
Cancer Vaccines: Transforming Treatment and Prevention

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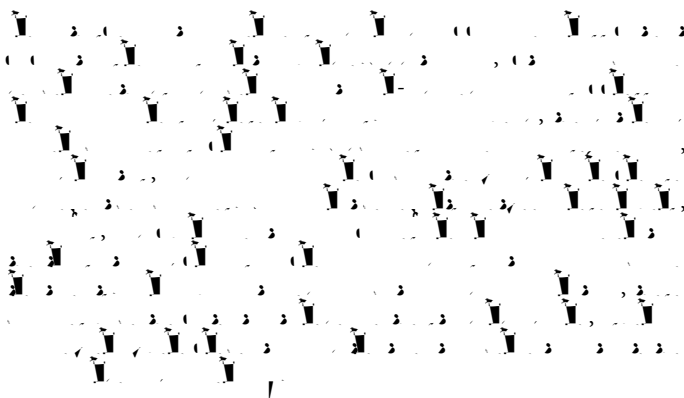
Abstract

Cancer vaccines are emerging as a transformative approach in oncology, offering innovative strategies for both the treatment and prevention of cancer. Unlike traditional vaccines for infectious diseases, cancer vaccines harness the body's immune system to target and destroy cancer cells or to prevent cancer from developing. This article explores the two main types of cancer vaccines—preventive and therapeutic—and their mechanisms of action. It highlights recent advancements, including personalized cancer vaccines, neoantigen vaccines, combination therapies, and mRNA vaccines, which have significantly enhanced vaccine efficacy and development. The clinical impact of these vaccines is evident

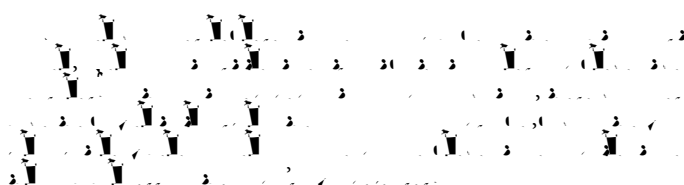
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References

1. Prociak A, Szczepaniak J, Skiba A, Zubowska M, Fendler W, et al. Dental anomalies as late adverse effect among young children treated for cancer. *Cancer Res Treat* 48: 658-667.
2. Voskuilen IGMVDP, Veerkamp JSJ, Raber-Durlacher JE, Bresters D, Wijk AJV, et al (2009) Long-term adverse effects of hematopoietic stem cell transplantation on dental development in children. *Support Care Cancer* 17: 1169-1175.
3. Ackerman JL, Acherman LA, Ackerman BA (1973) Taurodont, pyramidal, and fused molar roots associated with other anomalies in a kindred. *Am J Phys Anthropol* 38: 681-694.
4. Jafarzadeh H, Azarpazhooh A, Mayhall Jt (2008) Taurodontism: a review of the condition and endodontic treatment challenges. *Int Endod J* 41: 375-388.
5. Kaste SC, Hopkins KP, Jones D, Crom D, Greenwald CA, et al. (1997) Dental abnormalities in children treated for acute lymphoblastic leukemia. *Leukemia* 11: 792-796.
6. Agha RA, Franchi T, Sohrabi C, Mathew G (2020) The SCARE 2020 guideline: updating consensus surgical CARE REport (SCARE) guidelines. *Int J Surg* 84: 226-230.
7. Eyman RK, Grossman HJ, Chaney RH, Call TL (1990) The life expectancy of profoundly handicapped people with mental retardation. *N Engl J Med* 323: 584-589.
8. Crimmins EM, Zhang Y, Saito Y (2016) Trends over 4 decades in disability-free life expectancy in the United States. *Am J Public Health* 106: 1287-1293.
9. Nishimura S, Inada H, Sawa Y, Ishikawa H (2013) Risk factors to cause tooth formation anomalies in chemotherapy of paediatric cancers. *Eur J Cancer Care* 22: 353-360.
10. Trá Ā RisQ haov Pu M