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THE AMERICAN SOCIETY OF NEPHROLOGY
presents

MOLECULAR BIOLOGY FOR CLINICAL NEPHROLOGISTS

◆◆◆

This two-day course is designed to bring practicing nephrologists up-to-speed on the fundamentals of DNA/RNA structure, gene organization and other key definitions, terms and techniques that constitute the “jargon of molecular biology.”

November 1-2, 1996
(Immediately Preceding the ASN Annual Meeting)
New Orleans Marriott
New Orleans, Louisiana

Lectures and small group workshops will provide a concise, but complete, introduction to the methods and applications of recombinant DNA technology. The course will help you to understand and draw relationships between molecular biology, genetics and clinical medicine. **No prior knowledge will be assumed.**

**LECTURES AND WORKSHOP TOPICS WILL INCLUDE:**
- Basic Molecular Biology
- Genetic Cloning and Engineering
- Genes and Human Diseases
- Gene Therapy

**Course Directors:** Steven Hebert, M.D. and Robert Narins, M.D.

**Course Faculty**

| Joseph Bonventre, Boston, MA | Peter Igarashi, New Haven, CT |
| Thomas Coffman, Durham, NC | Richard Lifton, New Haven, CT |
| Leon Fine, London, England | Philip Marsden, Toronto, Canada |
| Stephen Gluck, St. Louis, MO | Orson Moe, Dallas, TX |
| William Guggino, Baltimore, MD | Alan Yu, Boston, MA |
| Steven Hebert, Boston, MA | Fuad Ziyadeh, Philadelphia, PA |

**Co-Sponsored by the National Kidney Foundation**

**Register Early...Attendance will be limited.**

For meeting registration and hotel reservation information contact:
American Society of Nephrology
1200 19th Street, N.W., Suite 300
Washington, DC 20036-2422
Phone: 202/857-1190; Fax: 202/223-4579; E-mail asn@sba.com
# Application for Active and Corresponding Membership

**LAST NAME**  

**FIRST NAME**  

**MIDDLE INITIAL(S)**  

**PREFERRED MAILING ADDRESS**  

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**BUSINESS ADDRESS (IF NOT LISTED ABOVE)**  

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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**

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**For office use only:**  

**ID#:**  

**Date entered:**  

**Check#:**  

**Check name:**
Training in Nephrology (Give inclusive dates for residences, fellowships, other relevant postgraduate education.)

Institution Name and Address   Position   Preceptor(s)   Inclusive Dates


List your five most significant publications.


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


List other societies to which you belong.


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


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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Introducing the new wave in growth hormone therapy
THE LIQUID SO
May improve dosing accuracy
Eliminates reconstitution
Reduces product waste
Leading the way in growth hormone therapy

New Nutropin AQ™
[somatropin (rDNA origin) injection]

Indicated for the long-term treatment of children with growth failure due to a lack of adequate endogenous growth hormone secretion and the treatment of children who have growth failure associated with chronic renal insufficiency up to the time of renal transplantation.
Therapeutic regimens requiring reconstitution are more complicated, which may lead to dosing errors that may go undetected until a patient's follow-up visit to his or her physician.

By eliminating reconstitution, Nutropin AQ greatly simplifies the preparation of growth hormone, which in turn may reduce training time.

Nutropin AQ can be used for 28 days after initial vial entry, compared to 14 days for reconstituted lyophilized growth hormone, resulting in less product waste for some patients.

Genentech has made a long-term commitment to offer the latest advances in growth management products and programs to the pediatric endocrinology and nephrology communities. Nutropin AQ is the most recent example of our commitment.

Patients being treated with this and other growth hormone products, and/or their parents, should be informed of the potential benefits and risks associated with growth hormone therapy.

- Intracranial hypertension (with papilledema, visual changes, headache, nausea, and/or vomiting) has been reported in a small number of patients treated with growth hormone.
- Patients should be advised to seek prompt medical attention if allergic reactions occur.
- Testing for antibodies to human growth hormone should be carried out in any patient who fails to respond to therapy.
- Patients should be encouraged to report the development of a limp or complaints of hip or knee pain.
- Leukemia has been reported in a small number of growth hormone-deficient patients treated with growth hormone; however, experts cannot conclude that growth hormone therapy is responsible for these occurrences. The risk, if any, remains to be established.
- Growth hormone should not be used in subjects with closed epiphyses or in patients with active neoplasia.

For more information on Nutropin AQ, please contact your Genentech sales representative.
May improve dosing accuracy...
Eliminates reconstitution..
Reduces product waste..
Leading the way in growth hormone therapy...

New Nutropin AQ™
[somatropin (rDNA origin) injection]
Nutropin® AG

[Genentech, Inc., 6000 Healthy Circle South, South San Francisco, CA 94080-4980]

DESCRIPTION

Nutropin® AG (somatropin [hGH origin] injection) is a human growth hormone (hGH) produced using recombinant DNA technology. Nutropin® AG 1 IU is 155 amino acids and molecular weight of 22,250 daltons. The amino acid sequence of the protein is identical to that in human growth hormone (hGH). Nutropin® AG is a highly purified preparation. Biological identity is determined by demonstrating that the hormone in Nutropin® AG is identical to that found in human growth hormone. The dosage form of Nutropin® AG is a sterile, nonpyrogenic, aqueous solution of recombinant human growth hormone (hGH). The solubility of the hormone in water is approximately 15 mg/mL. The solution contains human growth hormone formulated as Nutropin® AG in a 10 mL prefilled syringe. Nutropin® AG is a highly purified preparation. Biological identity is determined by demonstrating that the hormone in Nutropin® AG is identical to that found in human growth hormone.

Rotes Therapy - Adverse Reactions

Intravenous serum sickness, angioedema, urticaria, and hypotension have been reported in patients with severe hypersecretion. The clinical significance of this decrease is unknown.

Effects of Nutropin® AG on Other Hormones

Growth Hormone is not known whether Nutropin® AG (hGH origin) injection reduces the serum levels of thyroid stimulating hormone (TSH), gonadotropin, or renin in humans. Additional information is not available on the safety and effectiveness of the administration. It is not known whether Nutropin® AG can cause any decrease to be determined by the physician, by examinations on appropriate use in the treatment of children. The information is intended to aid in the safe and effective administration of the medication. If more widespread distribution of possible effects.

If use is reported, a prospective postmarketing database for the use of Nutropin® AG injection is available to the patient. Any adverse effects associated with the use of Nutropin® AG injection in children are not known.

ADVERSE REACTIONS

As with all protein pharmaceuticals, a small percentage of patients may develop immune system responses to the hormone, including mixed hypersensitivity reactions such as angioedema, urticaria, and hypotension. The signs and symptoms of these reactions are usually mild and consist of transient peripheral edema, rash, and pruritus. Additional short-term immunologic and renal function studies were carried out in a group of patients treated with growth hormone to evaluate the occurrence of renal complications in patients treated with Nutropin® AG.

Plasma Growth Hormone

Growth Hormone: Clinical trials were conducted to determine whether treatment with Nutropin® AG results in normal growth in children with chronic renal failure. In one study, the mean growth rate of 4.9 children treated with Nutropin® AG was compared to the normal growth rate of 4.9 children treated with Nutropin® AG. In addition, these studies showed that treatment with Nutropin® AG resulted in a significant increase in weight, height, and body mass index. These studies also demonstrated that Nutropin® AG therapy causes an increase in the number and size of the cartilage cells. Growth Hormone is not known whether Nutropin® AG (hGH origin) injection decreases the serum levels of thyroid stimulating hormone (TSH), gonadotropin, or renin in humans. It is not known whether Nutropin® AG can cause any decrease to be determined by the physician, by examinations on appropriate use in the treatment of children. The information is intended to aid in the safe and effective administration of the medication. It is not known whether Nutropin® AG can cause any decrease to be determined by the physician, by examinations on appropriate use in the treatment of children. The information is intended to aid in the safe and effective administration of the medication. It is not known whether Nutropin® AG can cause any decrease to be determined by the physician, by examinations on appropriate use in the treatment of children. The information is intended to aid in the safe and effective administration of the medication. It is not known whether Nutropin® AG can cause any decrease to be determined by the physician, by examinations on appropriate use in the treatment of children. The information is intended to aid in the safe and effective administration of the medication.
INSTRUCTIONS TO AUTHORS

Send manuscripts to the Editor:

C. Craig Tisher, M.D.
J. Am. Soc. Nephrol.
Division of Nephrology
Box 100224
University of Florida
Gainesville, Florida 32610

The Journal of the American Society of Nephrology will publish original manuscripts judged by peers to be of high quality and relevant to the broad field of nephrology. Nephrology is an alliance of scientists and physicians who seek to understand the functions of the kidneys and the means to improve the medical care of individuals with kidney disease. The strength and vitality of the discipline radiate, historically, from the dynamic interaction between the basic and the clinical sciences. The Journal strives to nurture this relationship by providing the means for communicating to nephrologists and others in related specialities critical information of broad significance in the field. Subjects appropriate for the Journal include, but are not restricted to:

- clinical nephrology
- cell and transport physiology
- pathophysiology and immunology
- cell and molecular biology
- pathophysiology of renal disease
- hormones, autotocids and growth factors
- hemodynamics, hypertension and vascular regulation
- dialysis
- transplantation
- epidemiology and outcomes research
- mineral metabolism and bone disease
- molecular medicine, genetics, and development

General Information

Original manuscripts are of two types: Regular Articles and Brief Communications. Regular Articles are traditional full length papers that address research questions with exhaustive experimental design and methodology. Brief Communications should contain not more that 2000 words (including abstract, figures, tables and references) describing important new observations in nephrology. 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 the correspondent. The cover letter should include a statement explaining why the research is especially important. The journal office may solicit editors to accompany articles that are especially newsworthy or controversial.

American Renal Training Centers

The purpose of this series is to provide 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 not exceed 15 double-spaced typed pages and should include:

- A brief focused patient presentation and if pertinent inclusion of a radiologic or histologic figure
- Background section - not to exceed one paragraph
- Clinical and pathologic presentation of the entity
- An overview of the etiology and the pathogenic 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
- A reference list of 20 or less citations

Copyright Transfer

Include one of the two 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.”

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The 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.

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It is the policy of the Journal to expedite manuscript review. Authors will receive within 7 days of receipt at the editorial office, acknowledgment that their manuscript has been forwarded to an associate editor and appropriate reviewers. 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 as privileged communications will be destroyed and not returned to the authors. Glossy prints and photographs from rejected manuscripts will be returned to authors.

Manuscript Preparation

- Submit an original manuscript and three photocopies, typed double-spaced in letter-quality print on one side only of standard (8-1/2 x 11 inch) white bond paper. Manuscripts should be organized as follows: title page, abstract, introduction, methods, results, discussion, acknowledgments, references, tables and figure legends.
- On the title page type the full names, highest academic degrees and affiliations of all authors. The title should not exceed 100 characters including spaces between words. Number all pages consecutively beginning with the title page. Include an abbreviated title of not more than 40 characters.
• **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 (1986; 262:200-202).

• Use generic names of drugs.

• Do not use abbreviations in the title. Define unusual abbreviations with the first use in the body of the manuscript. A list of accepted abbreviations can be found in the July and January issues of the Journal.

• 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 or the equivalent, and the manuscript should contain a statement to that effect.

• **Tables:** Type double-spaced on separate sheets of standard-sized white bond paper. Each table should have a title and be numbered in the order of appearance in the text. Use superscript letters to indicate footnotes typed at the bottom of the table.

• **Figures:** Four complete sets of glossy photographs of all figures including graphs, black and white light and electron micrographs and color photographs, must be submitted. The use of color illustrations is encouraged, but authors should contact the editor prior to their preparation for advice and assistance.

All figures should be clearly labeled on the back. Photomicrographs should be sized to fit one column (8 cm) or two columns (17 cm); the maximum plate size is 17 x 22 cm. Legends should state degree of magnification or scale bars should be used on the photograph. 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. Clear photocopies of the figures should be included with the original and each copy of the manuscript.

• **References:** References should be typed on a separate page and numbered in the order of appearance in the text, with 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 for each article cited. Journal names should be abbreviated according to the BIOSIS list of serials.

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  2. Send four sets of glossy print figures; each manuscript set should also contain photocopies of figures.

  3. Include a cover letter containing a copyright transfer statement.

  4. Include all authors' personal signatures.

  5. Designate a corresponding author and provide a telephone number, fax number and address.

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## Abbreviations and Symbols

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<tr>
<th>Symbol</th>
<th>Definition</th>
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<tr>
<td>A (not OD)</td>
<td>absorbance (A = log I/T)</td>
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<tr>
<td>ADP</td>
<td>adenosine diphosphate</td>
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<tr>
<td>AMP</td>
<td>adenosine monophosphate</td>
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<tr>
<td>ATP</td>
<td>adenosine triphosphate</td>
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<tr>
<td>AMPase, ADPase, ATPase</td>
<td>adenosine phosphatases</td>
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<tr>
<td>atm</td>
<td>standard atmosphere</td>
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<tr>
<td>BSA</td>
<td>bovine serum albumin</td>
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<td>Bq</td>
<td>Becquerel</td>
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<td>BUN</td>
<td>blood urea nitrogen</td>
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<td>C</td>
<td>Celcius</td>
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<tr>
<td>°C</td>
<td>degree Celsius</td>
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<td>cAMP, cGMP, etc.</td>
<td>cyclic AMP, cyclic GMP, etc.</td>
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<tr>
<td>cDNA</td>
<td>complementary DNA</td>
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<tr>
<td>cm, cm², cm³</td>
<td>centimeters, square centimeters, cubic centimeters</td>
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<td>CMP, CDP, CTP</td>
<td>cytidine phosphates</td>
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<td>d</td>
<td>Dalton</td>
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<td>DEAE-cellulose</td>
<td>O-(2-dimethylaminopropyl) cellulose</td>
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<td>DNA</td>
<td>deoxyribonucleic acid</td>
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<tr>
<td>Df</td>
<td>degrees of freedom</td>
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<tr>
<td>DPN or NAD</td>
<td>diphosphopyridine nucleotide</td>
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<tr>
<td>DPNH or NADH</td>
<td>diphosphopyridine nucleotide, reduced form</td>
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<td>DNase</td>
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<td>ED₅₀</td>
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<td>EDTA</td>
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<td>ethylene glycol (β-aminoethyl) ether</td>
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<td>ELISA</td>
<td>enzyme-linked immunosorbent assay</td>
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<td>FAD, FADH</td>
<td>flavin adenine dinucleotides</td>
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<td>GFR</td>
<td>glomerular filtration rate</td>
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<td>GMP, GDP, GTP</td>
<td>guanosine phosphates</td>
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<td>&gt;</td>
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<td>hnRNA</td>
<td>heterogeneous nuclear RNA</td>
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<td>HIV</td>
<td>human immunodeficiency virus</td>
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<td>HLA</td>
<td>human histocompatibility leucocyte antigens</td>
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<td>HPLC</td>
<td>high performance liquid chromatography</td>
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<td>IC₅₀</td>
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<td>intravenous(-ly)</td>
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**Note:** This list includes a wide range of abbreviations and symbols commonly used in scientific and medical contexts. It is not exhaustive and may not cover all the abbreviations and symbols used in specific fields or contexts. For more specific or specialized abbreviations, consult relevant textbooks, guides, or databases specific to the field of study.
There's a powerful attraction between quality and clinical results.


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 WHOSE 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 hexahydrate 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 tonicity. Water for injection q.s. pH adjusted
to 5.2 - 6.5 with hydrochloric acid and, if necessary, sodium hydroxide. Sterile, nonpyrogenic.
Therapeutic Class: Hematric.

INDICATIONS AND USAGE: Dexferrum 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 carcinogenic may attend the intravenous 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 carcinogenic 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, dizziness, 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 Dexferrum may exacerbate
cardiovascular complications in patients with pre-existing cardiovascular disease.

PRECAUTIONS: General: Unwarrented therapy with parenteral iron will cause excess
storage of iron with the consequent possibility of excessogenous hemosiderosis. Such iron overload
is particularly apt to occur in patients with hemoglobinopathies and other neoplastic anemias
that might be erroneously diagnosed as iron deficiency anemias.

Dexferrum 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 therapeutic doses of iron dextran injection. Therefore, administration of subsequent
tests or doses during therapy should be considered. (See DOSAGE AND ADMINISTRATION:
Administration.)

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

Nurses 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 Dexferrum.

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

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 Dexferrum 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 reticulo-
endothelial cells.

Blood samples with 99m Tc-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
erogenous 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. Dexferrum 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 Dexferrum is administered to a nursing
woman. Traces of unmetabolized iron dextran are excreted in human milk.

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

ADVERSE REACTIONS: Severe/Severe: 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 several minutes of administration, have been generally character-
ized 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, 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: Leucopenia, lymphocytopenia.

Musculoskeletal/soft tissues: Arthralgia, arthritis (may represent reactivation in patients
with quiescent rheumatoid arthritis – See PRECAUTIONS: General, myalgic; 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,
paroxysm, febrile episodes, chills, dizziness, disorientation, numbness.

Respiratory: Respiratory arrest, dyspnea, bronchospasm.

Urologic: Hematuria.

Delayed reactions: Arthralgia, backache, chills, dizziness, fever, headache, malaise,
myalgic, nausea, vomiting (See WARNINGS).

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

DOSAGE AND ADMINISTRATION: Oral iron should be discontinued prior to administration
of Dexferrum. Dexferrum 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 Dexferrum 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, wherever the solution and container permit.

HOW SUPPLIED: Dexferrum® (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).

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

CAUTION: Federal law prohibits dispensing without prescription.

See product package insert for full prescribing information.

INO234
Rev. 3/96

AMERICAN
REGENCY
LABORATORIES, INC.

One Lytspold Drive, Shirley, New York: 11967
Phone: (800) 645-1706, Fax: (516) 924-1731

DEXFERRUM Reimbursement Hotline: (800) 282-7712*
*In Washington, D.C., metropolitan area: (202) 942-2453.
Career Enhancement Grant

Purpose
The ASN Career Enhancement Grant is designed as a bridge grant to support investigators’ meritorious research applications that were close to the funding range, but did not receive NIH funding. These awards are designed only for those investigators who lack sufficient funds to maintain their laboratory efforts for the period needed to submit a revised grant proposal.

Amount
The award will provide $50,000 for one year to cover salaries/supplies for the investigator’s unfunded NIH research proposal, and payments will be made quarterly. A maximum of 10% ($5,000) may be used to cover indirect costs at the applicant’s sponsoring institution.

Terms
The Career Enhancement Grant is not renewable. The grantee must inform the ASN immediately, if an NIH or similar grant is funded during the tenure of this award.

Eligibility
Applicants, who must be active ASN members, shall have submitted an NIH grant proposal in the field of Nephrology that was favorably reviewed and close to the funding range, but did not receive support. Applicants shall not have other substantial research funding for the specific unfunded proposal or other projects. As a general rule, applicants who receive more than $40,000 in other direct funding as a principal investigator will not be considered for a Career Enhancement Grant. In addition, applicants shall have a full-time academic appointment at the time the award is initiated.

Application Deadlines
Three deadlines have been established to correspond with the NIH grant review cycle.

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<tr>
<td>February 15</td>
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One or two grants will be funded for each deadline.

Applicants should submit seven copies of the following:
1. Grant application form
2. NIH summary sheet
3. NIH grant proposal

Review
Applications shall be reviewed by a committee appointed by the President of the American Society of Nephrology. The applicant’s priority percentile score will strongly influence the Review Committee’s decision.
ASN Career Enhancement Grant Application

(PLEASE TYPE.)

Name: ___________________________________________

Address: _________________________________________

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Phone: ______________________________ Fax: ______________________________

Please list all other current sources and amounts of financial support below:

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Seven copies of your completed grant application form, NIH summary sheet and grant proposal must be received by the ASN no later than February 15, May 15, or October 15.

Mail to:
Career Enhancement Grant Review Committee
American Society of Nephrology
1200 19th Street, N.W.
Suite 300
Washington, DC 20036
A new era in cyclosporine therapy starts here...
INNOVATION
Through
Microemulsion
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
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

The daily dose of Neoral should always be given in two divided doses (b.i.d.) on a consistent schedule with regard to time of day and relation to meals.

Neoral and Sandimmune are not bioequivalent and cannot be used interchangeably without physician supervision.

Available in 25-mg and 100-mg soft gelatin capsules and oral solution (100 mg/mL).

In innovation through microemulsion

Neoral®
cyclosporine capsules and oral solution for microemulsion

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.

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


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.)

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

NEO-0695-01 Printed in U.S.A. 4/96
Cyclosporine.
THE AMERICAN SOCIETY OF NEPHROLOGY
and
THE NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES
Announce the 1996 Advances in Basic Science Conference:

Renal Developmental Biology

November 6-9, 1996
(Immediately following the ASN Annual Meeting.)
Hyatt Regency
New Orleans, Louisiana

TOPICS WILL INCLUDE:

Developmental Regulators
Epithelial Development
Vascular-Interstitial Development
Methodologies of Developmental Biology
The Cell Cycle, Apoptosis, and Signalling in Development

CONFERERCE CO-CHAIRS:

Ellis D. Avner, M.D.
Richard P. Woychik, Ph.D.

SPEAKERS WILL INCLUDE:

Dale Abrahamson, University of Alabama
Thomas Daniel, Vanderbilt University
Gregory Dressler, Howard Hughes Medical Institute
Eric Neilson, University of Pennsylvania
Frank Rauscher III, The Wistart Institute
Plus twenty-five other distinguished scientists

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

Frequency: One volume per year, beginning in January.

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For information on American Society of Nephrology membership, contact: Sherri Mara at (202) 857-1190.

Correspondence regarding editorial matters should be addressed to: Jared J. Grantham, M.D., Editor, JASN, University of Kansas Medical Center, 3901 Rainbow Blvd., Kansas City, KS 66160-7361.

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For documented iron-deficiency anemia not amenable to oral therapy

**A CRUCIAL LINK**

**INFeD® AND EPO**

in the treatment of iron-deficiency anemia for most ESRD patients

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Schein Pharmaceutical, Inc.
100 Campus Drive, Florham Park, NJ 07932

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INFeD® and EPO for target HCT range of 30% to 36% 

- Treatment is currently targeted to a hematocrit range of 30% to 36%.

INFeD® for effective erythropoiesis

- Erythropoiesis can rapidly mobilize iron reserves and deplete even ample iron stores.

INFeD® for rapid iron repletion

- IV iron should be considered for all patients with low iron stores requiring a rapid EPO response.
- In dialysis patients receiving EPO: "The efficacy of oral iron is variable in these patients, and many require the use of intravenous iron dextran to maintain adequate iron levels..."*

INFeD® evaluated for safety in hemodialysis patients

- After reviewing the charts of 573 patients treated with INFeD® from four hemodialysis centers, Fishbane et al concluded: "We found serious adverse reactions with IVFe in hemodialysis patients to be uncommon."*

The parenteral use of complexes of iron and carbohydrates has resulted in anaphylactic-type reactions. Deaths associated with such administration have been reported. Therefore, INFeD® 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.

Please see complete prescribing information under WARNINGS, PRECAUTIONS and ADVERSE REACTIONS including boxed WARNING for a complete listing of side effects.

*A study of 46 recombinant human erythropoietin-treated patients who were randomized to 4 groups to receive 4 different oral iron preparations demonstrated the following: In the short term oral iron was adequate to maintain iron status, but the downward trend in ferritin in 3 of the 4 groups indicated that eventually intravenous iron dextran would likely be required.

For documented iron-deficiency anemia not amenable to oral therapy

INFeD®
Iron Dextran Injection, USP 50 mg/mL
Replaces Iron Rapidly
**INF**{
**OX**
**IRON DEXTRAN INJECTION, USP**

**WARNINGS** - The Parenteral Use of Complexes of Iron and Carbohydrates has resulted in Anaphylactic-type Reactions. These reactions have been observed in association with either INFeD**{\textregistered}**or**{\textregistered}**Deotran. Therefore, although these products have been administered in combination with of albumin, gamma globulin, and other colloids, the possibility of similar reactions cannot be excluded.

**DESCRIPTION** - INFeD**{\textregistered}**iron injection, USP is a brown, slightly viscous sterile liquid complex of high-purity iron with the complexing agent dextran. Each ml of iron complex contains approximately 5.0 mg, 30 mg, or 60 mg iron and 7.5 ml, 15 ml, or 20 ml dextran. INFeD**{\textregistered}**iron injection is for intravenous or intramuscular use.

**INDICATIONS AND USAGE** - Intravenous or intramuscular injections of iron injection are indicated for the treatment of patients with iron deficiency anemia in whom oral iron therapy is impractical or impossible.

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

**WARNINGS** - Anaphylactic reactions have been reported with intravenous iron administration. These reactions have been observed in association with either INFeD**{\textregistered}**or**{\textregistered}**Deotran. Therefore, although these products have been administered in combination with of albumin, gamma globulin, and other colloids, the possibility of similar reactions cannot be excluded.

**ADVERSE REACTIONS** - In a study using laboratory methods to simulate the circulatory INFeD**{\textregistered}**iron from the transfusion-bound phase. INFeD**{\textregistered}**iron injection is a brown, slightly viscous sterile liquid complex of high-purity iron with the complexing agent dextran.

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