

LINC01198 promotes colorectal cancer cell proliferation and inhibits apoptosis *via* Notch signaling pathway

Dear Editor,

Despite therapeutic advances in recent years, the death rate of Colorectal Cancer (CRC) remains high¹ so novel and effective therapeutic strategies are needed.

Research on CRC treatment currently follows two aims.

The first one is to extend approved therapeutic protocols to frail patients usually excluded from resolutive therapies, as metastatic patients², elderly patients³ and HIV-positive patients⁴.

On the other hand, identification of molecular features is a paramount of therapeutic stratification of CRC patients. In recent years, an emerging class of molecules attracted the interest of researchers: long noncoding RNAs (IncRNAs).

LncRNAs are ubiquitous RNAs with transcripts more than 200 bp, not involved in encoding proteins, but in several biological functions⁵ which appear to be correlated with oncogenesis such as proliferation, apoptosis, angiogenesis, promotion of metastasis and hindrance of tumor suppressor genes⁶.

Chen et al⁷ explore LncRNA 1198 (LINC01198) as a new potential therapeutic target for CRC. The authors show that most CRCs upregulate LINC01198. Subsequently, through *in vitro* and *in vivo* methods, they demonstrated that tumorigenic ability of downregulated LINC01198 CRC cells declined by inhibition of molecules implicated in Notch pathway.

LINC01198 was investigated for oncogenetic role in glioma. Indeed, many scholars⁸ demonstrated that LINC01198 upregulation promotes gliomagenesis through activation of PI3K/AKT pathway and relates to resistance to temozolomide repressing PTEN expression⁹. Both studies confirm that LINC01198 overexpression is linked with worse prognosis of glioma.

In conclusion, several studies show that LINC01198 is involved in several pathways related to oncogenesis and could be linked to development of different neoplasms. However, before confirming LINC01198 involvement (or any other LncRNA) in oncogenesis of specific neoplasms, it is necessary to provide firm evidence of its overexpression. Indeed, molecular features of neoplasms are often heterogeneous¹⁰ so it is important to use sensitive and specific tests before confirming a specific LncRNAs as possible marker of specific tumor.

Conflict of interest

The Authors declare that they have no conflict of interests.

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