Tissue plasminogen activator (tPA) in the management of predominantly hemorrhagic age-related macular degeneration, milligram/milliliter or microgram/milliliter?

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Recently our hospital pharmacy, which serves an academic hospital with an internationally well-known department of ophthalmology, received a request for the aseptic preparation of an alteplase syringe solution for subretinal administration. Looking for dose rationale, our ophthalmology doctor came up with a concentration based on an article published by Arias and colleagues in Clinical Ophthalmology in 2010.1 This article is on subretinal alteplase administration for hemorrhagic age-related macular degeneration. In the methods section, a concentration of 125 mg/mL alteplase was declared, which we found peculiar. This concentration cannot be acquired with the commercially available preparation (which has a maximum concentration of 2 mg/mL), and could lead to undesirable side effects. In the literature, it is stated that an alteplase dose should be in the range of 200 µg/mL.2 Did the authors mean 125 µg/mL?

Disclosure
The authors declare no conflicts of interest in this work.

References