

INTERNATIONAL QUALITY CONTROLS IN THE FIELD OF RADIOTOXICOLOGICAL BIOASSAY

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Abstract

The Society for the Promotion of Quality Control in Medical and Radiotoxicological Analysis (**PROCORAD**) was founded in 1995.

The founding members of the Society are :

- The « Association des Biologistes de l'Industrie Nucléaire Française » (**A.B.N.F.**).
- The « Commissariat à l'Energie Atomique » (**C.E.A.**).
- The « Compagnie Générale des Matières Nucléaires » (**COGEMA**).

The purpose of the Society is to organise intercomparison exercises in the field of radiotoxicology in order to verify the quality of results and thereby promote good laboratory practice.

PROCORAD is responsible for organising annual intercomparison exercises as well as the meeting, held in June each year, at which the results of the intercomparisons are discussed.

The exercises usually include determinations of tritium in urine, strontium and caesium in urine, uranium in urine, actinides in urine and in faecal ash, and the determination of a « surprise » urine spiked with a nuclide or nuclides frequently encountered in the nuclear industry. Activity levels are kept low to reflect the reality of the monitoring of internal contamination.

The samples are dispatched by the end of February, and results have to be returned by the end of April. The results are discussed at the meeting in June. The fact that the results of the exercises are available within a few months of the analyses being completed makes them particularly useful for quality control.

A certain number of technical presentations are made at the June meeting, and participants have the opportunity of comparing their experiences.

In general, 45 to 50 different laboratories take part in some or all the exercises. Most of these laboratories are European, but the American continent is also represented. The number of participants has increased in recent years, as has the variety of the matrices proposed.

The PROCORAD intercomparisons are now the pre-eminent European intercomparison exercises involving radionuclides in excreta.

An overview of the intercomparisons organised up until 1996 will be presented at the conference.