



HYDROGEL COMPOSITIONS COMPRISING GASDERMIN D AND AN ESCRT INHIBITOR AND METHODS OF USE THEREOF

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The Invention

UW-Madison researchers have developed a novel approach for enhancing pyroptosis, which could prove beneficial in treating cancer. The inventors combine intracellular delivery of gasdermin with a small molecule that interferes with membrane repair in a single hydrogel nanoparticle. The gasdermin is delivered using a bacterial based vector (VNP-GD) and a calcium chelator (EI) is adhered to a nanoparticle (EI-NP). Calcium chelation blocks influx-triggered ESCRT III-dependent membrane repair. A biodegradable hydrogel matrix is used as a carrier to deliver and sustainably release the VNP-GD and EI-NP.

Key Benefits

- Platform delivery method
- Compatible with a range of therapeutic modalities
- Sustainable release

Tech Fields

- [Drug Delivery : Small molecules](#)
- [Therapeutics & Vaccines : Oncology](#)

For current licensing status, please contact Rafael Diaz at rdiaz@warf.org or 608-960-9847