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Abstract

The hallmarks of premalignant lesions were first described in the 1970's, a time when relatively little was known about the molecular underpinnings of cancer. Yet it was clear there must be opportunities to intervene early in carcinogenesis. A vast array of molecular information has since been uncovered, with much of this stemming from studies of existing cancer or cancer models. Here, examples of how an understanding of cancer biology has informed cancer prevention studies are highlighted and emerging areas that may have implications for the field of cancer prevention research are described. A note of caution accompanies these examples, in that while there are similarities, there are also fundamental differences between the biology of premalignant lesions or premalignant conditions and invasive cancer. These differences must be kept in mind, and indeed leveraged, when exploring potential cancer prevention measures.

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