Joseph Ciccolini, PharmD PhD

He is Assistant-Professor in Pharmacokinetics at Aix-Marseille Univ (Marseille, France) and Hospital Pharmacologist at La Timone University Hospital of Marseille. Dr Ciccolini is the Group Leader of the Experimental & Translationnal PK Dept of the Pharmacokinetics Laboratory (SMARTc, Inserm S_911), and is the current President of GPCO-Unicancer, the french leading group in pharmacokinetics and pharmacogenetics of anticancer agents.

Dr Ciccolini is specialized in the field of predicting and controlling inter-patient pharmacokinetics variability in oncology (i.e., cytotoxics, targeted therapies, biologics). At bedside, Dr Ciccolini has developed several testing strategies to identify cancer patients with impaired clearance when treated with major nucleoside analogs, thus leading to several world premieres over the last 10 years (e.g., first published cases of toxic-death risk in capecitabine-treated patients with DPYD genetic polymorphism or with CDA ultra-rapid metabolizer syndromes, first published cases of toxic-death risk in gemcitabine-, azacytidine- or cytarabine-treated patients with CDA deficiency syndromes).

Additionally, Dr Ciccolini's group has developed an expertise in pharmacometrics and model-driven regimen, including for managing complex combination regimen between cytotoxics, anti-angiogenics and other targeted therapies or immune check-point inhibitors. At the bench, preclinical activities include testing novel combinational therapies and/or innovative modalities of administration or pharmaceutical forms (e.g., metronomic chemotherapies, new drug delivery systems such as immunoliposomes or nanobodies), both in vitro and in tumor-bearing animals.

In particular, Dr Ciccolini's group has recently demonstrated how the size of nanoparticles was critical to achieve better targeting of tumor tissues, or how mathematical modeling could help to revisit anti-angiogenics + chemotherapy regimen to achieve higher efficacy over current standard dosing and scheduling.

Dr Ciccolini owns several patents in the field of phenotyping testing and liposomal drugs, and has co-authored more than one hundred international papers related to the pharmacokinetics and pharmacogenetics of anticancer agents.