MINIPRESS may cause syncope with sudden loss of 
consciousness. In most cases, this is believed to be due to an excessive postural hypotensive 
effect, although occasionally the syncopal episode has been preceded by a bout of severe 
tachycardia with heart rates of 120–160 beats per minute. Syncopal episodes have usually 
occurred within 30 to 90 minutes of the initial dose of the drug; occasionally, they have 
been reported in association with rapid dosage increases or the introduction of another 
antihypertensive drug into the regimen of a patient taking high doses of MINIPRESS. The 
incidence of syncopal episodes is approximately 1% in patients given an initial dose of 2 mg 
or greater. Clinical trials conducted during the investigational phase of this drug suggest
that syncopal episodes can be minimized by limiting the initial dose of the drug to 1 mg, by subsequently increasing the dosage slowly, and by introducing any additional antihypertensive drugs into the patient’s regimen with caution (see DOSAGE AND ADMINISTRATION). Hypotension may develop in patients given MINIPRESS who are also receiving a beta-blocker such as propranolol.

If syncope occurs, the patient should be placed in the recumbent position and treated supportively as necessary. This adverse effect is self-limiting and in most cases does not recur after the initial period of therapy or during subsequent dose titration.

Patients should always be started on the 1 mg capsules of MINIPRESS. The 2 and 5 mg capsules are not indicated for initial therapy.

More common than loss of consciousness are the symptoms often associated with lowering of the blood pressure, namely, dizziness and lightheadedness. The patient should be cautioned about these possible adverse effects and advised what measures to take should they develop. The patient should also be cautioned to avoid situations where injury could result should syncope occur during the initiation of MINIPRESS therapy.

PRECAUTIONS

General
Intraoperative Floppy Iris Syndrome (IFIS) has been observed during cataract surgery in some patients treated with alpha-1 blockers. This variant of small pupil syndrome is characterized by the combination of a flaccid iris that billows in response to intraoperative irrigation currents, progressive intraoperative miosis despite preoperative dilation with standard mydriatic drugs, and potential prolapse of the iris toward the phacoemulsification incisions. The patient’s ophthalmologist should be prepared for possible modifications to the surgical technique, such as the utilization of iris hooks, iris dilator rings, or viscoelastic substances. There does not appear to be a benefit of stopping alpha-1 blocker therapy prior to cataract surgery.

Information for Patients: Dizziness or drowsiness may occur after the first dose of this medicine. Avoid driving or performing hazardous tasks for the first 24 hours after taking this medicine or when the dose is increased. Dizziness, lightheadedness, or fainting may occur, especially when rising from a lying or sitting position. Getting up slowly may help lessen the problem. These effects may also occur if you drink alcohol, stand for long periods of time, exercise, or if the weather is hot. While taking MINIPRESS, be careful in the amount of alcohol you drink. Also, use extra care during exercise or hot weather, or if standing for long periods. Check with your physician if you have any questions.

Drug Interactions
MINIPRESS has been administered without any adverse drug interaction in limited clinical experience to date with the following: (1) cardiac glycosides—digitalis and digoxin; (2) hypoglycemics—insulin, chlorpropamide, phenformin, tolazamide, and tolbutamide; (3) tranquilizers and sedatives—chlordiazepoxide, diazepam, and phenobarbital; (4) antigout—allopurinol, colchicine, and probenecid; (5) antiarrhythmics—procainamide, propranolol (see
WARNINGS however), and quinidine; and (6) analgesics, antipyretics and anti-inflammatories–
propoxyphene, aspirin, indomethacin, and phenylbutazone.

Addition of a diuretic or other antihypertensive agent to MINIPRESS has been shown to cause
an additive hypotensive effect. This effect can be minimized by reducing the MINIPRESS dose
to 1 to 2 mg three times a day, by introducing additional antihypertensive drugs cautiously, and
then by retitrating MINIPRESS based on clinical response.

Drug/Laboratory Test Interactions
In a study on five patients given from 12 to 24 mg of prazosin per day for 10 to 14 days, there
was an average increase of 42% in the urinary metabolite of norepinephrine and an average
increase in urinary VMA of 17%. Therefore, false positive results may occur in screening tests
for pheochromocytoma in patients who are being treated with prazosin. If an elevated VMA is
found, prazosin should be discontinued and the patient retested after a month.

Laboratory Tests
In clinical studies in which lipid profiles were followed, there were generally no adverse changes
noted between pre- and post-treatment lipid levels.

Carcinogenesis, Mutagenesis, Impairment of Fertility: No carcinogenic potential was
demonstrated in an 18 month study in rats with MINIPRESS at dose levels more than 225 times
the usual maximum recommended human dose of 20 mg per day. MINIPRESS was not
mutagenic in \textit{in vivo} genetic toxicology studies. In a fertility and general reproductive
performance study in rats, both males and females, treated with 75 mg/kg (225 times the usual
maximum recommended human dose), demonstrated decreased fertility, while those treated with
25 mg/kg (75 times the usual maximum recommended human dose) did not.

In chronic studies (one year or more) of MINIPRESS in rats and dogs, testicular changes
consisting of atrophy and necrosis occurred at 25 mg/kg/day (75 times the usual maximum
recommended human dose). No testicular changes were seen in rats or dogs at 10 mg/kg/day
(30 times the usual maximum recommended human dose). In view of the testicular changes
observed in animals, 105 patients on long term MINIPRESS therapy were monitored for
17-ketosteroid excretion and no changes indicating a drug effect were observed. In addition,
27 males on MINIPRESS for up to 51 months did not have changes in sperm morphology
suggestive of drug effect.

Usage in Pregnancy: Pregnancy Category C. MINIPRESS has been shown to be associated
with decreased litter size at birth, 1, 4, and 21 days of age in rats when given doses more than
225 times the usual maximum recommended human dose. No evidence of drug-related external,
visceral, or skeletal fetal abnormalities were observed. No drug-related external, visceral, or
skeletal abnormalities were observed in fetuses of pregnant rabbits and pregnant monkeys at
doses more than 225 times and 12 times the usual maximum recommended human dose,
respectively.
The use of prazosin and a beta-blocker for the control of severe hypertension in 44 pregnant women revealed no drug-related fetal abnormalities or adverse effects. Therapy with prazosin was continued for as long as 14 weeks.¹

Prazosin has also been used alone or in combination with other hypotensive agents in severe hypertension of pregnancy by other investigators. No fetal or neonatal abnormalities have been reported with the use of prazosin.²

There are no adequate and well controlled studies which establish the safety of MINIPRESS in pregnant women. MINIPRESS should be used during pregnancy only if the potential benefit justifies the potential risk to the mother and fetus.

**Nursing Mothers:** MINIPRESS has been shown to be excreted in small amounts in human milk. Caution should be exercised when MINIPRESS is administered to a nursing woman.

**Usage in Children:** Safety and effectiveness in children have not been established.

### ADVERSE REACTIONS

Clinical trials were conducted on more than 900 patients. During these trials and subsequent marketing experience, the most frequent reactions associated with MINIPRESS therapy are: dizziness 10.3%, headache 7.8%, drowsiness 7.6%, lack of energy 6.9%, weakness 6.5%, palpitations 5.3%, and nausea 4.9%. In most instances, side effects have disappeared with continued therapy or have been tolerated with no decrease in dose of drug.

Less frequent adverse reactions which are reported to occur in 1–4% of patients are:

- **Gastrointestinal:** vomiting, diarrhea, constipation.
- **Cardiovascular:** edema, orthostatic hypotension, dyspnea, syncope.
- **Central Nervous System:** vertigo, depression, nervousness.
- **Dermatologic:** rash.
- **Genitourinary:** urinary frequency.
- **EENT:** blurred vision, reddened sclera, epistaxis, dry mouth, nasal congestion.

In addition, fewer than 1% of patients have reported the following (in some instances, exact causal relationships have not been established):

- **Gastrointestinal:** abdominal discomfort and/or pain, liver function abnormalities, pancreatitis.
- **Cardiovascular:** tachycardia.
Central Nervous System: paresthesia, hallucinations.

Dermatologic: pruritus, alopecia, lichen planus.

Genitourinary: incontinence, impotence, priapism.

EENT: tinnitus.

Other: diaphoresis, fever, positive ANA titer, arthralgia.

Single reports of pigmentary mottling and serous retinopathy, and a few reports of cataract development or disappearance have been reported. In these instances, the exact causal relationship has not been established because the baseline observations were frequently inadequate.

In more specific slit-lamp and funduscopic studies, which included adequate baseline examinations, no drug-related abnormal ophthalmological findings have been reported.
Literature reports exist associating MINIPRESS therapy with a worsening of pre-existing narcolepsy. A causal relationship is uncertain in these cases.

In post-marketing experience, the following adverse events have been reported:

*Autonomic Nervous System:* flushing.

*Body As A Whole:* allergic reaction, asthenia, malaise, pain.

*Cardiovascular, General:* angina pectoris, hypotension.

*Endocrine:* gynecomastia.

*Heart Rate/Rhythm:* bradycardia.

*Psychiatric:* insomnia.

*Skin/Appendages:* urticaria.

*Vascular (Extracardiac):* vasculitis.

*Vision:* eye pain.

Special Senses: During cataract surgery, a variant of small pupil syndrome known as Intraoperative Floppy Iris Syndrome (IFIS) has been reported in association with alpha-1 blocker therapy (see PRECAUTIONS).

**OVERDOSAGE**

Accidental ingestion of at least 50 mg of MINIPRESS in a two year old child resulted in profound drowsiness and depressed reflexes. No decrease in blood pressure was noted. Recovery was uneventful.

Should overdosage lead to hypotension, support of the cardiovascular system is of first importance. Restoration of blood pressure and normalization of heart rate may be accomplished by keeping the patient in the supine position. If this measure is inadequate, shock should first be treated with volume expanders. If necessary, vasopressors should then be used. Renal function should be monitored and supported as needed. Laboratory data indicate MINIPRESS is not dialysable because it is protein bound.

**DOSAGE AND ADMINISTRATION**

The dose of MINIPRESS should be adjusted according to the patient’s individual blood pressure response. The following is a guide to its administration:
Initial Dose
1 mg two or three times a day (see WARNINGS.)

Maintenance Dose
Dosage may be slowly increased to a total daily dose of 20 mg given in divided doses. The therapeutic dosages most commonly employed have ranged from 6 mg to 15 mg daily given in divided doses. Doses higher than 20 mg usually do not increase efficacy, however a few patients may benefit from further increases up to a daily dose of 40 mg given in divided doses. After initial titration some patients can be maintained adequately on a twice daily dosage regimen.

Use With Other Drugs
When adding a diuretic or other antihypertensive agent, the dose of MINIPRESS should be reduced to 1 mg or 2 mg three times a day and retitration then carried out.

HOW SUPPLIED

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References

Rx only