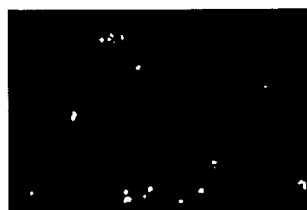


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FIG. 1A

Alkaline comet assay:



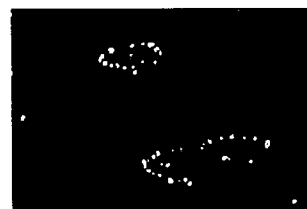
Control



MX only



Alimta



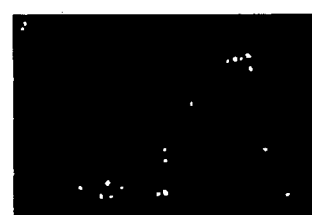
Alimta + MX

FIG. 1B

Neutral comet assay:



Control



MX only

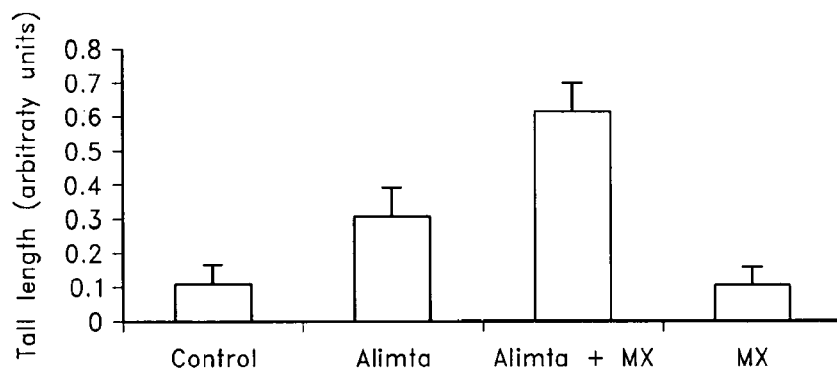
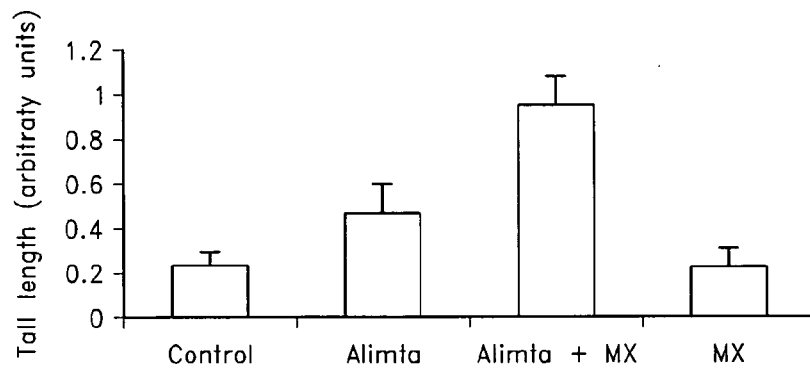


Alimta



Alimta + MX

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*FIG. 1C**FIG. 1D*

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FIG. 2 Mean MX Concentration in Plasma from Male Sprague Dawley Rats at Different Time Points After a Single Bolus Dosing of MX via intravenous and Oral Administration at 20 mg/kg Body Weight

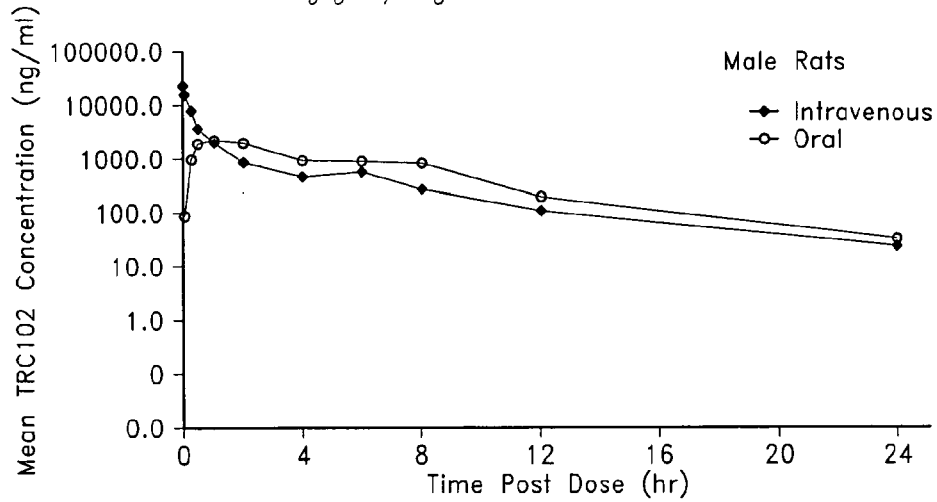
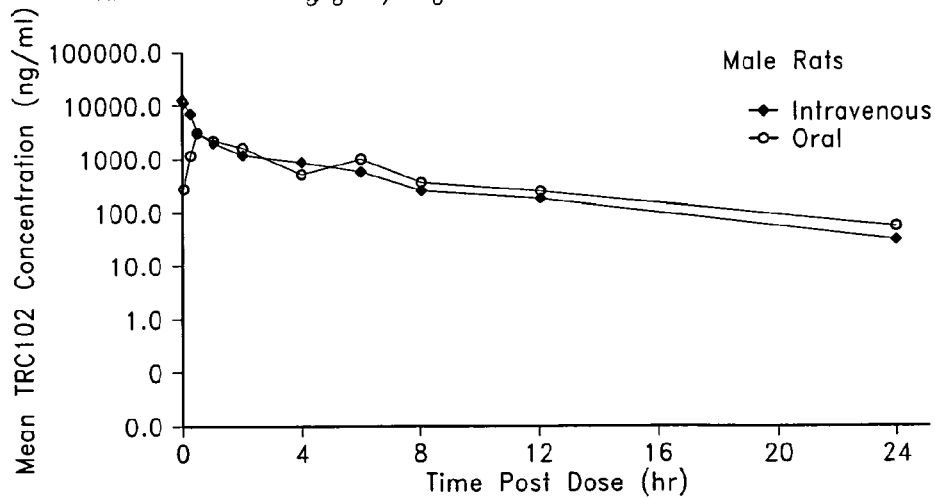
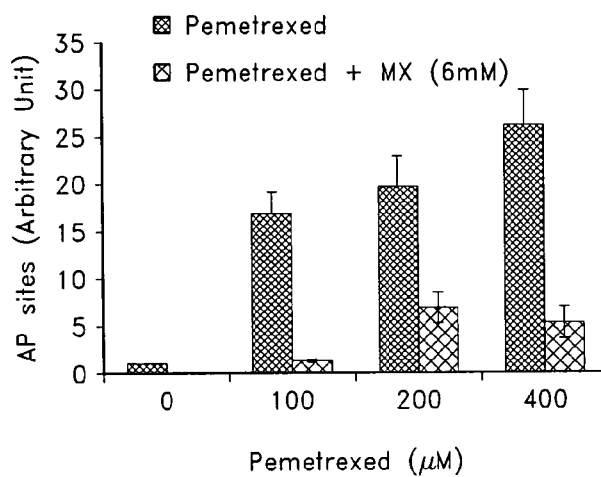
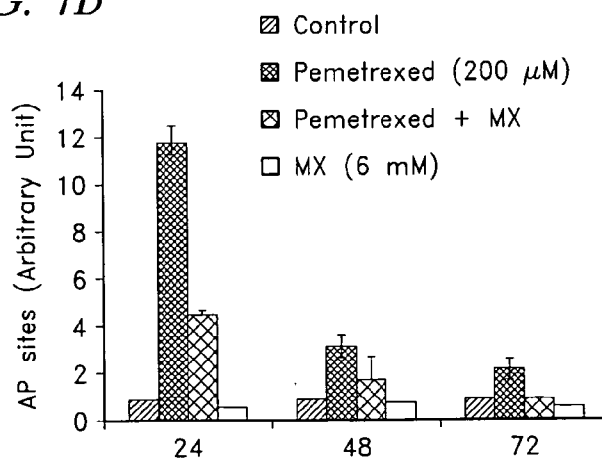


FIG. 3 Mean MX Concentration in Plasma from Female Sprague Dawley Rats at Different Time Points After a Single Bolus Dosing of MX via intravenous and Oral Administration at 20 mg/kg Body Weight



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FIG. 4A*FIG. 4B*

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MX bound AP sites are refractory to the repair by AP endonuclease

FIG. 5A

Schematic diagram indicate the preparation of a position specific oligonucleotide substrates containing an AP site or an MX bound AP site

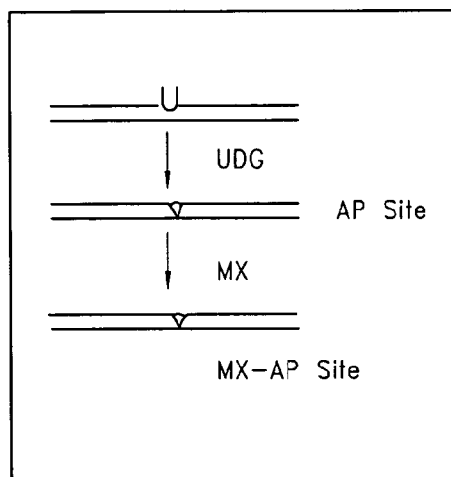
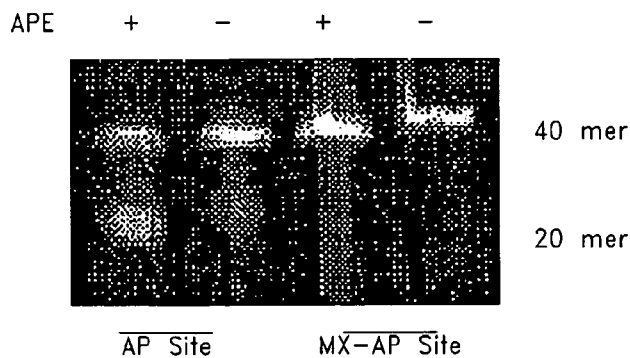


FIG. 5B

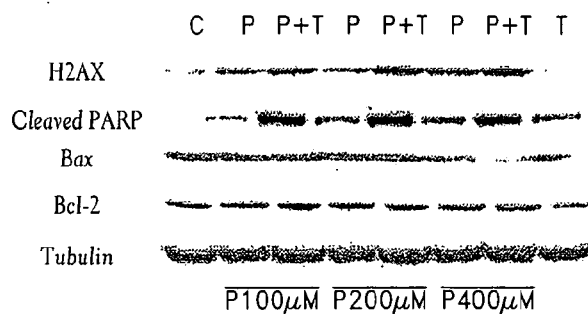
APE has reactivity to cleave the AP site but not MX-AP site, indicating that MX-AP site is refractory to the repair by APE.



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FIG. 6

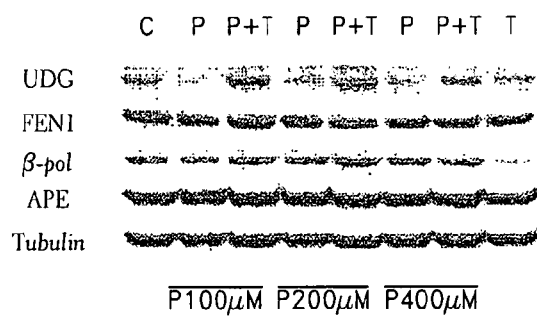
The combination of Pemetrexed and TRC2 enhances
DNA double strand breaks and apoptosis
that is independent of Bcl2 pathway



Cells were treated with MX at 6mM and collected at 24 hr

FIG. 7

BER Protein Levels in H460 Cells
Before and After Treated with Pemetrexed or the Combination



Cells were treated with MX at 6mM and collected at 24 hr

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FIG. 8A

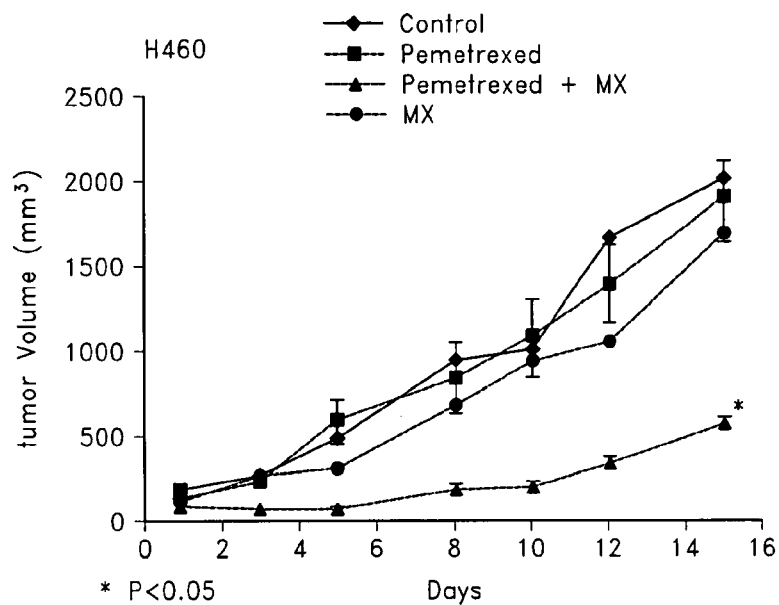
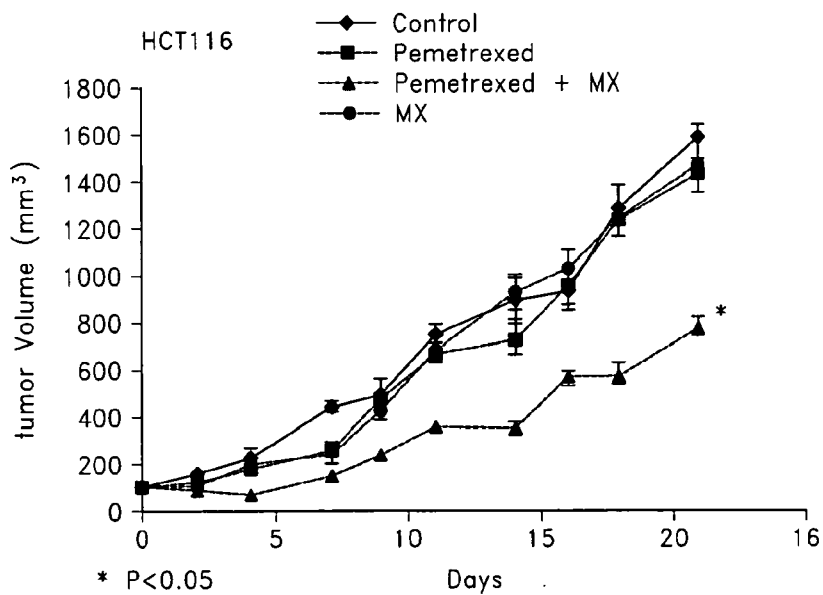


FIG. 8B



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FIG. 8C

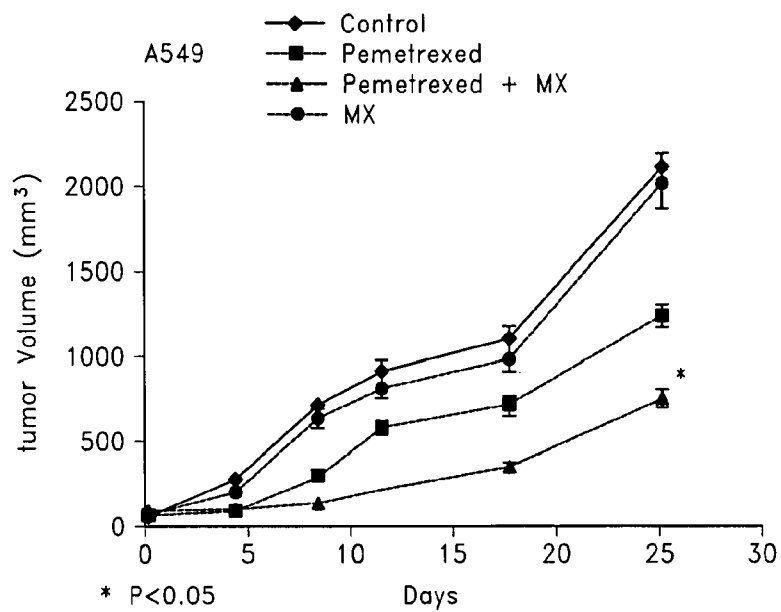


FIG. 8D

