

Laboratory of pharmacology and toxicology



RESEARCHERS

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DIPARTIMENTO

Biotechnology Chemistry and Pharmacy

LAB

Pharmacology and Toxicology

Research activity



Breve descrizione dell'attività di ricerca.

Research activities:

- study of the physiological mechanisms of intra- and extra-cellular antioxidant defense and evaluation of the main biomarkers of oxidative stress;
- nitric oxide (NO), nitrosothiols and other NOx: study of their function and metabolism;
- study of the antioxidant properties of some new chemical entities;
- study of the effect of the intra- and extracellular redox balance modulation on the progression of some pathological states.

Know-how and skills:

- use of the main analytical techniques suitable for the analysis of biomarkers of oxidative stress;
- use of animal models and ex vivo systems (isolated organs) for the development and pre-clinical characterization of new chemical entities.

Images



Technologies and services



Instruments and technologies:

- chromatographic techniques: HPLC, gas-chromatography, gel-chromatography;
- microsurgery techniques from pre-clinical studies, in particular for perfused isolated organs;
- apparatus for isolated perfused lung and liver;

Services:

- accurate and validated analyses of biomarkers of oxidative stress;
- metabolomic analysis in pre-clinical models;
- bioavailability
- first-pass metabolism analysis
- renal clearance analysis

Applications and collaborations



Applications:

- toxicological analyses on isolated perfused liver model for pharmaceutical companies;
- toxicological analyses on isolated perfused kidney model for pharmaceutical companies;
- analysis of biomarkers of oxidative stress for pharmaceutical companies.

For more information



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For more information



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