

Showcasing research from Professor Poinot's laboratory, Institute of Chemistry, University of Poitiers, France.

Induced-volatolomics for the design of tumour activated therapy

We developed a cocktail of enzyme-responsive probes releasing a volatile tracer upon activation by glycosidases. This cocktail allowed the simultaneous screening of several tumour-associated enzyme activities in living mice, through the detection of volatile tracers in their breath. This induced-volatolomics modality led to the identification of an enzyme target that was exploited in the course of a Tumour Activated Therapy for the treatment of triple-negative breast cancer *in vivo*. This study shows the potential of induced-volatolomics for the exploration of biological processes which could further trigger biomedical and pharmaceutical innovations.



