

A PDE APPROACH OF INFLAMMATORY PHASE DYNAMICS IN DIABETIC WOUNDS

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Abstract: The objective of the present paper is the modeling and analysis of the dynamics of macrophages and certain growth factors in the inflammatory phase, the first one of the wound healing process. It is the phase where there exists a major difference between diabetic and non-diabetic wound healing, an effect that we will consider in this paper.

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Key words: Wound healing modelling, diabetes influence, analytical well-posedness, bifurcation diagrams, numerical analysis of equilibria.