

PROGRESS IN CHEMOTHERAPY

Vol. 2 ANTIBACTERIAL · ANTIVIRAL · CHEMOTHERAPY

PROGRESS IN CHEMOTHERAPY

VOLUME II

ANTIBACTERIAL, ANTIVIRAL CHEMOTHERAPY

PROGRESS IN CHEMOTHERAPY
(Antibacterial, Antiviral, Antineoplastic)

**Proceedings of the 8th International
Congress of Chemotherapy Athens, 1974**

Editor
GEORGE K. DAIKOS

With the editorial assistance of
D.N. PAPANASTASSIOU

Volume II: Antibacterial, Antiviral Chemotherapy

HELLENIC SOCIETY FOR CHEMOTHERAPY
ATHENS 1974

Publisher

Hellenic Society of Chemotherapy Athens, Hellas

All rights, including reproduction in any form as well as translation, reserved by authors and publisher. It is not permitted, without written authorization by the publisher, to reproduce the book or parts of it by photomechanical procedures (photocopies, microcopies) or - by using electronic or mechanical systems - to effect storage, systematic computation, or distribution.

Composition and printing: N. Litsas, 70 M.Asias, Athens, Hellas.

© Hellenic Society for Chemotherapy Athens, Hellas 1974.

8th INTERNATIONAL CONGRESS OF CHEMOTHERAPY
Athens, September 8-14, 1973

Organizers
HELLENIC SOCIETY OF CHEMOTHERAPY
President G.K. DAIKOS

INTERNATIONAL SOCIETY OF CHEMOTHERAPY
President P. MALEK
Vice Presidents H. ERICSSON
G. GRASSI
P. RENTCHNICK
G. SAVAGE
G. WERNER
H. UMEZAWA
Secretary General H. KUEMMERLE
Associate Secretary A. MODR
Treasurer H. RAMIOUL
Members G. K. DAIKOS

Organizing Committee

Honorary President B. MALAMOS
President G. K. DAIKOS
Secretary General P. KONTOMICHALOU
Treasurers A. ARSENI
D. BILALIS
Members Ph. FESSAS
J. PAPAVALASSILIOU
D. RAZIS
D. LOUKOPOULOS

Publication Committee

G. K. DAIKOS
P. KONTOMICHALOU
D. LOUKOPOULOS
M. KONSTANTOULAKIS

Acknowledgements

The publication of these proceedings was partially supported by the Ministry of Culture and Sciences of Hellas

Congress Sponsors

The Ministry of Culture and Sciences
Upjohn International
Essex-Chemie A.G (Schering Co.)
Eli Lilly Co.
Beecham Laboratories Ltd.
C. Pfizer Co. Inc.
Wellcome Foundation
Abbott Laboratories
Olympic Airways
Ciba-Geigy S.A.
Squibb International
Professor D. Varonos

CONTENTS

VOLUME II

ANAEROBIC INFECTIONS

(Panel Presentations - Free Communications)

Panel Presentations

Anaerobic bacterial diseases	
A.T. Willis	5
Clinical diagnosis of endogenous anaerobic infections	
J.G. Bartlett	17
Laboratory diagnosis of endogenous anaerobic bacterial infections	
V.R. Dowell, Jr.	24
Methods for testing antibiotic susceptibility of anaerobic bacteria	
J.A. Washington II	33
Antibiotic susceptibility patterns of gram negative anaerobic bacilli	
H. Werner	38
Antibiotic susceptibility patterns of anaerobes other than gram-negative bacilli	
H. Beerens	45
The influence of antibiotics on the anaerobic flora of the intestine	
K. Ueno, K. Ninomiya, K. Watanabe, I. Mochizuki, Y. Shimizu, T. Miwa and S. Suzuki	51
Current recommendations for therapy of anaerobic bacterial infections	
S.M. Finegold	59

Free Communications

Disc sensitivity testing of anaerobic bacteria	
Y. Kanazawa and T. Kuramata	67
Chemotherapy of anaerobic infections	
S. Ishiyama, I. Nakayama, H. Iwamoto, S. Iwai, M. Takatori, T. Kawabe	73
Infections due to bacteroides species	
D.A. Leigh	79

Sensitivity of the genus <i>bacteroides</i> to rifampicin and other antibiotics G. Rodriquez, S. Conzalez, P. Prieto	89
The effect of clindamycin on the manifestations and clinical course of <i>bacteroides</i> infection P. Saphyakhajon, and P.C.T. Dickinson	92
Clindamycin in infections of the female genital tract R.M. Swenson, T.C. Michaelson, M.J. Daly, and E.H. Spaulding	

EVALUATION OF ANTIBACTERIAL AGENTS

Free Communications

Synergism between penicillins E.J. Russell, and R. Sutherland	109
Bactericidal effect of amoxycillin in vivo compared with ampicillin P.A. Hunter, G.N. Rolinson and D.A. Witting	113
Antibacterial activity of cyclacillin in vivo and in vitro: Effects on gram-negative organisms H. Friedman and G.H. Warren	119
Ticarcillin: Stability and compatibility studies B. Lynn	127
Activity of Cefazolin and other cephalosporins on bacteria causing urinary infections S. Castellino, G. Meinardi, V. Mandelli, I. De Carneri	131
Experimental studies on the new cephalosporin antibiotic cefazolin R. Hoffmann, W. Vomel	136
Preclinical studies with cephradine J.W. Poutsiake, H.H. Gadebusch, C.H. Keysser and E.C. Schreiber	142
The antibacterial activity of cefamandole, a new cephalosporin antibiotic, compared with that of cephaloridine, cephalothin and cephalixin S. Eykyn, and I. Phillips	150
Susceptibility of clinically important bacteria to new antibiotics G. Pulverer	154
Comparative study of cephalosporin antibiotics. Antibacterial activity in vitro D. Janovska, F. Vymola, M. Hejzlar	162
Preliminary studies on new semi-synthetic derivatives of ampicillin and cephalixin P.G. Gooding, E. Berman, J. Rubinfeld, and A. Weber	167
Tobramycin susceptibility testing: An analysis of data from 51 clinical laboratories W.E. Wick, and D.A. Preston	173
Bacteriological studies with tobramycin J. Andrews, J.D. Williams	181
In vitro activity and assay of tobramycin R. Ryden	188

In vitro effects of tobramycin and gentamicin on <i>pseudo-</i> <i>monas aeruginosa</i>	
M. Fooke-Achrerrath and H. Neussel	192
The bactericidal efficacy of sulphamethoxazol/trimetho- prim on different species of bacteria	
R. Gallien	198
Co-trimoxazole in sulfonamide resistant infections	
E. Böhni	204
Some sources of error in monitoring antibiotic treatment	
J. Elfving and O. Pettay	211
The effect of antibiotics produced by microorganisms from the intestinal flora of the larvae of <i>Galleria mellonella</i> L. on mycobacterium	
A. Paszewski	219

Free Communications

Studies with intravenous trimethoprim	
A.M. Geddes, J.A.D. Goodall, and C.M. Boosey	225
Intravenous bactrim in childhood	
N. Bax, R. Krenn and P.P. Rickham	229
Trimethoprim-sulphamethoxazole and nitrofurantoin in urinary tract infections, a controlled clinical study	
A. Lövestad, G. Sabel, M. Stefansson, B. Gästrin and R. Lundström	234
Comparative trial of trimethoprim-sulphamethoxazole and doxycycline in treatment of acute exacerbations of chronic bronchitis	
E. Aspevik, L. Ekroth, K. Renmarker	237
Cure rate in typhoid and paratyphoid B-carriers with trimethoprim-sulfonamide - Present stage of a joined long term study	
H. Pichler, K. Fabricius, H. Knothe and K.H. Spitzzy	243
The treatment of shigella infections with trimethoprim +superseptyl	
D. Munnich, M. Lakatos	247
The use of co-trimoxazole in tropical regions	
J. Huys, G. Van Den Berghe, P. Freyens and J. Kayihigi	251
Treatment of brucellosis with the TM-SMZ association	
F. Colonnello	254
The treatment of typhoid carriers with amoxycillin and in combination with probenecid	
D. Munnich, I. Bekesi, M. Lakatos, E. Bardovics	258
Clinical and laboratory investigations on ticarcillin, an anti-pseudomonal antibiotic	
R. Wise, D.S. Reeves	263
Comparatives studies of ticarcillin and carbenicillin	
J. Klastersky, P. Dor and A. Henri	267
Ticarcillin treatment of various infections	
G.K. Daikos, Gr. Fioretzis, G. Piperakis, H. Giamarellou	272

Ticarcillin (BRL 2288) in severe respiratory infections A. Pines	276
Antibacterial activity of sulbenicillin against gram negative bacilli, especially pseudomonas	279
Treatment of pseudomonas infections with sulbenicillin R. Norrby, J. Kjellander, and A. Lanner	283
Laboratory and clinical studies with indanyl-carbenicillin (carindacillin) A. Hany, F.H. Kayser, and G.A. Lupi	288
Evaluation of indanyl carbenicillin in the treatment of severe chronic urinary tract infection F.W. Reutter and B. Alloatti	291
Indanyl-carbenicillin in the treatment of urinary tract infection in gynecological patients M. Dedes, and Hirsch	295
Clinical and laboratory studies of a new carbenicillin (indanyl carbenicillin) in urinary tract infection Ch. Krasemann, P. Brühl, H.P. Bastian, R. Heerhorst	298
Comparative multicentre trial of cephacetrile and am- picillin in the treatment of urinary tract infections C. Ponticelli, P. Zucchelli, G. Casucci, I. Cervellati, C. Dalla Rosa, C. Giro, M. Motolese	302
Serum and middle ear levels of cephalixin, a new cephalosporin, in acute otitis media S.E. McLinn	305
A critical evaluation of the new cephalosporins W.J. Holloway	311
A clinical and laboratory evaluation of the effect of cephradine on patients with upper respiratory tract infections B. Meder, A.S. Malmberg, and J. Wersäll	318
Worldwide clinical experience with cephradine for infection J.A. Hubsher, D.L. Caloza and G.E. Bernfeld	321
A multi-center clinical trial with oral cephradine J.A. Hubsher, A. Zaki, R.W. Semar and G.E. Bernfeld	328
Clinical and laboratory evaluation of cefazolin E.L. Quinn, F. Cox, E. Fisher, T. Madhavan	336
In vitro and in vivo evaluation of cefazolin, a new cephalosporin antibiotic W. Vomel, R. Hoffmann	339
Clinical experience in treatment of respiratory and tissue infections with cefazolin P.M. Shah, E.B. Helm, W. Stille	349
Cefazolin sodium in the treatment of pneumococcal pneumonia M.J. Raff, J.H. Rogers, T. Smithivas	355
In vitro, pharmacological and clinical evaluation of cefa- zolin, a new cephalosporin antibiotic D. Kaye, S.P. Levison, K. Ries, D. Tanphaichitra, and M.E. Levison	360
Clinical studies of cefazolin with large doses against stubborn urinary tract infections M. Ohkoshi, I. Nagakubo, K. Niimura, K. Suzuki and Y. Naide	365

Clinical evaluations of cefazolin by oral administration against acute urinary tract infections K. Suzuki, Y. Naide, M. Ohkoshi, I. Nagakubo	372
The use of cefazolin sodium in genito-urinary infections A.H. Bennett, F.P. Morse	379
Cefazolin: A new cephalosporin antibiotic experience in genitourinary infections R.R. Landes	382
Clinical and pharmacological experience with cephacetrile (Ciba 36, 278-Ba), a new cephalosporin V. Whitmarsh, D. Reeves, R. Wise, P. Hepburn	386
Clinical and pharmacological studies with Ciba 36278-Ba A.P. Gillett, J.D. Williams, J. Kosmidis, J. Andrews	391
Clinical long term trial on a new cephalosporanic derivative: Ciba 36,278-Ba V. Mioli, L. De Vizia, R. Marrucci, P. Pacchiarotti and R. Tarchini	396
Clinical and pharmacological studies with tobramycin A.M. Geddes, J.A.D. Goodall, C.F. Speirs and J.D. Williams	400
Tobramycin treatment of various infections G.K. Daikos, G. Piperakis, N. Kampoulakis, A. Ioannidou, E. Kouroumalis, Ai. Demetriadou	404
Tobramycin: Clinical and microbiological evaluation E. Schoutens, and E. Yourassowsky	407
Experiences with tobramycin in clinical and experimental infections S. Saslaw	412
Studies on tobramycin: a) in vitro activity on gram-negative bacteria and pharmacodynamics in healthy subjects and in nephropathic patients; b) therapy of urinary tract infections in man S. Pauluzzi, F. De Rosa, U. Buoncristiani, F. Fabiani, R. Frongillo	417
Clinical experience with tobramycin E.B. Helm, P.M. Shah, W. Stille	421
A comparison of tobramycin - carbenicillin against gentamicin-carbenicillin in the treatment of acute infections in cancer patients T.R. McNitt, L.O. Gentry	425
Treatment of gram negative infections in surgical patients with a new aminoglycoside - tobramycin H.H. Stone, L.D. Kolb, C.E. Geheber, and C.A. Currie	431
Tobramycin in the therapy of post-surgical gram-negative meningitis A.B. Kaiser, and Z.A. McGee	433
Treatment of pseudomonas aeruginosa infections with Tobramycin; clinical, pharmacological and bacteriological results F.A. Waldvogel, M. Frochaux, S. Brancheva, W. Lehmann	437

Laboratory and clinical evaluation in infants and children of tobramycin, an aminoglycoside antibiotic P. Begue, T. Horodocanu, and R. Laplane	444
A clinical study on aminoglycosides: 3', 4' dideoxykanamycin B and tobramycin A. Saito, F. Matsumoto, J. Shimada, M. Omori, K. Shiba, Y. Ueda	448
On DKB treatment of urinary infection T. Ichikawa	454
Clinical study on 3', 4'-dideoxykanamycin B (DKB) in the field of otorhinolaryngology B. Sambe	458
Experience with gentamicin with special reference to hospital infections J. Falisevac, S. Schonwald, J. Rulnjevic, T. Tambic	462
Our experience with gentamicin in 200 cases of open-heart surgery J.M. Caffarena, M.C. Ruiz and F.G. Sanchez	466
Laboratory and clinical investigation of gentamicin in surgical infections I. Tulikoura and P. Peltokallio	469
Single daily dosage treatment of urinary tract infections with gentamicin A. Mosegaard, D.I. Smith, P.O. Madsen	476
Gentamicin in urinary tract infections A.M. Ferreira, J.B. De Oliveira and F.E. Calais Da Silva	482
Significant improvement of renal function in patients with chronic pyelonephritis after gentamicin therapy monitored by blood level assay M.S. Sabbour, L.M. Osman, N.A. Allouba and A.H. Lotfy	490
Gentamicin therapy of gram-negative bacillary septicaemia C.O. Solberg	494
Gentamicin in the treatment of bacterial infections of the respiratory tract in pediatrics D. Bassetti and B. Roscioli	
Clinical-pharmacological investigations with gentamicin E. Ivan, A.E. Nagy, and L. Kollar	503
Preliminary results in the treatment of acne rosacea with rifampicin M. Gandola, L. Mainardi, A. Bissanti, A. Luvara, G. Peverelli	508
The activity of rifampicin in psittacosis infection K. Jo	513
Recent Observations of the use of kitasamycin, (leucomycin) B.C. Stratford, and S. Dixon	518
Clinical evaluation of intravenous doxycycline survey of multicenter clinical program in Spain M.M. Usano	527

Intravenous doxycycline clinical study with a ready-made solution E. Klemola	534
In vitro and in vivo antibacterial activity of 7-chloro-6-methylene-5-oxytetracycline and its intra-cutaneous utilization in experimental animals V. Goffredo, F. Scrollini	537
The antianabolic effect of certain tetracyclines R.D. Mann, and H.F.J. Lahon	541
Variations of skin reactivity to histamine after administration of TAO F. Catizone, L. Bianchi, M. Tavano	546
Triacetyloleandomycin-induced ultrastructural modifications of the nuclear chromatin of rat hepatocytes W. Djaczenko, E. Garaci, A. Benedetto, and E. Genazzani	549

NEW DRUGS

Free Communications

Clinical pharmacology of 6-{D-a-(guanylureido) phenylacetamido}penicillanic acid (BL-P1654) G.P. Bodey, and N. Horikoshi	555
Synthesis and antimicrobial activity of 2-nitroimidazoles substituted in position 5 B. Cavalleri, V. Arioli and G.C. Lancini	560
A new heterocyclic ring system: synthesis of as-triazino/6,5-c/quinoline derivatives with high antibacterial activity L. Pallos, E. Berenyi and P. Benko	566
Chlorhexidine - bacteriological evaluation J. Vranova	570
Selective toxicity of chlorhexidine J.L. Honigman	578
Experimental studies with an antibacterial substance, taurolin D.S. Reeves, and F.A.W. Schweitzer	583
EM 49: A new broad-spectrum peptide antibiotic for the management of local infections R.J. McRipley, E. Meyers, D. Isaacson, W.L. Parker, W.E. Brown, and H. Gadebusch	587
Experimental study of biclothymol V. Chavdarova, T. Harizanova, L. Zheljazkov, P. Manolova	595
Carbohydrates of spirulina maxima N.G. Martinez Nadal	599
Oxolinic acid, its antibacterial spectrum, human biotransformation and place in the treatment of urinary tract infections H. Graber, M. Arr, and T. Perenyi	607

SIDE EFFECTS OF CHEMOTHERAPY

(Panel Presentations - Free Communications)

Panel Presentations

Side reactions to chloramphenicol in mouse erythroblasts	
P. Knolle	617
Chromosomal aberrations due to cytostatic agents	
A. Stacher and F. Ruzicka	618
Adverse reactions of chemotherapeutic agents as seen in a national monitoring centre	
B. Westerholm	619
Adverse reactions from chemotherapeutic drugs in hospitals	
I. Borda	620

Free Communications

Rossible eighth nerve toxicity with clindamycin	
P.C.T. Dickinson, and P. Saphyakhajon	625
The ototoxicity of gentamicin	
O. Tjernstrom and N.G. Toremalm	628
Experimental and clinical studies on the ototoxicity of tobramycin	
P. Federspil	634
Clinical and histological data on the liver toleration of intramuscular oleandomycin	
F. Catizone	638
Significance of the hydrophobic character of penicillins for their neurotoxicity	
T.R. Weihsrauch, D. Hoffler, and J. Krieglstein	644
Results of routine skin testing in prevention of severe allergic penicillin reactions	
J. Towpick and E. Bernardt	649
Rifampicin and delayed hypersensitivity reactions	
G. Gialdroni-Grassi, E. Pozzi, P. Menghini	656
Laukemia following chloramphenicol associated aplastic anemia	
K.P. Hellriegel and R. Gross	663
Studies on the influence of chloramphenicol on leukocyte bactericidal activity	
N. Kitani, S. Takehiro, F. Saito, M. Hori and Y. Kokubun	668
Antibiotic therapy with account of leucocytal tolerance	
E.M. Sergeyuk, P.N. Yurenev, V.S. Mayat	673
A prospective clinical study of possible side-effects of mexaform	
B. Bezjak, V. Breitenfeld, S. Schonwald, V. Car, N. Puskaric-Hamel, J. Vrancic, I. Lj. Hotujac	677

CLINICAL CHEMOTHERAPY
(Panel Presentations - Free Communications)

Panel Presentations

Chemotherapy of urinary infection W. Brumfitt, and J. Kosmidis	685
Importance of asymptomatic bacteriuria at various ages A.S. Dontas	693
Renal excretion of chloramphenicol and its metabolites in chronic renal impairment O. Schück, V. Prát, J. Grafnetterova, I. David, E. Kotanova, V. Reitschlagerova	694

Free Communications

Prevention of recurrent urinary infection in females by prophylactic chemotherapy (methenamine mandelate) with or without diuresis W. Brumfitt, R. Pursell, I. Franklin, and B.I.D. Davies	699
Factors affecting bacterial excretion during the "water-loading test" in bacteriuria P. Papanayiotou, G.N. Tsekos, K. Papanayiotou, S.G. Marketos and A.S. Dontas	705
Tetracyclines in urinary tract infections: In vitro sensitivity, urinary concentration and antibacterial effect F. Villani, A. Bohnet, J.L. Schelling, V. Bonifas	710
Comparative study of indanyl carbenicillin and gentamicin in urinary tract infections T. Germinale, and C. Giglio	714
The problem of infection after renal transplantation in man M. Papadimitriou, A. Dimitriadis, G. Papadopoulos, Ch. Zamboulis, P. Metaxas and D. Valtis	722
Septic shock in urology caused by gram-negative bacteria H. Haschek, P. Porpaczy, K. Kofler	725
The management of chest infection in cystic fibrosis J.A. Raeburn, and W.M. McCrae	730
Studies on postoperative pseudomonas infections in the surgical field N. Shinagawa, K. Shibata, M. Fujii, Y. Suzuki, and T. Muramatsu	735
Intravenous doxycycline in abdominal surgery concomitant intraperitoneal use S.F. De Lis	740
Clinical-pharmacological base of antibiotics choice in treatment of surgical infections A.M. Marshak, V.P. Jakovlev	744

Chemotherapy, postabortum septicemia A. Vata, S. Dimitriu, G. Cuciureanu, M. Mihalcea	747
Intravenous doxycycline hydrochloride in acute cholecystitis L. Wählby and L.O. Dahlbäck	751
Antibiotics in biliary surgery. Comparative results in recent years B.G. Kourias, E. Papaevangelou, and S. Mantonakis	754
The treatment of septicemia during granulocytopenia an observation of 24 cases J. Sternon, M. Van Haeverbeek and J.P. Butzler	757
Effects of antimicrobial treatment on the prognosis in septicemia G. Koya and M. Maesawa	764
Present concepts in the treatment of osteomyelitis with antibiotics C. Rigopoulos, B.T. Papathanassiou, A. Asimakopoulos and D. Tsvoglou	769
Bacterial endocarditis: Clinical and bacteriological pattern changes S.D. Mouloupoulos, C. Roussos, and P. Kontomichalou	774
The treatment of bacterial endocarditis H. Boudoulas, G. Dalamangas, A. Kontopoulos, G. Papazachariou, D.J. Valtis	780
Chemotherapy of acne vulgaris M. Stefanovic	784
The significance of bacteriological condition of the endocervix on the female sterility A. Stavropoulos, J. Vlachos, and D. Aravantinos	787
Toxic and allergic reactions to rifampicin and to other drugs in the treatment of tuberculosis J.M. Smith	792
Combined application of orotic acid with tuberculosta- tics and antibiotics in experimental tuberculosis T. Harizanova, V. Simova, A. Dobрева, T. Meshkov	795
An assessment of ambulatory anti-tuberculous chemothe- rapy with rifadin, isoxyl and myambutol, over a ten year period in Dublin C.S. Gallen	798
Limits of total body decontamination G.A. Nagel, R. Hughes, and W. Seiler	801
Gonorrhea in the United States-past and present J.D. Millar	807
National program for monitoring the therapy of uncomplicated gonorrhea in the USA P. Wiesner	813
In vitro antibiotic susceptibility profiles of neisseria gonorrhoeae C. Thornsberry	814
The genetics of antibiotic resistance in neisseria gonorrhoeae P.F. Sparling, F.A. Sarubbi, Jr., M.A. Maness, E. Blackman, and G. Foster	815

Status report on serological tests for the diagnosis of gonorrhea

D.S. Kellogg

821

Free Communications

Quantitative sensitivity of *N. gonorrhoeae* to antibiotics a new method using the CTA medium

U. Marcelou-Kinti, S. Papageorgiou, A. Mitroussia,
J. Capetanakis and J. Papavassiliou

829

Amoxycillin in two oral doses in the treatment of gonorrhoea

R.E. Willcox

833

Pivampicillin combined with probenecid in the treatment of acute uncomplicated gonorrhoea

L. Molin, H. Hansson, I. Juhlin, A.-S. Malmberg
and B. Nyström

839

Several years experience in the treatment of gonorrhea with various antibiotics

C.C. Schulman

843

Treatment of gonorrhea with trimethoprim/sulphamethoxazole

H. Ebner

845

ANTIVIRAL CHEMOTHERAPY

(Panel Presentations - Free Communications)

Panel Presentations

Sites of attack by antiviral drugs

H.J. Eggers

853

Laboratory animal models of viral diseases

R.R. Grunert and C.E. Hoffmann

856

Progress with interferon and interferon inducers in viral chemotherapy

R.F. Krueger, and G.D. Mayer

865

Present and future potential of nucleosides as antiviral agents

W.H. Prusoff, Y. Cheng, and J. Neenan

881

Antiviral activity of virazole: Review and structure-activity relationships

R.W. Sidwell, L.N. Simon, J.T. Witkowski, and
R.K. Robins

889

The clinical use of antiviral agents

D.J. Bauer

904

Clinical chemotherapy by herpes infections - an evaluation

E. Jawetz

909

Studies on the effect of ara-C and of human leukocyte interferon on certain virus infections

T.C. Merigan, D.A. Stevens, G.W. Jordan, S.E. Reed,
T.S. Hall and D.A.J. Tyrrell

914