OXILEM

A shield against inflammation
— In vitro clinical trials

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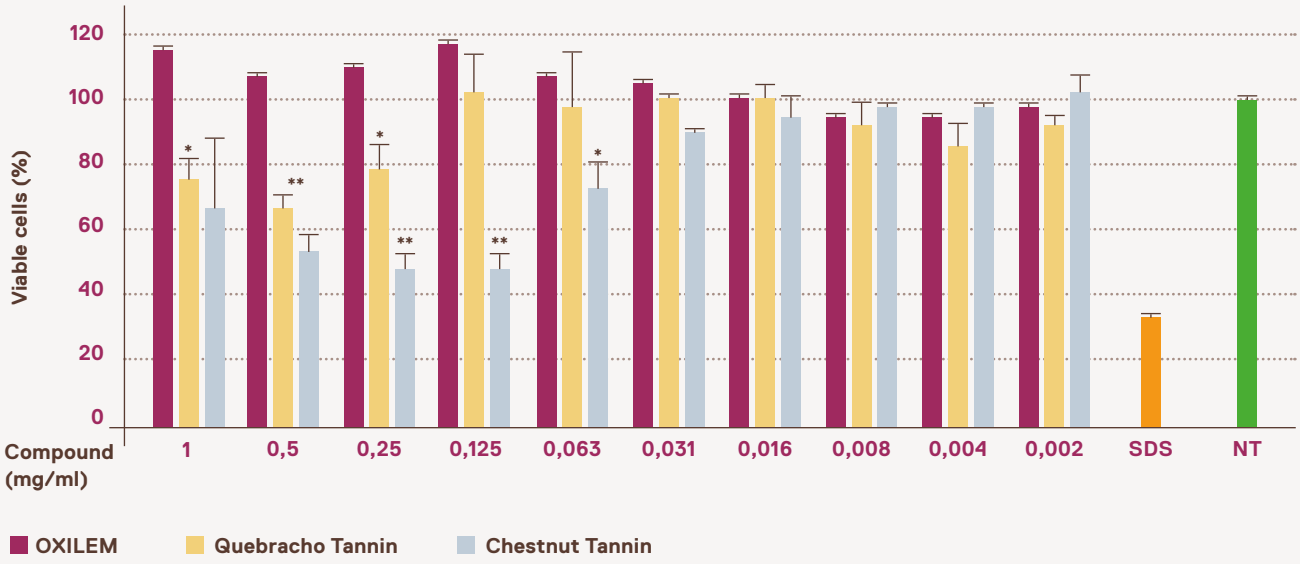
Comparison of OXILEM and Tannins: toxicological and proinflammatory profile / The toxicological profile was determined on a mammalian cell line Caco 2 (Intestinal barrier model).

The minimum toxic concentration was determined.

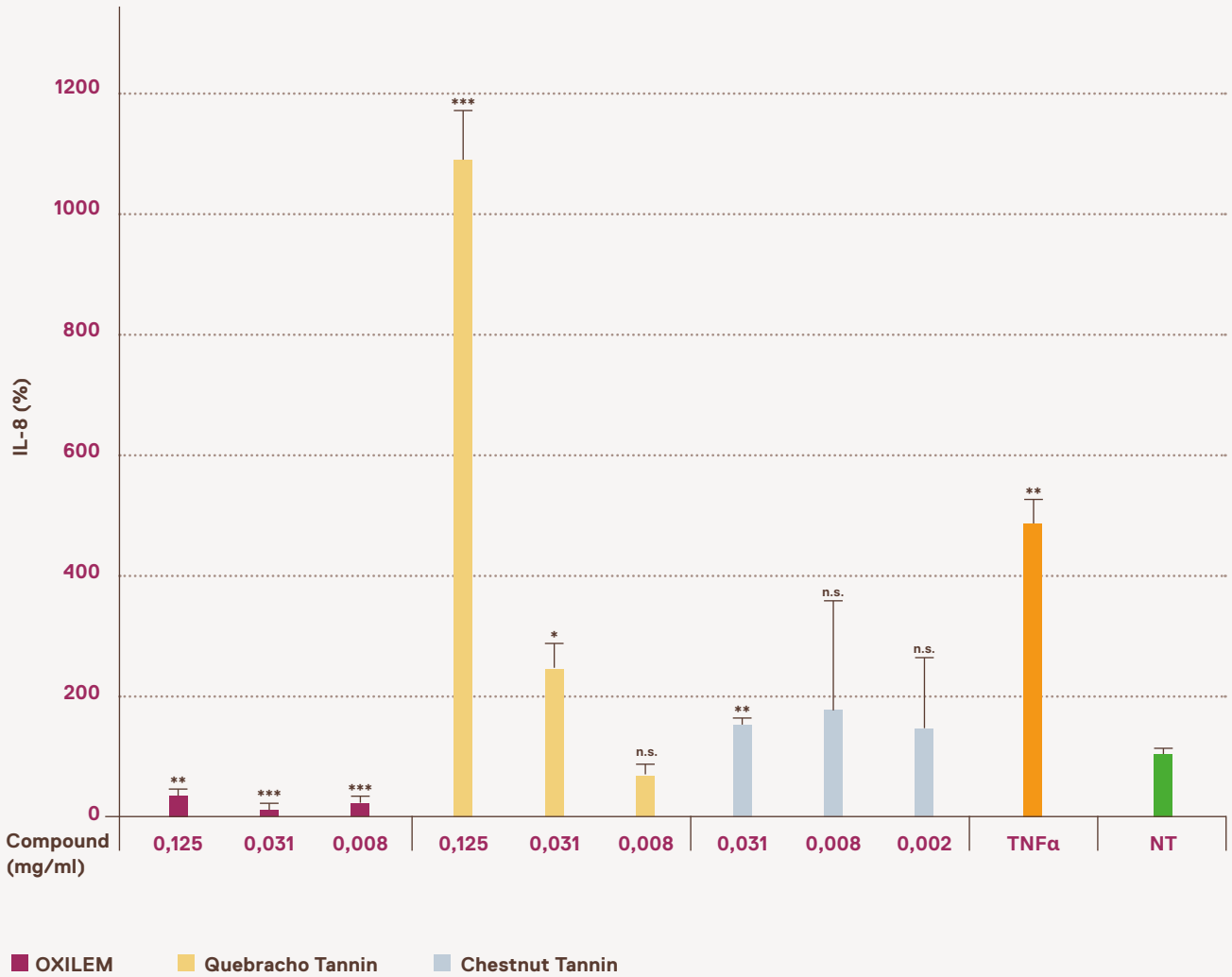
OXILEM is not toxic!



MTT Assay Caco-2 cells were treated with the three compounds for 24 hours. Cell vitality was determined by measuring absorbance at 595 nm after reaction with MTT. Viability values are expressed as a percentage of the absorbance of non-treated cells (NT). 1 mg/ml SDS (Sodium Dodecyl Sulfate) was used as positive control.

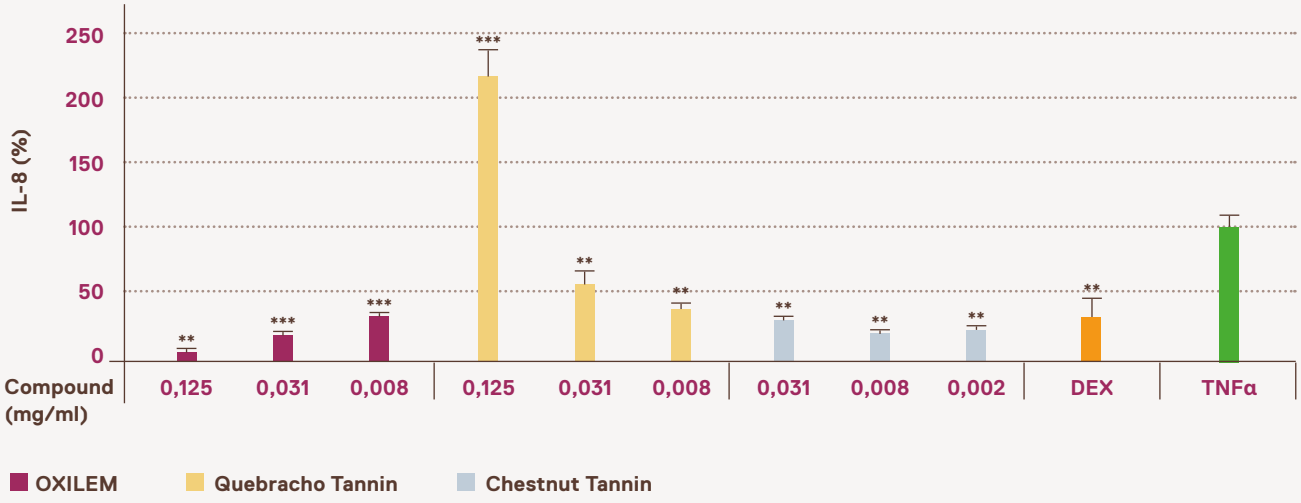
Comparison of OXILEM and Tannins: toxicological and proinflammatory profile / The ability of the compounds to trigger an inflammatory response was tested considering the ability to induce the interleukin 8 pathway. Chestnut tannin was tested at lower concentrations because at 0.063 mg/ml or higher it is harmful for the vitality of the cells (MTT assay). See previous page

OXILEM has no pro inflammatory activity as opposed to tannins which are found to have a significant inflammatory effect



Pro-inflammatory effect Caco 2 cells were treated with the three compounds for 48 hours. IL-8 concentration was determined through ELISA. Values are reported as a percentage of the IL-8 detected in non-treated cells (NT). 0.2 µg/ml TNFα was used as positive control.

Comparison of OXILEM and Tannins: toxicological and proinflammatory profile / The ability of the compounds of triggering off an inflammatory pathway was determined. TNFα (Tumor Necrosis Factor) was used to induce inflammation in the cell line, and the potential of the two compounds to decrease inflammation will be assayed. Chestnut tannin was tested at lower concentrations because at 0.063 mg/ml or higher it is harmful for the vitality of the cells (MTT assay).

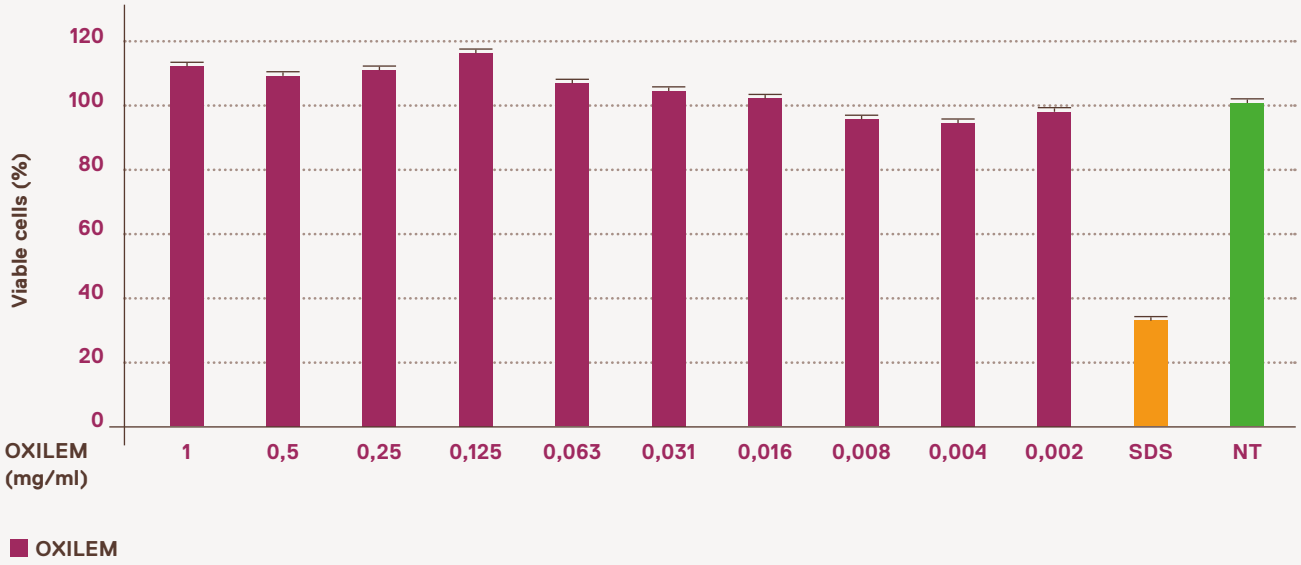


Anti-inflammatory effect Caco 2 cells were treated with 0.2 µg/ml TNF α in the absence or presence of the three compounds for 48 hours. IL-8 concentration was determined through ELISA. Values are reported as a percentage of the IL-8 detected in cells treated with TNFα only. 0.08 mg/ml **Dexamethasone** (DEX) was used as positive control.

OXILEM: toxicological and proinflammatory profile

The toxicological profile was determined on a mammalian cell line Caco-2.

OXILEM is not toxic to Caco-2 cells. In addition, at higher concentrations it appears to have a stimulating effect.

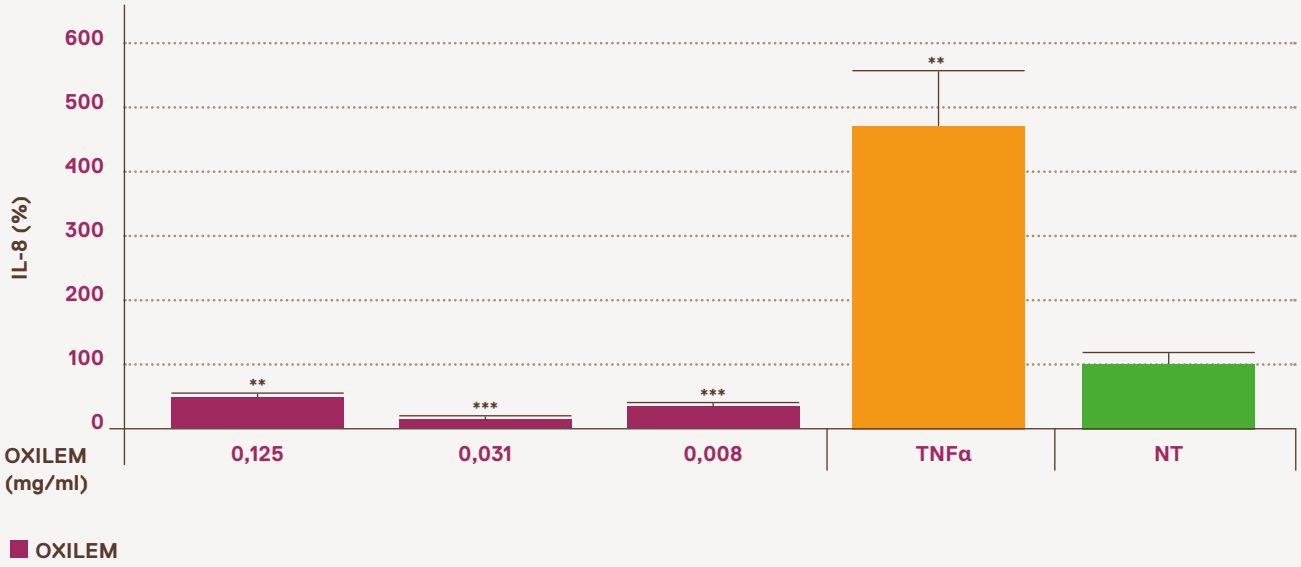


MTT Assay Caco-2 cells were treated with OXILEM for 24 hours. Cell vitality was determined by measuring absorbance at 595 nm after reaction with MTT. Viability values are expressed as a percentage of the absorbance of non treated cells. 1 mg/ml SDS (Sodium Dodecyl Sulfate) was used as positive control.

OXILEM: toxicological and proinflammatory profile

The ability of the compound to trigger a inflammatory response was tested considering the ability to induce the interleukin 8 pathway.

OXILEM has no pro inflammatory activity; on the contrary, it appears to reduce basal levels of IL 8



Pro-inflammatory effect Caco-2 cells were treated with OXILEM for 48 hours. IL-8 concentration was determined through ELISA. Values are reported as a percentage of the IL-8 detected in non treated cells. 0.2 µg/ml TNF α was used as positive control.

OXILEM: toxicological and proinflammatory profile

The ability of the compounds of triggering off an inflammatory pathway was determined. TNFα was used to induce inflammation in the cell line, and the potential of the two compounds to decrease inflammation will be assayed

OXILEM has an important anti inflammatory activity and the dose/effect relationship is clear

Anti-inflammatory effect Caco-2 cells were treated with 0.2 µg/ml TNF α in the absence or presence of OXILEM for 48 hours. IL-8 concentration was determined through ELISA. Values are reported as a percentage of the IL-8 detected in cells treated with TNFα only. 0.08 mg/ml Dexamethasone was used as positive control.

Green Innovation GmbH

Grabenweg 68
6020 Innsbruck, Austria
E. office@greeninnovation.at
T. + 43 512 319144