

Mr Jean Huss, President AKUT asbl - Luxembourg

Investigations done in Luxembourg :

Evaluation of Mercury Release from Dental Amalgams

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Exploring immune Functions

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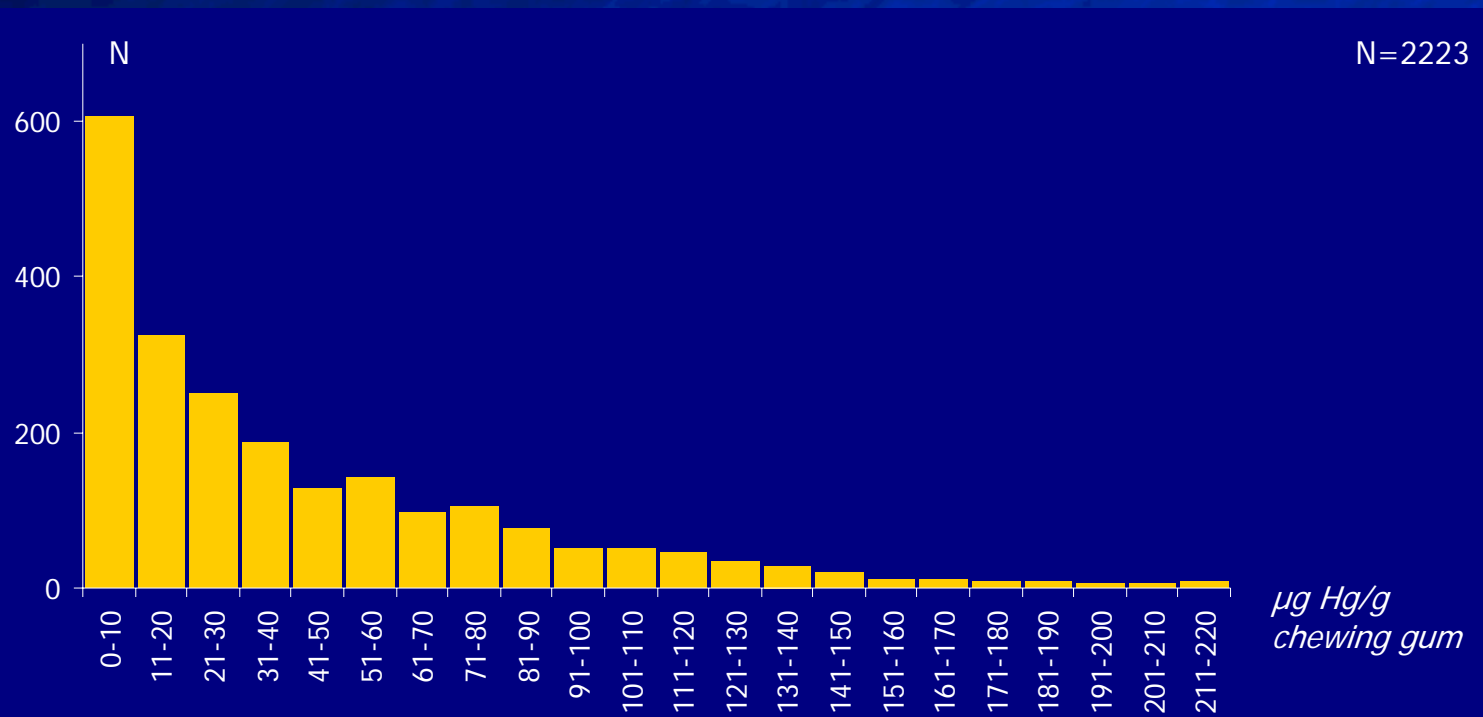
Clinique Ste Thérèse Luxembourg

Mercury [Hg]

Chew-Test



- Hg determination in the gum mass after 30' chewing : Chew-Test
 - Specific test for the Hg release from dental amalgams during mastication



Mercury [Hg]

Chew-Test : Theoretical Considerations on Results



■ 1. Statement:

- Test corresponds to a mastication of 30'/day
- Mercury absorption is about 80%

- Hg release for the
 - 50 centile (27 µg/g) is 189 µg Hg/week
 - 75 centile (63 µg/g) is 441 µg Hg/week
 - 95 centile (134 µg/g) is 938 µg Hg/week

Mercury [Hg]

Chew-Test : Theoretical Considerations on Results



■ 2. World Health Organization (WHO)

- Hg alimentary uptake
 - 16 - 147 μg Hg/week
- prov. tolerable Hg weekly intake
 - 350 μg Hg/week (PTWI) 70 kgbm

Mercury [Hg]

Chew-Test : Theoretical Considerations on Results



■ 3. Cumulated alimentary and amalgam Hg intake

- 50 centile:
 - min. 205 μg et max. 336 μg / week
 - << PTWI
- 75 centile:
 - min. 457 μg et max. 588 μg / week
 - >> PTWI

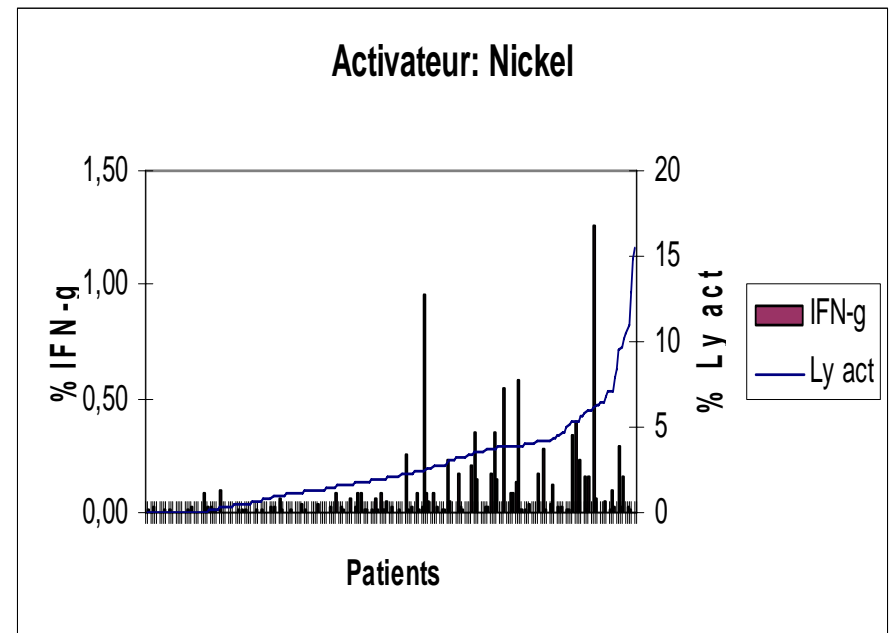
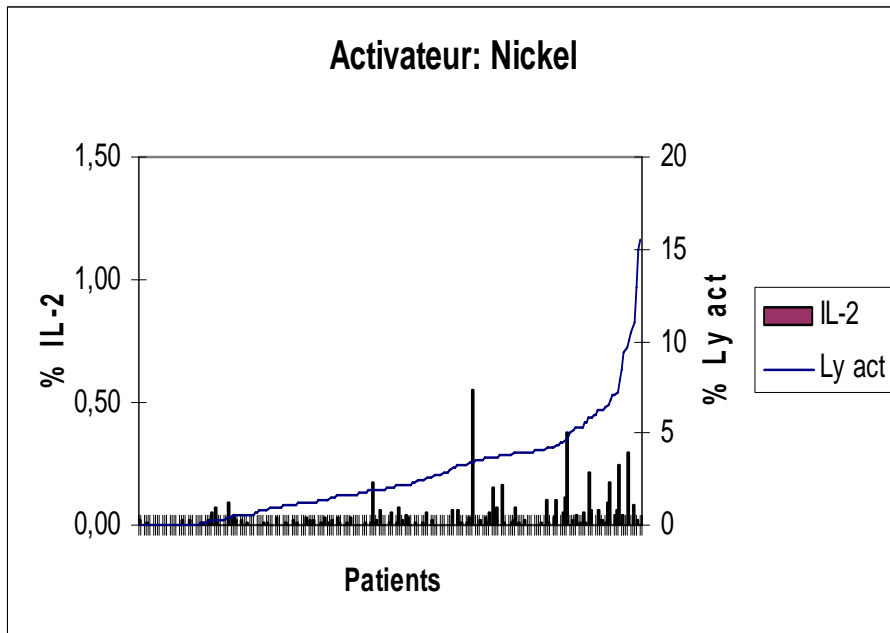
Mercury [Hg]

Mercury Release from Amalgams

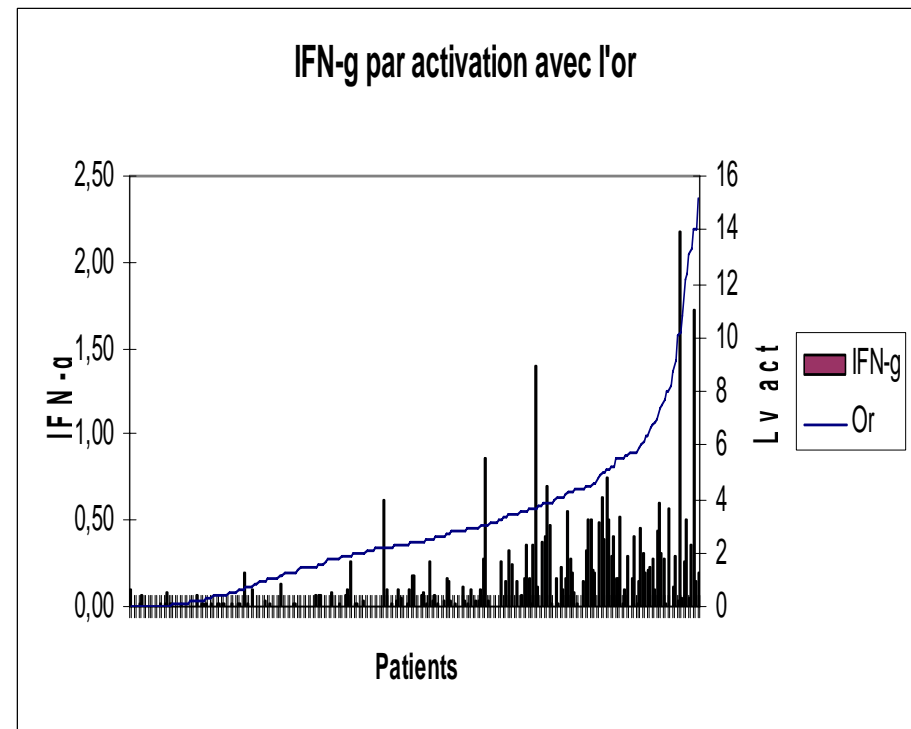
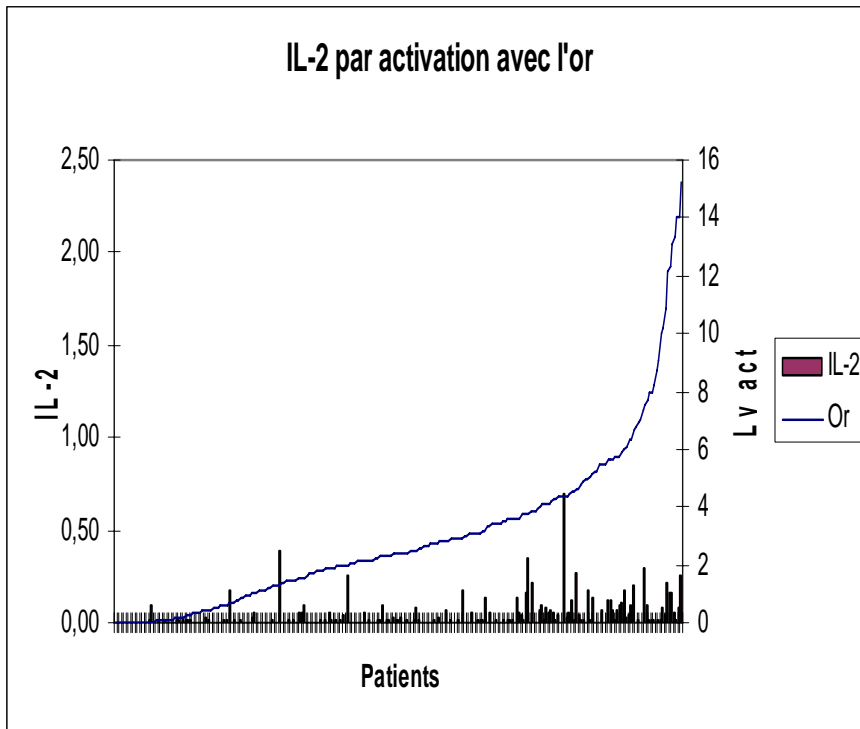


- In direct relation to :
 - Quantity of dental amalgams
 - Quality of dental amalgams

(1) Lymphocytes activés & production de cytokines: nickel

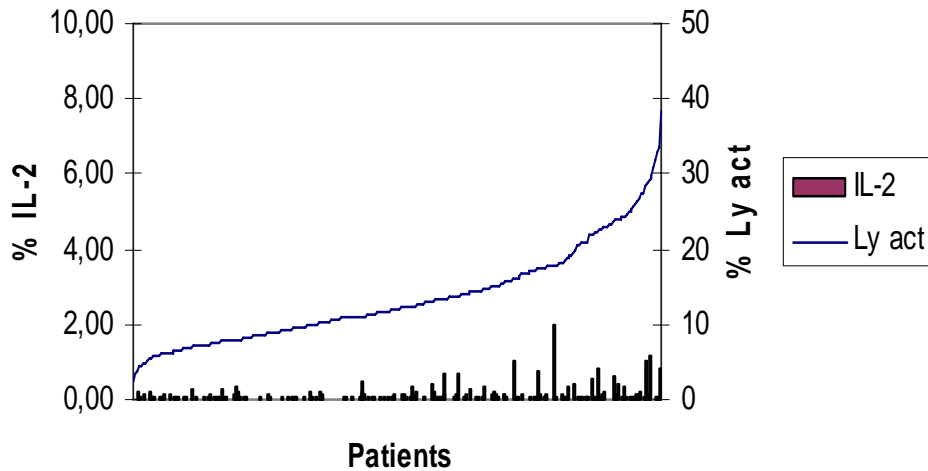


(2) Lymphocytes activés & production de cytokines: or

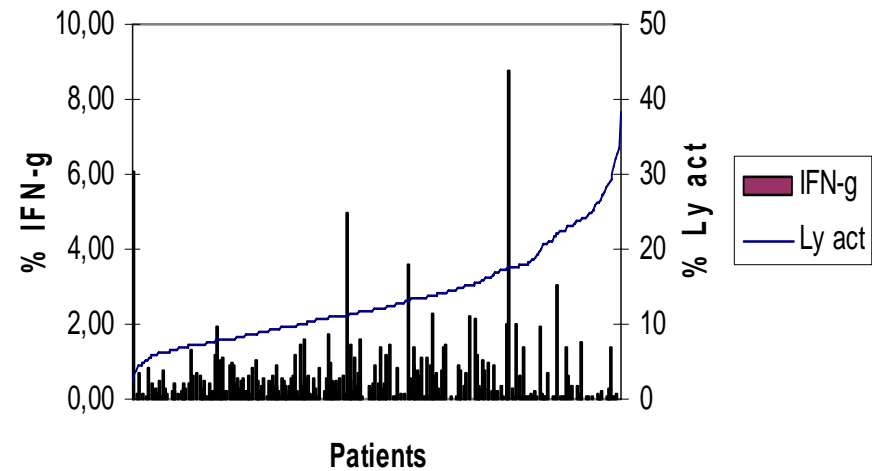


(3) Lymphocytes activés & production de cytokines: mercure

Activateur: Mercure

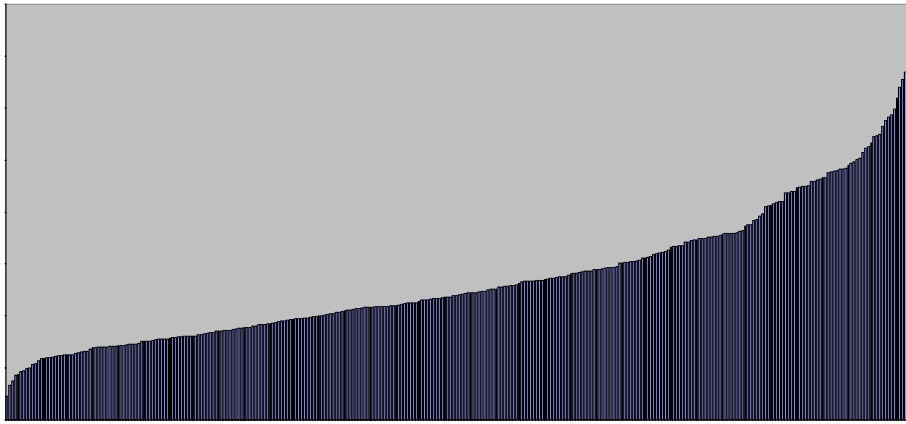


Activateur: Mercure

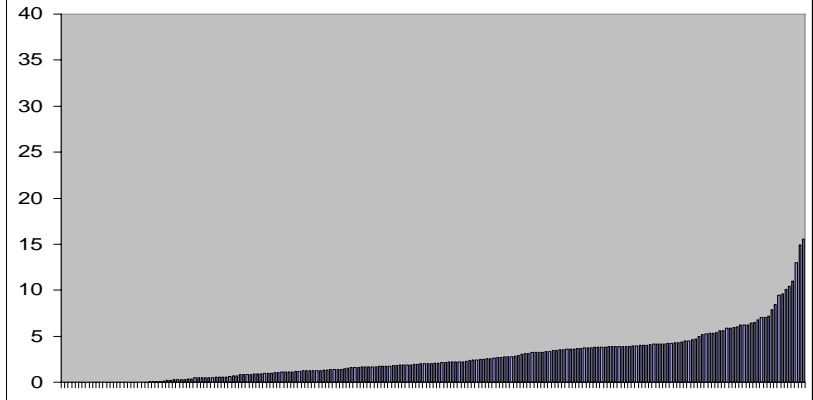


Le mercure: un cas particulier

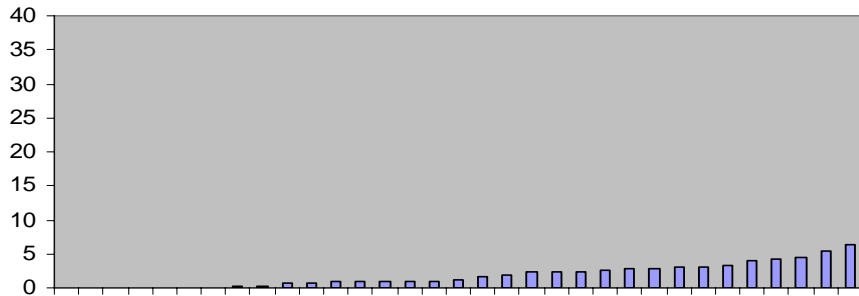
Activation par le mercure



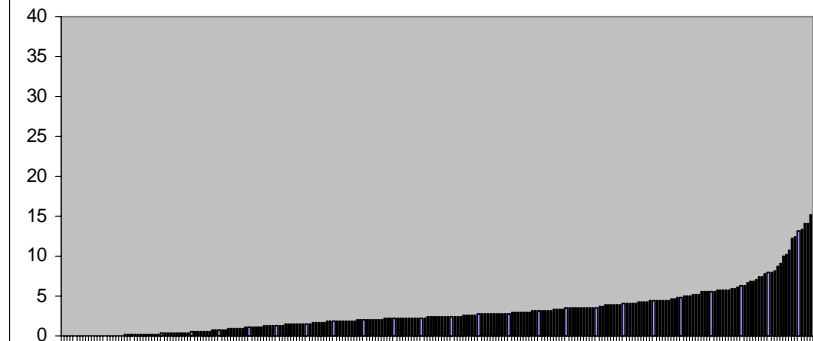
Nickel



Activation par la Perméthrine



Or



Ordre des activateurs

- Mercure > Ni, Au,... > biocides

Cytokines produites:

- IFN-g > IL-2 >> IL-6, IL-10,...

Réponse immunitaire:

- TH1 > TH0 >> TH2

Lymphocytes activés par les métaux lourds

Analyse multiparamétrique
pour >150 patients

