There's More To EPOGEN® (Epoetin alfa) Than Epoetin Alfa.

When you specify EPOGEN® (Epoetin alfa), you get more than a product. You also get a comprehensive support system. That's important, because the depth and quality of professional support is a significant element in long-term clinical success.

EPOGEN® support encompasses the Amgen Reimbursement Hotline, the Amgen SAFETY NET® Program, Professional Services, Professional Education Programs, and Clinical Support Services. Your Amgen Professional Sales Representative can tell you more about the ways these programs can satisfy your needs.

There simply is no comparable source of professional support. That's not surprising, because EPOGEN® is a lot more than just a drug. It's a way of life.

For more information, please call 1-800-77-AMGEN.

Programs available exclusively for dialysis patients and providers.
©1994 Amgen Inc.
For documented iron-deficiency anemia not amenable to oral therapy

The direct route to rapid iron replacement
IRON FAST
About 40 percent of iron from IV iron dextran was bound to transferrin 11 hours after IV administration.1*
A therapeutic response can be seen in a few days as an increase in reticulocyte count.2*

IRON UTILIZED
IV iron dextran supplies enough iron to permit RBC formation greater than 50 mL/day and replenishment of iron stores.3†

IRON CONTROL
Total iron dose to restore normal hemoglobin and provide adequate replenishment of iron stores can be determined and administered by professionals to assure accurate delivery to patients.

Test Dose: Prior to receiving their first INFED® (Iron Dextran Injection, USP 50 mg/mL) therapeutic dose, all patients should be given an intravenous or intramuscular test dose of 0.5 mL. (See PRECAUTIONS: General section of the prescribing information.) The IV test dose should be administered at a gradual rate over at least 30 seconds. Although anaphylactic reactions known to occur following INFED® administration are usually evident within a few minutes, or sooner, it is recommended that a period of an hour or longer elapse before the remainder of the initial therapeutic dose is given. Other hypersensitivity reactions include dyspnea, urticaria, other rashes and itching. Please see prescribing information under Warnings, Precautions and Adverse Reactions for a complete listing of side effects.
Iron Dextran Injection should be used with extreme care in patients with serious impairment of liver function and with caution in individuals with histories of significant allergies and/or asthma.

IRON CLAD
INFED® is reimbursable therapy for iron-deficiency anemia.

*Study done in general population.
†A study of 481 subjects who received 2,099 IV iron dextran injections indicates this result. Each injection usually contained 250 to 500 mg of iron dextran, administered at a rate of less than 100 mg/min. Side effects observed: three life-threatening immediate anaphylactoid and eight severe delayed reactions. There were no deaths.


For documented iron-deficiency anemia not amenable to oral therapy

INFED®
Iron Dextran Injection, USP 50 mg/mL
Replaces Iron Rapidly

Please see prescribing information including the boxed WARNING on following page.
**INDICATIONS**

Intramuscular Injection, USP

**DESCRIPTION:**

**HAFe** (Iron) contains elemental iron (as iron dextran complex). This material is prepared by chelating iron with a polyanionic carbohydrate polymer which forms an iron-carbohydrate complex. The iron content of the complex is approximately 9.8 percent (0.9 percent iron and 90 percent carbohydrate). The iron complex is subsequently purified by dialysis against a series of deionized water and 0.9 percent dextrose solutions.

**Clinical Pharmacology:**

The iron-carbohydrate complex is not absorbed in the digestive tract. Systemic absorption occurs when the complex is administered parenterally. The iron is rapidly distributed and then slowly replaced in the stores of the body. An initial maximum iron level appears in the circulatory system in about 24 hours following intramuscular administration. This initial level is replaced by a second peak at about 48 hours. Total body iron stores reach a maximum within 72 hours, after which time the iron level gradually declines. Integrated administered iron increments significantly increase the serum iron and iron saturation of the reticuloendothelial system. Iron deficiency anemia has been treated successfully with iron dextran. Although hemoglobin and hematocrit values rise more slowly and to lower levels, the clinical picture and therapeutic results are comparable to those obtained with iron sulfate. The ferritin level increases within 3 weeks. A residual iron complex not utilized by the reticuloendothelial tissues is eliminated via the urine and feces. When given in adequate doses for iron deficiency anemia, iron dextran may be administered intramuscularly or subcutaneously. It is not recommended for intravenous use. Iron dextran is not compatible with other solutions or intravenous fluids, and should not be administered simultaneously with dextran or other polymers. Iron dextran is a potent allergen and strict aseptic technique is mandatory throughout administration. The presence of sterile bacterial contamination is cause for discontinuing the administration. Erythema, local irritation, induration, and pruritus at the injection site have been reported. Anaphylactic reactions have been described but are rare. Dosage of iron dextran should not exceed 800 mg in the course of 3 to 4 weeks. The injection should be accompanied by careful observation of the patient. Care should be taken to avoid extravasation at the injection site, as tissue necrosis may result.

**Warnings:**

The following should be observed when administering iron dextran:

1. **HYPOчувствительная реакция.**
   - Anaphylaxis, angioneurotic edema, urticaria, dizziness, nausea, vomiting, and shock may occur with the intramuscular injection of iron dextran. Epinephrine should be immediately available in the event of an adverse reaction. The patient should be observed for at least 30 minutes after each dose. In the event of an untoward reaction, epinephrine in suitable dosage and by the proper route should be administered immediately. The patient should be watched for signs of cardiac toxicity such as tachycardia, hypertension, or other signs of drug overdose.
   - **Malignant transformation.**
     - There have been several reports of malignant transformation following long-term use of iron therapy. Malignant transformation has been reported in persons receiving long-term iron therapy for the treatment of iron deficiency anemia. It is recommended that patients receiving iron therapy for long periods be followed carefully for signs of malignant transformation. The risk of malignant transformation is increased in patients with chronic inflammatory conditions.
   - **Fetal damage.**
     - Some reports have suggested that iron dextran may cause fetal damage. However, no causative relationship between iron dextran and fetal damage has been established.
   - **Nephrotoxicity.**
     - No evidence of nephrotoxicity has been reported with the use of iron dextran. However, patients with known or suspected renal disease should be monitored carefully.
   - **Hypersensitivity reactions.**
     - Hypersensitivity reactions are rare but have been reported with the use of iron dextran. If such reactions occur, the administration of iron dextran should be discontinued and appropriate therapy instituted.

2. **Iron Requirement for Hematopoiesis.**

- **Iron requirement for normal hemoglobin synthesis.**
  - The iron content of the complex is approximately 9.8 percent (0.9 percent iron and 90 percent carbohydrate).
  - The iron complex is subsequently purified by dialysis against a series of deionized water and 0.9 percent dextrose solutions.

3. **Indications for iron dextran.**

- **Iron deficiency anemia.**
  - The iron complex is not absorbed in the digestive tract. Systemic absorption occurs when the complex is administered parenterally. The iron is rapidly distributed and then slowly replaced in the stores of the body. An initial maximum iron level appears in the circulatory system in about 24 hours following intramuscular administration. This initial level is replaced by a second peak at about 48 hours. Total body iron stores reach a maximum within 72 hours, after which time the iron level gradually declines. Integrated administered iron increments significantly increase the serum iron and iron saturation of the reticuloendothelial system. Iron deficiency anemia has been treated successfully with iron dextran. Although hemoglobin and hematocrit values rise more slowly and to lower levels, the clinical picture and therapeutic results are comparable to those obtained with iron sulfate. The ferritin level increases within 3 weeks. A residual iron complex not utilized by the reticuloendothelial tissues is eliminated via the urine and feces. When given in adequate doses for iron deficiency anemia, iron dextran may be administered intramuscularly or subcutaneously. It is not recommended for intravenous use. Iron dextran is not compatible with other solutions or intravenous fluids, and should not be administered simultaneously with dextran or other polymers. Iron dextran is a potent allergen and strict aseptic technique is mandatory throughout administration. The presence of sterile bacterial contamination is cause for discontinuing the administration. Erythema, local irritation, induration, and pruritus at the injection site have been reported. Anaphylactic reactions have been described but are rare. Dosage of iron dextran should not exceed 800 mg in the course of 3 to 4 weeks. The injection should be accompanied by careful observation of the patient. Care should be taken to avoid extravasation at the injection site, as tissue necrosis may result.

- **Malignant transformation.**
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- **Fetal damage.**
  - Some reports have suggested that iron dextran may cause fetal damage. However, no causative relationship between iron dextran and fetal damage has been established.

- **Nephrotoxicity.**
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4. **Iron Requirement for Hematopoiesis.**

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5. **Indications for iron dextran.**

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A new era in cyclosporine therapy starts here...
Unique Cyclosporine Formulation Offers Increased Bioavailability With Comparable Safety*

Now, Neoral® therapy is available for prophylaxis of organ rejection in kidney, liver, and heart allogeneic transplant recipients. Neoral offers you increased bioavailability, while adverse effects* are comparable to those seen with Sandimmune therapy when the dosage of the two drugs is adjusted to achieve the same cyclosporine blood trough concentrations. Intrasubject variability of the area under the concentration-versus-time curve (%CV) in renal transplant recipients was 9% to 21% for Neoral and 19% to 26% for Sandimmune® (cyclosporine). Today, the Neoral combination of microemulsion technology and comparable safety* offers an important option for providing cyclosporine to your transplant recipients.

*The principal adverse reactions of cyclosporine therapy are renal dysfunction, tremor, hirsutism, hypertension, and gum hyperplasia.

Innovation Through Microemulsion

NEORAL®
cyclosporine capsules and oral solution for microemulsion
Give Your Transplant Recipients Microemulsion Technology

Unique Cyclosporine Formulation . . . Comparable Safety*

- Routine monitoring is required and dosage adjustments may be necessary in both de novo patients and maintenance patients converted from Sandimmune® (cyclosporine) to Neoral®

- For de novo transplant recipients, start with the same Neoral dosage you would use with Sandimmune

- For maintenance patients, conversion to Neoral is generally safe and well tolerated
  - Start with a simple 1:1 dosage conversion to Neoral (see boxed warning)
  - Adjust the Neoral dosage to attain preconversion blood trough concentrations

*In controlled studies, the nature, severity, and incidence of the adverse events that were observed in transplant recipients treated with Neoral were comparable with those of patients who received Sandimmune in those same studies when the dosage of the two drugs was adjusted to achieve the same cyclosporine blood trough concentrations. The principal adverse reactions of cyclosporine therapy are renal dysfunction, tremor, hirsutism, hypertension, and gum hyperplasia.

Reference

WARNING
Only physicians experienced in immunosuppressive therapy and management of organ transplant patients should prescribe Neoral®. Patients receiving the drug should be managed in facilities equipped and staffed with adequate laboratory and supportive medical resources. The physician responsible for maintenance therapy should have complete information requisite for the follow-up of the patient.

Neoral® may be administered with other immunosuppressive agents. Increased susceptibility to infection and the possible development of lymphoma and other neoplasms may result from the degree of immunosuppression.

Neoral® Soft Gelatin Capsules (cyclosporine capsules for microemulsion) and Neoral® Oral Solution (cyclosporine oral solution for microemulsion) have increased bioavailability in comparison to Sandimmune® Soft Gelatin Capsules (cyclosporine capsules, USP) and Sandimmune® Oral Solution (cyclosporine oral solution, USP). Neoral® and Sandimmune® are not bioequivalent and cannot be used interchangeably without physician supervision. It is recommended that cyclosporine blood concentrations be monitored in patients taking Neoral® and that dose adjustments be made in order to avoid toxicity due to high concentrations and possible organ rejection due to low concentrations. For a given trough concentration, cyclosporine exposure will be greater with Neoral® than with Sandimmune®. If a patient who is receiving exceptionally high doses of Sandimmune® is converted to Neoral®, particular caution should be exercised. Comparison of blood concentrations in the published literature with blood concentrations obtained using current assays must be done with detailed knowledge of the assay methods employed. (See Blood Concentration Monitoring under DOSAGE AND ADMINISTRATION.)

SANDOZ

Please see brief summary of prescribing information on the following page.
NEO-0695-01  Printed in U.S.A.  4/96
NEORAL® Soft Gelatin Capsules (cyclosporine capsules for microemulsion) NEORAL Oral Solution (cyclosporine oral solution for microemulsion)

Contraindication: patients with a hypersensitivity to cyclosporine or to the development of interstitial fibrosis.

WARNING(S): (See also WARNINGS) Cyclosporine, the active ingredient of NEORAL, can cause nephrotoxicity and hepatotoxicity when used in Nephrotic Syndrome. It is not unusual for serum creatinine and BUN levels to be elevated during cyclosporine therapy. These elevations in renal transplant patients do not necessarily indicate rejection, and each patient must be fully evaluated before dosage adjustment is initiated. Based on the historical Sandimmumine experience with oral solution, nephrotoxicity associated with cyclosporine therapy had been reported in 20% to 45% of patients with renal transplants. The incidence of cyclosporine nephrotoxicity has been significantly reduced by the use of NEORAL Soft Gelatin Capsules (cyclosporine capsules, USP) and Sandimmumine Oral Solution (cyclosporine oral solution, USP). NEORAL and Sandimmumine are not bioequivalent and cannot be used interchangeably. NEORAL Soft Gelatin Capsules (cyclosporine microemulsion) have been demonstrated to be bioequivalent to Sandimmumine capsules (cyclosporine capsules, USP) and Sandimmumine Oral Solution (cyclosporine oral solution, USP). A study comparing the toxicities of the three formulations demonstrated that cyclosporine concentrations can be monitored in patients taking NEORAL and that dose adjustments be made in order to maintain a therapeutic drug level. Patients receiving cyclosporine therapy must be carefully observed for signs and symptoms of rejection. For a given trough concentration, cyclosporine exposure will be greater with NEORAL than with Sandimmumine. As a result, a lower dose of NEORAL microemulsion should be used in patients taking NEORAL to achieve the same cyclosporine concentration. In addition, caution should be exercised when using NEORAL Soft Gelatin Capsules (cyclosporine microemulsion) in patients with pre-existing renal impairment. Cyclosporine concentrations may be influenced by drugs that affect micromolecular enzymes, particularly cytochrome P-450 II A 6. Interactions between cyclosporine and other drugs should be carefully monitored.

INDICATIONS AND USAGE: NEORAL is indicated for the prophylaxis of organ rejection in kidney, liver, and heart transplant recipients.

PRECAUTIONS: Renal function should be monitored before and during NEORAL treatment. Drug Interactions: Reduced clearance of prednisolone, digoxin, and lovastatin has been observed in patients who have been treated with cyclosporine. In addition, a decrease in the apparent volume of distribution of digoxin has been reported. The clinical significance of this interaction is unknown. In a study of patients on cyclosporine therapy, an insignificant decrease in the clearance of digoxin has been seen within days of starting cyclosporine in several patients taking digoxin. Cyclosporine should not be co-administered with agents that are known to induce or inhibit cytochrome P450 enzymes and neutrophils. Cyclosporine-induced neutrophilia may be more pronounced in patients taking cyclosporine and neutrophilia may be more severe in patients taking cyclosporine with high dose prednisolone. Further information on drugs that may be incompatibility with cyclosporine is available from Sandimmumine.

Carcinogenesis, Mutagenesis, and Impairment of Fertility: Cyclosporine gave no evidence of mutagenic or teratogenic effects in appropriate test systems. Only at dose levels toxic to dams, were adverse effects seen in the reproductive toxicology studies in rats. Carcinogenicity studies were carried out in male and female rats and mice. In the 78-week mouse study, evidences of statistically significant increases in lymphoma formation were noted in all doses of cyclosporine. The increase in incidence of hepatocellular carcinomas in mid-dose mice significantly exceeded the control value. In the 104-week rat study, no increases in tumors were seen in cyclosporine-treated rats. The effects of cyclosporine on the development of teratogenicity in any species tested. There have been no adequate and well-controlled studies in pregnant women. NEORAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus. There is no information regarding the effects of cyclosporine on the human fetus. It is not known whether NEORAL is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when cyclosporine is administered to a nursing woman. Neoral and cyclosporine sustained release capsules are not bioequivalent. Patients who are allergic to one formulation cannot be switched to the other without a washout period. The pharmacokinetic profiles of Neoral and cyclosporine sustained release capsules are not bioequivalent. Patients should be advised to take Neoral on a consistent schedule with regard to time of day and relation to meals. Laboratory Tests: Renal and liver functions should be assessed regularly by measurement of BUN, serum creatinine, serum bilirubin, and liver enzymes. Drug Interactions: All of the individual drugs cited below are well substantiated to interact with cyclosporine.

NEORAL® Soft Gelatin Capsules (cyclosporine capsules for microemulsion) NEORAL Oral Solution (cyclosporine oral solution for microemulsion)

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THERE'S A POWERFUL ATTRACTION BETWEEN QUALITY AND CLINICAL RESULTS.

INTRODUCING DEXFERRUM® (IRON DEXTRAN INJECTION, USP).
THE NEW CHOICE IN THE INTRAVENOUS TREATMENT OF IRON DEFICIENCY ANEMIA.

Introducing a high quality, highly consistent, and clinically tested intravenous iron from a leader in quality parenterals.

The safety and efficacy of new DEXFERRUM have been established with ESRD patients on Epoetin alfa in controlled, multi-center trials.

American Regent Laboratories, known for quality parenterals throughout the U.S., supports the dialysis community with services such as a reimbursement hotline and a patient assistance program. Our clinical support specialists are dedicated to helping you achieve optimum patient outcomes.

Now you can prescribe injectable iron with a new measure of confidence. Because with new DEXFERRUM, the connection between quality care and clinical results is virtually inseparable.

The parenteral use of iron-carbohydrate complexes has resulted in anaphylactic-type reactions and death. Therefore, DEXFERRUM should not be administered to patients amenable to oral iron therapy.
New DEXFERRUM®
(IRON DEXTRAN INJECTION, USP)

The quality choice.

Please see brief summary of the prescribing information on the following page.
DEXFERRUM*

(IRON DEXTRAN INJECTION, USP)

**WARNING**

THE PARENTERAL USE OF COMPLEXES OF IRON AND CARBOHYDRATES HAS RESULTED IN ANAPHYLACTIC-TYPE REACTIONS. DEATHS ASSOCIATED WITH SUCH ADMINISTRATION HAVE BEEN REPORTED. THEREFORE, DEXFERRUM® SHOULD BE USED ONLY IN THOSE PATIENTS IN WHOM THE INDICATIONS HAVE BEEN CLEARLY ESTABLISHED AND LABORATORY INVESTIGATIONS CONFIRM AN IRON DEFICIENT STATE NOT AMENABLE TO ORAL IRON THERAPY.

**DESCRIPTION:** DEXFERRUM® (IRON DEXTRAN INJECTION, USP) is a dark brown, slightly viscous sterile liquid complex of ferric oxyhydroxide and a low molecular weight dextran derivative for intravenous use. Each ml contains: 50 mg elemental iron as an iron dextran complex. Sodium chloride may have been added for toxicity. Water for injection q.s. pH adjusted to 5.2 - 6.5 with hydrochloric acid and, if necessary, sodium hydroxide. Sterile, nonpyrogenic.

Therapeutic Class: Hematologic.

**INDICATIONS AND USAGE:** Dextran ferrum is indicated for treatment of patients with documented iron deficiency in whom oral administration is unsatisfactory or impossible.

**CONTRAINDICATIONS:** Hypersensitivity to the product. All anemias not associated with iron deficiency.

**WARNINGS:** See BOXED WARNING.

A risk of carcinogenesis may attend the intramuscular injection of iron-carbohydrate complexes. Such complexes have been found under experimental conditions to produce sarcoma when large doses or small doses injected repeatedly at the same site were given to rats, mice, and rabbits, and possibly in hamsters.

The long latent period between the injection of a potential carcinogen and the appearance of a tumor makes it impossible to measure accurately the risk in man. There have, however, been several reports in the literature describing tumors at the injection site in humans who had previously received intramuscular injections of iron-carbohydrate complexes.

Large intravenous doses, such as used with total dose infusions (TDI), have been associated with an increased incidence of adverse effects. The adverse effects frequently are delayed (1-2 days) reactions typified by one or more of the following symptoms: arthralgia, backache, chills, diarrhea, moderate to high fever, headache, malaise, myalgia, nausea, and vomiting. The onset is usually 24-48 hours after administration and symptoms generally subside within 3-4 days. The etiology of these reactions is not known. The potential for a delayed reaction must be considered when estimating the risk/benefit of treatment.

The maximum daily dose should not exceed 2 ml undiluted iron dextran.

This preparation should be used with extreme care in patients with serious impairment of liver function.

It should not be used during the acute phase of infectious kidney disease.

Adverse reactions experienced following administration of Dextran may exacerbate cardiovascular complications in patients with pre-existing cardiovascular disease.

**PRECAUTIONS:** General: Unwarranted therapy with parenteral iron will cause excess storage of iron with the consequent possibility of exogenous hemosiderosis. Such iron overload is particularly apt to occur in patients with hemoglobinopathies and other refractory anemias that might be erroneously diagnosed as iron deficiency anemias. Dextran ferrum should be used with caution in individuals with histories of significant allergies and/or asthma.

Anaphylaxis and other hypersensitivity reactions have been reported after uneventful test doses as well as after several vials of iron dextran for injection. Therefore, administration of subsequent test doses during therapy should be considered. (See DOSAGE AND ADMINISTRATION: Administration.)

Epinephrine should be immediately available in the event of acute hypersensitivity reactions. (Usual adult dose: 0.5 ml of a 1:1000 solution, by subcutaneous or intramuscular injection.)

(Note: Patients using beta-blocking agents may not respond adequately to epinephrine. Isoproterenol or similar beta-agonist agents may be required in these patients.

Patients with rheumatoid arthritis may have an acute exacerbation of joint pain and swelling following the administration of Dextran ferrum.

**Information For Patients:** Patients should be advised of the potential adverse reactions associated with the use of Dextran ferrum.

**Drug/Laboratory Test Interactions:** Large doses of iron dextran (5 ml or more) have been reported to give a brown color to serum from a blood sample drawn 4 hours after administration. The drug may cause falsely elevated values of serum bilirubin and falsely decreased values of serum calcium.

Serum iron determinations (especially by colorimetric assays) may not be meaningful for 3 weeks following the administration of iron dextran.

Serum ferritin peaks approximately 7 to 9 days after an intravenous dose of Dextran and slowly returns to baseline after about 3 weeks.

Examination of the bone marrow for iron stores may not be meaningful for prolonged periods following iron dextran therapy because residual iron dextran may remain in the reticulopelletelial cells.

Bone scans with 99mTc-labeled bone-seeking agents, in the presence of high serum ferritin levels or following iron dextran infusions, have been reported to show reduction of bone uptake, marked renal activity, and excessive blood pool and soft tissue accumulation.

**Carcinogenesis, Mutagenesis, Impairment Of Fertility:** See WARNINGS.

**Pregnancy:** Teratogenic Effects, Pregnancy Category C: Iron dextran has been shown to be teratogenic and embryocidal in mice, rats, rabbits, dogs, and monkeys when given in doses of about 3 times the maximum human dose.

No consistent adverse fetal effects were observed in mice, rats, rabbits, dogs and monkeys at doses of 50 mg iron/kg or less. Fetal and maternal toxicity has been reported in monkeys at a total intravenous dose of 90 mg iron/kg over a 14 day period. Similar effects were observed in mice and rats on administration of a single dose of 125 mg iron/kg. Fetal abnormalities in rats and dogs were observed at doses of 250 mg iron/kg and higher. The animals used in these tests were not iron deficient. There are no adequate and well-controlled studies in pregnant women.

Dextran ferrum should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Placental Transfer:** Various animal studies and studies in pregnant humans have demonstrated inconclusive results with respect to the placental transfer of iron dextran as iron dextran.

It appears that some iron does reach the fetus, but the form in which it crosses the placenta is not clear.

**Nursing Mothers:** Caution should be exercised when Dextran ferrum is administered to a nursing woman. Trace of unmetabolized iron dextran are excreted in human milk.

**Pediatric Use:** Not recommended for use in infants under 4 months of age (See DOSAGE AND ADMINISTRATION).

**ADVERSE REACTIONS:** Severe/Fatal: Anaphylactic reactions have been reported with the use of iron dextran injection; on occasions these reactions have been fatal. Such reactions, which occur most often within the first few minutes of administration, have been generally characterized by sudden onset of respiratory difficulty and/or cardiovascular collapse. (See boxed WARNING and PRECAUTIONS: General, pertaining to immediate availability of epinephrine.)

Cardiovascular: Chest pain, chest tightness, shock, hypotension, hypertension, tachycardia, flushing, arrhythmias. (Flushing and hypotension may occur from too rapid injections by the intravenous route.)

Dermatologic: Urticaria, pruritus, purpura, rash.

Gastrointestinal: Abdominal pain, nausea, vomiting, diarrhea.

Hematologic/Lymphatic: Leucocytosis, lymphadenopathy.

Musculoskeletal/soft tissue: Arthritis, arthralgia, arthritis (may represent reactivation in patients with quiescent rheumatoid arthritis — See PRECAUTIONS: General), myalgia, backache; sterile abscess; brown skin and/or underlying tissue discoloration (staining); cellulitis; swelling; inflammation; local phlebitis at or near intravenous injection site.

Neurologic: Convulsions, seizures, syncope, headache, weakness, unresponsiveness, paresthesia, febrile episodes, chills, diziness, disorientation, numbness.

Respiratory: Respiratory arrest, dyspnea, bronchospasm.

Urologic: Hematuria.

Dysrhythmias: Arhythmia, backache, chills, diziness, fever, headache, malaise, myalgia, nausea, vomiting (See WARNINGS).

Miscellaneous: Febrile episodes, sweating, shivering, chills, malaise, altered taste.

**DOSAGE AND ADMINISTRATION:** Oral iron should be discontinued prior to administration of Dextran ferrum. Dextran ferrum should not be administered intramuscularly.

**Administration:** Intravenous Injections: PRIOR TO RECEIVING THEIR FIRST DEXFERRUM THERAPEUTIC Dose, ALL PATIENTS SHOULD BE GIVEN AN INTRAVENOUS TEST Dose OF 0.5 ml. (See PRECAUTIONS: General) THE TEST Dose SHOULD BE ADMINISTERED AT A GRADUAL RATE OVER AT LEAST 5 MINUTES.

See full prescribing information for instructions on administration and dosage.

**NOTE:** Do not mix Dextran ferrum with other medications or add to parenteral nutrition solutions for intravenous infusion.

Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever the solution and container permit.

HOW SUPPLIED: Dextran ferrum (Iron Dextran Injection, USP) containing 50 mg of elemental iron per ml is available in 2 ml single dose vials (for intravenous use) in cartons of 10 (NDC 0517-0234-10).


INO234
Rev 3/96

AMERICAN REGENT LABORATORIES, INC.
One Luipold Drive, Shirley, New York 11967
Phone: (800) 645-7106, Fax: (516) 924-1731

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Abbott Renal Care
Abbott Park, IL 60064-3500
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Fortunately, the debilitating effects of hyperparathyroid bone disease need no longer be a common clinical occurrence. An important factor is the availability of calcitriol therapy to suppress increased levels of PTH. Many physicians feel that early intervention with calcitriol keeps PTH values in line and simplifies aspects of patient management.

Because Calcijex is injected at the end of each dialysis treatment, you also retain critical dosage control, so laboratory values can be reviewed and the prescription adjusted virtually on a session-by-session basis.

At your request, your Abbott Renal Care representative can supply materials covering current thinking in PTH control in calcitriol therapy. Your representative also has details on upcoming symposia and other events that will further broaden the information base available to you and your staff.
BRIEF SUMMARY
CALCITRIOL INJECTION

INDICATIONS AND USAGE
Calcitriol (calcitriol injection) is indicated in the management of hypercalcemia in patients undergoing chronic renal dialysis. It has been shown to significantly reduce elevated parathyroid hormone levels. Reduction of PTH has been shown to result in an improvement in renal osteodystrophy.

CONTRAINDICATIONS
Calcitriol (calcitriol injection) should not be given to patients with hypercalcemia or evidence of vitamin D toxicity.

WARNINGS
Since calcitriol is the most potent metabolite of vitamin D available, vitamin D and its derivatives should be withheld during treatment.

A sodium phosphate-binding compound should be used to control serum phosphorus levels in patients undergoing dialysis.

Overdosage of any form of vitamin D is dangerous (see also OVERDOSAGE). Progressive hypercalcemia due to overdosage of vitamin D and its metabolites may be so severe as to require emergency attention. Chronic hypercalcemia can lead to generalized vascular calcification, nephrocalcinosis and other soft-tissue calcification. The serum calcium times phosphorus (Ca x P) product should not be allowed to exceed 70. Radiographic evaluation of suspect anatomic regions may be useful in the early detection of this condition.

PRECAUTIONS:

1. General
Excessive dosage of Calcitriol® (calcitriol injection) induces hypercalcemia and in some instances hypercalcuria, therefore, early in treatment during dosage adjustment, serum calcium and phosphorus should be determined at least twice weekly. Should hypercalcemia develop, the drug should be discontinued immediately.

Safety net should be given cautiously to patients on dialysis, because hypercalcemia in such patients may precipitate cardiac arrhythmias.

2. Information for the Patient
The patient and his or her parents should be informed about adherence to instructions about diet and calcium supplementation and avoidance of the use of unapproved non-prescription drugs, including magnesium-containing antacids. Patients should also be carefully informed about the symptoms of hypercalcemia (see ADVERSE REACTIONS).

3. Laboratory Tests
Serum calcium, phosphorus, magnesium and alkaline phosphatase and 24-hour urinary calcium and phosphorus should be determined periodically. During the initial phase of the medication, serum calcium and phosphorus should be determined more frequently (once weekly).

4. Drug Interactions
Magnesium-containing antacid and Calcitriol should not be used concomitantly, because such use may lead to the development of hypermagnesemia.

5. Carcinogenesis, Mutagenesis, Impairment of Fertility
Long-term studies in animals have not been performed to evaluate the carcinogenic potential of Calcitriol (calcitriol injection). There was no evidence of mutagenicity as studied by the Ames Method. No significant effects of calcitriol on fertility were reported using oral Calcitriol.

6. Use in Pregnancy: Pregnancy Category C
Calcitriol given orally has been reported to be teratogenic in rabbits when given in doses 4 and 15 times the dose recommended for human use.

All 15 fetuses in 3 litters at these doses showed external and skeletal abnormalities. However, none of the offspring born to 6 pregnant rabbits showed significant abnormalities compared with controls. Teratology studies in rats showed no evidence of teratogenic potential. There are no adequate and well-controlled studies in pregnant women. Calcitriol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

7. Nursing Mothers
It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk and because of the potential for serious adverse reactions in nursing infants from calcitriol, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the potential risk to the mother.

8. Pediatric Use
Safety and efficacy of Calcitriol in children have not been established.

ADVERSE REACTIONS
Adverse effects of Calcitriol® (calcitriol injection) are, in general, similar to those encountered with excessive vitamin D intakes. The early and late signs and symptoms of vitamin D intoxication associated with hypercalcemia include:

- Early:
  - Weakness, headache, somnolence, nausea, vomiting, dry mouth, constipation, muscle pain, bone pain and metallic taste.

- Late:
  - Polyuria, polydipsia, anorexia, weight loss, nocturia, conjunctivitis (calcitic), pancreatitis, photophobia, rhinorrhea, conjunctivitis, decreased visual acuity, elevated BUN, albuminemia, hypercalcemia, hypercalciuria, elevated SGT and SEPT, ectopic calcification, hypokalemia, cardiac arrhythmias and, rarely, overt psychosis.

Occasional mild pain on injection has been observed.

OVERDOSAGE
Administration of Calcitriol® (calcitriol injection) to patients in excess of their requirements can cause hypercalcemia, hypercalciuria and hyperphosphatemia. High intake of calcium and phosphorus concomitant with Calcitriol may lead to similar abnormalities.

1. Treatment of Hypercalcemia and Overdosage in Patients on Renal Dialysis
General treatment of hypercalcemia (greater than 1 mg/dL above the upper limit of normal range) consists of immediate discontinuation of Calcitriol therapy, institution of a low calcium diet and withdrawal of calcium supplements. Serum calcium levels should be determined daily until normocalcemia ensues. Hypercalcemia usually resolves in two to seven days. When serum calcium levels have returned to within normal limits, Calcitriol therapy may be reinstated at a dose 0.5 mcg less than prior therapy. Serum calcium levels should be obtained at least twice weekly after dosage changes.

2. Treatment of Acute Overdosage of Calcitriol Injection
The treatment of acute accidental overdosage of Calcitriol should consist of general supportive measures. Serial serum electrolyte determinations (especially calcium), rate of urinary calcium excretion and assessment of renal function, radiographic abnormalities due to hypercalcemia should be obtained. Such monitoring is critical in patients receiving digoxin. Discontinuation of supplemental calcium and low calcium diet are also indicated in acute overdosage. Due to the relatively short duration of the pharmacologic activity of calcitriol, further measures are probably unnecessary. Should, however, persistent and markedly elevated serum calcium levels occur, there are a variety of therapeutic alternatives which may be employed concomitantly on the patient's underlying condition. These include the use of drugs such as phosphates and corticosteroids as well as measures to induce an appropriate forced diarrhea. The use of peritoneal dialysis against a calcium-free dialysate has also been reported.

HOW SUPPLIED
Calcitriol® (calcitriol injection) is supplied in 1 mL ampules containing 1 mcg (Lot No. 12108) and 2 mcg (Lot No. 12109).

Protected from light.

Store at controlled room temperature 15° to 30°C (59° to 86°F).

Caution: Federal (USA) law prohibits dispensing without prescription. See complete Professional Use Information before prescribing.

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06-4836-R5-Rev. Oct., 1990

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Frequency and type of side effects, eg, peripheral edema, headache, flushing/heat sensation, dizziness and fatigue/asthenia, are typical of dihydropyridine calcium channel blockers. Please see brief summary of Prescribing Information on following page.  

*Data on file, Bayer Corporation, Pharmaceutical Division.
ADALAT CC was well tolerated when administered to combinations with a beta-blocker in 187 hypertensive patients in a placebo-controlled clinical trial. However, there have been published experimental observations indicating that the combination of nifedipine and beta-adrenergic blocking drugs may improve the traditional and objective blood pressure lowering effects. The following adverse events have been reported in patients given nifedipine in other therapeutic indications. Nifedipine is contraindicated in patients with documented or probable allergic reactions to any component of nifedipine tablets. Nifedipine should be used with caution in patients with known cardiovascular disease, cerebrovascular disease, or peripheral vascular disease. Nifedipine may be expected to increase the risk of angina and ischemic heart disease. The use of nifedipine in patients with congestive heart failure is not recommended. Nifedipine may be expected to cause fluid retention with a resultant increase in blood pressure. Nifedipine may be expected to cause fluid retention with a resultant increase in blood pressure. Nifedipine may be expected to cause fluid retention with a resultant increase in blood pressure. Nifedipine may be expected to cause fluid retention with a resultant increase in blood pressure.
Their iron therapy shouldn't be 

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Richard P. Woychik, Ph.D.

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For meeting registration and hotel reservation information contact:
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1200 19th Street, N.W., Suite 300
Washington, DC, 20036-2422
Phone: 202/857-1190
Fax: 202/223-4579
The Official American Society of Nephrology Board Review Course...

...will take place August 24-30, 1996 in San Francisco.
The American Society of Nephrology (ASN) Board Review Course will be a week-long, in-depth review of nephrology and hypertension featuring nationally renowned teachers. The course is designed as an intensive preparation for the Nephrology Board Examination to be held in November 1996 and will also serve as an outstanding review for anyone in need of a timely update. The course will feature a variety of formats including lectures, interactive workshops, computer-assisted programs and small-group, question-and-answer sessions. It will prepare participants for the upcoming board examination by blending relevant physiology and pathophysiology with clinical discussions.
The site for this user-friendly course will be the Palace Hotel. Registration is as follows: ASN members - $735; ASN associate members - $660; nonmembers - $840; nonmember fellows - $700. “Early bird” reduced rates are also available until April 15, 1996. To make your reservation or obtain an information brochure, call ASN national headquarters at 202/857-1190. If you need to get in shape for the fall exam, leave your gym card at home and join us in San Francisco.
### Abbreviations and Symbols

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>A (not OD)</td>
<td>absorbance (A = \log 1/T)</td>
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<tr>
<td>ADP</td>
<td>adenosine diphosphate</td>
</tr>
<tr>
<td>AMP</td>
<td>adenosine monophosphate</td>
</tr>
<tr>
<td>ATN</td>
<td>acute tubular necrosis</td>
</tr>
<tr>
<td>ATP</td>
<td>adenosine triphosphate</td>
</tr>
<tr>
<td>AMPase, ADPase, ATPase</td>
<td>adenosine phosphatase</td>
</tr>
<tr>
<td>atm</td>
<td>standard atmosphere</td>
</tr>
<tr>
<td>BSA</td>
<td>bovine serum albumin</td>
</tr>
<tr>
<td>Bq</td>
<td>bequerel</td>
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<tr>
<td>BUN</td>
<td>blood urea nitrogen</td>
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<tr>
<td>C</td>
<td>coulomb</td>
</tr>
<tr>
<td>°C</td>
<td>Celsius</td>
</tr>
<tr>
<td>cAMP, cGMP, etc.</td>
<td>cyclic AMP, cyclic GMP, etc.</td>
</tr>
<tr>
<td>cDNA</td>
<td>complementary DNA</td>
</tr>
<tr>
<td>cm, cm², cm³</td>
<td>centimeters</td>
</tr>
<tr>
<td>CMP, CDP, CTP</td>
<td>cytidine phosphates</td>
</tr>
<tr>
<td>r</td>
<td>correlation coefficient</td>
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<tr>
<td>cpm</td>
<td>counts per second</td>
</tr>
<tr>
<td>cps</td>
<td>counts per second</td>
</tr>
<tr>
<td>cRNA</td>
<td>complementary RNA</td>
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<tr>
<td>D</td>
<td>diffusion coefficient</td>
</tr>
<tr>
<td>d</td>
<td>dalton</td>
</tr>
<tr>
<td>DEAE-cellulose</td>
<td>O-(diethylaminoethyl) cellulose</td>
</tr>
<tr>
<td>DNA</td>
<td>deoxyribonucleic acid</td>
</tr>
<tr>
<td>df</td>
<td>degrees of freedom</td>
</tr>
<tr>
<td>DPN or NAD</td>
<td>dephosphopyridine nucleotide</td>
</tr>
<tr>
<td>DPNH or NADH</td>
<td>reduced form of dephosphopyridine nucleotide, reduced</td>
</tr>
<tr>
<td>dps</td>
<td>disintegrations per minute</td>
</tr>
<tr>
<td>DTTase</td>
<td>deoxyribonuclease</td>
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<tr>
<td>dTMP, dTDP, dTTP</td>
<td>thymidine phosphates</td>
</tr>
<tr>
<td>dyn</td>
<td>dyne</td>
</tr>
<tr>
<td>EC₅₀</td>
<td>effective concentration, 50%</td>
</tr>
<tr>
<td>ED₅₀</td>
<td>effective dose, 50%</td>
</tr>
<tr>
<td>EDTA</td>
<td>ethylenediaminetetraacetic acid</td>
</tr>
<tr>
<td>EGTDA</td>
<td>ethylene glycol (β-aminomethyl ether)</td>
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<tr>
<td>ELISA</td>
<td>enzyme-linked immunosorbent assay</td>
</tr>
<tr>
<td>EPR</td>
<td>electron paramagnetic resonance</td>
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<tr>
<td>eq</td>
<td>equivalent</td>
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<tr>
<td>ESR</td>
<td>electron spin resonance</td>
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<tr>
<td>ESRE</td>
<td>end-stage renal disease</td>
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<tr>
<td>exp</td>
<td>exponential</td>
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<tr>
<td>°F</td>
<td>Fahrenheit</td>
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<tr>
<td>FAD, PADH</td>
<td>flavin adenine dinucleotides</td>
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<tr>
<td>GFR</td>
<td>glomerular filtration rate</td>
</tr>
<tr>
<td>GMP, GDP, GTP</td>
<td>guanosine phosphates</td>
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<tr>
<td>G &gt;</td>
<td>greater than</td>
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<tr>
<td>g</td>
<td>gram</td>
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<tr>
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<td>kilogram</td>
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<td>pg</td>
<td>picogram</td>
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<td>μ</td>
<td>micro</td>
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<td>μM</td>
<td>micromolar</td>
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<tr>
<td>μmol</td>
<td>micromole</td>
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<tr>
<td>N</td>
<td>normal (concentration); number (statistics)</td>
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<tr>
<td>O</td>
<td>outside diameter</td>
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<tr>
<td>osM</td>
<td>osmol</td>
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<tr>
<td>osmol</td>
<td>osmole</td>
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<td>P</td>
<td>probability</td>
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<tr>
<td>p</td>
<td>pico</td>
</tr>
<tr>
<td>p</td>
<td>para-, in chemical name</td>
</tr>
<tr>
<td>ρ</td>
<td>per cent</td>
</tr>
<tr>
<td>RIA</td>
<td>radioimmunoassay</td>
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<tr>
<td>RPF</td>
<td>renal plasma flow</td>
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<tr>
<td>RRA</td>
<td>radioreceptor assay</td>
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<tr>
<td>RSN</td>
<td>ribosomal RNA</td>
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<tr>
<td>S</td>
<td>Siemens, Svedberg unit</td>
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<td>sec</td>
<td>second</td>
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<tr>
<td>SD</td>
<td>standard deviation</td>
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<td>SE</td>
<td>standard error</td>
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<tr>
<td>S</td>
<td>Student's t test</td>
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<tr>
<td>S</td>
<td>subcutaneous(b)-ly</td>
</tr>
<tr>
<td>SUN</td>
<td>serum urea nitrogen</td>
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<tr>
<td>TPN</td>
<td>triphosphopyridine nucleotide</td>
</tr>
<tr>
<td>TPNH or NADPH</td>
<td>triphosphopyridine nucleotide, reduced</td>
</tr>
<tr>
<td>Tris</td>
<td>(tris(hydroxymethyl)aminomethane</td>
</tr>
<tr>
<td>U</td>
<td>unit</td>
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<tr>
<td>V</td>
<td>volt</td>
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<tr>
<td>vol</td>
<td>volume</td>
</tr>
<tr>
<td>volume ratio</td>
<td>weight ratio</td>
</tr>
<tr>
<td>w</td>
<td>weight</td>
</tr>
<tr>
<td>w/v</td>
<td>weight/volume (concentration)</td>
</tr>
<tr>
<td>x</td>
<td>mean</td>
</tr>
<tr>
<td>yr</td>
<td>year</td>
</tr>
</tbody>
</table>

### Examples

- **LC₅₀**: lethal concentration, 50%
- **LD₅₀**: lethal dose, 50%
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presents

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- electrolyte and acid-base metabolism
- hypertension
- dialysis
- renal transplantation

General Information

Manuscripts are of four types: Concise Reports, Comprehensive Studies, Comments and Letters to the Editor.

Concise Reports should contain in not more than 2500 words (including abstract, figures, tables and references) important new observations of sufficient interest to nephrologists to warrant rapid publication. Comprehensive Studies are traditional full length papers that address research questions with exhaustive experimental design and methodology. Comments are brief reports limited to fewer than 1000 words (including introductory paragraph describing the origins and chief conclusions, one figure or table, and fewer than 15 references) that are preliminary, negative or confirmatory. Highly innovative technical advances will be considered. Letters to the Editor should be confined to brief scientific commentary about articles published in JASN or to topics of general interest to nephrologists. Reviews of basic and clinical topics of interest to the readership will be solicited by the editors.

In the cover letter, designate one author as correspondent. All coauthors should have contributed in substantial ways to the study and manuscript preparation.

Include in the cover letter a statement explaining why the research is especially important. It is at this stage that claims of new or novel findings ("This is the first . . .") should be mentioned, not within the text of the paper. The journal office may solicit editorials to accompany articles that are especially newsworthy or controversial.

Include in the cover letter the names, addresses, telephone and areas of expertise of at least five individuals (peers) who may serve, at the discretion of the editors, as reviewers of the manuscript.

American Renal Training Centers

This series is to serve as a forum for concise yet comprehensive updates on a subject of current interest in clinical nephrology, centered around a patient presentation. The articles are to be authored by fellows in training under the guidance of a senior faculty member. The manuscripts should include:

- A brief focused patient presentation. If pertinent a radiologic or histologic figure can complement it.
- Background—not to exceed one paragraph.
- Review of clinical and pathologic presentation of the entity.
- An overview of the etiology and the pathogenetic mechanism of the disease.
- Review of therapeutic approaches.
- A summary—conclusion paragraph that contains a "take home message", and if at all possible, reverts back to the patient.
- No more than three tables or figures that confer a critical message or summarize information from various sources.
- References should not exceed 20.
- The overall length of the communication should not exceed 15 double-spaced typewritten pages.

Copyright Transfer: Include one of the following statements on copyright interests signed by all authors.

"In consideration of the American Society of Nephrology's taking action in reviewing and editing this submission, the author(s) undersigned hereby transfer(s), assign(s) or otherwise convey(s) all copyright ownership to the ASN in the event this work is published by the ASN.

Federal Government: "I was an employee of the United States Federal Government when this work was investigated and prepared for publication; therefore, it is not protected by the Copyright Act and there is no copyright of which the ownership can be transferred."

These signatures, that must accompany the cover letter, indicate that each author approved the final version of the manuscript and is prepared to take public responsibility for the work.

It is the policy of the Journal to expedite the review process. Authors will receive within 10 days of receipt at the editorial office, acknowledgment that their manuscript has been forwarded to an associate editor and reviewing editors. Manuscripts that are judged by a panel of screening editors to fall outside the range of interest of the readership or that fail to satisfy technical requirements will be promptly returned to the authors without further review. In order to reduce postage expense, manuscripts sent to outside reviewers will be destroyed and not returned to the authors. Glossy prints and photographs from rejected manuscripts will be returned to authors. Authors who have not received formal notification of manuscript review status 21 days following acknowledged receipt at the editorial office are encouraged to contact the editorial office for a status report.

Manuscript Preparation

- Submit an original manuscript and three photocopies, typed double-spaced in letter-quality print on one side only of standard (8½ × 11 inch) white bond paper.
- Manuscripts submitted as Concise Reports and Comprehensive Studies should be organized as follows: title page, abstract, introduction, methods, results, discussion, acknowledgments, tables, legends to figures, and references. Comments should contain: title page; introductory paragraph; methods, results and discussion; acknowledgements; table or figure legend; and references. A brief
description of methods may be included in the table or figure legends. **Letters to the Editor** will be edited and shortened in consultation with the author.

- **On the title page** type the full names, highest academic degrees and affiliations of all the authors. The title should not exceed 100 characters and spaces. Include an abbreviated title of not more than 40 characters and spaces.
- **Abstract:** State the problem considered, methods, results, and conclusions in less than 250 words. List 5 index terms not included in the title.
- **Use of Systeme International d'Unites (SI) for measurements is preferred throughout the manuscript.** Factors for converting frequently used components can be found in JAMA (1989:262:200–202).
- **Use generic names of drugs.**
- **Do not use abbreviations in the title or abstract.** Define unusual abbreviations on the first use in the body of the manuscript. A list of accepted abbreviations can be found in the July and January issues of JASN.
- **Text footnotes should be typed on a separate page.**
- **Foreign contributors, whose language is not English, should obtain help from colleagues who are proficient in scientific English.**
- **It is assumed that all clinical investigation described in the manuscript was conducted in accordance with the guidelines proposed in the Declaration of Helsinki.** Document in the manuscript that informed consent was obtained.
- **It is assumed that all animal experimentation described in the manuscript was conducted in accord with the NIH Guide for the Care and Use of Laboratory Animals, and the manuscript should contain a statement to that effect.**
- **Tables:** Double-space on separate sheets of standard-sized white bond paper. Title all tables and number in order of appearance in the text. Footnotes may include methods in *Concise Reports and Comments.* Use superscript letters to indicate footnotes typed at the bottom of the table.
- **Figures:** Include clear photocopies of the figures with the *original and each copy* of the manuscript as well as three sets of 5 × 7 inch glossy photographs for all line drawings, clearly labeled on the back. Graphs must be of professional quality: computer-generated graphs should be of laser quality. High contrast prints for roentgenographic photographs and electron micrographs are essential; halftones must be sharp and legible. Graphs should be approved by the author and at the author’s expense. Photomicrographs should be sized to fit one column (8 cm) or two columns (17 cm); the maximum plate size is 17 × 22 cm. Legends should state degree of magnification or scale bars should be used on the photograph and specified in the length.
- **References:** Cite in numerical order, only one reference to a number. Citation of unpublished observations or personal communications (include separately permission to quote from appropriate individual) should be placed in the text in parentheses.

**Journal articles, abstracts and books:** List all authors when six or fewer; when seven or more, list only the first three and add et al. Journal names should be abbreviated according to the BIOSIS list of serials.

**Examples:**

**Manuscripts by Electronic Diskettes—Preparation of Disks:** Authors are encouraged to submit electronic diskettes of the final version of their manuscripts along with the typed REVISEd manuscript. Diskettes produced on IBM or IBM-compatible computers are preferred, but those produced on most Apple/Macintosh or Wang computers can also be converted. The following word processing programs are preferred: XyWrite III Plus; Word Perfect 4.2, 5.0, or 5.1 (IBM or Macintosh); Microsoft Word (IBM or Macintosh); Word for Windows; Wang OIS (WPS); and Wordstar (IBM). Among other word processing systems that we can convert are CPT 5000; MacWrite II; Display Write 3 or 4; Multimate; PC Write; Volkswriter; and Write Now. Authors preparing diskettes on Macintosh computers should not use the Fast Save option. Files in ASCII can also be used, but are not preferred. Identify the diskette by providing journal name, manuscript number, senior author’s name, manuscript title, name of computer file, type of hardware, operating system and version number, and software program and version number.

The journal does not assume responsibility for errors in conversion of customized software, newly released software, and special characters. Mathematics and tabular material will be processed in the traditional manner.

**Manuscript checklist**
1. Include the original typed manuscript and three photocopies.
2. Send three sets of glossy print figures: each manuscript set should contain photocopies of figures.
3. Include in cover letter: a) copyright transfer statement.
   b) list of five candidates for peer review.
4. Include all authors’ personal signatures.
5. Designate a corresponding author and provide a telephone number and address.

- Please read, correct, and return the original set of proofs with the manuscript and figure copy. Be sure that all Editor’s or printer’s queries are answered. Only minor corrections are permitted. Authors will be charged for excessive changes. Excess page charges will be assessed on articles and concise reports that exceed four pages in length ($80.00 per printed page). Invited reviews, editorials, and special articles will be exempt. The enclosed prints of your illustrations should be reviewed carefully and any corrections noted on the figure proof. **Return the corrected proof and manuscript within 48 hrs. to:**
  - Journal Editing, Williams & Wilkins, 351 W. Camden Street, Baltimore, MD 21201-2436.

Reprints: Authors of articles published in JASN will receive reprint order forms with page proof. Reprint order blanks must be returned within 10 days of receipt to avoid late charges. Orders received late will be charged an additional fee of 25%. Send Reprint Order blanks to: Journal Editing, Williams & Wilkins, 351 W. Camden Street, Baltimore, MD 21201-2436.

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Application for Active and Corresponding Membership

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**Preferred Mailing Address**

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**Business Telephone**  **Business Fax**  **E-mail Address**

**Date of Birth**  **Sex**  **Country of Citizenship**

**If you reside in the U.S., but are not a U.S. citizen, please provide visa status**

(Individuals residing in the U.S. with temporary visa status will apply for corresponding membership.)

**Academic Appointment:**  **Full Time**  **Part Time**  **None**

**Primary Professional Interest** (e.g., Adult Nephrology, Pediatric Nephrology, Pathology, Urology, Physiology, etc.)

**Primary Institutional Affiliation** (e.g., Medical School-Faculty/Clinical Dept., Medical School-Faculty/Research Dept., Hospital-Staff/Clinical Staff, Private Practice, Armed Forces or Other Federal Services, etc.)

**Present Hospital/University Appointments** (titles and departmental affiliations)

Please indicate the amount of time spent on the following. Your total should amount to 100%.

| Clinical | Research | Teaching | Administration | Other |

**Professional Education and Training** (To qualify for active and corresponding membership you must have an M.D., Ph.D. or equivalent, such as D.O., D.V.M., F.R.C.P., M.B.B.S., Pharm.D., etc.)

| Institutional Name/Address | Degree | Dates |

For office use only:

| ID# | Date entered | Check# | Check name |
Training in Nephrology (Give inclusive dates for residences, fellowships, other relevant postgraduate education.)

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List your five most significant publications.

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Describe your clinical experiences as a specialist and consultant in kidney disease and related conditions that would provide basis for qualification of membership.

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List other societies to which you belong.

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Provide names and addresses of three persons from whom letters of reference may be requested if needed.

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Please return your completed application with the first year’s dues (see below) payable to the ASN in U.S. funds.

- **$125**—ACTIVE MEMBERSHIP for residents of North or Central America.
- **$140**—CORRESPONDING MEMBERSHIP for those who meet the qualifications for Active Membership, but are not residents of North or Central America. Corresponding Members will receive all Society mailings and member discounts, but do not have the right to vote or hold office.

If you would like to pay by Visa or MasterCard, please list the cardholder’s name, number and expiration date below:

- [ ] Visa
- [ ] MasterCard

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