Supplementary Information

Pre-clinical dose-ranging efficacy, pharmacokinetics, tissue biodistribution, and toxicity of a targeted contrast agent for MRI of amyloid deposition in Alzheimer's disease

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1 Supplementary Information

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Supplementary Figure S1: No significant differences in signal intensity were seen in pre-contrast magnetic resonance imaging (MRI) scans of transgenic and wild type mice. Signal intensity mean and range for (a) T1-weighted spin echo (T1w-SE), and (b) fast spin echo inversion recovery (FSE-IR) sequences for pre-contrast scans of both wild type (n=18) and transgenic (n=18) animals. Regions of interest (ROI) were drawn in the cortex for each animal. No significant differences (NS) were found between signal intensities for wild type and transgenic animals for either T1w-SE or FSE-IR sequences.

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Supplementary Figure S2: Determination of optimal time point for imaging of amyloid plaques. Three transgenic and three wild type mice were imaged before (Day 0) and after administration of ADx-001 at 2, 4, 6, 8, and 21 days post-contrast. Maximum signal enhancement was seen at day 4 post-contrast (black arrow). Transgenic animals demonstrated signal enhancement relative to wild type animals in both (a) T1-weighted spin echo (T1w-SE) and (b) fast spin echo inversion recovery (FSE-IR) sequences. Signal returned to near baseline levels by day 21.





- 2 **Supplementary Figure S3:** Demonstration of cortical regions of interest (ROI) identification.
- 3 Cortical ROIs are outlined in red on fast spin echo inversion recovery (FSE-IR) brain images. Pre-
- 4 contrast gray scale (a) and post-contrast gray scale (c) images are compared with pre-contrast
- 5 (b) and post-contrast (d) color magnitude images.
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