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## New strategies for improving the quality of life of cancer survivors: Reversible p53 inhibition

In recent years, with the improvement of cancer survival through more effective treatment, the emphasis has been in trying to minimize the side effects caused by chemo and radiotherapy, to ensure that patients have the best quality of life throughout their cancer journey. The tumour suppressor p53 is widely implicated in a broad range of cancers. Indeed, p53 is either mutated or inactivated in the majority of cancers. Abundant evidence indicates that toxicity caused by DNA-damaging anticancer therapies in normal tissues is also mainly mediated by p53. p53 accumulates in the cells shortly after anticancer challenges and acts as a nuclear transcription factor that modulates the expression of numerous p53-responsive genes (e.g. $p21^{Waf1}$, 14-3-3-σ, Mdm2, cyclin G, Bax). This initiates a cascade of events leading to massive programmed cell death in specific normal tissues during the systemic genotoxic stress associated with chemo and radiotherapies. This makes p53 a target for therapeutic suppression: An approach to reduce side effects associated with treatment of p53-deficient cancers. Here I summarize the role of p53 and the possibilities of its manipulation to improve side effects during active treatment through survivorship.

### Biography

After her MD from Medical school of University Kunming, China and her PHD thesis on inner ear cell degeneration and therapies from University of Montpellier, France. Jing Wang is the team leader of "Sensory loss and rescue" group at the Institute of Neurosciences of Montpellier, Montpellier, France. During her career, Jing Wang published 36 papers in international journals (web of science h-Index: 19, citations, 1040 citations), 9 book chapters and more than 150 communications or posters. She is member of the Editorial Boards of international journals. In addition to basic research, she took out 3 patents for tinnitus and deafness treatments and promoted translational research.

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