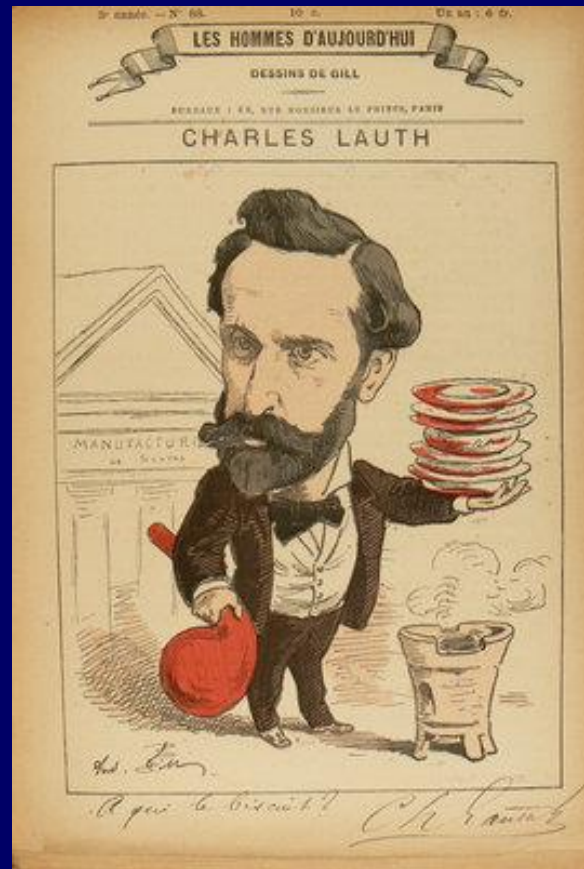


I am cofounder of ABBY, a company developing imipramine blue, a triphenylmethane, for the treatment of glioblastoma

“Where there is no interest, there is no conflict”

Raymond Schinazi, PhD, co-discoverer of Emtriva

Charles Lauth, discoverer of gentian violet

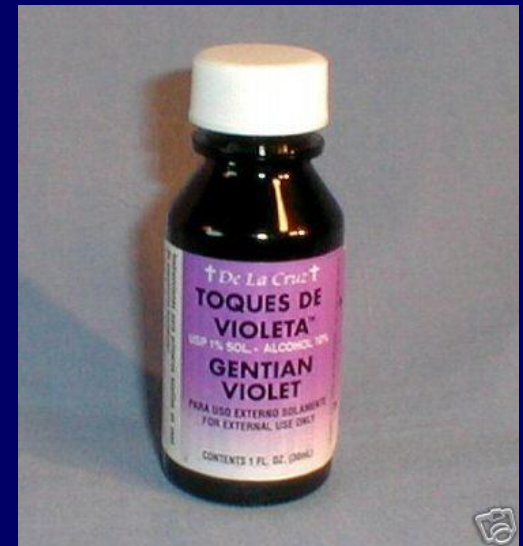


Lauth, C. (1867), "On the new aniline dye, 'Violet de Paris'", Laboratory, 1: 138–139

- Available OTC as 1% or 2% solutions, creams, ointments and pessaries (\$2-\$6)

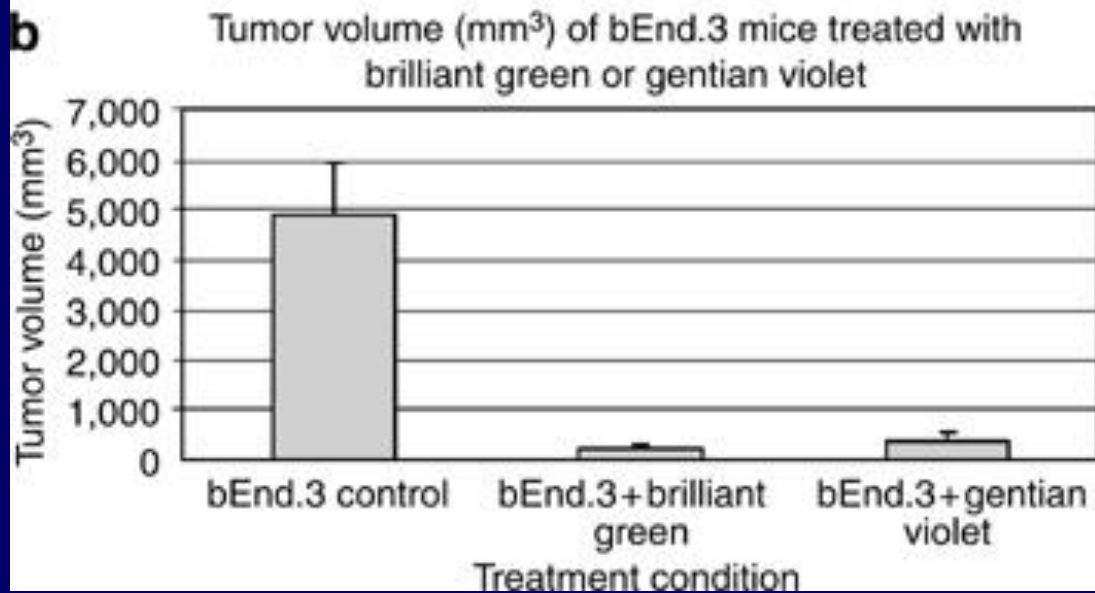
- Other names:

- andergon
- aniline violet
- basic violet 3
- Brilliant violet 58
- hexamethyl pararosaniline Cl
- meroxylan
- pyoktanin
- crystal violet
- etc.....





Control Brilliant green Gentian violet



Infantile Hemangioma

- Most common tumor of infancy
- Usually absent at birth → appears within 1st weeks of life → undergoes rapid prolifer → spontaneous involution of years
- Result in a range of complications, from cosmetic to life threatening



Before and after Gentian Violet to ulcerated hemangioma (1 month of treatment, Leslie Lawley, M.D.)



Gentian violet downregulates Angptl4

Proof of concept using
Triphenylmethanes in
Humans (Gentian violet
Plus imiquimod)

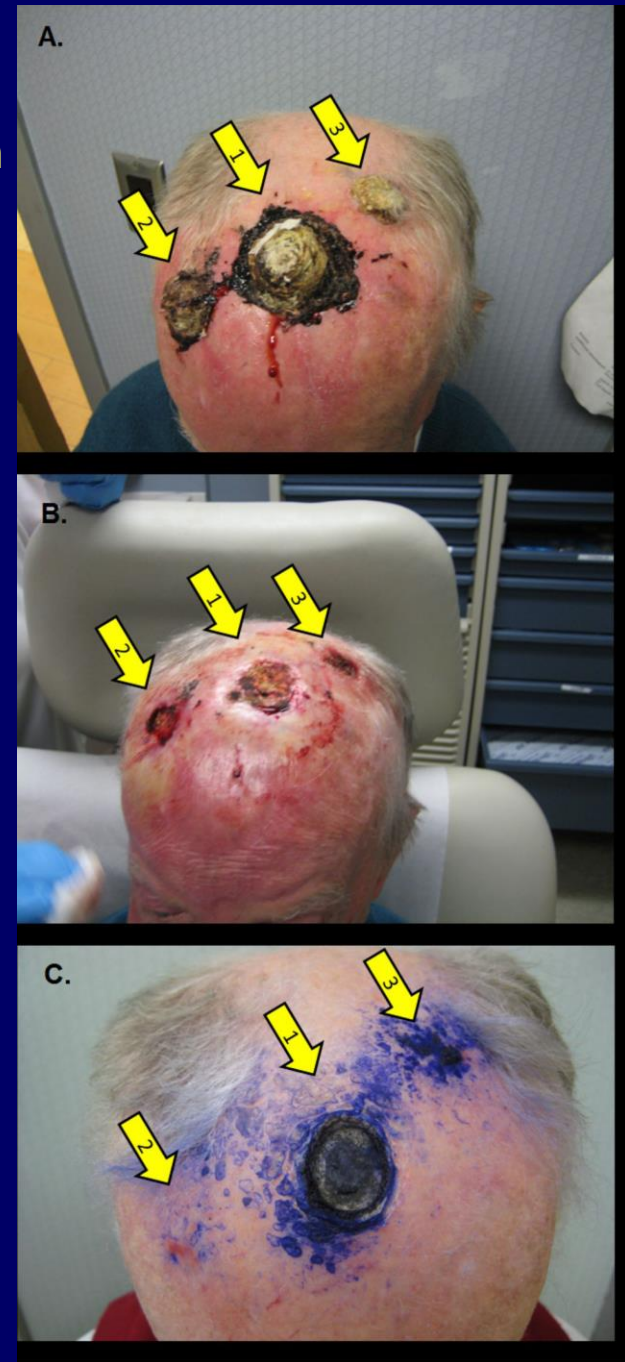
Hypothesis: Combining
Imiquimod (TLR7 agonist,
Interferon inducer) with
Gentian violet (NADPH
Oxidase inhibitor) will
result in superior immune
response than imiquimod
alone

Combination therapy of imiquimod and
gentian violet for cutaneous melanoma metastases.
Arbiser JL, Bips M, Seidler A, Bonner MY, Kovach C.
J Am Acad Dermatol. 2012 Aug;67(2):e81-3. doi

Three bulky melanoma
metastases at presentation

Three bulky melanoma
metastases after debulking

Lack of recurrence at 6
months following gentian
violet and imiquimod



Regression of diffuse B-cell lymphoma of the leg with intralesional gamma violet.

Rao S, Morris R, Rice ZP, Arbiser JL.

Exp Dermatol. 2017 Aug 20. doi: 10.1111/exd.13418

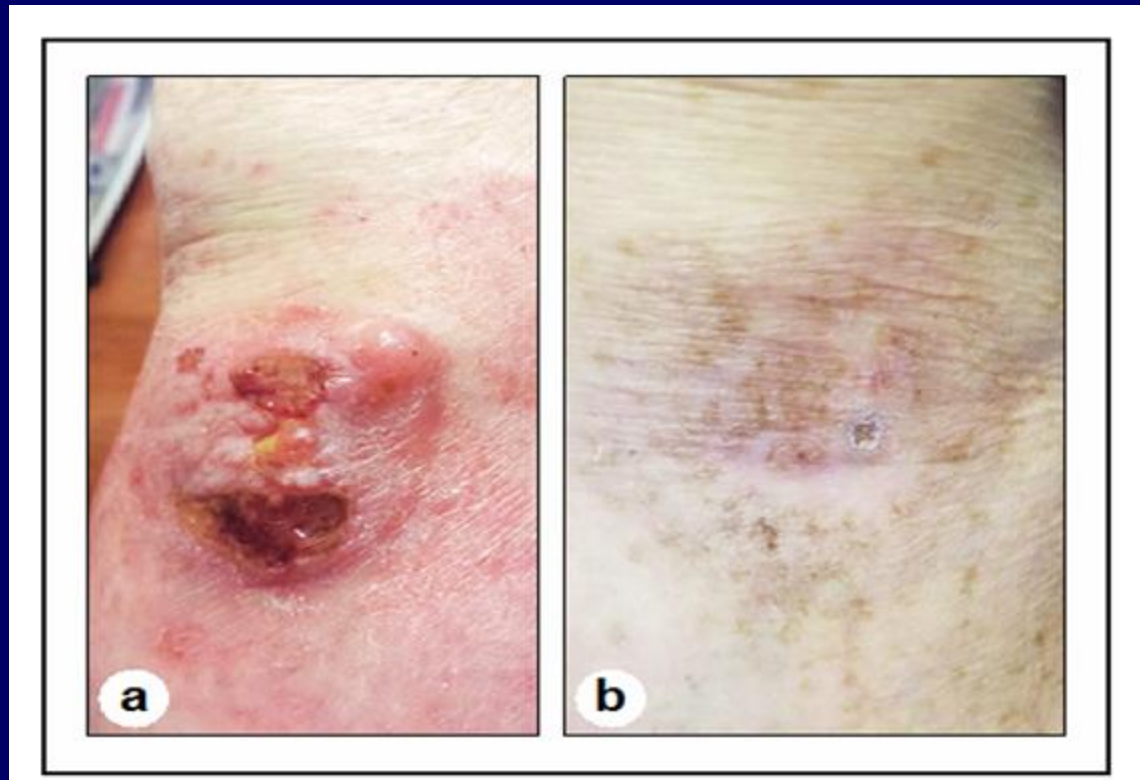


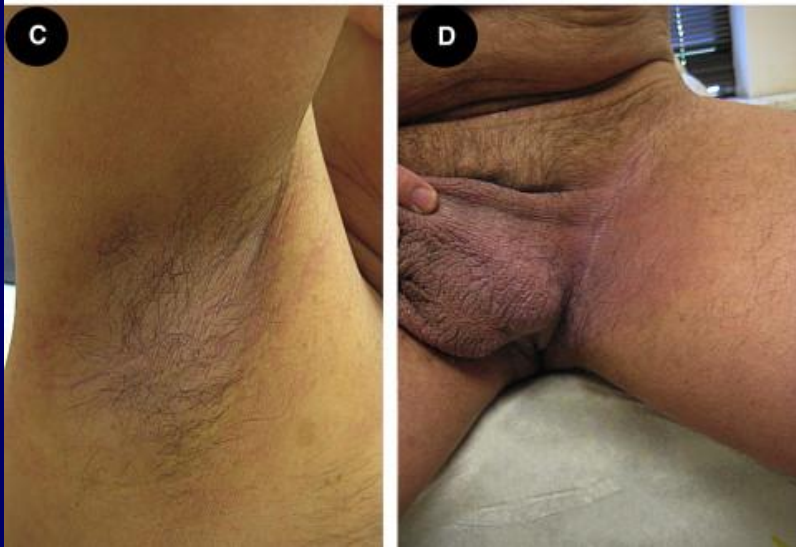
Figure 1: Primary Cutaneous Diffuse B-cell lymphoma, leg type: Clinical appearance of the patient at presentation a), and lesion at four months follow up b)



JAAD Case Report 2019 May; 5(5): 413–415.

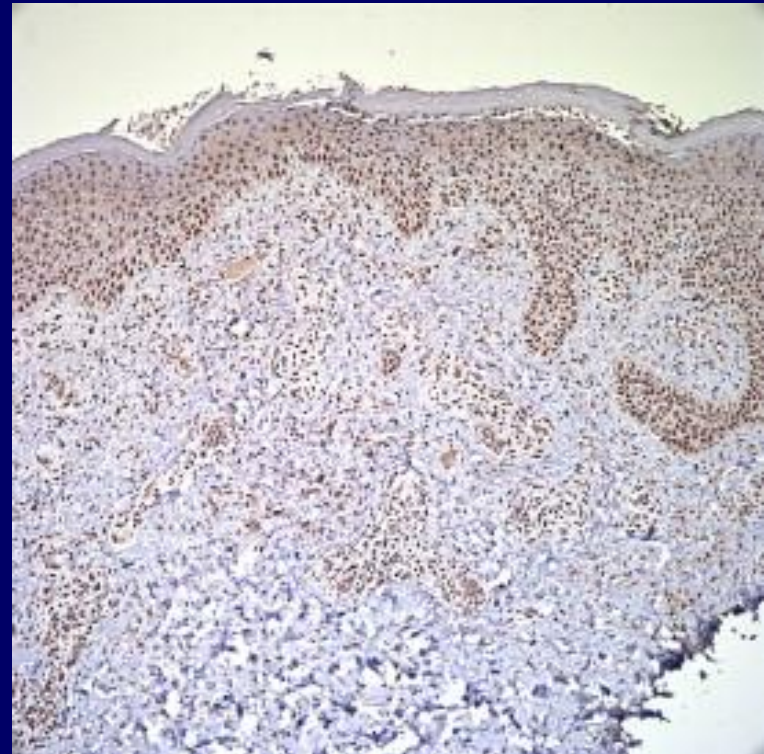
Treatment of recalcitrant mycosis fungoides with topical gentian violet

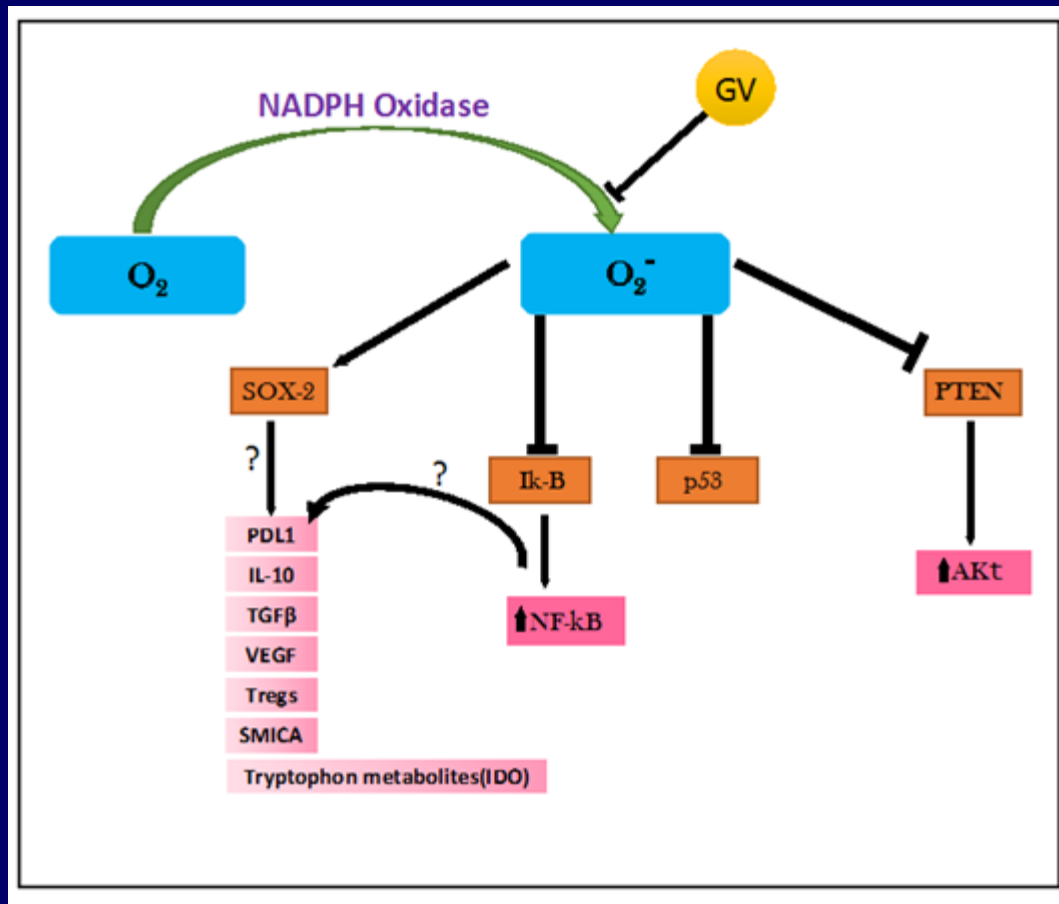
Anti-inflammatory effects of gentian violet in humans



Journal of the American Academy of Dermatology

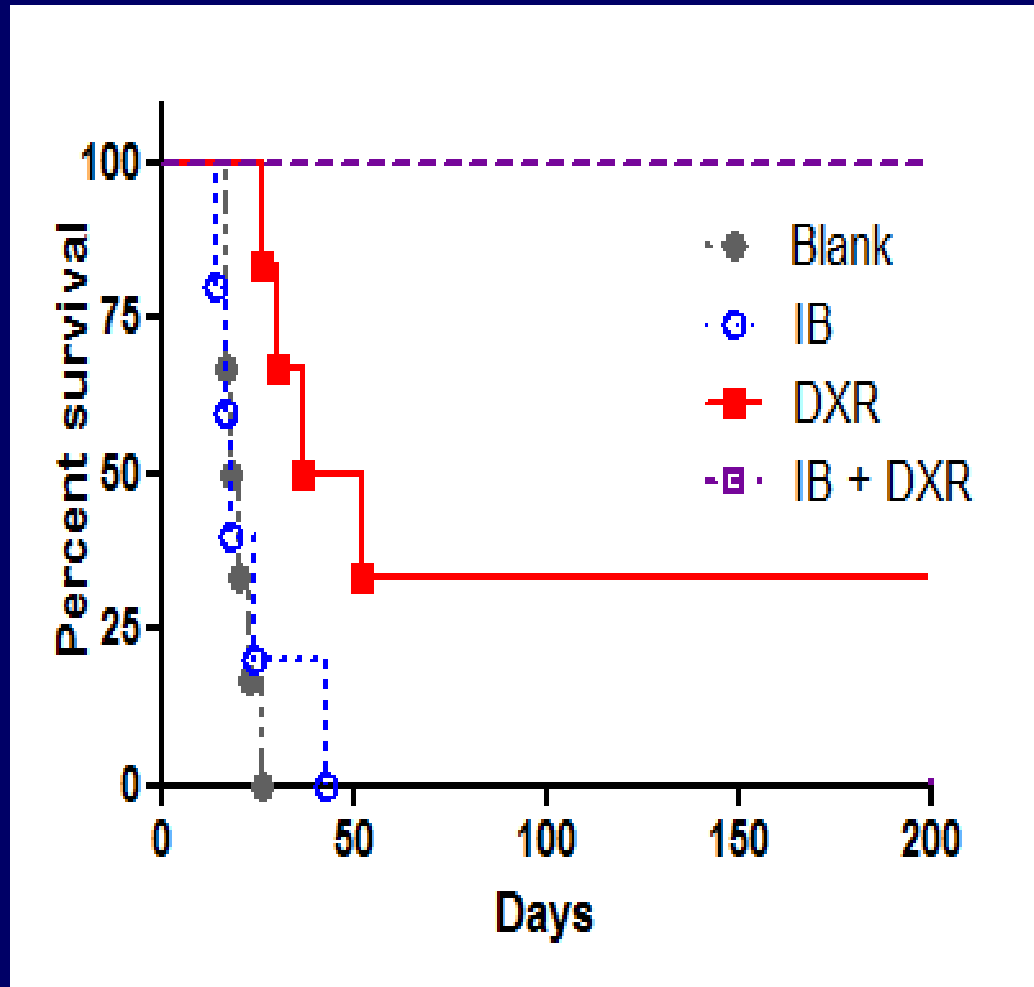
Volume 63, Issue 3, September 2010,
Pages 537-539





Generation of reactive oxygen species results in activation of NF κ B, Akt and suppression of wild type p53. In addition, SOX-2 may increase the production of immunosuppression factors.

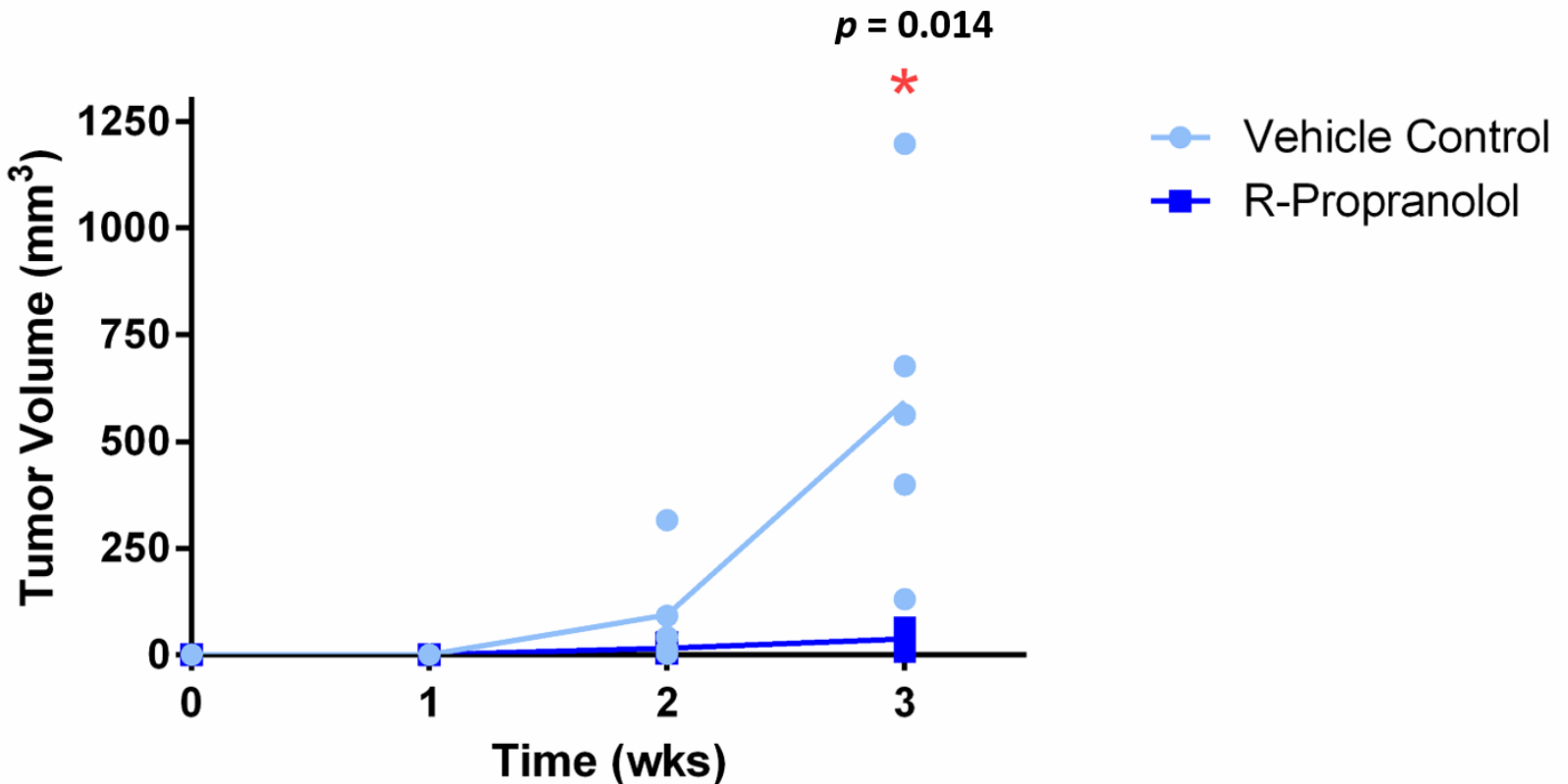
In Vitro Studies (Glioblastoma in Rats) - Delivery of NANO-IB Before DXR Yields Increased Survival



Anti-Invasive Adjuvant Therapy with Imipramine Blue Enhances Chemotherapeutic Efficacy Against Glioma

Science Translational Medicine 28
Mar 2012:

R-Propranolol has antitumor activity in vivo



NPJ Precis Oncol. 2019 Nov
1;3:27. doi: 10.1038/s41698-
019-0099-9. eCollection 2019

Summary

- GV has been used for many years
- Antimicrobial/antimycotic actions are well documented
- Discovery of GV as NADPH oxidase inhibitor leads to use as anti-inflammatory and anti-tumor agent
- Novel uses for the future.....novel delivery modes

Precursor to systemic NADPH oxidase inhibitors for cancer and inflammation