

POSTGRADUATE RESEARCH INSTITUTE OF SCIENCE, TECHNOLOGY, ENVIRONMENT AND MEDICINE

Limassol, March 2000,

Dear Participants and Colleagues,

Welcome to Cyprus for the Millennium 10<sup>th</sup> ICOC and Biomed Workshop (sponsored by the European Community, BIOMED, Grant BMH4-CT97-2149), which are under the auspices of the Minister of Health and the Mayor of Limassol. Over 15 countries are represented and we hope that the scientific presentations and discussions will stimulate our efforts to improve scientific knowledge and the treatment of thousands of patients, especially after the registration of L1-Deferiprone in Europe, in addition to India. We are grateful to the International and Local Scientific Committees, Patients' Organisations and Sponsors for helping to make this conference a successful one. Selected abstracts will be published in Transfusion Science. We wish you a very pleasant stay in Limassol and hope to welcome you back to my birthplace in Famagusta, when Cyprus is reunited.

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## L1-DEFERIPRONE WORLDWIDE UPDATE AND NEW STRATEGIES FOR IMPROVING ITS THERAPEUTIC EFFICIENCY

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L1-Deferiprone has been registered in Europe last year, in addition to India, thus increasing the prospects of more patients using it, especially those who have complications with Desferal therapy or cannot afford its high price.

However, commercial considerations and antagonism appear to still dominate the scene in the field of iron chelation. There are five companies selling L 1 and at least three companies selling desferrioxamine. The price of L 1 been sold in Europe is about the same as that of Desferal and there is a rush to find an alternative chelator as the patent of L1 is about to end in 2003. Despite that the Desferal patent has ended several years ago, cheaper desferrioxamine has not reached the market because of fierce competition between phannaceutical companies.

Over 6000 patients have been receiving L 1 Deferiprone in 40 countries since the first clinical trials back in 1987 [1,2]. Many patients in India, Switzerland and Cyprus have been taking L1 daily since 1989. The number of patients using L 1 increases steadily worldwide.

About 5% of the patients have been abandoning treatment with L1 due to its toxic side effects or insufficient iron removal. Thalassaemia intermedia and other non heavily transfused patients easily reach negative iron balance at L1 doses of about 75 mg/kg.

Similarly, combination therapy of LI and Desfem1 appear to be favored by some groups.

The Toronto group's abandonment of L1 because at 3x25 mg/kg/day was ineffective and may cause liver fibrosis [3] has not been confirmed by any other group especially in patients who have been taking L1 daily for over 8-10 years at 75-120 mg/kg eg in the Swiss group or the Mumbai group (Tondury et al and Agarwal et al, 10<sup>th</sup> ICOC abstracts 2000.

It is interesting that a Swiss patient, who was taking LI secretly at 150 mg/kg for 2 years had a liver fibrosis score 0 (Töndury et al, 10<sup>th</sup> ICOC abstracts, 2000 and also a hypertransfused Cypriot patient, who was taking L1 for 10 years and at 115 mg/kg for the last 2.5 years had no indications of liver damage.

The rapid clearance of L1 allows the use of repeated administration as previously described in the case of an inpatient (250 mg/kg/day) [5]. 75-120 mg/kg/day doses of L1 should be sufficient in most patients to cause a decrease within two years in serum ferritin and maintain it below 2.0 mg/L. Despite that other factors such as dietary, metabolic and pharmacokinetic should also be considered for improving the therapeutic profile of L1, no such studies have yet been undertaken.

L 1 is becoming a first line treatment for thousands of patients and there is a big scope for improving its therapeutic efficacy and minimizing its toxic side effects.

References:

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