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(57) Abstract :
Cancer that develops in any part of the mouth or oral cavity is said to be oral cancer. While there are many modalities to treat oral cancer, but, they all suffer with various problems/ limitations. Accordingly, the present disclosure provides a nano-hybrid conjugate system of a theranostic agent for treatment of oral cancer. Particularly, the nano-hybrid conjugate system of the present disclosure comprises of functionalized gold and titanium dioxide nanoparticles that are conjugated by coupling reaction using (1-Ethyl-3-(3-dimethyl aminopropyl) carbodiimide) and (N-hydroxysuccinimide). The synergistic nature of the combination of functionalized gold and titanium dioxide nanoparticles is vital to show the intended therapeutic activity.

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