

# Metal-Phenolic Network (MPN) biomaterials for drug delivery

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Metal-Phenolic Network (MPN), which make use of the coordination between metal ions and phenolic molecules, have emerged as promising materials for nanomedicine. Compared with other materials, MPNs have several potential advantages, including pH responsiveness, negligible cytotoxicity. Additionally, the phenolic groups in the materials can be functionalized to meet specific applications. We constructed a series of polyphenol-based nanoplatform for combination cancer immunotherapy<sup>1-5</sup>. These nanoplatforms were stable under normal physiological environment and release therapeutic agents in the tumor site. The MPN can enhance anti-tumor immune response by various strategies by exploiting the tumor microenvironment. MPN based nanoplatforms can evoke highly efficacious cancer immunosurveillance while minimizing systemic side effects. The MPN theranostics nanoplatforms also establish a novel promising strategy for drug delivery.

## References

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