

Pharmacological Modulation of the Heat Shock Response

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1	Stress and the Heat Shock Response	418
2	Chaperone-Mediated Cytoprotection	418
3	Possible Therapeutic Use of Chaperone Induction	419
3.1	Ischemia Reperfusion	420
3.2	Inflammation and Sepsis	421
3.3	Aging and Chaperone Overload	422
4	Heat Shock Response Modulators	422
4.1	Aspirin as a Chaperone Co-inducer	423
4.2	Glutamine Is a Remedy for the Critically Ill	423
4.3	Zinc Supplementation Is a Prerequisite of Proper Chaperone Induction	423
4.4	Hsp90 Inhibitors Are Useful Cytoprotective Agents	424
4.5	Proteasome Inhibition Activates Cytoprotection	424
4.6	Anti-ulcer Drugs Induce Chaperones	425
4.7	Prescription Drugs May Induce a Heat Shock Response	425
4.8	Herbal Medicines Contain Potent Cytoprotective Compounds	426
4.9	Cyclopentenone Prostaglandins: Antiviral Drug Candidates	426
4.10	Nutrition State Influences Hsp Response	427
4.11	Low-Frequency Electromagnetic Fields: Beneficial Potential and Health Hazard	427
4.12	Chaperone Co-inducers: A Safer Opportunity to Induce the Heat Shock Response	428
5	Conclusions and Perspectives	429
	References	430

Abstract Life presents a continuous series of stresses. Increasing the adaptation capacity of the organism is a long-term survival factor of various organisms and has become an attractive field of intensive therapeutic research. Induction of the heat shock response promotes survival after a wide variety of environmental stresses. Preclinical studies have proven that physiological and pharmacological chaperone inducers and co-inducers are an efficient therapeutic approach in different acute and chronic diseases. In this chapter, we summarize current knowledge of the current state of chaperone modulation and give a comprehensive list of the main drug candidates.

Keywords Chaperone inducers · Chaperones · Heat shock proteins · Heat shock response · Stress proteins