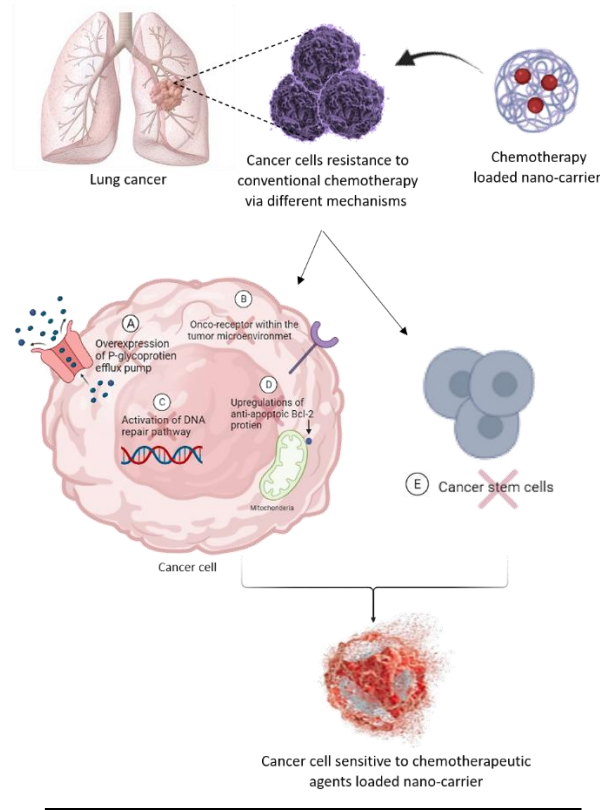


Nanomedicines as promising approach to overcome drug resistance in lung cancer

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Highlights

- Nano-carrier used as drug delivery system to overcome different mechanisms of drug resistance following lung cancer conventional chemotherapy.
- Lung cancer related drug resistance can occur by many mechanisms such as, the overexpression of P-glycoprotein efflux pump transporter, tumor microenvironment, activation of DNA repair pathway, preventions of cell apoptosis and lung cancer stem cells formations.
- Different nano-formulations were investigated in vitro and in vivo studies in comparison with free drug formulations.
- Nanotechnology has shown promising results in delivery of chemotherapeutic agents by increasing their circulation time, offering precise multiple targeting, enhancing drug accumulation at the tumor site and improving cellular uptake.