

## **Evaluation of the Draft NCRP Wound Model using USTUR Case 262 Data**

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The highly anticipated NCRP wound model is due to be published in 2007. Concepts and approaches incorporated in this model have been presented at several recent internal dosimetry meetings. Previous dosimetric analyses of wound cases have not included specific representation of the mechanisms of particle retention and absorption from the wound site nor particle transfer to associated lymphatic tissue. Rather, the kinetics of systemic uptake have been represented purely empirically, for example as multi-phased exponential retention components. The new NCRP model incorporates specific clearance pathways, based upon animal experimental data for various radionuclides, with an emphasis on solution chemistry that has been extrapolated to humans. Therefore, specific tests of its applicability to the human metabolic system are needed. This study discusses the applicability of the conceptual NCRP wound model to evaluating human plutonium contaminated wound data. An empirical biokinetic analysis of USTUR Case 262 has recently been published. This study re-examines these Case 0262 data in relation to the mechanistic NCRP wound model.

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