# Article information:

Age and cancer related changes of Alu element DNA methylation in colon | Cancer Research | American Association for Cancer Research
<https://aacrjournals.org/cancerres/article/64/7_Supplement/970/515650/Age-and-cancer-related-changes-of-Alu-element-DNA>

# Article summary:

1. The study examined the age and cancer related changes of DNA methylation in Alu repetitive elements.

2. Analysis of Alu element DNA methylation in 40 normal and 31 colon cancers showed that overall, methylation was very heavy with methylation ranging from 97.0 to 70.5% of methylatable sites.

3. There was a strong correlation of Alu element methylation with age, with mean Alu methylation in normal colon mucosa of patients 50 years of age and under being 89.3%, while those over 50 years of age was 83.3%.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy, as it is published by the American Association for Cancer Research (AACR), which is a reputable organization dedicated to advancing cancer research worldwide. The authors are also affiliated with the M. D Anderson Cancer Center, which is one of the leading cancer research centers in the world, further adding to the credibility of the article. Furthermore, the article provides detailed information about its methodology and results, making it easier for readers to understand and evaluate its findings objectively.

However, there are some potential biases that should be noted when evaluating this article's trustworthiness and reliability. For example, although the authors mention that they did not find a statistically significant decrease in DNA methylation when comparing matched pairs of normal colon to colon cancers, they do not provide any evidence or data to support this claim or explain why they did not find such a decrease. Additionally, although they mention that there was no correlation between gender, tumor location (left vs right), or gene specific methylation with degree of Alu element methylation, they do not provide any evidence or data to support this claim either. Finally, although they mention that there is an age-related decrease in repetitive element methylation which may account for the apparent paradoxical increase in CpG island methylation but decrease in total genome methylation with increasing age, again they do not provide any evidence or data to support this claim either.

In conclusion, while this article is generally reliable and trustworthy due to its publication by AACR and affiliation with MDA Anderson Cancer Center, there are some potential biases that should be noted when evaluating its trustworthiness and reliability due to lack of evidence provided for certain claims made by the authors throughout the article.

# Topics for further research:

* DNA methylation and cancer
* Alu element methylation
* CpG island methylation
* Repetitive element methylation
* Age-related decrease in methylation
* Correlation between gender and tumor location with methylation

# Report location:

<https://www.fullpicture.app/item/fa8e9fbdb87c613f52c268d0250b9e52>