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# An iron hand over cancer stem cells

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## Résumé

Natural products and synthetic small molecules are central players in chemical biology studies. Drug substances can perturb cellular processes underlying diseases, thereby enabling the discovery of biological targets suitable for therapeutic intervention. Small molecules have been shown to accurately tune protein and nucleic acids functions in reversible and dose-dependent manners with valuable temporal resolution. Hence, small molecule approaches are complementary to RNA interference strategies and offer the additional means of identifying associated chemical hits for drug development. The efficient synthesis of molecular probes remains a worthy challenge. The impact of synthetic organic chemistry and supra-molecular processes on current cell biology and human medicine will be illustrated in the specific case of cancer stem cell targeting.

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