

## **EXHIBIT 25**

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March 2, 2007

VIA E-MAIL & FACSIMILE

Thomas F. Fleming  
Kaye Scholer LLP  
425 Park Avenue  
New York, NY 10022-3598

**Re: *Amgen Inc. v. F. Hoffmann LaRoche Ltd., et al. (05-CV-12237 WGY)***

Dear Tom:

I write to designate Dr. Joseph W. Eschbach in accordance with our proposed Protective Order at ¶¶ 9 (c) and 13, and to notify you of our intention to share Confidential Discovery Material him. I enclose a current copy of his curriculum vitae and will provide you in the next ten days with a signed copy of the agreement to abide by the terms of the parties' protective order.

Very truly yours,

DAY CASEBEER  
MADRID & BATCHELDER LLP



Deborah E. Fishman

DEF:rlp

Enclosures

cc: Michele Moreland  
Mark Israelewicz  
Hank Heckel  
Peter Fratangelo

**CURRICULUM VITAE****Joseph Wetherill Eschbach, M.D.**

<b><u>Date of Birth</u></b>	January 21, 1933	
<b><u>Place of Birth</u></b>	Detroit, Michigan	
<b><u>Family</u></b>	Wife: Mary Ann Children: Cheryl Louise Ann Elizabeth Joseph Charles	
<b><u>Education</u></b>	B.A., B.S., Otterbein College Westerville, Ohio	1955
	M.D., Jefferson Medical College Philadelphia, Pennsylvania	1959
<b><u>Postgraduate Training</u></b>		
	Internship, King County Hospital, Seattle, Washington, Assistant Resident, Department of Medicine University of Washington, Seattle, Washington,	1959-1960 1960-1961
	Resident, Department of Medicine Henry Ford Hospital, Detroit, Michigan,	1961-1963
	Research Fellow, Division of Nephrology, University of Washington, Seattle, Washington,	1963-1965
<b><u>Professional Positions</u></b>		
	Practice of Nephrology and Internal Medicine Minor and James Medical Group, Seattle, Washington;	1965-
	University of Washington, Seattle, Washington: Director of Home Dialysis;	1965-1972
	Clinical Instructor, Division of Nephrology,	1965-1967
	Clinical Assistant Professor, Division of Nephrology,	1967-1970
	Clinical Associate Professor, Division of Nephrology,	1970-1975
	Clinical Professor, Division of Nephrology,	1975-1985
	Clinical Professor, Divisions of Nephrology and Hematology;	1985-
<b><u>Hospital Positions</u></b>		
	Attending Staff: Swedish Hospital Medical Center, Seattle, Washington;	1965-
	Providence Medical Center, Seattle, Washington;	1965-
	Northwest Hospital, Seattle, Washington;	1983-
<b><u>Honors and Awards</u></b>		
	Alpha Omega Alpha	1958
	President, Jefferson Student Research Society	1959
	Distinguished Service Award for Outstanding Community Service, Seattle Jaycees	1979

Seattle Academy of Medicine's Robert H. Williams Leadership in Medicine Award	1986
Institute of Medicine of the National Academy of Sciences	1990
Special Alumni Achievement Award, Otterbein College	1991
Haviland Award of Excellence, Northwest Kidney Foundation, Seattle	1991
David M. Hume Memorial Award, National Kidney Foundation (USA);	1995

**Board Certification**

Diplomate American Board of Internal Medicine	1966
Diplomate in Nephrology American Board of Internal Medicine	1974

**Organizations**

Fellow, American College of Physicians  
 American Society of Nephrology  
 International Society of Nephrology  
 American Society for Artificial Internal Organs  
 King County Medical Society; Washington State Medical Association  
 American Medical Association  
 North Pacific Society of Internal Medicine  
 Pacific Interurban Clinical Club  
 National Kidney Foundation

**Special Local Responsibilities**

Trustee, First Avenue Service Center, Seattle;	1975-1986
President, Board of Trustees, Northwest Kidney Center, Seattle;	1985-1987
President, King County Medical Society;	1987
Member, Search Committee for Chairman of the Department of Medicine, University of Washington;	1990-1991
President, Washington Association for Biomedical Research	1999-

**Special National Responsibilities**

Work Group Chair, National Kidney Foundation--Dialysis Outcomes Quality Initiative, Clinical Practice Guidelines for the Treatment of Anemia of Chronic Renal Failure;	1995-1999
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## BIBLIOGRAPHY

## Joseph Wetherill Eschbach, M.D.

1. Eschbach, J.W. and Renoldo, J.A.: Metastatic carcinoid. A familial occurrence. *Ann. Intern. Med.* 57:647-650, 1962.
2. Frame, B., Eschbach, J.W., Haubrich, W.S., and Garman, J.E.: Fever, chills, hepatomegaly and debility. A case report from Medical Grand Rounds. *Henry Ford Hospital Med. Bull.* 11:65-69, 1963.
3. Targat, W.H., Trump, B.F., Lagunoff, D., and Eschbach, J.W.: Systemic amyloidosis and ulcerative colitis. *Gastroenterology* 44:335-341, 1963.
4. Eschbach, J.W., Hutchings, R.H., Meston, B., Burnell, J.M., and Scribner, B.H.: A technique for repetitive and long-term human cross circulation. *Trans. Am. Soc. Artif. Intern. Organs* 10:280-284, 1964.
5. Burnell, J.M., Thomas, E.D., Ansell, J.S., Cross, H.E., Dillard, D.H., Epstein, R.B., Eschbach, J.W., Hogan, R., Hutchings, R.H., Motulsky, A., Ormsby, J.W., Poffenberger, P., Scribner, B.H., and Volwiler, W.: Observations on cross circulation in man. *Am. J. Med.* 38:832-841, 1965.
6. Epstein, R.B., Eschbach, J.W., and Thomas, E.D.: Prolongation of skin graft survival by methotrexate and cross circulation. *Transplantation* 4:484-489, 1965.
7. Eschbach, J.W., Epstein, R.B., Burnell, J.M., and Thomas, E.D.: Physiologic observations in human cross circulation. *N. Engl. J. Med.* 273:997-1003, 1965.
8. Thomas, E.D., Epstein, R.B., Eschbach, J.W., Prager, D., Buckner, C.D., and Marsaglia, G.: Treatment of leukemia by extracorporeal irradiation. *N. Engl. J. Med.* 273:6-12, 1965.
9. Eschbach, J.W., Wilson, W.E., Peoples, R.W., Wakefield, A.W., Babb, A.L., and Scribner, B.H.: Unattended overnight home hemodialysis. *Trans. Am. Soc. Artif. Intern. Organs* 12:346-356, 1966.
10. Barnett, B.M.S., Cole, J.J., Daly, S., Tyler, L., and Eschbach, J.W.: A report of local and remote home hemodialysis. *Proc. 3rd Conf. Europ. Dial. & Transpl. Assoc.*, 132-134, 1966.
11. Eschbach, J.W., Funk, D., Adamson, J., Kuhn, I., Scribner, B.H., and Finch, C.A.: Erythropoiesis in patients with renal failure undergoing chronic dialysis. *N. Engl. J. Med.* 276:653-658, 1967.
12. Eschbach, J.W. and Cole, J.J.: Dialyzers currently in use. In: *Long-Term Hemodialysis*. C. L. Hampers and E. Schupak (eds.). Grune and Stratton, New York, pp. 23-41, 1967.
13. Grumrud, L., Cole, J.J., Eschbach, J.W., Babb, A.L., and Scribner, B.H.: Safety aspects of hemodialysis. *Trans. Am. Soc. Artif. Intern. Organs* 13:1-4, 1967.
14. Pollard, T.L., Barnett, B.M.S., Eschbach, J.W., and Scribner, B.H.: A technique for storage and multiple re-use of the kill dialyzer and blood tubing. *Trans. Am. Soc. Artif. Intern. Organs* 13:24-28, 1967.
15. Eschbach, J.W., Barnett, B.M.S., Daly, S., Cole, J.J., and Scribner, B.H.: Hemodialysis in the home: A new approach to the treatment of chronic uremia. *Ann. Intern. Med.* 67:1149-1162, 1967.
16. Eschbach J.W. and Daly, S.: *Home Hemodialysis Patient Manual*, First Ed., University of Washington, 1967.
17. Adamson, J.W., Eschbach, J.W., and Finch, C.A.: The kidney and erythropoiesis. *Am. J. Med.* 44:725-733, 1968.
18. Fenton, S.S.A., Blagg, C.R., Eschbach, J.W., and Scribner, B.H.: Treatment of end-stage renal disease by home hemodialysis. *J. Amer. Women's Assoc.* 23:1096-1103, 1968.
19. Cook, J.D., Marsaglia, G., Eschbach, J.W., Funk, D.D., and Finch, C.A.: Ferrokinetics: A biologic model for plasma iron exchange in man. *J. Clin. Invest.* 49:197-205, 1970.
20. Eschbach, J.W., Cook, J.D., and Finch, C.A.: Iron absorption in chronic renal disease. *Clin. Sci. Clinical Research* 38:191-196, 1970.
21. Finch, C.A., Deubelbeiss, K., Cook, J.D., Eschbach, J.W., Harker, L.A., Funk, D.D., Marsaglia, G., Hillman, R.S., Slichter, S., Adamson, J.W., Ganzoni, A., and Gilbert, E.R.: Ferrokinetics in man. *Medicine* 49:1753, 1970.
22. Blagg, C.R., Daly, S.M., Rosenquist, B.J., Jensen, W.M., and Eschbach, J.W.: The importance of patient training in home hemodialysis. *Ann. Intern. Med.* 73:841-847, 1970.
23. Torrance, J., Jacobs, P., Restrepo, A., Eschbach, J., Lenfant, C., and Finch, C.A.: Intraerythrocytic adaptation to anemia. *N. Engl. J. Med.* 283:165-169, 1970.

24. Blagg, C.R., Hickman, R.O., Eschbach, J.W., and Scribner, B.H.: Home hemodialysis: Six years experience. *N. Engl. J. Med.* 283:1126-1131, 1970.
25. Eschbach, J.W. and Finch, C.A.: Anemia and hemodialysis. *Proc. 4th Int. Cong. Nephrology*, 3:165-173, 1970.
26. Eschbach, J.W., Adamson, J.W., and Cook, J.D.: Disorders of red blood cell production in uremia. *Arch. Int. Med.* 126:812-815, 1970.
27. Blagg, C.R., Eschbach, J.W., Sawyer, T.K., and Casaretto, A.A.: Dialysis for endstage diabetic nephropathy. *Proc. Clin. Dial. & Transpl. Forum* 1:133-135, 1971.
28. Eschbach, J.W., Adamson, J.W., and Anderson, R.G.: Anemia of chronic renal failure: Studies of marrow regulation in the uremic sheep. *Trans. Am. Soc. Artif. Intern. Organs* 18:295-298, 1972.
29. Eschbach, J.W. and Adamson, J.W.: Improvement in the anemia of chronic renal failure with fluoxymesterone. *Ann. Intern. Med.* 78:527-532, 1973.
30. Labardini, J., Papayannopoulou, T., Cook, J.D., Adamson, J.W., Woodson, R.D., Eschbach, J.W., Hillman, R.A., and Finch C.A.: Marrow radioiron kinetics. *Haematologia* 7:301-312, 1973.
31. Farrell, P.C., Eschbach, J.W., Vizzo, J.E., and Babb, A.L.: Hemodialyzer reuse: Estimation of area loss from clearance data. *Kidney Int.* 5:446-450, 1974
32. Eschbach, J.W., Harker, L.A., and Dale, D.C.: The hematologic consequences of renal failure. *In: The Kidney*. B.M. Brenner and F.C. Rector, Jr. (eds.). Philadelphia: W. B. Saunders, Co., 1522-541, 1975.
33. Cook, J.D. and Eschbach, J.W.: Iron absorption and loss in chronic renal disease. *In: Iron Metabolism and its Disorders*. Excerpta Medica International Congress Series No. 366, 190-198, 1975.
34. Eschbach, J.W.: Anemia. *In: Clinical Aspects of Uremia and Dialysis*. S.G. Massry, and A.L. Sellers (eds.). Springfield, Ill.: Charles S. Thomas, 146-178, 1976.
35. Eschbach, J.W., Korn, D., and Finch, C.A.: 14C-cyanate as a tag for red cell survival in normal and uremic man. *J. Lab. Clin. Med.* 89:823-828, 1977.
36. Eschbach, J.W. and Cook, J.D.: Quantitating iron balance in hemodialysis patients. *Trans. Am. Soc. Artif. Intern. Organs* 23:54-57, 1977.
37. Gelfman, N.A., Cook, J.D., Erslev, A.J., Eschbach, J.W., Hendler, E.D., Lindsay, R.M., and Pickering, M.J.: The anemia of end-stage renal disease and dialysis. *Monograph*. Merrell-National Laboratories, 1976.
38. Eschbach, J.W., Cook, J.D., Scribner, B.H., and Finch, C.A.: Iron balance in hemodialysis patients. *Ann. Intern. Med.* 87:710-713, 1977.
39. Eschbach, J.W.: Androgens in anemia of renal disease. *In: Androgens in the Anemia of Bone Marrow Failure*. *Proc. Symp. Am. Soc. Hematol.*, December, 63-66, 1977.
40. Eschbach, J.W.: Hematologic problems of dialysis patients. *In: Replacement of Renal Function by Dialysis*. W.Drukker, F.M. Parsons, and J.F. Maher (eds.). The Hague: M. Nijhoff BV Publisher, 557-570, 1978.
41. Milutinovic, J., Babb, A.L., Eschbach, J.W., Follette, W.C., Graefe, U., Strand, M.J., and Scribner, B.H.: Uremic neuropathy: Evidence of middle molecule toxicity. *Artif. Organs* 2:45-54, 1978.
42. Eschbach, J.W., Adamson, J.W., and Dennis, M.B.: Physiologic studies in normal and uremic sheep. I. The experimental model. *Kidney Int.* 18:725-731, 1980.
43. Eschbach, J.W., Detter, J.C., and Adamson, J.W.: Physiologic studies in normal and uremic sheep. II. Changes in erythropoiesis and oxygen transport. *Kidney Int.* 18:732-745, 1980.
44. Eschbach, J.W.: Anemia of chronic renal disease. *In: Hematology and Oncology*. M.A. Lichtman (ed) Grune & Stratton, New York, 28-31, 1980.
45. Eschbach, J.W.: Hematologic problems of dialysis patients. *In: Replacement of renal Function by Dialysis*, 2nd ed. W. Drukker, F.M. Parsons, and J.F. Maher (eds.). The Maque: M. Nijhoff BV Publishers, 630-645, 1983.
46. Eschbach, J.W.: Iron kinetics in healthy individuals and in chronic renal insufficiency. *Contr. Nephrol.* 38:129-134, 1983.
47. Eschbach, J.W., Seymour, M., Potts, A., Clark, M., and Blagg, C.R.: A hemodialysis orientation unit. *Nephrol.* 33:106-110, 1983.
48. Eschbach, J.W., Mladenovic, J., Garcia, J.F., Wahl, P.W., and Adamson, J.W.: The anemia of chronic renal failure in sheep: The response to erythropoietin-rich plasma *in vivo*. *J. Clin. Invest.* 74:434-441, 1984.

49. Mladenovic, J., Eschbach, J.W., Garcia, J.F., and Adamson, J.W.: The anaemia of chronic renal failure in sheep: Studies *in vitro*. *Br. J. Hematol.* 58:491-500, 1984.
50. Eschbach, J.W. and Adamson, J.W.: Anemia of end-stage renal disease (ESRD). Editorial review. *Kidney Int.* 28:1-5, 1985.
51. Mladenovic, J., Eschbach, J.W., Koup, J.R., Garcia, J.F., and Adamson, J.W.: Erythropoietin kinetics in normal and uremic sheep. *J. Lab. Clin. Med.* 105:659-663, 1985.
52. Delwiche, F., Segal, G.M., Eschbach, J.W., and Adamson, J.W.: Hematopoietic inhibitors in chronic renal failure: Lack of *in vitro* specificity. *Kidney Int.* 29:641-648, 1986.
53. Cazzola, M., Pootrakul, P., Huebers, H.A., Eng, M., Eschbach, J.W., and Finch, C.A.: Erythroid marrow function in anemic man. *Blood* 1:296-301, 1987.
54. Eschbach, J.W., Egrie, J.C., Downing, M.R., Browne, J.K., and Adamson, J.W.: Correction of the anemia of end-stage renal disease with recombinant human erythropoietin: Results of a combined phase I and II clinical trial. *N. Engl. J. Med.* 316:73-78, 1987.
55. Eschbach, J.W. and Adamson, J.W.: Anemia of acute and chronic renal failure. *In: Diseases of the Kidney*, 4th ed. R.W. Schrier and C.W. Gottschalk (eds.). Boston: Little, Brown and Company, 3019-3033, 1988.
56. Segal, G.M., Eschbach, J.W., Egrie, J.C., Stueve, T., and Adamson, J.W.: The anemia of end-stage renal disease: Hematopoietic progenitor cell response. *Kidney Int.* 33:983-988, 1988.
57. Eschbach, J.W. and Adamson, J.W.: Recombinant human erythropoietin: Implication for nephrology. *Am. J. Kidney Dis.* 11:203-209, 1988.
58. Adamson, J.W., Egrie, J.C., Browne, J.K., Downing, M.R., and Eschbach, J.W.: The use of recombinant human erythropoietin (EPO) to correct the anemia of end-stage renal disease: A progress report. *Behring Inst. Mitt.* 83:188-192, 1988.
59. Eschbach, J.W. and Adamson, J.W.: Modern aspects of the pathophysiology of renal anemia. *Contr. Nephrol.* 66:63-70, 1988.
60. Eschbach, J.W.: The haematopoietic system in uraemia. *Nephrology: 10th International Congress of Nephrology*, A.M. Davison (ed.), Bailliere Tindall, London. 2:1050-1056, 1988.
61. Eschbach, J.W.: The anemia of chronic renal failure: Pathophysiology and the effects of recombinant erythropoietin. *Kidney Int.* 35:134-148, 1989.
62. Eschbach, J.W.: Hematologic problems of dialysis patients. *In: Replacement of Renal Function by Dialysis*, 3rd ed. W. Drukker, F.M. Parsons and J.F. Maher (eds.). The Maque: M. Nijhoff BV Publishers, pp. 851-864, 1989.
63. Eschbach, J.W., Haley, N.R., and Adamson, J.W.: The use of recombinant erythropoietin in the treatment of the anemia of chronic renal failure. *In: Molecular and Cellular Controls of Hematopoiesis*, D. Orlic (ed.). New York Acad. Sci. 554:225-230, 1989.
64. Eschbach, J.W., Kelly, M.R., Haley, N.R., Abels, R.I., and Adamson, J.W.: Treatment of the anemia of progressive renal failure with recombinant human erythropoietin. *N. Engl. J. Med.* 321(3):158-163, 1989.
65. Eschbach, J.W., Egrie, J.C., Downing, M.R., Browne, J.K., and Adamson, J.W.: Recombinant human erythropoietin (rHuEpo): Effect in end-stage renal disease. *In: Prevention of Chronic Uremia*, E. Friedman (ed.), Field & Wood, Pennsylvania, 148-155, 1989.
66. Eschbach, J.W. and Adamson, J.W.: Guidelines for recombinant human erythropoietin therapy. *Am. J. Kidney Dis.* 14(2) Suppl. 1:2-8, 1989.
67. Ad Hoc Committee for the National Kidney Foundation: Statement on the clinical use of recombinant erythropoietin in anemia of end-stage renal disease. *Am. J. Kidney Dis.* XIV(3):163-169, 1989.
68. Eschbach, J.W., Abdulhadi, M.H., Browne, J.K., Delano, B.G., Downing, M.R., Egrie, J.C., Evans, R.W., Friedman, E.A., Graber, S.E., Haley, N.R., Korbet, S., Krantz, S.B., Lundin, A.P., Nissenson, A.R., Ogden, D.A., Paganini, E.P., Rader, B., Rutsky, E.A., Stivelman, J., Stone, W.J., Teschan, P., Van Stone, J.C., Van Wyck, D.B., Zuckerman, K., and Adamson, J.W.: Recombinant human erythropoietin in anemic patients with end-stage renal disease. *Ann. Intern. Med.* 111:992-1000, 1989.
69. Eschbach, J.W., Downing, M.R., Egrie, J.C., Browne, J.K., and Adamson, J.W.: USA multicenter clinical trial with recombinant human erythropoietin (Amgen), Results in hemodialysis patients. *Erythropoietin: From Molecular Structure to Clinical Application*. C.A. Baldamus, P. Scigalla, L. Wiczorek, and K.M. Koch (volume eds.). International Workshop on Treatment of Anemia with

- Recombinant Human Erythropoietin, Cologne, March 12-14, 1989. *In: Contributions to Nephrology*. G.M. Berlyne and S. Givannetti (Series eds.). S. Karger, Basel, 76:160-165, 1989.
70. Adamson, J.W., and Eschbach, J.W.: Management of the anaemia of chronic renal failure with recombinant erythropoietin. *Quart. J. Med.* 73(271):1093-1101, 1989.
  71. Adamson, J.W. and Eschbach, J.W.: Experience with recombinant Human erythropoietin in Man: An Update. *In Mechanisms of Action and Therapeutic Applications of Biologicals in Cancer and Immune Deficiency Disorders*, J.E. Groopman, D.W. Golde, and D.H. Evans (eds.) pp.1-11, Alan R. Liss Inc., New York, 1989.
  72. Evans, R.W., Rader, B., Manninen, D.L., and the Cooperative Multicenter Epo Clinical Trial Group: The quality of life of hemodialysis recipients treated with recombinant human erythropoietin. *J.A.M.A.* 263:825-830, 1990.
  73. Adamson, J.W. and Eschbach, J.W.: Treatment of the anemia of chronic renal failure with recombinant human erythropoietin. *Annu. Rev. Med.* 41:349-60, 1990.
  74. Eschbach, J.W., Haley, N.R., and Adamson, J.W.: New insights into the treatment of the anemia of chronic renal failure with erythropoietin. *Seminars in Dialysis* 3(2):112, 1990.
  75. Adamson, J.W. and Eschbach, J.W.: The anemia of chronic renal failure: Pathophysiology and treatment with recombinant human erythropoietin. *Nefrologia* 10(1):26-33, 1990.
  76. Robertson, H.T., Haley, N.R., Guthrie, M.R., Cardenas, D.D., Ahmad, S., Eschbach, J.W., and Adamson, J.W.: Recombinant erythropoietin improves exercise capacity in anemic hemodialysis patients. *Am. J. Kidney Dis.* 15(4):325-332, 1990.
  77. Eschbach, J.W.: Erythropoietin therapy for the anemia of chronic renal failure. *The Kidney* 22(5):1-6, 1990.
  78. Eschbach, J.W., Haley, N.R., Adamson, J.W.: The anemia of chronic renal failure: Pathophysiology and effects of recombinant erythropoietin. *Contr. Nephrol.* 78:24-37, 1990).
  79. Eschbach, J.W. and Adamson, J.W.: Hematologic consequences of renal failure. *In: The Kidney*, 4th ed. B.M. Brenner and F.C. Rector, Jr. (eds.), 1990.
  80. Buckner, F.S., Eschbach, J.W., Haley, N.R., Davidson, R.C., and Adamson, J.W.: Hypertension following erythropoietin therapy in anemic hemodialysis patients. *Am. J. Hypertension*, 3:947-955, 1990.
  81. Eschbach, J.W.: Preface to "Erythropoietin", Wichtig Editore, 1990.
  82. Eschbach, J.W. (consultant): Anemia, Hypertension, and Hemodynamics in Patients on Dialysis (monograph), Global Medical Communications. New York, New York. 1990.
  83. Eschbach, J.W.: Erythropoietin - associated hypertension. *N. Engl. J. Med.* 323:999-1000, 1990.
  84. Adamson, J.W. and Eschbach, J.W.: The use of recombinant human erythropoietin in humans. *In: Molecular control of haematopoiesis*. Wiley, Chichester (Ciba Foundation Symposium 148) pp. 186-200, 1990.
  85. Adamson, J.W. and Eschbach, J.W.: Use of recombinant human erythropoietin (rhEpo) in humans. *In: Hematological Growth Factors in Clinical Applications*. Mertelsmann, R. and Herrmann, F. (eds.), 192:139, 1990.
  86. Adamson, J.W., and Eschbach, J.W.: The use of recombinant human erythropoietin (rHuEpo) in man. *In: Molecular Biology of Haematopoiesis*. Sachs, L., Abraham, N.G, Wiederman, C.J., Levine, A.S., Konwalink, G. (eds.), pp. 219-228, 1990.
  87. Eschbach, J.W. and Adamson, J.W.: Erythropoietin: Issues in its use as a therapeutic for the anemia of chronic renal failure. *Blood Purification*, 8:239-254, 1990.
  88. Adamson, J.W., and Eschbach, J.W.: The use of recombinant human erythropoietin (rHuEpo) in man. *Cancer Surveys* 9:157-167, 1990.
  89. Adamson, J.W. and Eschbach, J.W.: Management of the anemia of chronic renal failure with recombinant human erythropoietin. *In: Growth Factors in Health and Disease: Basic and Clinical Aspects*. Proceedings of the 4th Nordisk Insulin Symposium. B. Westermark, C. Betsholtz, B. Hokfelt, (eds.), pp. 349-363, Excerpta Medica, Amsterdam, 1990.
  90. Eschbach, J.W. and Adamson, J.W.: The pathophysiology and treatment of the anemia of chronic renal failure. *In: Current Nephrology*. 14, Gonick, H.C. (ed) 259-291, 1991
  91. Eschbach, J.W., Egrie, J.C., Downing, M.R., Browne, J.K., and Adamson, J.W.: The safety of epoetin alfa (recombinant human erythropoietin): Results of clinical trials in the United States. *Contr. Nephrol.* 88:72-80, 1991.



92. The US Recombinant Human Erythropoietin Predialysis Study Group: Double-blind, placebo-controlled study of the therapeutic use of recombinant human erythropoietin for anemia associated with chronic renal failure in predialysis patients. *Am. J. Kidney Dis.* 18:50-59, 1991.
93. Eschbach, J.W.: Recombinant human erythropoietin (epoetin alfa) in hemodialysis patients: Results of clinical trials in the United States. In: *Erythropoietin: Molecular, Cellular and Clinical Biology*. Erslev, A., Adamson, J.W., Eschbach, J.W., Winearls, C.W. (eds.). The Johns Hopkins University Press, Baltimore, 1991.
94. Eschbach, J.W.: Recombinant human erythropoietin: A new therapy for the nephrologist. *Nephrology: Proceedings of the 4th Asian-Pacific Congress of Nephrology*, Jinhong, Z., Xuehai, O., Zhihong, L. and Leishi, L. (eds.), 555-562, 1991.
95. Eschbach, J.W.: Erythropoietin 1991 -- An overview. *Am. J. Kidney Dis.* 18:3-9, 1991
96. Eschbach, J.W. (Consulting Editor): *Epoetin Alfa in Clinical Practice*, Monograph. Global Medical Communications, Ltd. 1991.
97. Eschbach, J.W., Haley, N.R., Egrie, J.C., and Adamson, J.W.: A comparison of the responses to recombinant human erythropoietin in normal and uremic subjects. *Kidney Int.* 43:407-416, 1992.
98. Eschbach, J.W., Aquiling, T., Haley, N.R., Fan, M.H., and Blagg, C.R.: The long term effects of recombinant human erythropoietin on the cardiovascular system. *Clin. Nephrol.* 38, Suppl. 1: S98-S103, 1992.
99. Eschbach, J.W. and Adamson, J.W.: Use of recombinant human erythropoietin in the anemia of progressive renal failure. *International Yearbook of Nephrology 1993*. Andreucci, V.E., Fine, L.G. (eds.), pp. 231-241, Springer-Verlag, London, 1992.
100. Guthrie, M., Cardenas, D., Eschbach, J.W., Haley, N.R., Robertson, H.T., and Evans, R.W.: Effects of erythropoietin on strength and functional status of patients on hemodialysis. *Clin. Nephrol.*, 39(2):97-102, 1992.
101. Eschbach, J.W. and Adamson, J.W.: Anemia in renal disease. In: *Diseases of the Kidney*, 5th ed. R. W. Schrier and C.W. Gottschalk (eds.), pp. 2743-2758, Little, Brown and Company, Boston, 1993.
102. Eschbach, J.W.: Erythropoietin is Not a Cause of Access Thrombosis. *Seminars in Dialysis*, 6:1180-1184, 1993.
103. Eschbach, J.W.: in Bergstrom, J.: *Frontiers in Medicine: New Aspects of Erythropoietin Treatment*. *J. Internal Med.* 233: 445-462, 1993.
104. Eschbach, J.W.: Erythropoietin: The Promise and the Facts. *Kidney International*, 45(Supp.44): S-70 - S-76, 1994.
105. Eschbach, J.W.: Anemia of Chronic Renal Failure. In: *Morbidity and Mortality of Renal Dialysis: An NIH Consensus Conference Statement*. *Arch Intern Med.* 121:62-70, 1994.
106. Eschbach, J.W.: The cardiovascular system in chronic renal failure: the impact of anaemia and its correction with erythropoietin. In: *EPO-Yearbook 1993*. *Excerpta Medica.* 5:1-4, 1994.
107. Eschbach, J.W. and Davidson, R.C.: Red Blood Cell Mass/Erythropoietin and Blood Pressure: Lessons from Patients with Renal Disease. In *Hypertension: Pathophysiology, Diagnosis and Management*, 2nd ed. J. H. Laragh and B. M. Brenner (eds.). Raven Press, New York; 389-398, 1995.
108. Eschbach, J.W.: The Future of Recombinant Human Erythropoietin. *Nephrol Dial Transplant* 1995; 10 (Suppl. 2): 96-109
109. Paganini, E.P., Eschbach, J.W., Lazarus, J.M., Van Stone, J.C., Gimenez, L.F., Graber, S.E., Egrie, J.C., Okamoto, D., Goodkin, D.A.: Intravenous versus Subcutaneous Dosing of Epoetin Alfa in Hemodialysis Patients. *Am. J. Kidney Dis.* 26: 331-340, 1995
110. Eschbach, J.W.: Hematological Problems of Renal Failure. In: *Drukker, Parsons & Maher, Replacement of Renal Function by Dialysis, Fourth Edition*. Jacobs, C, Kjellstrand, C.M, Koch, K.M, Winchester, J.F. (eds.). 1996
111. Eschbach, J.W.: Anemia. *Dialysis & Transplantation*, 25:725-727, 1996
112. Eschbach, J.W.: Causes and management of erythropoietin resistance. *Janssen Medical News*, 1996
113. Eschbach, J.W.: Normalization of Haematocrit in the ESRD Patient. *Janssen Medical News*, Vol 3, Issue 2, 1997.
114. Eschbach, J.W.: The Treatment of Anemia in CRF: Past, Present, and Future. In: *Re-evaluating Iron Management in Renal Failure*, by Eschbach, J., Fishbane, S., Wish, J. Triclinica Communications, Inc. 1997

115. Eschbach, J.W.: What are the Major Changes in Dialysis Practice Recommended by the National Kidney Foundation Dialysis Outcomes Quality Initiative (NKF-DOQI)? (Treatment of the Anemia of Chronic Renal Failure). *Seminars in Dialysis*, 10:156-157, 1997.
116. Eschbach, J., DeOreo, P., Adamson, J., Berns, J., Biddle, G., Comstock, T., Jabs, K., Lazarus, M., Nissenson, A., Stivelman, J., Van Wyck, D., Wish, J.: NKF-DOQI Clinical Practice Guidelines for the Treatment of Anemia of Chronic Renal Failure. *Am. J. Kidney Dis.* 30, N. 4, Suppl 3 (October): S192-240, 1997.
117. Druke, T.B., Barany, P., Cazzola, M., Eschbach, J.W., Grutzmacher, P., Kaltwasser J.P, Koch, K.M, Macdougall, I.C, Pippard, M.J, Shaldon, S, van Wyck, D.: Management of iron deficiency in renal anaemia: guidelines for the optimal therapeutic approach in erythropoietin-treated patients. *Clinical Nephrology*, 48:1-8, 1997.
118. Gupta, A, Eschbach, J.W.: Oral iron therapy in hemodialysis patients and the new NKF-DOQI clinical practice guidelines. *Correspondence, To the Editor. Am. J. Kidney Dis.* 31:556-558, 1998
119. Eschbach, J.W.: Prólogo (Preface), in *Eritropoyetina humana recombinante*, Valderrábano, F. (ed.). Masson, S.A., Ronda General Mitre, 149-Barcelona (Espana), 1998.
120. Eschbach, J.W.: Hematócrito diana (target hematocrit), in *Eritropoyetina humana recombinante*, Valderrábano, F. (ed.). Masson, S.A., Ronda General Mitre, 149-Barcelona 1998.
121. Eschbach, J.W.: NKF-DOQI Clinical Practice Guidelines for the Treatment of Anemia of Chronic Renal Failure; Commentary. *Abstracts of Clinical Care Guidelines* 10:#7, July/August 1998, pg 4-5.
122. Adamson, J.W., Eschbach, J.W.: Erythropoietin Therapy in End-Stage Renal Disease; Editorial. *N. Engl. J. Med.* 339:625-627, 1998
123. Eschbach, J.W.: The history of renal anaemia (anaemia and erythropoietin). *Nephrology* 124. 4:279-287, 1998
124. Eschbach, J.W., Adamson, J.W.: Iron Overload in Renal Failure Patients: Changes since the introduction of erythropoietin therapy. *Kidney Int.* 55: Suppl. 69, S-35-S43, 1999
125. Eschbach, J.W.: Iron Therapy and the Anemia of ESRD: Historical Perspective. *Seminars in Dialysis* 12:212-218, 1999
126. Eschbach, J.W., Adamson, J.W. (Response to Letter to Editor) Moderately high serum ferritin concentration is not a sign of iron overload in dialysis patients. *Kidney Int* 56:758-759, 1999

#### IN PRESS

1. Eschbach, J.W. (Consulting Editor): *Epoetin Alfa in Clinical Practice*, Monograph. Global Medical Communications, Ltd., 2nd edition
2. Adamson, J.W., Auerbach, M, Bukowski, R., Burakoff, R., Cavill, I., Eschbach, J.W., Glaspy, J., Henry, D., Rubin, P.H.: Iron-deficiency anemia in oncology and gastroenterology. *Cancer*
3. DeOreo P.B., Eschbach, J.W.: Implementation of the Anemia Guidelines. *Advances in Renal Replacement Therapy*
4. Eschbach, J.W. Anemia of Chronic Renal Failure, chapter for the text "Principles of Nephrology", editors, Johnson and Feehally

#### ABSTRACTS

1. Eschbach, JW, Mladenovic, J, and Adamson, JW: Erythropoietin (Ep) action in chronic renal failure CRF). *Kidney Int.* 21: 260(A), 1982.
2. Beguin, Y., Huebers, H., Postrakul, P., Haley, R., Eschbach, J.W., Adamson, J.W., and Finch, C.A.: Plasma transferrin receptor levels as a monitor of erythropoiesis in man: Correlation with ferrokinetics and stimulation by recombinant human erythropoietin. *Blood* 70 (Suppl. 1):S1a, 1987.
3. Egrie, J.C., Eschbach, J.W., McGuire, T., and Adamson, J.W.: Pharmacokinetics of recombinant human erythropoietin administered to hemodialysis (HD) patients. *Kidney Int.* 33:262, 1988.
4. Haley, N.R., Matsumoto, A.M., Eschbach, J.W., and Adamson, J.W.: Low testosterone (T) levels increase in male hemodialysis patients (HDP) treated with recombinant human erythropoietin (rHuEpo). *Kidney Int.* 35:193, 1988.

5. Cardenas, D.D., Guthrie, M.R., Evans, R., Eschbach, J.W., and Adamson, J.W.: Recombinant human erythropoietin improves quadriceps strength in hemodialysis patients. *Arch. Phys. Med. Rehabil.* 69:724, 1988.
6. Guthrie, M., Cardenas, D., Robertson, T., Evans, R., Eschbach, J., Adamson, J.: Recombinant erythropoietin improves exercise capacity and strength in hemodialysis patients. *Physical Therapy*, 69(5):162, 1989.
7. Eschbach, J.W., Buckner, F.S., Davidson, R.C., Haley, R.N., and Adamson, J.W.: Erythropoietin-induced hypertension in chronic renal failure. *Am. Soc. Hypertension* 2(5):64, 1989.
8. Haley, N.R., Davidson, R.C., Eschbach, J.W., Adamson, J.W., and Easterling, T.: Patterns of development of hypertension with recombinant human erythropoietin (rHuEPO) therapy: A prospective study. *Am. Soc. Hypertension* 2(5):56A, 1989.
9. Eschbach, J.W., Haley, N.R., Aquiling T. Browne, J.K., Downing, M.R., Egrie, J.C., and Adamson, J.W.: Three years of erythropoietin (rHuEPO) therapy. *Kidney Int.* 37: 237, 1990.
10. Haley, N.R., Huebers, H.A., Adamson, J.W., and Eschbach, J.W.: Changes in plasma transferrin receptor protein (TRP) levels: Monitoring the response to recombinant human erythropoietin (Epo). *J. Am. Soc. Nephrol.* 1:399, 1990.
11. Haley, N.R., Hesterberg, L., Broudy, V.C., Eschbach, J.W., and Adamson, J.W.: Field test of an enzyme-linked assay for serum erythropoietin levels in normal and anemic states. *Exp. Hematol.* 18:576(A), 1990.
12. Eschbach, J.W., Haley, N.R., McCabe, D., and Egrie, J.C.: Epoetin Dosing: What route and frequency is best? *J. Am. Soc. Nephrol.* 2:376, 1991.
13. Paganini, E.P., Miller, T., Eschbach, J., Gimenez, L.F., Graber, S., Lazarus, M., and Van Stone, J.: A prospective randomized multi-center study of subcutaneous erythropoietin administration. *J. Am. Soc. Nephrol.* 2:384, 1991.
14. Eschbach, J.W.; Glenny, R.; Robertson, T.; Guthrie, M.; Rader, B.; Evans, R.; Chandler, W.; Easterling, T.; Denney, J., and Schneider, G.: Normalizing the Hematocrit (Hct) in hemodialysis patients (HDP) with Epo improves quality of life (q/l) and is safe. *J. Am. Soc. Nephrol.* 4:425, 1993.

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### **Joseph Wetherill Eschbach, M.D.; Biographical Summary**

Nephrologist-internist in private practice in Seattle, WA. Born January 21, 1933, raised by an artist mother and obstetrician-gynecologist father in Dearborn, MI, graduated from Otterbein College (Westerville, OH) with B.A. & B.S. (1955), and Jefferson Medical College (Philadelphia, PA), with M.D. (1959), completed internal medicine training (1963) at U. Washington, Seattle and Henry Ford Hospital, Detroit, and nephrology fellowship (1965) with Belding Scribner, U. WA. For 35 years has been concerned about the medical problems and the care of patients with chronic renal failure (CRF), doing research into the anemia of CRF at the University of Washington, Seattle, (supported primarily by NIH research grants), while at the same time pursuing a clinical practice in nephrology and internal medicine. This relationship between private practice and academic medicine allowed for the investigation in the laboratory of medical problems experienced clinically in the office, dialysis center and hospital. As Director of the first home hemodialysis training center (established 1965) patients from throughout the United States and overseas had access to dialysis that otherwise was not possible at that time. This center served as the prototype for other such training centers. Iron metabolism in CRF was extensively studied and disclosed, in contrast to previous concepts, that intestinal iron absorption is normal in CRF. Erythropoietin (Epo) deficiency was shown to be the main cause of the anemia of CRF, in contrast to the then prevailing paradigm that uremia blunted Epo, or erythropoiesis, directly. Studies in both an animal (sheep) model of CRF using Epo-rich sheep plasma (1969-1980), and in hemodialysis patients, using recombinant human Epo (epoetin) (1987-92), indicated that erythropoietin was just as effective in CRF as in normal subjects. In December, 1985, injected the first epoetin into a human as part of co-conducting the first clinical trial with this hormone in anemic dialysis patients. More recently concluded a pilot study indicating that a normal red cell mass, achieved by epoetin therapy, is physiologic and safe for patients with CRF. Chairman of the Anemia Work Group of the National Kidney Foundation's Dialysis Outcome Quality Initiative that developed evidence-based guidelines for managing the anemia of CRF (1995-1998).

Has lectured extensively on the anemia of CRF and its treatment with epoetin throughout the United States and in 25 other countries. Publications include over 100 journal articles, 11 chapters in medical texts, and co-editor of two books.

A member of the Institute of Medicine since 1990, past president of the King County (WA) Medical Society (1987), past president (1985-1987) of the Board of Trustees of the Northwest Kidney Centers (the first kidney center in the world, which remains not-for-profit, community based), and recipient of a Special Alumni Achievement Award, Otterbein College (1991), Haviland Award of Excellence, Northwest Kidney Foundation, Seattle (1991), and the David M. Hume Memorial Award, National Kidney Foundation (1995).

Married to Mary Ann Charles for 41 years, helped raise Cheryl Eschbach-Duffield (B.A., Stanford; Ph.D., Princeton; M.D., U. Va.), Annbeth Eschbach-Parcells (B.A., Northwestern; M.B.A., NYU), and Joseph Charles (B.A., Colorado College; C.P.A.); five grandchildren. Interests include woodworking/ sculpture, singing, classical music, opera, skiing, squash, hiking, theology and reading.

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425