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**Usnic acid-loaded polyaniline/polyurethane foam wound dressing: preparation and bactericidal activity**

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**ABSTRACT:** The improved bactericidal activity of new composites for wound dressing prototypes represents an important strategy for development of more efficient devices that make use of synergistic interaction between components. The doping level of polyaniline represents a critical parameter for its corresponding biologic activity. In this work, it is explored the doping effect of usnic acid on undoped polyaniline, that introduces important advantages namely, improved bactericidal activity of polyaniline and the anti-biofilm properties of lichen derivative. The deposition of the resulting material on polyurethane foam potentializes its applicability as wound dressing, characterizing a new platform for application against *Escherichia coli* and *Staphylococcus aureus*.

**KEYWORDS:** polyurethane, polyaniline, composites, usnic acid, bactericidal activity

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