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Speaker
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Titolo
***Les liaisons dangereuses*: autologous recognition and signaling by B-cell receptors in chronic lymphocytic leukemia**"

Abstract
Cell-autonomous B-cell receptor (BcR)-mediated signaling is a hallmark feature of the neoplastic B-lymphocytes in chronic lymphocytic leukemia (CLL)[1], the most common of leukemia in the Western
world. A combination of biochemical, structural, and cellular techniques were used to elucidate th e structural basis of autonomous activation of CLL B-
cells. BcR immunoglobulins from CLL patients interact homotypically to initiate intracellular signali ng through structural epitopes that are specific for each subgroup of patients[2]. The molecular deta ils of the BcR-
BcR interactions apparently dictate the clinical course of disease, with stronger affinities and longe r half-lives in indolent cases, and weaker, short-
lived contacts mediating the aggressive ones. The high-
resolution descripiton of the diverse homotypic BcR contacts leading to cell-
autonomous signaling explains clinical heterogeneity of CLL, albeit under a common pathogenetic mechanism, and offers opportunities for innovative treatment strategies.

[1] Dühren-von Minden M*, et al.* Chronic lymphocytic leukaemia is driven by antigen-independent cell-autonomous signalling. *Nature* **489**, 309-312 (2012)
[2] Minici C, *et al.*, Distinct homotypic B-
cell receptor interactions shape the outcome of chronic lymphocytic leukaemia. *Nat Commun* **8**, 15746 (2017)