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Sommario/riassunto	Apoptosis is highly defined programmed cell death, which leads to the elimination of cells. Deregulation of programmed cell death is associated with serious diseases such as cancer, autoimmunity, AIDS and neurodegeneration. In recent years, apoptosis has been successfully studied using a systems biology approach. Systems biology is a novel field of science which combines mathematical modeling with experimental data leading to predictions of biological processes. The development of this field in recent years is fascinating. Studies of apoptosis using systems biology have provided novel insights into the quantitative regulation of cell death. In Systems Biology of Apoptosis, contemporary systems biology studies devoted to cell death signaling both from experimental and modeling sides is discussed, as well as a focus on how systems biology helps to

understand life/death decisions made in the cell and the development of new approaches to rational treatment strategies.