# Article information:

Diverse effects of obesity on antitumor immunity and immunotherapy: Trends in Molecular Medicine
[https://www.cell.com/trends/molecular-medicine/fulltext/S1471-4914(22)00294-5?\_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS1471491422002945%3Fshowall%3Dtrue](https://www.cell.com/trends/molecular-medicine/fulltext/S1471-4914%2822%2900294-5?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS1471491422002945%3Fshowall%3Dtrue)

# Article summary:

1. Obesity is linked to multiple types of cancer due to increased levels of hormones and adipokines, gut dysbiosis, altered tumor metabolism, and chronic low-grade inflammation.

2. Obesity negatively affects the antitumor functions of natural killer (NK) cells, T cells, and dendritic cells, contributing to tumor progression.

3. In some patient cohorts and cancer types, obese patients responded better to immune checkpoint blockade than patients with a lower BMI.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

该文章提供了关于肥胖与癌症、免疫系统和免疫治疗之间相互作用的综述。然而，该文章存在一些潜在的偏见和不足之处。

首先，该文章没有探讨肥胖与某些癌症类型之间的因果关系。虽然该文章提到了多种癌症与肥胖有强相关性，但并没有明确说明这种关系是如何建立起来的。此外，该文章也没有考虑到其他可能影响癌症发展的因素，例如遗传、环境和生活方式等。

其次，该文章过于强调肥胖对抗肿瘤免疫细胞（如自然杀伤细胞和CD8 T细胞）的抑制作用，并未探讨肥胖对其他类型免疫细胞（如B细胞和巨噬细胞）的影响。此外，该文章也没有考虑到不同类型癌症对免疫反应的差异性。

第三，该文章提出了一些主张却缺乏证据支持。例如，在某些患者群体和癌症类型中，BMI>30的肥胖患者对免疫检查点阻断的反应更好。然而，该文章并未提供任何具体数据或研究结果来支持这一主张。

第四，该文章没有探讨肥胖对免疫治疗的潜在风险。虽然该文章提到了肥胖可能影响免疫治疗的反应性，但并未考虑到肥胖本身可能会增加手术和化疗等治疗的风险。

综上所述，该文章存在一些偏见和不足之处。虽然它提供了有关肥胖、癌症和免疫系统之间相互作用的综述，但需要更多的证据来支持其主张，并且需要更全面地考虑相关因素。

# Topics for further research:

* Causal relationship between obesity and cancer types
* Impact of obesity on different types of immune cells and immune response in cancer
* Evidence supporting the claim that obese patients with BMI>30 respond better to immune checkpoint blockade
* Potential risks of obesity on cancer treatment
* including immunotherapy
* Other factors that may influence cancer development beyond obesity
* Differences in immune response to cancer based on cancer type.

# Report location:

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