Pain relieving power in harness

When Brufen was first introduced, it soon established a reputation as an effective and exceptionally well tolerated drug.

That was more than ten years ago.

Since then, many new anti-inflammatory agents have become available for the treatment of rheumatic conditions. Brufen has been evaluated against most of them.

Today, Brufen is prescribed in more than 100 countries across the World; more than 30 million people have been treated with Brufen.

Experience has confirmed that Brufen is one of the most efficient, reliable and best tolerated drugs available for the treatment of arthritis.

BRUFEN 400

Ibuprofen B.P.

The Great British Workhorse in arthritis

Prescribing Information: **Presentation** Brufen 400 are sugar-coated tablets each containing 400mg of Ibuprofen B.P. The tablets are light magenta in colour and bear the overprint 'Brufen 400' in black. **Uses** Brufen is indicated for its anti-inflammatory and analgesic effect in the treatment of rheumatoid arthritis including Juvenile rheumatoid arthritis or Still's disease), ankylosing spondylitis, osteoarthrosis and other non-rheumatoid (seronegative) arthropathies. In the treatment of non-articular rheumatic conditions, Brufen is indicated in periarticular conditions such as frozen shoulder (capsulitis), bursitis, tendinitis, tenosynovitis and low back pain; it can also be used in soft tissue injuries such as sprains and strains. **Dosage and Administration** Adult: The recommended initial dosage of Brufen is 1200mg daily in divided doses. Some patients can be maintained on 600 to 1200mg daily. It can be advantageous in severe conditions to increase the dosage to 1600mg daily in divided doses until the acute phase is brought under control. Children: 20mg of Brufen per kg of body weight daily, except that in children weighing less than 30kg, the total dose of Brufen given in 24 hours should not exceed 500mg. **Contra-indications** Brufen should not be given to patients with severe or active peptic ulceration. **Use in Pregnancy** No teratogenic effects have been demonstrated in animal experiments; nevertheless the use of Brufen during pregnancy should be avoided if possible. **Warnings and Adverse Effects** Brufen should be prescribed with caution for patients with asthma and especially for those who have developed bronchospasm with other non steroidal agents. The adverse effects reported include dyspepsia, gastro-intestinal intolerance and bleeding and skin rashes of various types. Less frequently, thrombocytopenia has occurred. A very rare occurrence can be toxic amblyopia, but in reported cases, recovery occurred upon cessation of treatment. **Treatment of Overdosage** Gastric lavage; if necessary, correction of blood electrolytes. There is no specific antidote to Brufen. **Pharmaceutical Precautions** Recommended storage conditions: 5°C to 20°C. **Legal Category** POM. **Package Quantities** 400mg tablets (Brufen 400): tin of 100, tin of 250. **Further Information** When Brufen is taken on an empty stomach, the peak serum levels occur 45 minutes after ingestion, whereas when taken after a meal, the peak is delayed to 90 minutes. Consequently, as most patients can take Brufen on an empty stomach without gastric discomfort, if the first daily dose is taken on awakening with a drink, the rapid absorption of the drug will help to relieve morning stiffness. **Basic NHS Price** Brufen 400: 250 Pack £11.90. **Product Licence Number :** 400mg tablets (Brufen 400): PL0014/0158.

1 tablet 3–4 times daily

BRUFEN is a registered trade mark

The Boots Company Ltd, Nottingham

The American Orthopaedic Association

presents the

First International Symposium on the Child's Hip

This conference, sponsored by the Alfred I. duPont Institute will be held October 20 through the 23 in Wilmington, Delaware. The conference will provide 32 hours credit in the AMA Category I.

For more information, please contact G. Dean MacEwen, M.D., Medical Director, Alfred I. duPont Institute, P.O. Box 269 Wilmington, Delaware, 19899, U.S.A.

BRITISH POSTGRADUATE MEDICAL FEDERATION
University of London

One week Residential Course in Advanced Rheumatology

The first full-time residential course in Rheumatology to be organized by the BPMF will be held from 7th to 11th July, 1980.

During the course, which will be based at five London hospitals, the following topics will be covered: the scope of rheumatology, the application of immunology to rheumatic diseases, osteoarthrosis and metabolic arthritis, inflammatory polyarthritides, systemic connective tissue disorders and management of the rheumatic diseases.

The fee for the course will be £180.00 which includes residence and all catering charges. Approval under APTS is being sought.

Further details and application forms are obtainable from the Secretary to the Rheumatology Course, British Postgraduate Medical Federation, 33 Millman Street, London, WC1N 3EJ (Telephone 01-831-6222 Ext. 24). Closing date for the receipt of application is *16th May, 1980.*

Histocompatibility and Rheumatic Disease

The Proceedings of a Symposium organized by the Heberden Society

Edited by Derrick A. Brewerton

Speakers and Additional Discussants ● Ankylosing spondylitis and HL-A 27 ● Identification of HL-A antigens by serological criteria ● Mixed lymphocyte reaction stimulating antigens, their detection and relation to disease, and other markers of the major histocompatibility system ● The HL-A system and its association with immune response and disease ● Disease predisposition immune responsiveness, and the fine structure of the HL-A supergene. A need for reappraisal ● Family studies indicating genetic factors in rheumatic disease ● Reiter's disease and HL-A 27 ● HL-A 27 in reactive arthritis following infection ● HL-A 27 and the spondylitis of chronic inflammatory bowel disease and psoriasis ● HL-A 27 and acute anterior uveitis ● HL-A antigens in juvenile chronic polyarthritis (Still's disease) ● Family studies on ankylosing spondylitis ● Family studies ● Aberrant immunity in W27-positive rheumatic disease ● Lymphocyte function in ankylosing spondylitis ● Brief Clinical Reports ● HL-A 27 and ankylosing spondylitis. A family study ● Behçets disease ● Circinate erosive balanitis ● Panel Discussion ● Concluding Remarks ● Bibliography

Price: Inland £2·50; Overseas US$6·25 including postage

ORDER FROM: The Publishing Manager, Annals of the Rheumatic Diseases, B.M.A. House, Tavistock Square, London WC1 9JR

METHRAZONE®

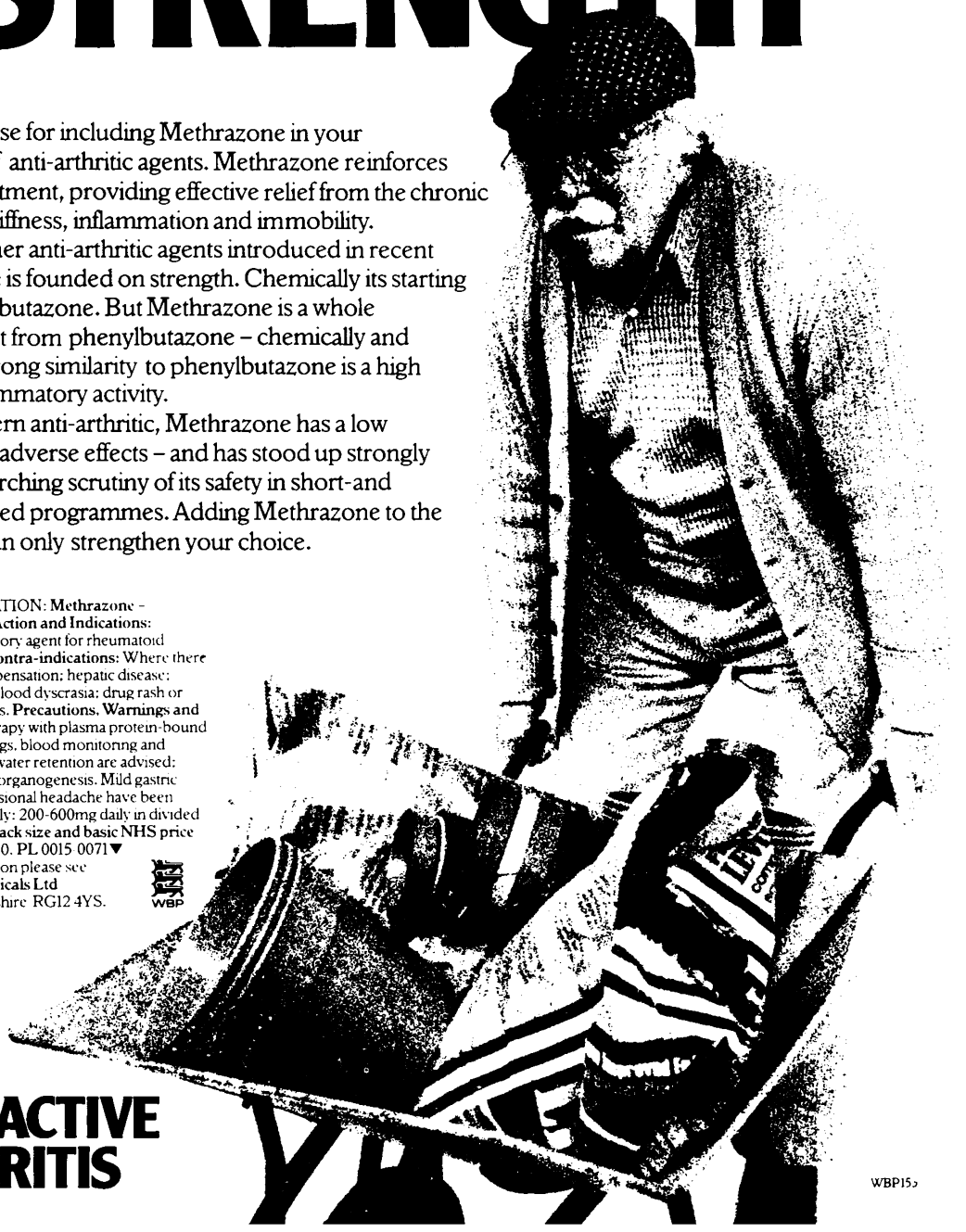
feprazone

HAS THE STRENGTH

There's a strong case for including Methrazone in your armamentarium of anti-arthritic agents. Methrazone reinforces your choice of treatment, providing effective relief from the chronic problem of pain, stiffness, inflammation and immobility.

Unlike many other anti-arthritic agents introduced in recent times, Methrazone is founded on strength. Chemically its starting point lies in phenylbutazone. But Methrazone is a whole generation different from phenylbutazone – chemically and clinically. Its one strong similarity to phenylbutazone is a high degree of anti-inflammatory activity.

As befits a modern anti-arthritic, Methrazone has a low incidence of major adverse effects – and has stood up strongly to a particularly searching scrutiny of its safety in short-and long-term monitored programmes. Adding Methrazone to the armamentarium can only strengthen your choice.



PRESCRIBING INFORMATION: **Methrazone** – feprazone capsules 200mg. **Action and Indications:** Non-steroidal anti-inflammatory agent for rheumatoid arthritis and osteoarthritis. **Contra-indications:** Where there is a danger of cardiac decompensation; hepatic disease; history of peptic ulceration; blood dyscrasia; drug rash or known sensitivity to pyrazoles. **Precautions, Warnings and Side effects:** Concurrent therapy with plasma protein-bound agents; as for all pyrazole drugs, blood monitoring and surveillance for sodium and water retention are advised; caution in pregnancy during organogenesis. Mild gastric intolerance, rashes, and occasional headache have been reported. **Dosage:** Adults only: 200-600mg daily in divided doses by mouth after food. **Pack size and basic NHS price** (UK only) 100 capsules, £9.90. **PL** 0015 0071▼
For full prescribing information please see data sheet. **WB Pharmaceuticals Ltd**
PO Box 23 Bracknell Berkshire RG12 4YS.

WBP

REALLY ACTIVE IN ARTHRITIS

WBP152

Arthritis

★ 24 hour cover
★ Highly effective
★ Low level of side effects

2 capsules at night **Lederfen*** fenbufen

Prescribing Information

Presentation *300 mg Capsules* Dark blue capsules each containing 300 mg [illegible] and printed Lederle 300 mg [illegible] on both the cap and body. *Uses* Lederfen is a [illegible] steroidal anti-inflammatory and analgesic agent indicated for the symptomatic treatment of rheumatoid arthritis and osteoarthritis. **Dosage and Administration** *Adults.* 2 or 3 capsules (600-900 mg) daily in single or divided doses. Many patients can be adequately [illegible] with a daily dosage of 2 capsules (600 mg) taken at night whereas some may require an extra capsule in the morning. Total daily dosage should not exceed 600 mg in a single dose or 900 mg in divided doses. *Children* Not recommended for administration to children under the age of 14. **Contra-indications, Warnings, etc.** *Contra-indications:* Hypersensitivity to [illegible] anti-inflammatory drugs or aspirin. *Precautions:* Lederfen should be used with great caution in patients with a history or evidence of peptic or intestinal ulceration and only when considered essential in pregnant and nursing women. *Warnings and Adverse Effects* Adverse effects may include gastrointestinal intolerance. Other reactions have occurred infrequently, including skin rash, dizziness, drowsiness and headache. Slight decreases in blood leucocytes, haemoglobin and haematocrit as well as slight increases in [illegible] have occasionally been recorded. Transient elevations in values of liver function tests have occurred in some patients. *Drug interactions:* When single doses of aspirin 900 mg and Lederfen 500 mg are administered together, serum concentrations of Lederfen and its metabolites are reduced by 10%-20%. Concomitant use of aspirin may require adjustment of dosage of Lederfen. Lederfen is strongly protein bound. Although no clinically significant interactions have been noted as yet, practitioners should be alert to this possibility. *Overdosage:* There is no experience with overdosage, consequently the signs, symptoms and treatment have not been identified. There is no specific antidote. **Pharmaceutical Precautions.** Store at a temperature not exceeding 15°C in the original container. Keep lid tightly closed. **Legal Category.** POM. **Package Quantities.** Bottle of 100. Basic NHS cost £16.24 per 100 capsules. **Further Information** Lederfen's long duration of action is attributable to the prolonged half-life of its active metabolites (10-17 hours). Major metabolites are detectable 48 hours after oral administration. Single oral doses given at night will therefore provide adequate plasma levels to provide symptomatic relief of nocturnal pain and morning stiffness. **Product Licence Number** 0095/0043

Lederle

Lederle Laboratories, a division of Cyanamid of Great Britain Limited
Fareham Road, Gosport, Hants PO13 0AS Tel: (0329) 236131.

*TRADE MARK

A preliminary study reported at the IXth European Congress of Rheumatology at Wiesbaden[1] indicates that there may be an important addition to that select group of drugs which can actually alter the disease profile of rheumatoid arthritis. This agent is Flenac, already known for its analgesic and anti-inflammatory properties, but now also shown to exhibit anti-rheumatoid effects comparable with those of D-penicillamine.

anti-rheumatoid effects demonstrated in recent study

The report described a single-blind trial, conducted in two British hospital centres, comparing the effects of Flenac, D-penicillamine and placebo in three groups of patients (47 in all) with severe rheumatoid disease. All patients were maintained on their existing anti-inflammatory/analgesic treatment throughout the study.

Clinical and laboratory parameters of disease activity were assessed three, four and six months after treatment began.

Flenac significantly improved all clinical parameters of disease activity – the duration of early morning stiffness was reduced and severity of pain decreased, joint size, grip strength and articular index all improved.

Laboratory parameters of rheumatoid activity – E.S.R., C-reactive protein and immunoglobulins – all showed decreases. In seven out of the eight seropositive patients in the Flenac group a fall in rheumatoid factor titre was observed during the trial.

In the context of this preliminary study, Flenac was comparable with, or superior to, D-penicillamine in the majority of measured parameters. In contrast, 13 of the 15 patients on placebo had to be withdrawn from the trial,12 of them because of lack of effect.

The total number of side-effects reported in the Flenac group (7) was not significantly different from that reported in the placebo group (5), whilst a total of 18 side-effects was reported in the group receiving D-penicillamine.

Changes in clinical and laboratory parameters during therapy

	Flenac			D-penicillamine		
	after 3 months	after 4 months	after 6 months	after 3 months	after 4 months	after 6 months
Early morning stiffness (minutes)	−25	−36*	−37*	+20	−26	−60**
Articular index	−3.8	−7.9	−9.2*	−1.6	−1.9	−0.9
Ring size	−6	−14**	−18**	−3	−6	−16**
Grip strength (mm Hg)	+20	+58	+66*	+2	+23	+37
Pain – visual analogue scale	−13	−22**	−35**	−1	−6	−14
C-reactive protein (mg 100ml $^{-1}$)	−0.02	−1.7*	−1.6*	+1.3	−0.04	−0.5
ESR (mm/hr $^{-1}$)	−8	−18**	−9	−18**	−13*	−20*
IgM (mg 100ml $^{-1}$)	−30*	−12	−15	−8	−4	+3
IgG (mg 100ml $^{-1}$)	−32*	−300*	−240**	+179	−62	+80

*significance $p < 0.05$ **significance $p < 0.01$

FLENAC®

fenclofenac

analgesic, anti-inflammatory and now shown to exert demonstrable anti-rheumatoid effects

Presentation Tablets of 300mg fenclofenac.

Indications Chronic and sub-acute rheumatological conditions such as osteoarthrosis, rheumatoid arthritis, ankylosing spondylitis.

Dosage and administration Adults: 600-1200mg (2-4 tablets) daily, in divided doses (morning and night) with or after food. Flenac is not recommended for children.

Contra-indications Active peptic ulceration or gastric bleeding.

Warnings Flenac should not at present be prescribed for children or for pregnant or lactating women. Flenac should not be co-administered with anti-coagulants. Care should be taken when treating patients with known renal or hepatic dysfunction, eczema, asthma, or sensitivity to other non-steroidal anti-inflammatory drugs.

Note Flenac interferes with thyroid function tests.

Side effects Gastro-intestinal symptoms sufficient to require discontinuing treatment are rare. Rashes have occurred, but have resolved shortly after withdrawal of the drug.

N.H.S. Price £11.24 pack of 100.

[1] Paper presented at IXth European Congress of Rheumatology, Wiesbaden, Germany, Sept 1979.

Additional information is available from:
Reckitt & Colman Pharmaceutical Division, Hull HU8 7DS.
Tel: 0482 26151
Distributors in Republic of Ireland, Reckitts (Ireland) Ltd., Dublin 12. Flenac is a registered trade mark.

PL 44/0060 Irish PA27/13/1.

Anti-inflammatory Analgesic Capsules
Flufenamic Acid BP

the valid alternative in arthritis

You and your arthritic patient will have experienced the time-consuming search through the available non-steroidal armamentarium for the drug "... which combines optimal effectiveness and absence of adverse effects"[1]

MERALEN may just be the right drug for many of your arthritic patients

MERALEN belongs to the fenamates, totally unrelated to the propionic acid derivatives, salicylates and phenyl-pyrazolone derivatives.

"Flufenamic acid (**MERALEN**) appears to be useful as an anti-rheumatic drug, especially in rheumatoid and osteo-arthritis, where long-standing pain and joint inflammatory processes were still active. It gives relief and even enhances mobility where joint pathology incapacitates movement".[2]

Presentation MERALEN 100mg. Hard gelatin capsule with light blue body and dark blue cap.
Composition Each 100mg. capsule contains: Flufenamic Acid BP 100mg.
Action MERALEN is an anti-inflammatory analgesic known chemically as N-(α α α -trifluoro-m-tolyl) anthranilic acid.
Indications For the relief of pain in rheumatoid arthritis, osteoarthrosis and ankylosing spondylitis.
Dosage and administration (Oral) *Adults*: 600mg. daily in divided doses, preferably with food. After four weeks continuous therapy, reduced maintenance dosage of 400mg. daily may be satisfactory in some patients. For those weighing less than 45kg (100 lb.) dosage should not exceed 10mg. per kg. bodyweight daily. *Children*: MERALEN should not be given to children of 14 years or less.
Contra-indications, warnings, etc. Contra-indicated in pregnancy; in inflammatory bowel disease and in patients suffering from gastric and/or intestinal ulceration, and in renal or hepatic disease.
Precautions Concurrent therapy with other plasma protein binding drugs, eg., anti-coagulants, may necessitate a modification in dosage.
Warnings and Adverse Effects Discontinue administration of MERALEN if diarrhoea or abnormalities in liver function tests occur. The commonest side effect is gastro-intestinal upset characterised by nausea, vomiting or epigastric discomfort. If gastro-intestinal intolerance occurs and the physician attributes this to the drug, the dose of MERALEN may be reduced by one half. If signs and symptoms do not subside, the drug may need to be completely discontinued. The physician may be able to increase the daily dosage of MERALEN again, once these symptoms have subsided. In some patients the gastro-intestinal symptoms subside spontaneously without reduction of dosage of MERALEN.
MERALEN should be discontinued in the event of rash suspected to be a sensitivity reaction. One case of purpura and four of leucopenia have been reported, one of the latter had been diagnosed as spontaneous leucopenia before MERALEN therapy had commenced. Bronchospasm may be precipitated in patients suffering from, or with a previous history of bronchial asthma or allergic disease.
Treatment of overdosage Gastric lavage in the conscious patient and intensive supportive therapy where necessary. Activated charcoal has been shown to be a powerful absorbent for MERALEN and its metabolites. Studies in experimental animals showed that a 5 to 1 ratio of charcoal resulted in considerable suppression of absorption of the drug.
Pharmaceutical precautions No special storage precautions.
Legal category P.M.
Package Quantities 100mg. capsules available in a pack of 100 capsules.
Basic NHS cost £4.40 for 100 capsules (June 1979).
Product Licence No. MERALEN Capsules 100mg: 0027/0034.

References: 1. Focus on Rheumatology (1978) Supplement to *Doctor*. 2. Van Collier, P.E. (1970). *Medical Proceedings*, **16**, 342.

Merrell Division, Richardson-Merrell Ltd., 20 Queensmere, Slough, Berks. SL1 1YY.

Arthritis

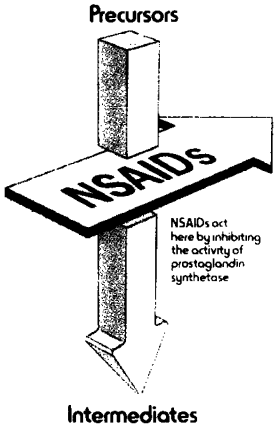
When a nonsteroidal anti-inflammatory agent is indicated...

...a potent antiprostaglandin must be considered as first line treatment

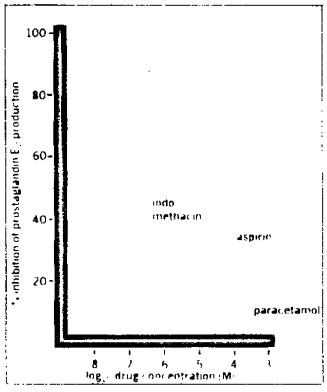
See overleaf for prescribing information.

Froben is a potent antiprostaglandin

It is now accepted that the analgesic and anti-inflammatory effect of nonsteroidal anti-inflammatory drugs (NSAIDs) is due mainly to their inhibitory action on prostaglandin synthetase activity. It has also been well demonstrated that the level of antiprostaglandin activity exhibited by these drugs correlates closely with their clinical analgesic and anti-inflammatory potency.



Since the antiprostaglandin activity of a drug bears a relationship to its clinical potency, the higher the level of this activity, the more likely it is that the drug will be effective in reducing pain and inflammation.



"...the study *in vitro* of the inhibitory effect of a drug on prostaglandin synthetase activity may be used to predict, in most cases, its anti-inflammatory activity..."[1]

A potent antiprostaglandin must be considered as first line treatment in arthritis.

"Concurrent studies in our department have shown flurbiprofen to be one of the most powerful of the anti-inflammatory drugs in inhibiting the action of prostaglandin synthetase from rheumatoid synovium..."[2]

Froben is a potent antiprostaglandin.

In the treatment of osteoarthrosis, rheumatoid disease and ankylosing spondylitis, Froben provides the powerful analgesic and anti-inflammatory action needed to effectively relieve the pain and stiffness of arthritis and so provide a progressive improvement in the mobility of the arthritic patient.

Prescribing Information

Presentation: Sugar coated tablets each containing [illegible]

Uses: Froben is indicated [illegible]

Dosage: [illegible]

Contra-indications, Warnings etc: [illegible]

Basic NHS Price: [illegible]

Product Licence No: [illegible]

References: [illegible]

[illegible]

The Boots Company Ltd., Nottingham, England

Froben

flurbiprofen

Arthritis: tomorrow there may be a cure. Today, there's Froben.