Supplementary Information 1: Detailed inclusion and exclusion criteria.

Inclusion criteria: Subjects must have met all of the following inclusion criteria to be considered for participation in this study:

1. At least 50 years old at the time of signed informed consent
2. (Genetic inclusion criterion removed in Protocol version 3.0.)
3. Sufficiently clear ocular media, adequate pupillary dilation, fixation to permit quality fundus imaging, and was able to cooperate sufficiently for adequate ophthalmic visual function testing and anatomic assessment
4. Understood the full nature and purpose of the study, including possible risks of study procedures, and provided informed consent prior to initiation of any study procedure; all subjects with a reproductive potential must have agreed to use effective contraceptive methods for 90 days from their last dose of GEM103
5. BCVA in the study eye using ETDRS Chart VA score of 5 to 45 letters (equivalent to Snellen VA of approximately 20/800 to 20/125)
6. Confirmed diagnosis of central GA in the study eye with the following characteristics:
    a. GA could have been multifocal, and cumulative GA lesion must have resided completely within the FAF imaging field (field 2, 30-degree image centered on the fovea), as confirmed by the Image Reading Center (IRC)
    b. GA must have been central, defined as GA that affects the foveal center point (diagnosis of GA and location relative to the foveal center point was determined by an IRC eligibility read, based on multi-modal imaging with CFP, FA, OCT, and near infrared reflectance imaging)
    c. Total size of all GA lesions in the study eye must have been within 0.5 to 15.0 Disc Areas.

Exclusion criteria: A subject who met any of the following exclusion criteria was ineligible to participate in this study:

1. (Genetic exclusion criteria removed in Protocol Version 3.0.)
2. Presence of the following ocular conditions – in the study eye:
    a. Exudative AMD or choroidal neovascularization
    b. Any active ocular disease or condition that could confound the assessment of the macula or be a contraindication to IVT injection, e.g., macular hole (stage 3 or 4), GA or maculopathies due to any disease other than AMD, uveitis, uncontrolled glaucoma, ocular infection (diabetes mellitus without retinopathy was not a criterion for exclusion)
    c. Any intraocular surgery (with the exception of intraocular lens replacement surgery more than 3 months prior to consent)
    d. Aphakia or absence of the posterior capsule
    e. History of laser therapy to the macula or fundus (exception: laser therapy to treat peripheral retinal tears is not exclusionary)
    f. Prior corneal transplant
3. Presence of any of the following ocular conditions in either eye:
    a. History of herpetic infection
    b. Ongoing treatment with antiangiogenic therapies in the fellow eye or completed treatment in the study eye with antiangiogenic therapies within 5 half-lives of first GEM103 dose
    c. Concurrent disease that could require medical or surgical intervention during the study period
    d. Active uveitis and/or vitritis (grade: trace or above)
    e. History of idiopathic or autoimmune-associated uveitis
    f. Active infectious conjunctivitis, keratitis, scleritis, or endophthalmitis

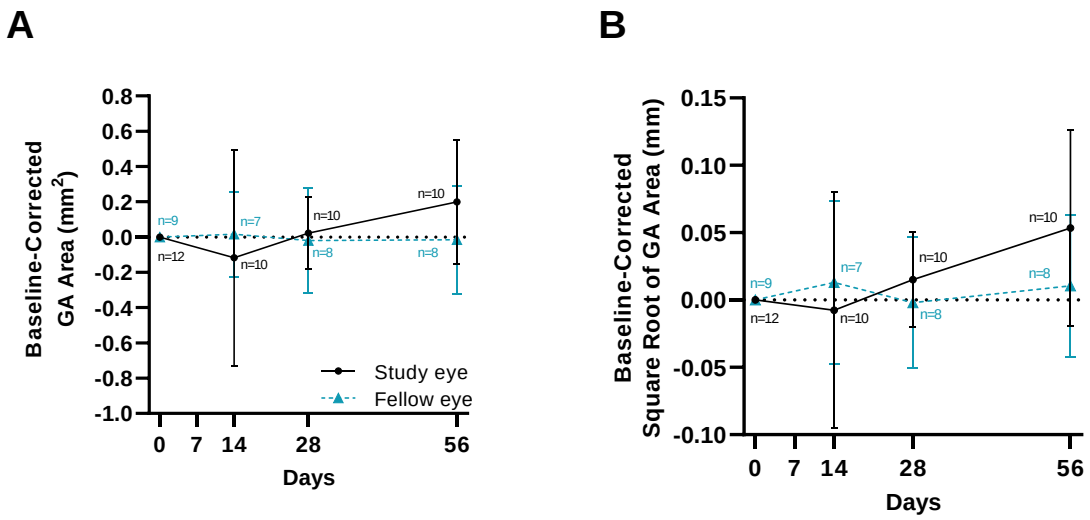
g. Any ophthalmologic condition that reduces the clarity of the media and that, in the opinion of the Investigator, interferes with ophthalmologic examination

4. In the opinion of the Investigator, the subject had any prior or ongoing medical condition (e.g., ocular other than dry AMD, systemic, psychiatric) or clinically significant screening laboratory value that may have presented a safety risk, interfered with study compliance, interfered with consistent study follow-up, or confounded data interpretation throughout the longitudinal follow-up period

5. Female subjects must not have been pregnant or lactating

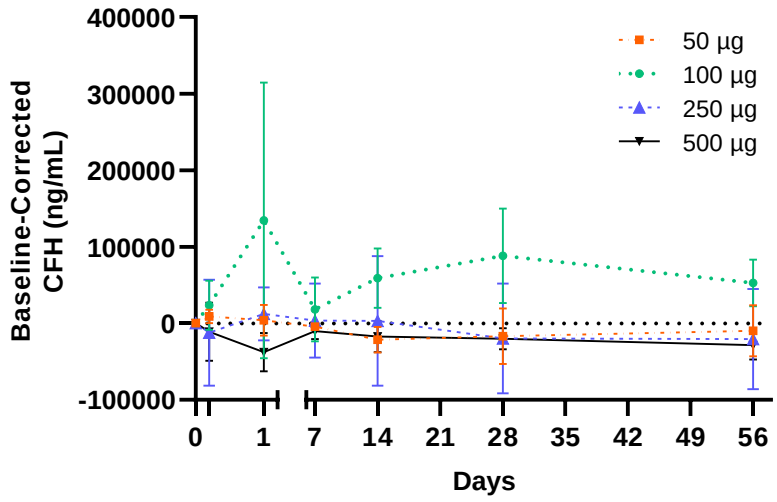
6. Current use of medications known to be toxic to the lens, retina, or optic nerve (deferoxamine, chloroquine/hydroxychloroquine [Plaquenil®], tamoxifen, phenothiazines, ethambutol, digoxin, and aminoglycosides). (Current use was defined as the administration of first dose of GEM103 within 5 half-lives of the prohibited medication.) Use of certain medications that may potentially exacerbate macular edema or macular degeneration was permitted if, in the opinion of the Investigator, such use would not have confounded the interpretation of study results.

Supplementary Figure 1. Mean (±standard deviation) baseline-corrected GA area (**A**) and square root of GA area (**B**) following GEM103 administration



GA, geographic atrophy

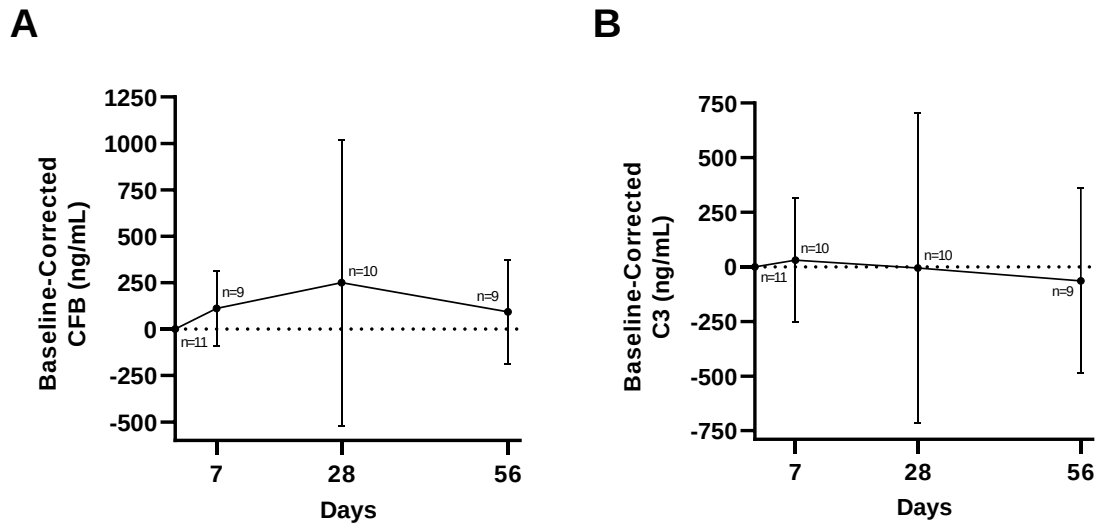
Supplementary Figure 2. Mean (±standard deviation) baseline-corrected levels of plasma CFH by treatment group following GEM103 administration



CFH, complement factor H

Note: Data was available for all 12 participants except for 1 participant in the 50 µg dose group at Week 1 and Week 8.

Supplementary Figure 3. GEM103 affected levels of complement activation biomarkers in AH. Presented are mean (±standard deviation) baseline-corrected levels CFB (**A**), and C3 (**B**)



AH, aqueous humor; C3, complement component 3; CFB, complement factor B