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# Cancer cell lines involving cancer stem cell populations respond to oxidative stress

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## Highlights

- Incubation of cancer cells with H<sub>2</sub>O<sub>2</sub> results in oxidative stress.
- Cancer cell lines involving cancer stem cell populations respond to oxidative stress and are directed towards apoptosis.
- Presence of different CSC populations may involve when cancer cells generate response to oxidative stress.

## Abstract

Cancer cells may be more prone to the accumulation of reactive oxygen species (ROS) than normal cells; therefore increased oxidative stress can specifically kill cancer cells including cancer stem cells (CSCs). In order to generate oxidative stress in various cancer cell lines including A549, G361 and MCF-7, cultured cells were exposed to H<sub>2</sub>O<sub>2</sub>. Incubation of cancer cells with H<sub>2</sub>O<sub>2</sub> results in concentration-dependent cell death in A549 and G361-7 cells, whereas MCF-7 cells showed higher sensitivity even at a lower H<sub>2</sub>O<sub>2</sub> concentration. H<sub>2</sub>O<sub>2</sub> treatment

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