

Mathematical models of resistance and resistance to cancer treatments and simple therapy optimization

Luis Almeida¹,

¹ Université Pierre et Marie Curie

Some simple mathematical phenotype structured population models for cancer cells allow us to describe the dynamics of persistent and resistant behaviors in tumor cell populations subject to chemotherapy. We will also see how a further simplification of these models can be used to get some insight into simple strategies that may help optimizing the treatment protocols in order to avoid the appearance of resistance.