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Title:	Article: Fluoroquinolones stimulate the DNA cleavage activity of topoisomerase IV by promoting the binding of Mg (2+) to the second metal binding site
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Author(s)/ Presenter(s):	Lisa M. Oppegard, Heidi A. Schwanz, Tyrell R. Towle, Robert J. Kerns, Hiroshi Hiasa
Abstract (or Book Review):	Fluoroquinolones target bacterial type IIA topoisomerases, DNA gyrase and topoisomerase IV (Topo IV). Fluoroquinolones trap a topoisomerase-DNA covalent complex as a topoisomerase-fluoroquinolone-DNA ternary complex and ternary complex formation is critical for their cytotoxicity. A divalent metal ion is required for type IIA topoisomerase-catalyzed strand breakage and religation reactions. Recent studies have suggested that type IIA topoisomerases use two metal ions, one structural and one catalytic, to carry out the strand breakage reaction.