

REFERENCES

- Anderson, S.D., McEvoy, J.D.S., and Biance, S., 1972, Changes in lung volumes and airways resistance after exercise in asthmatic subjects. Amer. Rev. Resp. Dis. 106, 30.
- Anderson, S.D., et al., 1975, Inhaled and oral bronchodilator therapy in exercise-induced asthma. Aust. N. Z. J. Med. 5, 544.
- Bass, M., 1970, Sudden sniff death. J. Am. Med. Ass. 212, 2075.
- Beardshaw, J., Maclean, L., and Chan-Yeung, M., 1974, Comparison of the bronchodilator and cardiac effects of hydroxyphenyl-
orciprenaline and orciprenaline. Chest. 65, 507.
- Benjamin, C., 1972, A comparative study of the bronchodilator effects of five adrenoreceptor stimulant drugs in patients with reversible broncho-obstruction. Med. Proc. 18, 35.
- Beumer, H. M., 1971, Comparative studies of the protective effects of alupent and Th 1165 a against histamine in man. Respiration. 28, 148.
- Blackhall, M. I., et al., 1976, Inhalation of fenoterol (Berotec) by asthmatic children. A clinical comparison with salbutamol, orciprenaline and isoproterenol. Med. J. Aust. 2, 439.

- Brocklehurst, W. E., 1953, Occurrence of an unidentified substance during anaphylactic shock in cavy lung. *J. Physiol.* 120, 160.
- Brocklehurst, W. E., 1962, Slow reacting substance and related compounds. *Progr. in Allerg.* 6, 539.
- Buchelt, L., und Rominger, K. L., 1970, Pharmacokinetik von Th 1165a beim Menschen (ADME III). *Expose vom.* 29, 9.
- Conolly, M.E., et al., 1971, Resistance to beta adrenoceptor stimulants (a possible explanation for the rise in asthma deaths). *Br. J. Pharmac.* 43, 389.
- Curry, J. J., and Lowell, F. C., 1948, Measurement of vital capacity in asthmatic subjects receiving histamine and acetyl-beta-methylcholine. *J. Allerg.* 19, 9.
- Davies, D. S., 1972, Metabolism of isoprenaline and other bronchodilator drugs in man and dog. *Bull. Physiolpathol. Respir.* 8, 679.
- Eisenstadt, W. S., and Nicholas, S. S., 1969, The adverse effects of adrenergic aerosols in bronchial asthma. *Ann. Allerg.* 27, 283.
- Emergril, C., et al., 1977, Fenoterol : Clinical trial of a new long acting bronchodilator. *Ann. Allerg.* 39, 415.
- Foreman, J. C., and Garland, L.G., 1976, Cromoglycate and other antiallergic drugs : A possible mechanism of action. *Brit. Med. J.* 1, 820.

Giles, R. E., Williams, J. C., and Finkel, M.P., 1973, The bronchodilator and cardiac stimulant effects of Th 1165 a, salbutamol and isoproterenol, *J. Pharmacol. Exp. Ther.* 186, 472.

Goodman, L. S., and Gilman, A., 1975, The pharmacological basis of therapeutics. 5th ed. New York. MacMillan Publishing Co., pp 477.

Greenberg, M. J., and Pines, A., 1967, Pressurized aerosols in asthma. *Brit. Med. J.* 1, 563.

Hoffbrand, B. I., et al., 1966, Trial of bronchodilator drugs given by metered aerosol with a comparison of two bed-side methods of estimating airway resistance. *Brit. Med. J.* 1, 1014.

Hume, K. M., and Gandevia, B., 1957, Forced expiratory volume before and after isoprenaline. *Thorax*, 12, 276

Lal, S., Dash, C. H., and Gribben, M.D., 1974, An economical method of comparing inhaled bronchodilators in reversible diffuse airways obstruction. *Thorax*. 29, 317.

Lands, A. M., et al., 1967, Differentiation of receptor systems activated by sympathomimetic amines. *Nature*. 214, 597.

Laros, C. D., Swierenga, J., and Vanderschueren, R., 1975, A model of the pathways of inhaled medicaments to their receptor sites. *Respiration*. 32, 284.

Laros, C.D., Van Urk, P., and Rominger, K. L., 1977, Absorption, distribution and excretion of the Tritium-labelled beta-2 stimulant

- fenoterol hydrobromide following aerosol administration and instillation into the bronchial tree. *Respiration.* 34, 131.
- Litchterfeld, A., 1972, Comparative data on therapeutic effects of Th 1165a and metaproterenol metered dose inhalers in outpatients. *Int. J. Clin. Pharmacol.* 4, 153. Suppl.
- Lockhart, W., et al., 1960, Practical experience with the peak flow meter. *Brit. Med. J.* 1, 37.
- Mattila, M., and Muittari, A., 1966, The effects of bronchodilator aerosols on the peak expiratory flow rate in asthmatic patients. *Acta. Med. Scan.* 180, 421
- Middleton, E. Jr., and Phillips, G. B., 1964, Distribution and properties of anaphylactic and venom-induced slow-reacting substance and histamine in guinea pigs, *J. Immun.* 93, 220.
- Middleton, E. Jr., 1965, The anatomical and biochemical basis of bronchial obstruction in asthma. *Ann. Intern. Med.* 63, 695.
- Morrow, P. E., 1974, Aerosol characterization and deposition. *Am. Rev. Respir. Dis.* 110, 88. (part 2).
- Newhouse, M., Sanchis, J., and Bienenstock, J., 1976, Lung defense mechanism. *N. Engl. J. Med.* 295, 990.
- Newhouse, M. T., and Ruffin, R. E., 1978, Deposition and fate of aerosolized drugs. *Chest.* 73, 936. Suppl.

- O'Donnell, S. R., 1970, A selective beta-adrenoceptor stimulant (Th 1165a) related to occiprenaline. *Eur. J. Pharmacol.* 12, 34.
- Offermeier, J., et al., 1972, The beta-2 selectivity of various beta-adrenergic drugs. *Med. Proc.* 18, 5.
- Orehek, J., et al., 1976, Patient error in use of bronchodilator metered aerosols. *Brit. Med. J.* 1, 76.
- Pain, M. C. F., and Read, J., 1963, Patterns of response to bronchodilator in young patients with asthma. *Aust. Ann. Med.* 12, 216.
- Patterson, J. W., et al., 1968, Isoprenaline resistance and the use of pressurized aerosols in asthma. *Lancet.* 2, 426.
- Paterson, C., and Crompton, G. K., 1976, Use of pressurized aerosols by asthmatic patients. *Brit. Med. J.* 1, 76.
- Permutt, S., 1978, What should we measure to evaluate bronchodilator drugs response. *Chest.* 73, 944. Suppl.
- Persson, H., and Olsson, T., 1970, Some pharmacological properties of terbutaline, 1-(3,5 dihydroxy-phenyl)-2-t-butylaminoethanol, a new sympathomimetic beta-receptor stimulating agent. *Acta. Med. Scand.* 512, 11. Suppl.
- Pickworth, K. H. and Westwood, J., 1965, Use of the Wright peak flow meter. A double blind trial of two bronchodilator aerosols. *Practitioner.* 194, 260.

Reed, C. E., 1978., Physiology and pharmacology of beta-2 adrenergic agents. Chest. 73, 914. Suppl.

Ritchie, B., and Melb, M. B., 1962, A comparison of forced expiratory volume and peak flow in clinical practice. Lancet. 2, 271.

Rominger, K. L., 1970, Biochemische untersuchungen mit ³H-Th 1165a an ratten (ADME I) Expose vom. 26, 7.

Ruffin, R. E., Kenworthy, M.C., and Newhouse, M.T., 1978, Dose response of asthmatic patients to inhaled fenoterol. Chest. 73, 990. Suppl.

Simonsson, B. G., 1963, "Peak expiratory flow" as a measure of ventilatory capacity value in pharmacological tests. Acta. Allerg. (Kbh). 19, 340.

Sobol, B. J., 1978, Some problems encountered in the evaluation of bronchodilator therapy. Chest. 73, 991. Suppl.

Staneseu, D. C., and Van de Woestune, K. P., 1972, Asthma attack induced by isoprenaline aerosols. Respiration. 29, 532.

Taylor, G. J., and Harris, W. S., 1970, Cardiac toxicity of aerosol propellants. JAMA. 214, 81.

Wright, B. M. and McKerrow, C. B., 1959, Maximum forced expiratory flow rate as a measure of ventilatory capacity, Brit. Med. J.1, 1041.

Yeates, D. B., et al., 1973, Regional clearance of ions from the airways of the lung. Am. Rev. Respir. Dis. 107, 602.

Yeates, D. B., et al., 1976, Mucociliary tracheal transport rates in man. J. Appl. Physiol. 39, 487.

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