# Article information:

Androgens in Patients With Luminal B and HER2 Breast Cancer Might Be a Biomarker Promoting Anti-PD-1 Efficacy - PMC  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9307975/>

# Article summary:

1. Androgens, such as testosterone and dihydrotestosterone (DHT), may be a potential biomarker for promoting anti-PD-1 efficacy in patients with HER2 and Luminal B breast cancer.

2. The expression of androgen receptor (AR) has a significant correlation with overall survival advantage for Luminal B patients.

3. Testosterone and DHT are positively correlated with the PD-1 expression on Vδ1+ T cells in HER2 and Luminal B patients, suggesting a potential approach of combining androgens with PD-1 blockade for treating these types of breast cancer.

# 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:

作为一篇研究性文章，本文提供了一些有趣的发现和假设，但也存在一些潜在的偏见和缺陷。

首先，文章的标题可能会误导读者认为雄激素是促进抗PD-1疗法有效性的生物标志物。然而，在文章中并没有直接证明这一点，而只是提出了雄激素与PD-1表达之间的相关性，并建议将雄激素与PD-1阻断联合使用来治疗HER2和Luminal B乳腺癌。因此，标题可能存在夸大其词的嫌疑。

其次，文章中提到了AR在ER阳性乳腺癌中作为肿瘤抑制剂的作用。然而，这个结论仍然存在争议，并且该领域还需要更多的研究来确定AR在不同类型的乳腺癌中的确切作用。因此，在没有更多证据支持之前，将AR定位为肿瘤抑制剂可能过于简单化。

此外，在讨论雄激素与PD-1表达之间的关系时，文章没有考虑其他可能影响这种关系的因素。例如，是否存在其他细胞类型或分子可以干扰这种关系？是否存在其他因素可以影响雄激素和PD-1表达之间的相关性？这些问题需要更深入的研究来回答。

最后，文章没有探讨使用雄激素与PD-1阻断联合治疗可能带来的风险或副作用。例如，是否存在可能增加肿瘤生长或转移的风险？这些问题需要在进一步的研究中得到解决。

总之，虽然本文提供了一些有趣的发现和假设，但读者应该注意到其中存在的潜在偏见和缺陷，并谨慎对待其中提出的建议。

# Topics for further research:

* Other factors affecting the relationship between testosterone and PD-1 expression
* Controversy surrounding the role of androgen receptor as a tumor suppressor in ER-positive breast cancer
* Potential risks or side effects of combining testosterone and PD-1 blockade therapy
* Need for further research to determine the exact role of androgen receptor in different types of breast cancer
* Other cell types or molecules that may interfere with the relationship between testosterone and PD-1 expression
* Caution in interpreting the suggestions made in the article without further evidence to support them.

# Report location:

<https://www.fullpicture.app/item/324c68a07b4cde751daff381b1a2eb60>