

DCVax-L

Dendritic cell (DC) immunotherapy is emerging as a potential addition to the standard of care in the treatment of glioblastoma multiforme (GBM).

DCVax®-L, one of the implementations of the DCVax platform, provides personalized active immunotherapy composed of autologous dendritic cells pulsed with autologous whole tumor lysate. Clinical trials with DCVax-L for GBM included previous Phase I/II/III clinical trials ¹⁾.

Addition of DCVax-L to standard therapy is feasible and safe in glioblastoma patients, and may extend survival. Trial registration Funded by Northwest Biotherapeutics; Clinicaltrials.gov number: NCT00045968; <https://clinicaltrials.gov/ct2/show/NCT00045968?term=NCT00045968&rank=1> ; initially registered 19 September 2002 ²⁾.

Various research conducted phase I and II trials of DC-immunotherapy on patients with newly diagnosed (ND) and recurrent GBM and other high-grade gliomas in an attempt to improve the poor prognosis. Results show an increase in overall survival (OS), while vaccination-related side effects are invariably mild. Northwest Biotherapeutics, Inc., Bethesda, Maryland, U.S.A. (NWBT) developed the DCVax®-L vaccine as an adjunct to the treatment of GBM. It is currently under evaluation in a phase III trial in patients with ND-GBM, which is the only ongoing trial of its kind ³⁾.

DC vaccine trials provide evidence of low toxicity in GBM patients and effective induction of antitumor immunity in the latest publications correlate with clinical improvements. Preliminary reports on DCVax-Brain clinical outcomes seem to follow these trends ⁴⁾.

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Hdeib A, Sloan AE. Dendritic cell immunotherapy for solid tumors: evaluation of the DCVax® platform in the treatment of glioblastoma multiforme. CNS Oncol. 2015;4(2):63-9. doi: 10.2217/cns.14.54. Review. PubMed PMID: 25768330.

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Liau LM, Ashkan K, Tran DD, Campian JL, Trusheim JE, Cobbs CS, Heth JA, Salacz M, Taylor S, D'Andre SD, Iwamoto FM, Dropcho EJ, Moshel YA, Walter KA, Pillainayagam CP, Aiken R, Chaudhary R, Goldlust SA, Bota DA, Duic P, Grewal J, Elinzano H, Toms SA, Lillehei KO, Mikkelsen T, Walbert T, Abram SR, Brenner AJ, Brem S, Ewend MG, Khagi S, Portnow J, Kim LJ, Loudon WG, Thompson RC, Avigan DE, Fink KL, Geoffroy FJ, Lindhorst S, Lutzky J, Sloan AE, Schackert G, Krex D, Meisel HJ, Wu J, Davis RP, Duma C, Etame AB, Mathieu D, Kesari S, Piccioni D, Westphal M, Baskin DS, New PZ, Lacroix M, May SA, Pluard TJ, Tse V, Green RM, Villano JL, Pearlman M, Petrecca K, Schulder M, Taylor LP, Maida AE, Prins RM, Cloughesy TF, Mulholland P, Bosch ML. First results on survival from a large Phase 3 clinical trial of an autologous dendritic cell vaccine in newly diagnosed glioblastoma. J Transl Med. 2018 May 29;16(1):142. doi: 10.1186/s12967-018-1507-6. Erratum in: J Transl Med. 2018 Jun 29;16(1):179. PubMed PMID: 29843811; PubMed Central PMCID: PMC5975654.

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Polyzoidis S, Ashkan K. DCVax®-L-developed by Northwest Biotherapeutics. Hum Vaccin Immunother. 2014;10(11):3139-45. doi: 10.4161/hv.29276. Review. Erratum in: Hum Vaccin Immunother.

2015;11(7):1881. PubMed PMID: 25483653; PubMed Central PMCID: PMC4514134.

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Wheeler CJ, Black KL. DCVax-Brain and DC vaccines in the treatment of GBM. Expert Opin Investig Drugs. 2009 Apr;18(4):509-19. doi: 10.1517/13543780902841951 . Review. PubMed PMID: 19335279.

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