



References

- Aach RD, Stevens CE, Hollinger FB. 1991. Hepatitis C virus infection in post-transfusion. Hepatitis an analysis with first and second generation assay. *N Engl J Med*, 325: 1325-9.
- Aach RD, Szmuness W, Mosley JW. 1981. Serum alanine aminotransferase of donors in Relation to the risk of non-A, non-B hepatitis in recipients: the transfusion- Transmitted viruses study. *N Engl J Med*, 304: 989-94.
- Adrian M, Bisceglie D, Stanley E, et al. 1991. The role of chronic viral hepatitis in Hepatocellular carcinoma in the United States. *Am J Gastroenterol*, 86: 335-338.
- Alberti A, Chemello L, Bonetti P, et al. 1993. Treatment with interferon(s) of community-acquired chronic hepatitis and cirrhosis type C. *J Hepatol*, 17(suppl 3): S122-6.
- Alter H, Alter M, Barbara J, Colombo M, Hanson P, Houghton M, et al. 1989. *Proc 1 st Int Symp Hepatitis C virus Rome*.
- Alter HJ, JeH BW and Polito AJ. 1990. Analysis of the role of hepatitis C virus in Transfusion-associated hepatitis. In: Hollinger FB, Stanley ML, Margolis HS, eds. *The 1990 International Symposium on viral Hepatitis and Liver Disease Baltimor, USA* : Willian & Wilkins, 396-410.
- Alter HJ, Purcell RH, Holland PV. 1981. Donor transminase and recipient hepatitis. Impact On blood transfusion services. *JAMA*, 246: 630-4.
- Alter M, Hadler SC, Judson FN, Mares A, Alexander WJ, Hu PY, et al. 1990. Risk factors for acute non-A, non-B hepatitis in the United States and association with hepatitis C virus infection. *JAMA*, 264: 2231-5.
- Alter MJ, Margolis HS, Krawczynski K, et al. 1992. The natural history of community-acquired hepatitis C in the United States. *N Engl J Med*, 327: 1899-905.

- Alter MJ. Epidemiology of Community acquired hepatitis C.1990. In: Hollinger FB, Stanley ML, Mergolis HS, eds. *The 1990 International Symposium on Viral Hepatitis and Liver Disease*. Baltimor, USA: Williams & Wilkins, 410-12.
- Antonio C, Piero A. 1999. *Viral liver disease*, 491-492.
- Arguillas MG, Domingo EO and T suda F.1994. Seroepidemiology of hepatitis C virus infection in the Philippines: A preliminary study and comparison with hepatitis B virus infection among blood donors, medical personnel, and patient groups in Davaos Philippines. *Gastroenterol Japonical*, 26: 170-5.
- Begum, S.A. 1995. Cost Analysis of Childhood Diarrhoeal Inpatients: A Case study of Narayanganj District Hospital Bangladesh. Bangkok Chulalongkorn University.
- Boyer N, Marcellin P, Duchatelle V, et al. 1995. Sustained response after alpha interferon therapy in patients with chronic hepatitis C. *Hepatology*, 22: 291A.
- Bradley DW, Maynard JE, Popper H. et al.1983. Posttransfusion non-A, non-B Hepatitis: Physicochemical properties of two distinct agents. *J Infect Dis*, 148: 254-265.
- Bradley DW, McCaustland KA, Cook EH.1985. Posttransfusion non-A, non-B hepatitis in Chimpanzees: Physicochemical evidence that the tubule-forming agent is a Small enveloped virus. *Gastroenterology*, 88: 773-9.
- Braun WE. 1990. Long-term complications of renal transplantation. *Kidney International*, 37: 1363-78.
- Bruix J, Calvet X, Costa J et al. 1989. Prevalence of antibodies to hepatitis C virus in Spanish patients with hepatocellular carcinoma and hepatic cirrhosis. *LANCET*. October [28], 1004-1006.
- Cable R, Badon S, Pray C, Popovsky MA. 1997. Limited utility of alanine Aminotransferase Screening of hepatitis C antibody-screened blood donor *Transfusion*, 37: 206-9.

- Cantilena, C.C. 1982. Routes of Infection, Viremia, and Liver Disease in Blood Donors Found to Have Hepatitis C virus Infection. 1996consideration, (Available: <http://www.Hepnet.com>, June 1, 2001).)
- Causse X, Godinot H, Chevallier M, et al. 1991. Comparison of 1 or 3 MU of interferon alfa-2b and placebo in patients with chronic non-A, non-B hepatitis. *Gastroenterology*, 101: 497-502.
- Choo QL, Berger K, Kuo G and Houghton M. 1990. Detection and mapping of immunologic Epitopes expressed by bacterial cDNA clone of the hepatitis C virus. In: Hollinger FB, Stanley ML, Margolis HS, The 1990 *International Symposium On viral Hepatitis and Liver Disease*. Baltimor, USA: Williams & Wilkins, 345-346.
- Choo QL, Kuo G, Weiner AJ, Overby LR, Bradley DW, Houghton M. 1989. Isolation of a cDNA derivd from a blood-borne non-A, non-B viral hepatitis genome. *Science*. 244: 359-62.
- Choo QL, Richman KH, Han JH, Berger K, Lee C, et al. 1991. Genetic organization and Diversity of the hepatitis C virus. *Proc Natl Acad Sci USA*, 88: 2451-5.
- Choo QL, Weiner AJ, overby LR, et al. 1990. Hepatitis C virus: The major causative agent Agent of viral non-A, non-B hepatitis. *Br Med Bull*, 46: 423-441.
- Choo QL, Weiner Aj, Overby LR. Kuo G and Houghton M. 1990. Hepatitis Cvirus : The major causative agent of viral non-A, non-B hepatitis. *BrMed Bull*, 46: 426-441.
- Christiano K, Baker B, Di Bisceglie A and Feinstone S. 1990. Detection of hepatitis C viral RNA by the polymerase chain reaction. In : Hollinger FB, Stanley ML, Margolis HS. Eds. *The 1990 International Symposium on Viral Hepatitis and Liver Disease*. Baltimor, USA: Williams & Wilkins, 374-6.
- Christopher J. Tibb and Heather M. Smith. 2001. *Viral Hepatitis*, 153-160

- Contreras M, Barbara J, Anderson CC. 1991. Low incidence of non-A, non-B posttransfusion hepatitis in London confirmed by hepatitis C virus-serology. *Lancet*, 337: 753-7.
- Creese, A. And Parker, D. 1994. *Cost Analysis in Primary Health Care*. Geneva: World Health Organization.
- Davis GL, Balart LA, Schiff ER. 1989. Treatment of chronic hepatitis C with recombinant interferon alfa: a multicenter randomized controlled trial. *N Eng J Med*, 321: 1510-6.
- Di Bisceglie A, Conjeevaram H, Fried M, et al. 1995. Ribavirin as monotherapy for chronic hepatitis C: a randomized double-blind, placebo-controlled trial. *Ann Intern Med*, 123: 897-903.
- Di Bisceglie A, Shindo M, Fong T-I, et al. 1994. A pilot study of ribavirin therapy for chronic hepatitis C. *Hepatology*, 16: 649-54.
- Donald M Mclean. 1989. Virological infections for students and practitioners of Medicine and Allied Health Sciences. Springfield; Illinois: Charles C Thomas Pleblisger, 627-29.
- Donohur JG, Nelson KE and Munor A. 1992. Antibody to hepatitis C virus RNA in Chronic Non-A, non-B liver disease. *Gastroenterology*, 102: 692-4.
- Drummond, M.F.1997. *Method for the Economic Evaluation of Health Care Programmes* (second edition). Toronto: Oxford University Press.
- Dusheiko G, Main J, Thomas H, et al. 1996. Ribavirin treatment for patients with chronic hepatitis C: results of a placebo-controlled study. *J Hepatol*, 25: 591-8.
- Estaban JI, Gonzalez A and Hernandez JM. 1990. Open prospective efficacy trial of anti-HCV screening of blood donors to prevent posttransfusion hepatitis: Interim report of the Baveclona PTH study. In : Hollinger FB, Stanley ML, Margolis HS, eds. *The 1990 International Symposium on Viral Hepatitis and Liver disease*. Baltimor, USA: William & Wilkins, 431-3.

- Esteban JI, Esteban R and Vilacomiul. 1989. Hepatitis C virus antibodies among risk groups in Spain. *Lancet*, 294-7.
- Esteban JI, Gonzalez A, Hernandez JM, et al. 1990. Evaluation of antibodies to hepatitis C virus in study of transfusion associated hepatitis. *N Engl J Med*, 323: 1107-1112.
- Estoban R, Esteban JI and Loper-talarera JC.1990. Epidemiology of hepatitis C virus Infection. In : Hollisher FB, Stanley ML, Margolis HS eds. *The 1990 International Symposium on Viral Hepatitis and Liver isease*. Edited by Baltimor, USA: William & Wilkins, 413-15.
- Farci P, London TW, Wong DC, et al. 1992. The natural history of infection with hepatitis C Virus (HCV) in chimpanzees: Comparison of serologic response measured with first and second generation assays and relationship to HCV viremia. *J infect Dis*, 165: 106-11.
- Fattovich G, Giustina G, Degos F, et al. 1997. Morbidity and mortality in compensated cirrhosis C: a retrospective follow-up study of 384 patients. *Gastroenterology*, 112: 463-72.
- Feinstone SM. 1990. Blood-borne non-A, non-B hepatitis. In : Belshe RB ed. *Textbook of Human Virology*. 2nd ed. St. Louis: Mosby-Year Book. Inc., 769-780.
- Food and Drug Administration U.S. Department of Health and Human Services Public Health Service. FDA Licenses Improves Supplemental Tedt for Hepatitis C, 1999. (Available: <http://www.who.int>, June 1, 2001).
- Fujiyama S, Kawano S and Sato S. 1991. The prevalence of anti-HCV antibodies in hemodialysis patients. *Gastroenterol Japonica*, 26: 206-8.
- Giovannini M, Tagger A, Ribero ML, Zuccotti G, Pogliani L, Grossi A, et al. 1990. Maternal-infant transmission of hepatitis C virus and HIV infection: A possible interaction. *Lancet*, 335-116.
- Grakoui A, Wychowski C, Lin C. 1993. Expression and identification of hepatitis C virus polyprotein cleavage products. *J Virol*, 67: 1385-95.

- Gutierrez P, Orduna A and Bratos M.A. 1992. Prevalence of anti-hepatitis C virus antibodies in positive FTA-ABS non-drug abusing female prostitutes in Spain. *Sexually Transmitted Diseases*, 19: 39-40.
- Hadler SC, Margolis HS. 1991. Viral hepatitis. In: *Viral infection of Human; Epidemiology and Control*. Edited by Evans AS. 3rd ed. New York: Plenum Medical book Company, 315-391.
- Hagiwara H, Hayashi N, Mita E, et al. 1992. Detection of hepatitis C virus RNA in chronic Non-A, non-B liver disease. *Gastroenterology*, 102: 692-694.
- Hepatocellular carcinoma in the United States. 1991. *Am J Gastroenterol*, 86: 335-338.
- Hijikata M, Kato N, Ootsuyama Y. 1991. Gene mapping of the putative structural region of the hepatitis C virus genome by in vitro processing analysis. *Proc Natl Acad Sci USA*, 88: 5547-51.
- Hishioka K. 1991. Hepatitis C virus infection in Japan. *Gastroenterol Japonica*, 26: 152-155.
- Hofman H and Kunz C. 1990. Low risk of health care workers for infection with hepatitis C virus. *Infection*, 18: 286-8.
- Hollinger FB. 1990. Non-A, non-B hepatitis viruses. In: Fields BN, Knipe DM. Eds. *Virology* 2nd ed. New York: Reven Press, Ltd, 2239-73.
- Hoofnagle J. 1993. Treatment. In: Zuckerman Arie J. *Viral hepatitis: Scientific Basis and Clinical Management*. Great Britain : The Bath Press, Avon, P-303-13.
- Hornbrook, M.C. 1982. Reducing the incidence of non-A, non-B post-transfusion hepatitis by testing donor blood for alanine aminotransferase: economic consideration, (Available: <http://www.findarticle.com>, June 1, 2001).

- Hosein B, Fany CT, Popovsky MA, et al. 1991. Improved serodiagnosis of hepatitis C virus Infection with synthetic peptide antigen from capsid protein. *Proc Natl Acad Sci USA*, 88: 3647-3651.
- Houghton M, et al. Hepatology. 1991. (Available: <http://www.hepnet.com>, June 1, 2001).
- Iino S, Hino K, Kuroki T, et al. 1993. Treatment of chronic hepatitis C with high dose interferon alpha-2. A multicenter study. *Dig Dis Sci*, 38: 612-18.
- Intajak, S. 1996. Cost and benefit analysis of the contracting out primary medical care to Private clinics under social security scheme. Bangkok Chulalongkorn University.
- Intron A: Background Information In: 1996. Managing the Patient with Chronic Hepatitis C. Schering-plough eds. Cheshire UK: Adelpi Communications Ltd, 4-5.
- Intron A: Background Information In : 1996. Managing the patient with Chronic Hepatitis C. Schering-Plough eds. Cheshire UK: Adelpi Communications Ltd. 7-9.
- Jott BW, Genesca J and Shih James WK. 1990. Transfusion transmitted hepatitis C virus in Open heart surgery patients. In: *The 1990 International symposium on viral Hepatitis and liver disease*. Edited by Hollinger FB, Stanley ML, Margolis HS. Baltimor, USA: William & Wilkins, 424-6.
- Kaklamani E, Trichopoulos D, Tzonou A et al. 1991. Hepatitis B and C virus and their interaction in the origin of hepatocellular carcinoma. *JAMA*, 265: 1974-1976.
- Katkov WN, Diustag JL, Cody H, et al. 1991. Role of hepatitis C virus in non-B chronic liver Disease. *Arch Intern Med*, 151: 1548-1552.
- Khemnak, P. 1990. Hepatitis C Virus Seroprevalence and Risk Factors among Patient Attending Sexually Transmitted Diseases and Aids Control Section, Regional Center, Saraburi. Bangkok: Mahidol University.

- Kleinman S, Alter H, Busch M. 1992. Increased detection of hepatitis C virus (HCV) Infected blood donors by a multiple antigen HCV enzyme immunoassay. *Transfusion*, 32: 805-19.
- Koff RS. 1991. Comment of anti-HCV screening of blood donors: The impact in Spain. *Gastroenterol*, 100: 840-841.
- Kongsin, S. 1990. Cost-Benefit Analysis of Screening HIV-Antibody (AIDS) in Venereal Disease Patients. Bangkok Chulalongkorn University.
- Kuo G, Choo GL, and Alter AJ. 1989. An assay for circulating antibodies to a major etiologic virus of human non-A, non-B hepatitis. *Science*, 362-4.
- Kuo Q, Choo QL and Alter AJ. 1989. An assay for circulating antibodies to a major etiology virus of human non-A, non-B hepatitis. *Science*, 224: 362-4.
- Leaw YF, Chien RN and Sheen IS. 1991. Hepatitis C virus infection in patients with chronic liver diseases in an endemic area for hepatitis B virus infection. *Gastroenterol Japonica*, 26: 167-9.
- Lenzi M, Johnson PM, Mcfarland IG, et al. 1991. Antibodies to hepatitis C virus in autoimmune liver disease: Evidence for geographical heterogeneity. *Lancet*, 338: 277-280.
- Lim SG, Lee CA, Charman H, Tilsed G, Griffiths PD and Kernoft P. 1991. Hepatitis C Antibody assay in a longitudinal study of hemophiliacs. *Br J Haematol*, 78: 398-402.
- Lok, A. Diagnosis of Hepatitis C. 1997. (Available: <http://www.hepnet.com>, June 1, 2001).
- Luksamijarulkul P, Plucktaweesak S. 1996. High hepatitis C seroprevalence in Thai intravenous drug abusers and qualitative risk analysis. *Southeast Asian J Trop Med Public Health*, 27: 654-8.

- Marcellin P, Boyer N, Giostra E. 1991. Recombinant human alpha-interferon in patients with chronic non-A, non-B hepatitis : a multicenter randomized controlled trial from France. *Hepatology*, 13: 393-7.
- Marcellin, P. Natural History & Treatment 2000. (Available: <http://www.hepnet.com>, June 1, 2001).
- Matsura Y, Miyamura T. 1993. The molecular biology of hepatitis C virus. *Intervirology*, 4: 297-304.
- Mattson L, Aberg B, Sydow MV and Weiland O. 1991. Incidence of hepatitis and Seroconversion to hepatitis C virus after open heart surgery in transfused and non-transfused patients in Sweden. *Scand J Infect Dis*, 23: 25-29.
- Mattson L, Grillner L and Weiland O. 1992. Seroconversion to hepatitis C virus antibodies In patients with acute post-transfusion non-A, non-B hepatitis in Sweden With a second generation test. *Scand J Infect Dis*, 24: 15-20.
- McHutchinson J, Gordon s, SchiV E, etal. 1998. Interferon alfa-2b alone or in combination with ribavirin as initial treatment for chronic hepatitis C. Hepatitis Interventional Therapy Group. *N Engl J Med*, 339: 1485-92.
- Meng ZD, Sun YDD and Chen XZ. 1991. A serological study of hepatitis C virus infection in Plasmapheresis donors. *Chin Med J (Engl)*, 104: 494-7.
- Michael F. 1997. *Drummond"Method for the Economic Evaluation of Health Care Programmes (second edition)"*, 14.
- Miller RH, Purcell RH. 1990. Hepatitis C virus share amino acid sequence simlality with Pestiviruses and flaviviruses as well as members of two plant virus supergroups. *Proc Natl Acad Sci USA*, 87: 2057-61.

- Myint H, Soe MM, Khin T, et al. 1985. A clinical and epidemiological study of an epidemic Of non-A, non-B hepatitis in Rangoon. *J Trop Med Hyg*, 34: 1183-1189.
- Nelson, B. Be in Charge: Chapter 7 Hearing Your Diagnosis. (Available: <http://www.findarticle.com>, June 1, 2001).
- Nuchprayoon T, Somjitta S, Adulwijit S, Chummijarakij T. 1993. Hepatitis C virus antibody in blood donors. *Chula Med J*, 37: 443-9.
- Poovorawan Y, Pongpanlert W, Chumdermpadetsuk S, Sakulrumrung R, Tsrasena S. 1991. The prevalence of hepatitis C virus antibodies among high risk groups in Thailand. *Southeast Asian J Trop Med Public Health*, 22: 133-4.
- Poovorawan Y. 1992. Hepatitis C. *Clinic*, 7: 193-6.
- Poynard T, Bedossa P, Chevallier M, et al. 1995. A comparison of three interferon alpha-2b regimens for the long-term treatment of chronic non-A, non-B hepatitis. *N Engl J Med*, 332: 1457-62.
- Poynard T, Bedossa P, Opolon P, et al. 1997. Natural history of liver fibrosis progression in patients with chronic hepatitis C. *Lancet*, 349: 825-32.
- Poynard T, Leroy V, Cohard M, et al. 1996. Meta-analysis of interferon randomized trials in the treatment viral hepatitis C: effects of dose and duration. *Hepatology*, 24: 778-89.
- Poynard T, Marcellin P, Lee s, et al. 1998. Randomised trial of interfero alpha 2b plus ribavirin for 48 weeks or for 24 weeks versus interferon alpha 2b plus placebo for 48 weeks for treatment of chronic infection with hepatitis C. International Hepatitis Interventional Therapy Group (IHIT). *Lancet*, 352: 1426-32.
- PR Newswire Association, Inc., 2000. AcroMetrix Announces the Release of a New Hepatitis C Virus (HCV) Nucleic Acid Controls for Blood Screening, (Available: <http://www.findarticle.com>, June 1, 2001).

- Pramoonsinsub S. 1990. Hepatitis C Virus. In: Development in gastrointestinal Diseases. 6th ed. Edited by Wongpitune W, Archrawong K and Chaipanit T. Bangkok: Krungteprethasan, 216-235.
- Prommeenate, W. 2000. Cost-Benefit Analysis of Adverse Drug Reaction Monitoring Program at Lerdsin Hospital in 1999. Bangkok: Mahidol University.
- Reichard O, Andersson J, Schvarcz R, et al. 1991. Rivavirin treatment for chronic hepatitis C. *Lancet*, 337: 1058-61.
- Renault PE, Hoofnagle J. 1991. Side effects of alpha interferon. *Seminars in Liver Disease*, 273-81.
- Rumi MG, Colombo M, Gringeri A. 1990. High prevalence of antibody to hepatitis C virus in multitransfused hemophiliacs with normal transaminase level. *Ann Intern Med*, 112: 379-80.
- Saracco G, Rosina F, Abate ML, et al. 1993. Long-term follow-up of patients with chronic hepatitis C treated with different doses of interferon. *Hepatology*, 18: 1300-5.
- Schreiber GP, Busch MP, Kleinman SH. 1996. The risk of transfusion-transmitted viral Infection: The retrovirus epidemiology donor study. *N Engl J Med*, 334: 1685-90.
- Shaughnessy, d. 2000. Providing a safe and cost-effective blood transfusion service, Hospital Pharmacist Vol.7 No.5, (Available: <http://www.org>, June 1, 2001).
- Sherker, A. 1996. Unravelling the Mystery of Hepatitis C Serology, (Available: <http://www.hepnet.com>, June 1, 2001).
- Songsivilai S, Jinathongthai S, Wongsena W, Tiangpitayakorn C, Dharakul T. 1997. High prevalence of hepatitis C infection among blood donors in northeastern Thailand. *Am J Trop Med Hyg*, 57: 66-9.

- Stark K, Bienzle U, Vonk R, Guggenmoos-Holzmann J. 1997. History of syring sharing in Prison and risk of hepatitis B virus, hepatitis C virus and human immunodeficiency virus infection among injecting drug users in Berlin. *Inter J Epidemiol*, 26: 1359-66.
- Stevens CE and Taylor PE. 1990. Perinatal and sexual transmission of hepatitis C virus. A preliminary report. In : Hallingel FB, Stanley ML, Margolis HS, eds. *The 1990 International Symposium on Viral Hepatitis and Liver Disease*. Baltimore, USA: William & Wilking, 407-9.
- Sugg U, Deinhardt F, Raschofer R and Roggendort M. 1990. Prevalence of hepatitis C virus infection in a prospective study of posttransfusion non-A, non-B hepatitis in Germany. *Science*: 436-9.
- Suzich JA, Tamura JK, Palmer-Hill F. 1993. Hepatitis C virus NS3 protein polynucleotide Stimulated nucleoside triphosphatase and comparison with the related pestivirus and flavivirus enzymes, *J Virol*, 67: 6152-8.
- Takamatsu K, Okayasu I, Koyannagi Y and Yamamoto N. 1998. Hepatitis C virus propagater in Salivary gland. *J Infect Dis*, 165: 973-4.
- Takamizawa A, Mori C, Fuke I, Manabe S, Murakami S, Fujita J, et al. 1991. Structure and Organization of the hepatitis C virus genome isolated from human carriers. *J Virol*, 65: 1105-13.
- Thammata, N. 2000. Validity of Risk Assessment form for Screening Hepatitis C virus Virus Infection and HbsAg Positive Carrier in Blood Donors. Bangkok: Mahidol University.
- Tong M, El-Farra N, Reikes A, et al. 1995. Clinical outcomes after transfusion associated hepatitis C. *N Engl J Med*, 332: 1463-6.
- Tor J, Libre JM, Carbonell M. 1990. Sexual transmission of hepatitis C virus and its relation with hepatitis B virus and HIV. *Br Med J*, 301: 1130-3.

- Tsukiyama-Kohara K, Iizuka N, Kohara M. 1992. Internal ribosome entry site within Hepatitis C virus RNA. *J Virol*, 66: 1476-83.
- Uchida T. 1994. Pathology of hepatitis C. *Intervirol*, 37: 126-132.
- Van der Poel CL, Reesink HW, Lelie PN, Leentvaar-Kuypers A, Choo QL, Kuo G, et al. 1989. Anti-hepatitis C antibodies and non-A, non-B posttransfusion hepatitis in the Netherlands. *Lancet*, 2: 297-8.
- Vassiliki P, Henry P, Gemma R, Robert K, Zhiying H, David C, Bruce H, Keith K, and William B. 1998. Increased Transmission of Vertical Hepatitis C virus (HCV) Infection to Human Immunodeficiency Virus (HIV)-Infected Infants of HIV-and HCV-Coinfected Woman. *J Infect Dis*, 178: 1047-52.
- Vrieling H, Zaaijer HL, Reesink HW. 1995. Comparison of two anti-hepatitis C virus Enzyme-linked immunosorbent assays. *Transfusion*, 35: 601-4.
- Wang JT, Wang TH, Lin JT, sheu JC, Lu CZ and Chen DS. 1992. Improved serodiagnosis of Post-transfusion hepatitis C virus infection by a second-generation Immunoassay based on multiple recombinant antigens. *Vox Sang*, 62: 21-24.
- Waxman I, Baker B, Feinstone SM and Di Bisceglie AM. 1991. Detection of hepatitis C viral RNA in serum of a patient with acute non-A, non-B hepatitis. *Am J Gastroenterol*, 86: 1240-2.
- Weiner AJ, Truett MA, Rosenblatt J, et al. 1990. HCV : Immunologic and hybridization Based diagnostics. In : Hollinger FB, Stanley ML, Margolis HS eds. *The 1990 International Symposium on Viral Hepatitis and Liver Disease* Baltimore, USA William & Wilkins, 360-3.
- WHO, Fact Sheet No. 164. 2000. (Available: <http://www.who.int>, June 1, 2001).

Wong, J. Pharmacoeconomics of Combination Therapy for HCV. 2000 (Available: <http://www.hepnet.com>, June 1, 2001).

WU JC, Lin HC and Jeng FS. 1993. Prevalence infectivity and risk factor analysis of hepatitis C virus infection in prostitutes. *J Med Virol*, 39: 312-7.

Yoo BJ, Spaete RR, Geballe AP. 1992. 5' End-dependent translation initiation of hepatitis C Viral RNA and the presence of putative positive and negative translational control elements within the 5' untranslated region. *Virology*, 191: 889-99.

Zanetti AR, Tanzi E, Paccagnini S. et al. 1995. Mother-to-infant transmission of hepatitis C virus. *Lancet*, 345: 289-91.

Zuckerman J, Clewley G and Griffiths. 1994. Prevalence of hepatitis C antibodies in clinical health-care. *Lancet*, 343: 1619.

APPENDIX

Appendix I

CHRONIC

| Physical Check up | Baht/year |
|---|-----------|
| CBC, albumin, ALT, AST, TBI, DBI, HCV-RNA, Anti-HCV | 4,620 |
| CBC, Albumin, ALT, AST, TBI, DBI | 370 |
| Total | 4,990 |

Source: Gastroenterology department, Chulalongkorn Memorial Hospital.

Appendix II

CIRRHOSIS

| Treatment | Price(Baht) | Remark |
|---------------|-------------|------------------------|
| 1. Ultrasound | 600 | Every 3 months/5 years |
| 2. AFP | 150 | Every 3 months/5 years |
| Total | 750 | 15,000 Bahts/5 years |

| Medication | Tablet/day | Price(Baht) | Per/Month(Baht) | 5 years |
|----------------------|------------|-------------|-----------------|------------|
| 1. Lasix (40mg) | 2 | 03.70 | 222.00 | 13,320.00 |
| 2. Aldactone (100mg) | 2 | 11.10 | 666.00 | 39,960.00 |
| 3. Lactulose (30cc) | - | 789.00 | 2,349.00 | 140,940.00 |
| Total | | 803.80 | 1,1237.00 | 194,220.00 |

Source: Gastroenterology department, Chulalongkorn Memorial Hospital.

Appendix II

PATIENT HISTORY

Carcinoma

| Patient | Age (Year) | Sex | Admitted date | Discharge date | Days | Diagnosis | Expenditure IPD | | | |
|---------|-----------------|--------|------------------|-------------------|-------|-----------|-----------------|------------|--------------|------------|
| | | | | | | | Treatment | Medication | Room service | Total |
| 1 | 57 | Male | 25/6/44 | 5/11/44 | 15 | carcinoma | 58,423.80 | 4,456.20 | 1,500.00 | 64,380.00 |
| 2 | 45 | Male | 8/8/44 | 10/8/44 | 3 | carcinoma | 23,613.00 | 3,481.80 | 300.00 | 27,394.80 |
| 3 | 56 | Male | 10/2/44 | 14/2/44 | 5 | carcinoma | 10,840.00 | 9,605.00 | 500.00 | 20,945.00 |
| 4 | 66 | Male | 29/1/44 | 30/1/44 | 2 | carcinoma | 7,740.00 | 433.90 | 200.00 | 8,373.90 |
| 5 | 72 | Male | 8/7/44 | 28/8/44 | 52 | carcinoma | 6,275.00 | 5,086.22 | 5,200.00 | 16,561.22 |
| 6 | 60 | Male | 4/4/44 | 6/4/44 | 3 | carcinoma | 1,030.00 | 47.40 | 300.00 | 1,377.40 |
| 7 | 43 | Male | 30/4/44 | 26/7/44 | 18 | carcinoma | 23,703.00 | - | 200.00 | 23,903.00 |
| 8 | 54 | Male | 23/3/44 | 27/3/44 | 5 | carcinoma | 770.00 | 323.50 | 500.00 | 1,593.50 |
| 9 | 50 | Male | 30/4/44 | 30/04/44(Death) | 1 | carcinoma | 2,362.00 | 523.00 | 100.00 | 2,985.00 |
| 10 | 68 | Female | 19/5/44 | 20/5/44(Death) | 1 | carcinoma | 670.00 | 455.50 | 200.00 | 1,325.50 |
| 11 | 40 | Female | 22/1/44 | 25/1/44 | 4 | carcinoma | 7,370.00 | 149.50 | 400.00 | 7,919.50 |
| 12 | 44 | Male | 9/5/44 | 10/5/44 | 2 | carcinoma | 1,130.00 | 42.60 | 200.00 | 1,372.60 |
| 13 | 56 | Male | 18/2/44 | 22/02/44(Death) | 5 | carcinoma | 8,250.00 | 2,088.70 | 500.00 | 10,838.70 |
| 14 | 52 | Male | 3/1/44 | 5/1/44 | 3 | carcinoma | 8,090.00 | 255.10 | 300.00 | 8,645.10 |
| 15 | 62 | Male | 25/6/44 | 27/6/44 | 3 | carcinoma | 32,440.00 | 1,946.40 | 300.00 | 34,686.40 |
| 16 | 47 | Female | 3/2/42 | 23/1/44 | 66 | carcinoma | 344,933.30 | 25,444.42 | 6,600.00 | 376,977.72 |
| Average | | | | | 11.75 | | 33,602.51 | 3,396.20 | 1,081.25 | 38,079.96 |

Source: Division of Medical recorded, Chulalongkorn Hospital

BIOGRAPHY



Ms. Suparathana Ranumas was born on 19 January 1971, Nakhon Si Thammarat. She completed her Degree in Nursing Science from Assumption University in 1999 and furthered study in Master of Science in Health Economics, Faculty of Economics, Chulalongkorn University.