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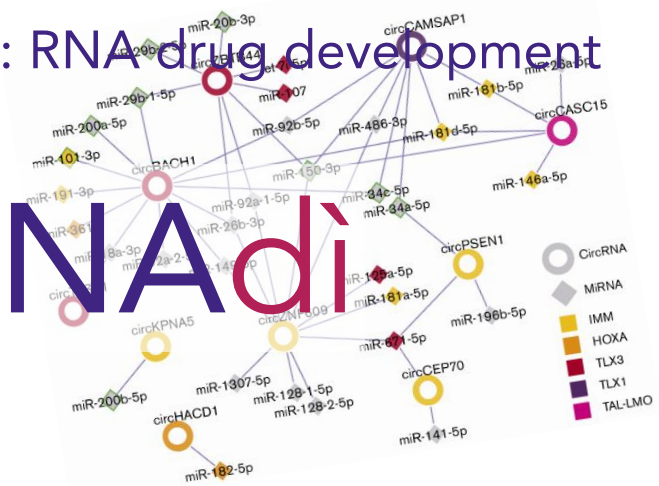
Italiadomani PIANO NAZIONALE DI RIPRESA E RESILIENZA
spoke.6

MUR PNRR National Center for Gene Therapy and Drugs based on RNA Technology

Spoke 6: RNA drug development

veRNAdì



A webinar series about RNA

to share projects and competences,
increase networking, discuss issues
and new ideas, and disseminate results

Every last Friday of the month

https://rb.gy/y40y6

XIII veRNAdì: Friday 28 February 2025, 15:00

Role of circular RNAs in acute lymphoblastic leukemia: from software tool development to functional studies

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Circular RNAs (circRNAs) are covalently closed RNAs generated through an unconventional mode of RNA processing known as back-splicing and are emerging molecular players in cancer and leukemias. CircRNA are indeed versatile regulators of cellular functions, operating through various mechanisms, primarily involving interactions with other RNAs and proteins. We and others have shown that circRNAs are pervasively expressed in the hematopoietic compartment and discovered the dysregulation and oncogenic potential or the tumor suppressor role of circRNAs in acute leukemias, unearthing new disease mechanisms that can be targeted. As a ring, RNA gains stability and longevity, making it an ideal biomarker and increasing as well its potential for RNA therapy. In this perspective, we will present new bioinformatics tools developed to study circRNAs and discuss data about the dysregulation and functional role of circRNAs in aggressive subtypes of acute lymphoblastic leukemia.