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# The mechanistic effects of the dioxonaphthoimidazolium analog YM155 in renal cell carcinoma cell cycling and apoptosis

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## Highlights

- YM155 halts cell cycle progression in RCC cells at concentrations that are closely aligned to its growth inhibitory IC<sub>50</sub>.
- YM155 arrests the cells in the S phase of the RCC cell cycle
- YM155 activates the DNA damage response cascade in RCC
- YM155 down-regulates inhibitor of apoptosis proteins and induces profound apoptosis in RCC cells

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