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To: Subcommittee on Government Reform
Subject: Thiomersal
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to be forwarded to

Congressman Dan Burton, Chairman Government
Reform Committee, 2157 Rayburn House Office Building, Washington, D.C. 20515-6143.

As the former head of the Official Medicines Control Laboratory (regulating batch release and performing licensure assessment reports from 1988-98) one of my main interest was organomercurials in medicinal products.

In 1987-88 I did a lot of literature research on organomercurials in medicinal products (Thiomersal=TM and Na-timerfonat). In addition in collaboration with the Institute for Analytical Chemistry we were able to find, that thiomersal was degraded to ethylmercurychlorid and thiosalicylic acid in immunglobulins and vaccines.

At the beginning my main concern was TM in antithymocytic globulin preparations (ALS). In one product we were surprised to detect thiomersal, as a undeclard ingredient according to the SPC. With this product up to 58 mg TM can be given in 4 weeks and intoxication cannot be excluded with this product. This intoxication would result in a "silent" damage. The product also violated the regulations laid down in the European Pharmacopoiea. The product (ATGAM, Upjohn USA) was withdrawn from the market in Austria in 1988- and due to my concerns not licensed in Germany (in 1988 I was 10 weeks at the Paul Ehrlich Institute sponsored by WHO).

Heyworth MF (San Francisko) published a Review (Immunological Review (1982) 65:79-97) Title" Clinical Experience with Antilymphocyte Serum(ALS)" where he concluded "... merthiolate should no longer be added to ALS or other materials which are intended for use in human subjects".

To communicate my concers I wrote a letter to the editor of New England J of Medicine titled "Unconsidered risk due to TM in Anti-Lymphocytic Globulin Preparation"; the publication was rejected on 19.12.1988, the same happened with a letter to The Lancet.

My further interest was focused on TM in immunoglobulins in general. Nearly all immunoglobulins for human use were preserved with TM at this time.

Toxicity due to TM was published at this time, only one example Matheson DS et al. J of Pediatrics (1980) 97:153-155. Matheson describes a classical mercury intoxication and concludes: "It would appear... that the merthiolate (= TM) which is used as a preservative in a commercially available gammaglobulin preparation represents a potential hazard to patients receiving chronic parenteral therapy with gammaglobulin.." One older paper in a chronic dosing study of squirel monkeys summarized "Nevertheless accumulation of mercury from chronic use of TM preserved medicines is viewed as a potential hazard for man"Blair AM Toxicology (1975) 3:171-76. Some TM containig immunoglobulins were taken off the market in the early 90ies- in special TM containing Rubella-immunoglobulins.

Dr. Manfred Haase Paul-Ehrlich Institute (PEI) shared my concerns and initiated the removal of TM in immunoglobulins. A letter from the PEI (dated 22.Jan.1992) was also written to the CPMP in order that all

Member States support the action.

In parallel in 1988 I started to make a literature research on TM in other products including vaccines. In the late 80ies we had some "immunomodulators" on the market (look in google.com for Imudon, Buccalin and IRS 19 among others) with questionable potency but preserved with TM. In addition we had TM containing inactivated vaccines on the market. Since we have a good coverage of Tick-borne-encephalitis vaccine, we had a higher then normal amount of people sensitized against mercury, sometimes higher than against nickel- and also a higher mercury burden in vaccines in the first 15 month of life.

I also calculated mercury burden in vaccines and in baby food resulting in the fact that much more organic mercury was given with vaccines in the 1st yr of live compared to food.

During all this time I addressed my concerns also to representatives of the pharmaceutical industry at meetings in Austria and abroad, also to representatives of US-manufacturers of vaccines.

In a letter to the European Pharmacopoiea (addressed to Jean-Marc Spiesser) dated 21.May 1996 I again formulated my concerns and proposed a ban on organomercurials. As enclosure I added the core literature regarding TM. This letter was forwarded to EMEA and together with other concerned people the discussion started to remove TM. So concerns regarding TM in medicines were published from the 70ies including sensitization (Mvller H Merthiolate Allergy- a nationwide iatrogenic sensitization Acta Dermatovener(Stockholm) (1977)57:509-517).

To my opinion it was very clear in the 80ies, that TM is an unappropiate preservative in medicines. Major toxicity concerns regarding its use in preparations with a high volume per injection and/or low body weight and major concerns due to potential mass sensitization so jeopardizing every vaccination programm. Specially women of childbearing age could have anadditional but avoidable teratogenic risk (Rubella-immunoglobulins with TM, and vaccines with TM and other products). In medicine risks which can be avoided must be avoided.

I urge you to ban organomercurials in medicinal products and also in medical devices.

Sincerely

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