



## EVIDENCIA Y LITERATURA CIENTIFICA DE RESPALDO EN ONCOLOGIA MOLECULAR E INMUNOTERAPIA

Con frecuencia, un paciente nos comenta que le dijeron que este tratamiento no existe, no se sabe nada, no sirve, o no tiene estudios al respecto. Para total transparencia, aquí mostramos una selección de las principales publicaciones en revistas médicas de alto impacto y prestigio. Con esto queda claro para el paciente que, quien le comentó eso, simplemente esta desactualizado o falta estudio en el tema, y como muchas veces ocurre, el paciente termina sabiendo más que a quién consultó. **NO ACEPTE QUE LO DESINFORMEN.**

### INMUNOTERAPIA ADOPTIVA - Células dendríticas y exosomas:

Destacada en distintas publicaciones por ser 1 de las 3 inmunoterapias (junto a T-CAR e inhibidores de checkpoints) con mayor respaldo, así como alta precisión, personalizada, de mínimas reacciones adversas y de costo más accesible en comparación a otras inmunoterapias. Ver pág 20, créditos a REVISTA: “Investigación y Ciencia, especial de INMUNOTERAPIA CONTRA EL CANCER, 2018” (link <https://www.investigacionyciencia.es/revistas/especial/inmunoterapia-contra-el-cancer-748>)

#### **1. Células dendríticas en Tumor Sólido:**

- a. Enhancing Dendritic Cell Therapy in Solid Tumors with Immunomodulating Conventional Treatment (2019)
  - i. [https://www.cell.com/molecular-therapy-family/oncolytics/pdfExtended/S2372-7705\(19\)30037-3](https://www.cell.com/molecular-therapy-family/oncolytics/pdfExtended/S2372-7705(19)30037-3)
- b. Dendritic Cells: The Tools for Cancer Treatment
  - i. <https://www.intechopen.com/books/dendritic-cells/dendritic-cells-the-tools-for-cancer-treatment>
- c. Integrating Next-Generation Dendritic Cell Vaccines into the Current Cancer Immunotherapy Landscape.
  - i. [https://linkinghub.elsevier.com/retrieve/pii/S1471-4906\(17\)30094-7](https://linkinghub.elsevier.com/retrieve/pii/S1471-4906(17)30094-7)
- d. Dendritic Cell-Derived Exosomes as Immunotherapies in the Fight against Cancer:
  - i. <https://www.jimmunol.org/content/jimmunol/193/3/1006.full.pdf>
- e. Trial watch: Dendritic cell-based anticancer immunotherapy:
  - i. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5543823/pdf/koni-06-07-1328341.pdf>
- f. An update on Dendritic Cell-Based Cancer Immunotherapy:
  - i. <https://www.longdom.org/open-access/an-update-on-dendritic-cellbased-cancer-immunotherapy-1745-7580-10000106.pdf>
- g. Improvement of Impaired Immunological Status of Patients with Various Types of Advanced Cancers by Autologous Immune Cell Therapy.
  - i. <http://ar.iijournals.org/content/35/8/4535.full.pdf+html>
- g. Efficacy of Dendritic Cell-Based Cancer Immunotherapy: <https://www.omicsonline.org/open-access/efficacy-of-dendritic-cellbased-cancer-immunotherapy-2161-1009-1000240.pdf>
- h. Cell Cancer Therapy: Vaccinating the Right Patient at the Right Time
  - a. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6174277/pdf/fimmu-09-02265.pdf>

#### **2. Células dendríticas en Cáncer de cabeza y cuello:**

- a. Establishment of Synergistic Chemoimmunotherapy for Head and Neck Cancer Using Peritumoral Immature Dendritic Cell Injections and Low-Dose Chemotherapies:
  - i. <https://www.sciencedirect.com/science/article/pii/S1936523317304242>

#### **3. Células dendríticas en Glioblastoma:**

- a. First results on survival from a large Phase 3 clinical trial of an autologous dendritic cell vaccine in newly diagnosed glioblastoma
  - i. [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5975654/pdf/12967\\_2018\\_Article\\_1507.pdf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5975654/pdf/12967_2018_Article_1507.pdf)
  - ii. <https://www.ncbi.nlm.nih.gov/pubmed/29843811>



4. **Células dendríticas en Cáncer de Esófago y Estómago:**
  - a. Cytokine-induced killer cells/dendritic cells and cytokine-induced killer cells immunotherapy for the treatment of esophageal cancer in China: a meta-analysis
    - i. <https://www.dovepress.com/cytokine-induced-killer-cellsdendritic-cells-and-cytokine-induced-kill-peer-reviewed-fulltext-article-OTT>
5. **Células dendríticas en Cáncer de Páncreas:**
  - a. Efficacy of vaccination with tumor-exosome loaded dendritic cells combined with cytotoxic drug treatment in pancreatic cancer:
    - i. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5486185/>
6. **Células dendríticas en Cáncer de Colon:**
  - a. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6225919/>
7. **Células dendríticas en Cáncer de Vejiga:**
  - a. Immunotherapy based on dendritic cells in bladder cancer treatment:
    - i. [https://umo.abvpress.ru/jour/article/view/143?locale=en\\_US](https://umo.abvpress.ru/jour/article/view/143?locale=en_US)
8. **Células dendríticas en Cáncer Renal:**
  - a. [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5477104/pdf/40425\\_2017\\_Article\\_255.pdf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5477104/pdf/40425_2017_Article_255.pdf)
1. **Células dendríticas en Cáncer de próstata:**
  - a. Current and emerging trends in prostate cancer immunotherapy
    - i. [http://www.ajandrology.com/temp/AsianJAndrol2116-6380399\\_174323.pdf](http://www.ajandrology.com/temp/AsianJAndrol2116-6380399_174323.pdf)
2. **Células dendríticas en Cáncer uterino:**
  - a. Dendritic cell immunotherapy in uterine cancer:
    - i. <https://www.tandfonline.com/doi/pdf/10.4161/hv.28716>
3. **Células dendríticas en Cáncer de Ovario:**
  - a. Personalized cancer vaccine effectively mobilizes antitumor T cell immunity in ovarian cancer
    - i. <https://stm.sciencemag.org/content/10/436/eaao5931/tab-pdf>
  - b. Understanding dendritic cell immunotherapy in ovarian cancer:
    - i. <https://www.tandfonline.com/doi/full/10.1080/14737140.2016.1178576?scroll=top&nedAccess=true>
4. **Células dendríticas en Cáncer de mama:**
  - a. Dendritic cell-based vaccines: clinical applications in breast cancer:
    - i. [https://www.futuremedicine.com/doi/abs/10.2217/imt.13.169?rfr\\_dat=cr\\_pub%3Dpubmed&url\\_ver=Z39.88-2003&rfr\\_id=ori%3Arid%3Aacrossref.org&journalCode=imt](https://www.futuremedicine.com/doi/abs/10.2217/imt.13.169?rfr_dat=cr_pub%3Dpubmed&url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Aacrossref.org&journalCode=imt)
  - b. Antitumor efficacy of the Runx2-dendritic cell vaccine in triple-negative breast cancer *in vitro*:
    - i. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6096217/pdf/ol-16-03-2813.pdf>
5. **Células dendríticas en Melanoma:**
  - a. Dendritic cell therapy in melanoma:
    - i. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5653516/pdf/atm-05-19-386.pdf>
  - b. Strategies to Improve the Efficacy of Dendritic Cell-Based Immunotherapy for Melanoma:
    - i. <https://www.frontiersin.org/articles/10.3389/fimmu.2017.01594/full>
6. **Células dendríticas en Sarcoma:**
  - a. Dendritic cell immunotherapy in soft tissue sarcoma:
    - i. <https://www.futuremedicine.com/doi/pdf/10.2217/imt.12.106>
7. **Células dendríticas en Linfoma, Leucemia, Mieloma:**
  - a. Dendritic Cell Therapies for Hematologic Malignancies:
    - i. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5415319/pdf/main.pdf>



**8. Células dendríticas en Cáncer de Pulmón:**

- a. Dendritic cell-derived exosomes as maintenance immunotherapy after first line chemotherapy in NSCLC: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4839329/pdf/koni-05-04-1071008.pdf>
- b. Dendritic cell vaccine and cytokine-induced killer cell therapy for the treatment of advanced non-small cell lung cancer.
  - i. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4812113/pdf/ol-11-04-2605.pdf>
- c. A dendritic cell-based p53 vaccine (Ad.p53-DC) in small cell lung cancer: observed association between immune response and enhanced chemotherapy effect:
  - i. <https://www.tandfonline.com/doi/abs/10.1517/14712598.2010.484801>

**9. Células dendríticas en Cáncer pleural – Mesotelioma:**

- a. Autologous Dendritic Cell Therapy in Mesothelioma Patients Enhances Frequencies of Peripheral CD4 T Cells Expressing HLA-DR, PD-1, or ICOS (2018):
  - i. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6137618/>
- b. Consolidative Dendritic Cell-based Immunotherapy Elicits Cytotoxicity against Malignant Mesothelioma: [https://www.atsjournals.org/doi/full/10.1164/rccm.200909-1465OC?url\\_ver=Z39.88-2003&rfr\\_id=ori%3Arid%3Acrossref.org&rfr\\_dat=cr\\_pub%3Dpubmed#readcube-epdf](https://www.atsjournals.org/doi/full/10.1164/rccm.200909-1465OC?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub%3Dpubmed#readcube-epdf)

**10. Células dendríticas en Enfermedades autoinmunes:**

- a. Regulatory Dendritic Cells for Immunotherapy in Immunologic Diseases
  - i. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3907717/>

**11. Células dendríticas en Rechazo a trasplantes:**

- a. Tolerogenic dendritic cell therapy in organ transplantation.
  - i. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5827529/pdf/fimmu-09-00274.pdf>

**12. Células dendríticas a Futuro:**

- a. Personalized Dendritic Cell Vaccines—Recent Breakthroughs and Encouraging Clinical Results:
  - i. <https://www.frontiersin.org/articles/10.3389/fimmu.2019.00766/full>
- b. The evolving clinical landscape for dendritic cell vaccines and cancer immunotherapy.
  - i. <http://sci-hub.se/10.2217/imt-2018-0129>

**13. Rol de lisado tumoral autologo:**

- a. A tumor lysate is an effective vaccine antigen for the stimulation of CD4<sup>+</sup> T-cell function and subsequent induction of antitumor immunity mediated by CD8<sup>+</sup> T cells:
  - i. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4846130/pdf/kcvt-16-11-1078027.pdf>

**14. Células dendríticas en Inmunoterapia combinada contra el cáncer**

- a. Wang Y, Deng W, Li N, et al. Combining Immunotherapy and Radiotherapy for Cancer Treatment: Current Challenges and Future Directions. *Front Pharmacol.* 2018;9:185. Published 2018 Mar 5. doi:10.3389/fphar.2018.00185
- b. Wang, Chengshi; Pu, Juan; Yu, Hanxu; Liu, Yanyan; Yan, Honghuan; He, Zhongxiang; Feng, Xin. A Dendritic Cell Vaccine Combined With Radiotherapy Activates the Specific Immune Response in Patients With Esophageal Cancer. *Journal of Immunotherapy: February/March 2017 - Volume 40 - Issue 2 - p 71–76* doi: 10.1097/CJI.0000000000000155
- c. Shweta Joshi and Donald L. Durden, “Combinatorial Approach to Improve Cancer Immunotherapy: Rational Drug Design Strategy to Simultaneously Hit Multiple Targets to Kill Tumor Cells and to Activate the Immune System,” *Journal of Oncology*, vol. 2019, Article ID 5245034, 18 pages, 2019
- d. Optimizing Dendritic Cell-Based Approaches for Cancer Immunotherapy (2014) [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4257036/pdf/yjbm\\_87\\_4\\_491.pdf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4257036/pdf/yjbm_87_4_491.pdf)
- e. Combination Strategies to Optimize Efficacy of Dendritic Cell-Based Immunotherapy: <https://www.frontiersin.org/articles/10.3389/fimmu.2018.02759/full>